



# HARGIS + ASSOCIATES, INC.

HYDROGEOLOGY • ENGINEERING

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March 16, 2020

## VIA EMAIL AND GEOTRACKER UPLOAD

Mr. Carl Bernhardt  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION  
3737 Main Street, Suite 500  
Riverside, California 92501-3348

Re: 2019 Annual Groundwater Monitoring and Remediation System  
Operation Results, Raytheon Company, Former Building 684, Fullerton, California

Dear Mr. Bernhardt:

This letter presents the results of groundwater monitoring and operation of the full-scale groundwater remediation system (groundwater remediation system) and of the soil vapor extraction system (SVE system) for the period January 2019 through December 2019 at the Raytheon Company, Former Building 684 site (the Site), located at 2357 Moore Avenue (formerly 651 North Gilbert Street), Fullerton, California (Figures 1 and 2). Groundwater monitoring was performed at accessible monitor, extraction, and Orange County Water District (OCWD) test wells in May, August and November 2019 in general accordance with the monitoring schedule identified in the letter from Hargis + Associates, Inc. (H+A) to the California Regional Water Quality Control Board, Santa Ana Region (CRWQCB) dated November 8, 2002 (H+A, 2002).

### **GROUNDWATER MONITORING**

Groundwater monitoring was conducted at the Site in May, August and November 2019 in general accordance with the existing schedule (H+A, 2002). Quarterly groundwater monitoring was not conducted in the first quarter 2019 due to remediation system inoperation related to planned treatment system upgrades and unplanned Trojan Ultraviolet (UV) System shutdowns. Groundwater monitoring conducted in August 2019 was comprised of water level measurements in accessible monitor and extraction wells and collection of groundwater samples in all accessible monitor and extraction wells (Tables 1 and 2).

### **GROUNDWATER LEVELS**

Water levels were measured in accessible monitor wells, extraction wells, and two OCWD test wells in May, August and November 2019 (Table 1). Figures depicting water level elevations based on data obtained during annual monitoring conducted in August 2019 have been prepared (Figures 3 through 8). August 2019 water levels were used to prepare water level elevation figures representative of groundwater conditions.

The Site hydrostratigraphic units have been previously described in detail (H+A, 2013). Shallow zone and Upper Unit A water level data obtained in August 2019 indicate the same general patterns of hydraulic head and directions of groundwater flow that have been historically observed in these units prior to remediation system operations (Figures 3 through 5) (H+A, 1997). In August 2019, the direction of groundwater flow in the shallow zone was generally toward the east (Figure 3), and toward the

**Other Offices:**  
Folsom, CA  
Mesa, AZ  
Tucson, AZ

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north-northeast in the deeper shallow zone (Figure 4). In August 2019, the direction of groundwater flow in the Upper Unit A was generally toward the Upper Unit A groundwater extraction wells (Figure 5).

Extraction of groundwater from Lower Unit A ceased in April 2004 with approval from CRWQCB (CRWQCB, 2004). In August 2019, the direction of groundwater flow in Lower Unit A was generally toward the north and northwest (Figure 6), which is consistent with the flow direction observed prior to remediation system operations (H+A, 1997). As discussed in the previous monitoring submittal, Lower Unit A water level variations and/or changes in the historical direction of groundwater flow in this unit may, in part, account for the detections of tetrachloroethylene (PCE) and trichloroethylene (TCE) in this unit in 2019 that are not attributable to the Site.

In August 2019, the direction of groundwater flow in the A/B aquitard was toward the southwest (Figure 7), which is consistent with the flow direction observed prior to remediation system operations (H+A, 1997). As discussed in the previous monitoring submittal, A/B aquitard water level variations and/or the change in the historical direction of groundwater flow in this unit may, in part, account for the detections of PCE and TCE in this unit that are not attributable to the Site (H+A, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, and 2019).

In August 2019, the direction of groundwater flow in Unit B was toward the southwest (Figure 8), which was consistent with the historical trends observed in this unit (H+A, 2013). As discussed in the previous monitoring submittal, the detections and concentration increases of PCE and TCE in this unit are not attributable to the Site.

## **GROUNDWATER CHEMICAL QUALITY**

All groundwater samples collected during monitoring activities conducted in 2019 were analyzed by Eurofins Calscience Inc., Garden Grove, California for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B and for analysis of 1,4-dioxane by EPA Method 8270C MOD (Appendix A). TCE was the principal VOC detected in groundwater samples collected from extraction wells at the Site. Historically, other VOCs have been intermittently detected in groundwater samples collected from various wells at the Site (H+A, 1992). However, beginning in May 2005 and persisting to date at several locations, PCE and TCE have been detected in off-Site monitor wells at concentrations that are not consistent with historical groundwater concentration trends and observed water level elevation and gradient conditions associated with the respective wells. The lines of evidence that supported the conclusion that PCE and TCE concentrations in this area were increasing as a result of one or more off-Site, non-Raytheon source(s) of PCE and TCE to groundwater were previously described (H+A, 2013).

Chain-of-custody documentation was enclosed with each sample shipment. Quality assurance/quality control samples collected during monitoring in 2019 comprised trip blanks that accompanied each sample shipment, rinsate blanks, and field duplicates.

The principal VOC in groundwater is TCE (Table 2); PCE, 1,1-dichloroethylene (1,1-DCE), and all other detected compounds can be found in Table 3. Figures depicting the concentrations of TCE, PCE, and 1,1-DCE detected in groundwater samples collected in August 2019 have been prepared (Figures 9 through 14). Water quality hydrographs depicting the concentrations of TCE in extraction well groundwater samples obtained through November 2019 have been prepared (Figures 15 through 26). Comparisons of the historical concentrations of TCE with concentrations detected in August 2019 generally indicate stable or declining trends of TCE concentrations at the Site.

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### **GROUNDWATER REMEDIATION SYSTEM**

The remediation system is a semi-automated, pump-and-treat system designed to remediate groundwater at the Site in the underlying hydrostratigraphic units identified as the shallow zone and Unit A.

The remediation system consists of the following major subsystems:

- Extraction/collection system;
- Treatment system;
- Disposal system;
- Treatment system utilities;
- Electrical system; and
- Control system.

The extraction/collection system is used to extract groundwater from the shallow zone and Unit A, and convey the extracted groundwater to the treatment system. The treatment system is used to reduce the concentration of TCE in the extracted groundwater to meet treatment objectives using liquid phase carbon adsorption. The disposal system is used to convey and dispose of the treated groundwater into the subsurface using injection wells screened in both Upper and Lower Unit A. Treatment system utilities are provided to treat water generated during non-routine operations. An electrical system is provided to distribute power to the remediation system components. A control system regulates the operation of the major subsystems using microprocessor-based controllers.

Full-scale groundwater remediation commenced March 12, 1996. Groundwater historically has been extracted from the Shallow Zone, Upper Unit A, and Lower Unit A. In April 2004, groundwater extraction from Lower Unit A was discontinued, as approved by the CRWQCB (CRWQCB, 2004).

During the period January 1, 2019 through December 31, 2019, the groundwater remediation system treated approximately 86,881,110 gallons of water and removed approximately 2.3 gallons of TCE. TCE concentrations detected in groundwater samples collected from extraction wells are summarized in Figures 15 through 26. Through December 2019, the full-scale remediation system has treated approximately 1,708,677,402 gallons of water and removed approximately 116 gallons of TCE.

### **SOIL VAPOR EXTRACTION SYSTEM**

The SVE system is designed to treat VOCs in soil vapor, primarily TCE, which is extracted from two dual-nested SVE wells SVE-100S/D and SVE-101S/D. These two nested sets of SVE wells both have well screens that were installed at an angle of approximately 45-degrees from horizontal. Each nested SVE well has a shallow screened interval from approximately 5 to 25 feet below land surface (bls) and a deeper screened interval from approximately 25 to 50 feet bls. The trace of the SVE well screens in a horizontal plane projected onto land surface is illustrated on Figure 27. Treated soil vapors are discharged through a 35-foot stack which is regulated by the South Coast Air Quality Management District (SCAQMD) (Permit G37741, A/N 577664). Inside the enclosure, operational components include:

- two 1,000-pound vapor phase granular activated carbon adsorption vessels (2 vessels operated in series) with a 35-foot tall exhaust stack;
- one 250 standard cubic feet per minute (10 horsepower [hp]) positive displacement blower;
- an airstream heat exchanger with 1 hp cooling fan;

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- one 81-gallon vapor-liquid separator (knock-out pot);
- a 5 gallon per minute transfer pump (1/2 hp);
- a 550-gallon condensate water storage tank;
- conveyance pipelines; and
- miscellaneous instrumentation and controls.

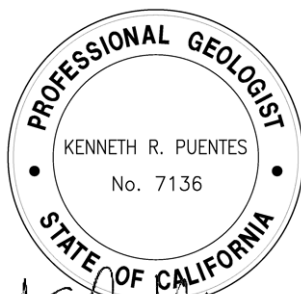
From January 1, 2015 through April 28, 2015, the SVE system remained non-operational due to an impending permit modification through SCAQMD. At the direction of SCAQMD, an application for a modification of the previous permit was submitted and on February 20, 2015, SCAQMD subsequently issued the modified second operational permit G34754, A/N 571829. In April 2015, startup operations under this modified second permit resumed and lasted until July 2015, until terminated due to permit condition related issues. A final permit modification was submitted in August 2015, and SCAQMD subsequently issued the modified third and current operational permit G37741, A/N 577664. The system was then restarted November 5, 2015.

During the period January 1, 2019 through December 31, 2019, the SVE system removed approximately 5.6 pounds of total VOCs and approximately 5.3 pounds of TCE (Table 4; Figure 28). In addition, system influent, effluent, and midpoint field samples were collected weekly at the SVE System and analyzed in the field using a calibrated flame-ionization detector (FID) or calibrated photo-ionization detector (PID). Weekly FID or PID measurements collected at the system were used to verify that the SCAQMD permit limits were not exceeded and, if necessary, operational adjustments were made to remain in permit compliance.

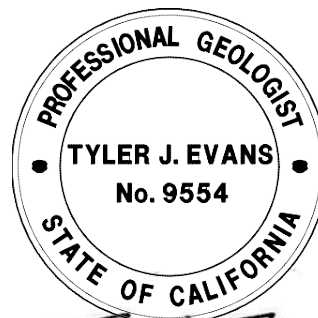
Please contact me at (858) 455-6500, extension 102, or [kpuentes@hargis.com](mailto:kpuentes@hargis.com), with any questions or comments.

Sincerely,

HARGIS + ASSOCIATES, INC



Kenneth R. Puentes, PG 7136, CHG 714  
Principal Hydrogeologist



Tyler J. Evans, PG 9554  
Hydrogeologist

KRP/TJE/mlm

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Enclosures: Tables 1 through 4  
Figures 1 through 28  
Appendix A – Laboratory Analytical Data

cc (w/encl.) Mr. Jonathan Hone, Raytheon Company  
Mr. Danny Samorano, Raytheon Company  
Ms. Tiffany Foo, City of Fullerton

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## REFERENCES

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- \_\_\_\_\_, 1997. Results of Groundwater Monitoring and Groundwater Remediation System Operation, March through December 1996, Hughes Aircraft Company, Building 684, Fullerton, California. March 26, 1997.
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\_\_\_\_\_, 2018. 2017 Annual Groundwater Monitoring and Groundwater Remediation System Operation Results, Raytheon Company, Former Building 684, Fullerton, California.  
March 21, 2018.

\_\_\_\_\_, 2019. 2018 Annual Groundwater Monitoring and Groundwater Remediation System Operation Results, Raytheon Company, Former Building 684, Fullerton, California.  
January 30, 2019.

**TABLE 1**  
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>Shallow Zone Water Table Monitor Wells</b>				
S-02	05/08/19	100.91	53.03	47.88
S-02	08/27/19	100.91	52.44	48.47
S-02	11/14/19	100.91	52.80	48.11
S-03	05/08/19	101.60	54.95	46.65
S-03	08/27/19	101.60	54.35	47.25
S-03	11/14/19	101.60	54.91	46.69
S-04	05/08/19	100.95	54.50	46.45
S-04	08/27/19	100.95	54.02	46.93
S-04	11/14/19	100.95	54.79	46.16
S-05	05/08/19	98.92	DRY @ 47.81	--
S-05	08/27/19	98.92	46.15	52.77
S-05	11/14/19	98.92	DRY @ 46.91	--
S-07	05/08/19	99.48	49.47	50.01
S-07	08/27/19	99.48	48.65	50.83
S-07	11/14/19	99.48	49.11	50.37
S-08	05/08/19	95.52	50.20	45.32
S-08	08/27/19	95.52	49.74	45.78
S-08	11/14/19	95.52	50.21	45.31
S-18	05/08/19	98.79	49.98	48.81
S-18	08/27/19	98.79	48.41	50.38
S-18	11/14/19	98.79	48.79	50.00
S-21	05/08/19	95.81	38.49	57.32
S-21	08/27/19	95.81	39.26	56.55
S-21	11/14/19	95.81	DRY @ 39.68	--
S-32	05/08/19	101.17	54.64	46.53
S-32	08/27/19	101.17	54.11	47.06
S-32	11/14/19	101.17	54.83	46.34
<b>Deeper Shallow Zone Monitor Wells</b>				
S-14	05/08/19	96.96	46.70	50.26
S-14	08/27/19	96.96	46.15	50.81
S-14	11/14/19	96.96	46.72	50.24
S-15	05/08/19	95.76	42.11	53.65
S-15	08/27/19	95.76	41.42	54.34
S-15	11/14/19	95.76	41.58	54.18



**TABLE 1**  
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>Deeper Shallow Zone Monitor Wells (continued)</b>				
S-24	05/08/19	95.66	42.44	53.22
S-24	08/27/19	95.66	41.60	54.06
S-24	11/14/19	95.66	41.92	53.74
S-26	05/08/19	97.68	41.38	56.30
S-26	08/27/19	97.68	41.02	56.66
S-26	11/14/19	97.68	41.17	56.51
S-27	05/08/19	119.98	74.47	45.51
S-27	08/27/19	119.98	74.05	45.93
S-27	11/14/19	119.98	74.71	45.27
S-29	05/08/19	91.42	36.92	54.50
S-29	08/27/19	91.42	36.36	55.06
S-29	11/14/19	91.42	36.76	54.66
S-30	05/08/19	95.00	40.12	54.88
S-30	08/27/19	95.00	39.85	55.15
S-30	11/14/19	95.00	40.38	54.62
S-31	05/08/19	94.31	40.58	53.73
S-31	08/27/19	94.31	40.07	54.24
S-31	11/14/19	94.31	40.54	53.77
SE-01	05/08/19	98.27	51.78	46.49
SE-01	08/27/19	98.27	51.46	46.81
SE-01	11/14/19	98.27	52.10	46.17
<b>Shallow Zone Extraction Wells</b>				
SE-04	05/08/19	95.53	UTM	--
SE-04	08/27/19	95.53	UTM	--
SE-04	11/14/19	95.53	UTM	--
<b>Upper Unit A Monitor Wells</b>				
UA-02	05/08/19	98.82	52.63	46.19
UA-02	08/27/19	98.82	53.15	45.67
UA-02	11/14/19	98.82	54.01	44.81
UA-06	05/08/19	97.53	50.96	46.57
UA-06	08/27/19	97.53	51.53	46.00
UA-06	11/14/19	97.53	52.16	45.37
UA-07	05/08/19	98.61	51.07	47.54
UA-07	08/27/19	98.61	51.71	46.90
UA-07	11/14/19	98.61	52.34	46.27

**TABLE 1**  
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>Upper Unit A Monitor Wells (continued)</b>				
UA-08	05/08/19	95.05	49.03	46.02
UA-08	08/27/19	95.05	49.60	45.45
UA-08	11/14/19	95.05	50.07	44.98
UA-11	05/08/19	94.89	48.63	46.26
UA-11	08/27/19	94.89	49.29	45.60
UA-11	11/14/19	94.89	49.81	45.08
UA-12	05/08/19	91.07	44.95	46.12
UA-12	08/27/19	91.07	45.55	45.52
UA-12	11/14/19	91.07	46.35	44.72
<b>Upper Unit A Extraction Wells</b>				
UAX-01	05/08/19	97.45	60.01	37.44
UAX-01	08/27/19	97.45	62.50	34.95
UAX-01	11/14/19	97.45	63.48	33.97
UAX-02	05/08/19	97.08	71.82	25.26
UAX-02	08/27/19	97.08	82.90	14.18
UAX-02	11/14/19	97.08	51.42	45.66
UAX-03	05/08/19	92.63	75.90	16.73
UAX-03	08/27/19	92.63	UTM	--
UAX-03	11/14/19	92.63	46.98	45.65
<b>Lower Unit A Monitor Wells</b>				
UA-04D	05/08/19	100.31	53.02	47.29
UA-04D	08/27/19	100.31	53.58	46.73
UA-04D	11/14/19	100.31	54.43	45.88
UA-06D	05/08/19	97.45	49.32	48.13
UA-06D	08/27/19	97.45	50.41	47.04
UA-06D	11/14/19	97.45	51.02	46.43
UA-07D	05/08/19	99.46	50.11	49.35
UA-07D	08/27/19	99.46	50.82	48.64
UA-07D	11/14/19	99.46	51.57	47.89
UA-08D	05/08/19	94.86	47.94	46.92
UA-08D	08/27/19	94.86	48.55	46.31
UA-08D	11/14/19	94.86	49.21	45.65
UA-10D	05/08/19	93.89	45.86	48.03
UA-10D	08/27/19	93.89	46.62	47.27
UA-10D	11/14/19	93.89	47.39	46.50

**TABLE 1**  
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>Lower Unit A Monitor Wells (continued)</b>				
UA-11D	05/08/19	94.35	47.06	47.29
UA-11D	08/27/19	94.35	46.85	47.50
UA-11D	11/14/19	94.35	48.56	45.79
UA-12D	05/08/19	90.57	43.97	46.60
UA-12D	08/27/19	90.57	44.64	45.93
UA-12D	11/14/19	90.57	45.42	45.15
UA-13D	05/08/19	91.28	42.83	48.45
UA-13D	08/27/19	91.28	44.12	47.16
UA-13D	11/14/19	91.28	44.63	46.65
UA-14D	05/08/19	91.08	43.88	47.20
UA-14D	08/27/19	91.08	44.71	46.37
UA-14D	11/14/19	91.08	45.38	45.70
UA-15D	05/08/19	95.69	49.54	46.15
UA-15D	08/27/19	95.69	50.06	45.63
UA-15D	11/14/19	95.69	50.91	44.78
UA-16D	05/08/19	93.86	46.27	47.59
UA-16D	08/27/19	93.86	47.11	46.75
UA-16D	11/14/19	93.86	47.79	46.07
UA-17D	05/08/19	93.89	46.29	47.60
UA-17D	08/27/19	93.89	47.15	46.74
UA-17D	11/14/19	93.89	47.96	45.93
<b>Lower Unit A Extraction Wells</b>				
LAX-01	05/08/19	88.77	41.20	47.57
LAX-01	08/27/19	88.77	42.00	46.77
LAX-01	11/14/19	88.77	42.66	46.11
LAX-02	05/08/19	96.18	48.97	47.21
LAX-02	08/27/19	96.18	50.62	45.56
LAX-02	11/14/19	96.18	50.26	45.92
LAX-03	05/08/19	96.66	49.85	46.81
LAX-03	08/27/19	96.66	50.40	46.26
LAX-03	11/14/19	96.66	50.91	45.75
<b>A/B Aquitard Monitor Wells</b>				
AB-01	05/08/19	97.24	49.26	47.98
AB-01	08/27/19	97.24	50.02	47.22
AB-01	11/14/19	97.24	50.69	46.55

**TABLE 1**  
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>A/B Aquitard Monitor Wells (continued)</b>				
AB-02	05/08/19	96.29	UTM	--
AB-02	08/27/19	96.29	48.88	47.41
AB-02	11/14/19	96.29	49.68	46.61
AB-03	05/08/19	96.64	48.47	48.17
AB-03	08/27/19	96.64	49.40	47.24
AB-03	11/14/19	96.64	50.11	46.53
AB-05	05/08/19	90.99	43.19	47.80
AB-05	08/27/19	90.99	44.34	46.65
AB-05	11/14/19	90.99	44.90	46.09
AB-06	05/08/19	93.67	45.84	47.83
AB-06	08/27/19	93.67	46.79	46.88
AB-06	11/14/19	93.67	47.51	46.16
AB-07	05/08/19	90.62	43.67	46.95
AB-07	08/27/19	90.62	44.22	46.40
AB-07	11/14/19	90.62	45.31	45.31
AB-08	05/08/19	93.92	46.44	47.48
AB-08	08/27/19	93.92	47.49	46.43
AB-08	11/14/19	93.92	48.12	45.80
<b>Unit B Monitor Wells</b>				
UB-01	05/08/19	100.47	52.35	48.12
UB-01	08/27/19	100.47	53.51	46.96
UB-01	11/14/19	100.47	54.21	46.20
UB-02	05/08/19	91.38	45.51	45.87
UB-02	08/27/19	91.38	47.04	44.34
UB-02	11/14/19	91.38	47.61	43.77
UB-03	05/08/19	94.94	48.47	46.47
UB-03	08/27/19	94.94	49.80	45.14
UB-03	11/14/19	94.94	50.37	44.57
UB-04	05/08/19	94.00	47.08	46.92
UB-04	08/27/19	94.00	48.40	45.60
UB-04	11/14/19	94.00	48.98	45.02
UB-05	05/08/19	90.59	44.36	46.23
UB-05	08/27/19	90.59	45.68	44.91
UB-05	11/14/19	90.59	46.33	44.26

**TABLE 1**
**WATER LEVEL ELEVATION DATA**

WELL IDENTIFIER	DATE MEASURED	MEASURING POINT ELEVATION (feet msl)	DEPTH TO WATER (feet bmp)	WATER LEVEL ELEVATION (feet msl)
<b>Unit B Monitor Wells (continued)</b>				
UB-06	05/08/19	93.83	47.41	46.42
UB-06	08/27/19	93.83	48.75	45.08
UB-06	11/14/19	93.83	49.18	44.65
<b>Orange County Water District Test Wells</b>				
36A6-255	05/09/19	92.09	46.33	45.76
36A6-255	08/27/19	92.09	47.70	44.39
36A6-255	11/14/19	92.09	48.26	42.83
36A6-855	05/09/19	92.09	77.64	14.45
36A6-855	08/27/19	92.09	86.51	5.58
36A6-855	11/14/19	92.09	87.51	4.58

**FOOTNOTES**

- msl = Mean sea level
- bmp = Below measuring point
- UTM = Unable to measure



TABLE 2

TRICHLOROETHYLENE IN GROUNDWATER SAMPLES

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	CONCENTRATION (ug/l)
<b>Shallow Zone Water Table Monitor Wells</b>			
SE-01	08/29/19	ORG	6,500
S-02	08/28/19	ORG	0.31 J
S-02	08/28/19	FD	0.31 J
S-03	08/28/19	ORG	3.1
S-04	08/29/19	ORG	25
S-05	--	--	NS
S-07	08/28/19	ORG	0.70
S-08	08/29/19	ORG	1,500
S-08	08/29/19	FD	1,500
S-21	--	--	NS
S-32	08/29/19	ORG	4.0
<b>Deeper Shallow Zone Monitor Wells</b>			
S-14	08/28/19	ORG	1.0
S-15	08/28/19	ORG	2.5
S-18	08/28/19	ORG	0.79
S-24	08/28/19	ORG	6.0
S-26	08/28/19	ORG	0.51
S-27	08/28/19	ORG	<0.50
S-29	08/28/19	ORG	0.29 J
S-30	08/28/19	ORG	0.30 J
S-31	08/28/19	ORG	0.66
<b>Shallow Zone Extraction Well</b>			
SE-04	--	--	NS
<b>Shallow Zone Horizontal Extraction Wells</b>			
HEW-01	05/08/19	ORG	560
HEW-01	05/08/19	FD	550
HEW-01	08/28/19	ORG	580
HEW-01	11/15/19	ORG	660 H
HEW-01	11/15/19	FD	610
HEW-02	05/09/19	ORG	120
HEW-02	08/27/19	ORG	110
HEW-02	11/15/19	ORG	120
HEW-03	05/08/19	ORG	87
HEW-03	08/29/19	ORG	91
HEW-03	11/15/19	ORG	100
HEW-04	05/08/19	ORG	120
HEW-04	08/27/19	ORG	120
HEW-04	08/27/19	FD	120
HEW-04	11/15/19	ORG	130



TABLE 2

TRICHLOROETHYLENE IN GROUNDWATER SAMPLES

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	CONCENTRATION (ug/l)
<b>Shallow Zone Horizontal Extraction Wells (continued)</b>			
HEW-05	05/09/19	ORG	110
HEW-05	08/28/19	ORG	120
HEW-05	11/15/19	ORG	120
<b>Upper Unit A Monitor Wells</b>			
UA-02	08/28/19	ORG	4.2
UA-06	08/28/19	ORG	0.69
UA-07	08/28/19	ORG	0.68
UA-08	08/28/19	ORG	2.7
UA-11	08/28/19	ORG	1.1
UA-12	08/28/19	ORG	3.7
<b>Upper Unit A Extraction Wells</b>			
UAX-01	05/08/19	ORG	2.4
UAX-01	08/29/19	ORG	2.9
UAX-01	11/15/19	ORG	2.8
UAX-02	05/08/19	ORG	3.8
UAX-02	08/28/19	ORG	4.3
UAX-02	08/28/19	FD	4.5
UAX-02	11/15/19	ORG	4.3
UAX-03	05/08/19	ORG	10
UAX-03	08/27/19	ORG	10
UAX-03	11/15/19	ORG	9.6
<b>Lower Unit A Monitor Wells</b>			
UA-04D	08/29/19	ORG	<0.50
UA-04D	08/29/19	FD	<0.50
UA-06D	08/28/19	ORG	0.53
UA-07D	08/28/19	ORG	0.15 J
UA-08D	08/28/19	ORG	1.9
UA-10D	08/28/19	ORG	<0.50
UA-11D	08/28/19	ORG	1.2
UA-12D	08/28/19	ORG	<0.50
UA-13D	08/28/19	ORG	0.37 J
UA-14D	08/28/19	ORG	0.62 J
UA-15D	08/28/19	ORG	0.37 J
UA-16D	08/28/19	ORG	<0.50
UA-17D	08/28/19	ORG	<0.50



TABLE 2

TRICHLOROETHYLENE IN GROUNDWATER SAMPLES

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	CONCENTRATION (ug/l)
<b>Lower Unit A Extraction Wells</b>			
LAX-01	05/08/19	ORG	<1.0
LAX-01	08/27/19	ORG	<0.50
LAX-01	11/14/19	ORG	<0.50
LAX-02	05/08/19	ORG	<1.0
LAX-02	08/27/19	ORG	0.12 J
LAX-02	11/15/19	ORG	<0.50
LAX-03	05/08/19	ORG	<1.0
LAX-03	08/28/19	ORG	0.31 J
LAX-03	11/15/19	ORG	<0.50
<b>Unit A Injection Wells</b>			
UAI-01	--	--	--
UAI-02	--	--	--
UAI-03	--	--	--
UAI-04	--	--	--
UAI-05	--	--	--
<b>A/B Aquitard Monitor Wells</b>			
AB-01	--	--	NS
AB-02	--	--	NS
AB-03	--	--	NS
AB-05	--	--	NS
AB-06	--	--	NS
AB-07	--	--	NS
AB-08	--	--	NS
<b>Unit B Monitor Wells</b>			
UB-01	--	--	NS
UB-02	--	--	NS
UB-03	--	--	NS
UB-04	--	--	NS
UB-05	--	--	NS
UB-06	--	--	NS





**TABLE 2**

**TRICHLOROETHYLENE IN GROUNDWATER SAMPLES**

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	CONCENTRATION (ug/l)
<b>Quality Assurance/Quality Control Samples</b>			
TB-050819	05/08/19	TB	<1.0
RB-050819	05/08/19	RB	<1.0
TB-082719	08/27/19	TB	<0.50
RB-082819A	08/28/19	RB	<0.50
RB-082819B	08/28/19	RB	<0.50
RB-082819C	08/28/19	RB	<0.50
TB-082919	08/29/19	TB	<0.50
RB-082919	08/29/19	RB	<0.50
TB-111419	11/14/19	TB	<0.50
TB-111519	11/15/19	TB	<0.50
RB-111519	11/15/19	RB	<0.50

FOOTNOTES

- (<) = Less than; numerical value is the Reporting Limit for Trichloroethylene
- FD = Field duplicate sample
- NS = Not sampled
- ORG = Original sample
- RB = Rinsate blank sample
- TB = Trip blank sample
- ug/l = Micrograms per liter
- J= Estimated Value

**TABLE 3**
**OTHER VOLATILE ORGANIC COMPOUNDS  
IN GROUNDWATER SAMPLES**

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	COMPOUND	CONCENTRATION (ug/l)
<b>Shallow Zone Water Table Monitor Wells</b>				
SE-01	08/29/19	ORG	Chloroform	3.9 J
SE-01	08/29/19	ORG	Tetrachloroethene	140
S-03	08/28/19	ORG	1,1,2-Trichloro-1,2,2-trifluoroethane	0.39 J
S-03	08/28/19	ORG	Trichlorofluoromethane	0.70
S-04	08/29/19	ORG	Chloroform	0.11 J
S-04	08/29/19	ORG	Tetrachloroethene	0.56
S-08	08/29/19	ORG	Tetrachloroethene	36
S-08	08/29/19	FD	Tetrachloroethene	34
S-18	08/28/19	ORG	1,1-Dichloroethane	0.099 J
S-18	08/28/19	ORG	1,1-Dichloroethane	0.12 J
S-32	08/29/19	ORG	Methylene Chloride	0.070 J
<b>Deeper Shallow Zone Monitor Wells</b>				
S-14	08/28/19	ORG	1,1-Dichloroethane	0.30 J
S-14	08/28/19	ORG	1,1-Dichloroethane	0.17 J
S-14	08/28/19	ORG	c-1,2-Dichloroethene	0.12 J
S-15	08/28/19	ORG	1,1-Dichloroethane	0.19 J
S-15	08/28/19	ORG	1,1-Dichloroethane	0.40 J
S-15	08/28/19	ORG	c-1,2-Dichloroethene	0.26 J
S-24	08/28/19	ORG	c-1,2-Dichloroethene	0.31 J
S-26	08/28/19	ORG	1,1-Dichloroethane	0.088 J
S-26	08/28/19	ORG	1,1-Dichloroethane	0.30 J
S-30	08/28/19	ORG	1,1-Dichloroethane	0.17 J
S-30	08/28/19	ORG	1,1-Dichloroethane	0.88
S-30	08/28/19	ORG	c-1,2-Dichloroethene	0.46 J
S-30	08/28/19	ORG	Tetrachloroethene	0.58
S-30	08/28/19	ORG	Vinyl Chloride	0.15 J
S-31	08/28/19	ORG	1,1-Dichloroethane	0.068 J
S-31	08/28/19	ORG	1,1-Dichloroethane	0.24 J
S-31	08/28/19	ORG	Methyl-t-Butyl Ether (MTBE)	0.35 J

TABLE 3

OTHER VOLATILE ORGANIC COMPOUNDS  
IN GROUNDWATER SAMPLES

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	COMPOUND	CONCENTRATION (ug/l)
<b>Shallow Zone Horizontal Extraction Wells</b>				
HEW-01	05/08/19	ORG	Chloroform	0.40 J
HEW-01	05/08/19	ORG	1,1-Dichloroethene	4.6
HEW-01	05/08/19	ORG	Tetrachloroethene	5.0
HEW-01	05/08/19	ORG	1,4-Dioxane	3.0
HEW-01	05/08/19	FD	Chloroform	0.34 J
HEW-01	05/08/19	FD	1,1-Dichloroethene	4.0
HEW-01	05/08/19	FD	Tetrachloroethene	4.5
HEW-01	05/08/19	FD	1,4-Dioxane	2.2
HEW-01	08/28/19	ORG	1,1-Dichloroethane	0.17 J
HEW-01	08/28/19	ORG	1,1-Dichloroethene	4.1
HEW-01	08/28/19	ORG	c-1,2-Dichloroethene	0.34 J
HEW-01	08/28/19	ORG	Chloroform	0.47 J
HEW-01	08/28/19	ORG	Tetrachloroethene	8.4
HEW-01	08/28/19	ORG	1,4-Dioxane	1.3
HEW-01	11/15/19	ORG	1,4-Dioxane	1.9
HEW-01	11/15/19	FD	Tetrachloroethene	10.0
HEW-01	11/15/19	FD	1,4-Dioxane	1.7
HEW-02	05/09/19	ORG	Chloroform	0.19 J
HEW-02	05/09/19	ORG	1,1-Dichloroethene	0.30 J
HEW-02	05/09/19	ORG	Tetrachloroethene	0.29 J
HEW-02	08/28/19	ORG	1,1-Dichloroethene	0.34 J
HEW-02	08/28/19	ORG	Chloroform	0.27 J
HEW-02	08/28/19	ORG	Tetrachloroethene	0.50
HEW-02	08/28/19	ORG	Trichlorofluoromethane	0.12 J
HEW-03	05/08/19	ORG	1,1-Dichloroethene	1.2
HEW-03	05/08/19	ORG	Tetrachloroethene	1.1
HEW-03	08/29/19	ORG	1,1-Dichloroethene	1.2
HEW-03	08/29/19	ORG	c-1,2-Dichloroethene	0.14 J
HEW-03	08/29/19	ORG	Chloroform	0.11 J
HEW-03	08/29/19	ORG	Tetrachloroethene	1.7
HEW-03	11/15/19	ORG	Tetrachloroethene	2.0
HEW-03	11/15/19	ORG	1,4-Dioxane	0.59
HEW-04	05/08/19	ORG	1,1-Dichloroethene	1.4
HEW-04	05/08/19	ORG	Tetrachloroethene	1.1
HEW-04	05/08/19	ORG	1,4-Dioxane	9.9
HEW-04	08/27/19	ORG	1,1-Dichloroethene	1.3 J
HEW-04	08/27/19	ORG	Tetrachloroethene	1.6 J
HEW-04	08/27/19	ORG	1,4-Dioxane	9.1
HEW-04	08/27/19	FD	1,1-Dichloroethene	1.4 J
HEW-04	08/27/19	FD	Tetrachloroethene	1.5 J
HEW-04	08/27/19	FD	1,4-Dioxane	6.6
HEW-04	11/15/19	ORG	1,4-Dioxane	6.6
HEW-05	05/09/19	ORG	1,1-Dichloroethene	0.27 J
HEW-05	05/09/19	ORG	c-1,2-Dichloroethene	1.3
HEW-05	08/28/19	ORG	1,1-Dichloroethane	0.080 J

**TABLE 3**
**OTHER VOLATILE ORGANIC COMPOUNDS  
IN GROUNDWATER SAMPLES**

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	COMPOUND	CONCENTRATION (ug/l)
<b>Shallow Zone Horizontal Extraction Wells (continued)</b>				
HEW-05	08/28/19	ORG	1,1-Dichloroethene	0.16 J
HEW-05	08/28/19	ORG	Benzene	0.073 J
HEW-05	08/28/19	ORG	c-1,2-Dichloroethene	5.9
HEW-05	08/28/19	ORG	Chloroform	0.14 J
HEW-05	08/28/19	ORG	Vinyl Chloride	0.079 J
HEW-05	11/15/19	ORG	c-1,2-Dichloroethene	4.1
<b>Upper Unit A Monitor Wells</b>				
UA-02	08/28/19	ORG	1,1-Dichloroethane	0.081 J
UA-02	08/28/19	ORG	1,1-Dichloroethane	1.8
UA-06	08/28/19	ORG	Tetrachloroethene	4.3
UA-07	08/28/19	ORG	1,1,1-Trichloroethane	0.085 J
UA-07	08/28/19	ORG	1,1-Dichloroethane	4.0
UA-08	08/28/19	ORG	1,1-Dichloroethane	0.064 J
UA-08	08/28/19	ORG	1,1-Dichloroethane	0.15 J
UA-08	08/28/19	ORG	Tetrachloroethene	0.30 J
UA-11	08/28/19	ORG	Tetrachloroethene	4.2
UA-12	08/28/19	ORG	1,1-Dichloroethane	0.17 J
UA-12	08/28/19	ORG	Tetrachloroethene	0.34 J
<b>Upper Unit A Extraction Wells</b>				
UAX-01	05/08/19	ORG	1,1-Dichloroethene	2.2
UAX-01	08/29/19	ORG	1,1-Dichloroethane	0.071 J
UAX-01	08/29/19	ORG	1,1-Dichloroethane	2.3
UAX-01	11/15/19	ORG	1,1-Dichloroethane	2.0
UAX-02	05/08/19	ORG	1,1-Dichloroethane	3.4
UAX-02	05/08/19	ORG	1,4-Dioxane	1.9
UAX-02	08/28/19	ORG	1,1-Dichloroethane	0.19 J
UAX-02	08/28/19	ORG	1,1-Dichloroethane	4.0
UAX-02	08/28/19	ORG	1,4-Dioxane	2.1
UAX-02	08/28/19	FD	1,1-Dichloroethane	0.18 J
UAX-02	08/28/19	FD	1,1-Dichloroethane	4.1
UAX-02	08/28/19	FD	c-1,2-Dichloroethene	0.13 J
UAX-02	08/28/19	FD	1,4-Dioxane	2.4
UAX-02	11/15/19	ORG	1,1-Dichloroethane	3.5
UAX-02	11/15/19	ORG	1,4-Dioxane	1.2
UAX-03	05/08/19	ORG	1,1-Dichloroethane	0.61 J
UAX-03	08/27/19	ORG	1,1-Dichloroethane	0.58
UAX-03	08/27/19	ORG	Chloroform	0.094 J
UAX-03	11/15/19	ORG	1,1-Dichloroethane	0.54

TABLE 3

OTHER VOLATILE ORGANIC COMPOUNDS  
IN GROUNDWATER SAMPLES

WELL IDENTIFIER	SAMPLE DATE	QUALITY ASSURANCE CODE	COMPOUND	CONCENTRATION (ug/l)
<b>Lower Unit A Monitor Wells</b>				
UA-04D	08/29/19	FD	1,2,4-Trimethylbenzene	0.075 J
UA-06D	08/28/19	ORG	Tetrachloroethene	2.7
UA-07D	08/28/19	ORG	1,1-Dichloroethane	0.66
UA-07D	08/28/19	ORG	Tetrachloroethene	1.2
UA-08D	08/28/19	ORG	Tetrachloroethene	0.33 J
UA-10D	08/28/19	ORG	Tetrachloroethene	9.7
UA-11D	08/28/19	ORG	Tetrachloroethene	0.62
UA-12D	08/28/19	ORG	Tetrachloroethene	0.52
UA-13D	08/28/19	ORG	Tetrachloroethene	0.35 J
UA-14D	08/28/19	ORG	Tetrachloroethene	38
UA-15D	08/28/19	ORG	Benzene	0.076 J
UA-16D	08/28/19	ORG	Tetrachloroethene	0.61
UA-17D	08/28/19	ORG	Carbon Disulfide	0.41 J
UA-17D	08/28/19	ORG	Methyl-t-Butyl Ether (MTBE)	1.6

FOOTNOTES

FD = Field duplicate sample  
 ORG = Original sample  
 ug/l = Micrograms per liter  
 J = Estimated Value

TABLE 4 - SYSTEM CALCULATIONS

Soil Vapor Extraction (SVE) System

Sample Date	Volume Soil Gas Extracted				Mass Removed			
	Average Flowrate		Hours Operated	Volume Air Extracted	Monthly Mass of Total VOCs Removed	Cumulative Mass of Total VOCs Removed	Monthly Mass TCE Removed	Cumulative Mass TCE Removed
	scfm	m <sup>3</sup> /hr						
12/03/14	60.0	101.9	168.4	17,166.8	1.3	1.3	1.1	1.1
04/30/15	60.0	101.9	29.9	3,048.0	1.0	2.4	0.9	2.0
05/14/15	67.0	113.8	696.6	79,296.5	25.0	27.4	22.5	24.5
06/25/15	25.0	42.5	683.5	29,031.8	21.6	48.9	19.9	44.4
07/23/15	25.0	42.5	669.0	28,415.9	13.6	62.6	12.4	56.9
11/12/15	128.1	217.7	340.0	74,023.4	36.7	99.2	34.2	91.0
12/17/15	141.6	240.6	517.0	124,379.8	24.3	123.5	23.6	114.6
01/21/16	141.0	239.6	168.4	40,342.0	2.5	126.0	2.3	116.9
02/18/16	96.0	163.1	390.6	63,708.8	3.2	129.2	3.0	120.0
03/17/16	113.2	192.3	583.1	112,113.4	5.6	134.8	5.2	125.1
04/21/16	150.0	254.9	669.4	170,597.6	10.1	144.9	9.5	134.6
05/19/16	166.8	283.3	668.2	189,307.7	6.7	151.6	6.5	141.1
06/23/16	133.4	226.6	509.7	115,522.5	3.4	154.9	3.3	144.4
07/21/16	159.0	270.1	673.6	181,968.0	3.4	158.3	3.2	147.6
08/18/16	153.8	261.2	671.3	175,358.9	3.8	162.1	3.5	151.2
09/15/16	150.0	254.9	672.6	171,413.1	2.9	165.0	2.8	154.0
10/06/16	151.8	257.8	188.0	48,471.1	3.7	168.7	0.6	154.6
11/17/16	155.5	264.2	458.0	121,001.8	2.3	171.0	2.1	156.8
12/08/16	139.8	237.5	887.0	210,681.7	2.1	173.1	1.9	158.7
01/19/17	142.5	242.1	528.0	127,833.5	1.3	174.3	1.2	159.9
02/09/17	147.5	250.6	490.0	122,795.9	1.5	175.9	1.5	161.3
03/09/17	141.4	240.2	683.0	164,083.9	1.7	177.5	1.6	162.9
04/13/17	137.5	233.6	694.0	162,128.0	2.0	179.5	1.9	164.9
05/18/17	141.3	240.0	672.0	161,270.0	1.8	181.3	1.7	166.6
06/15/17	141.0	239.6	846.0	202,668.1	2.0	183.3	1.9	168.5
07/27/17	150.0	254.9	164.4	41,897.6	0.7	184.0	0.6	169.2
08/09/17	133.0	226.0	835.5	188,796.5	1.4	185.5	1.3	170.5
09/20/17	130.0	220.9	600.2	132,567.0	1.2	186.6	1.1	171.6
10/19/17	130.0	220.9	717.9	158,563.5	1.4	188.0	1.3	172.9
11/16/17	128.0	217.5	750.0	163,105.0	0.7	188.7	0.6	173.5
12/14/17	113.0	192.0	542.2	104,096.0	0.5	189.2	0.4	173.9
01/18/18	125.0	212.4	664.8	141,187.7	0.6	189.7	0.5	174.5
02/15/18	99.5	169.1	499.0	84,356.7	0.3	190.0	0.3	174.7
03/22/18	97.8	166.2	665.9	110,648.1	0.4	190.5	0.4	175.1
04/12/18	108.0	183.5	683.0	125,325.8	0.6	191.1	0.6	175.7
05/10/18	112.0	190.3	688.5	131,014.1	0.6	191.7	0.6	176.3
06/14/18	103.8	176.3	670.5	118,190.6	0.4	192.1	0.4	176.6
07/12/18	102.6	174.3	604.5	105,375.5	0.4	192.5	0.4	177.0
08/09/18	99.0	168.2	843.5	141,878.4	0.5	193.0	0.5	177.5
09/20/18	98.6	167.5	667.0	111,737.4	0.5	193.5	0.5	178.0
10/11/18	106.6	181.1	671.0	121,527.8	0.5	194.0	0.5	178.5
11/01/18	99.7	169.3	830.7	140,666.3	0.5	194.6	0.5	179.0
12/06/18	98.6	167.5	654.4	109,626.6	0.2	194.8	0.2	179.2

FOOTNOTES

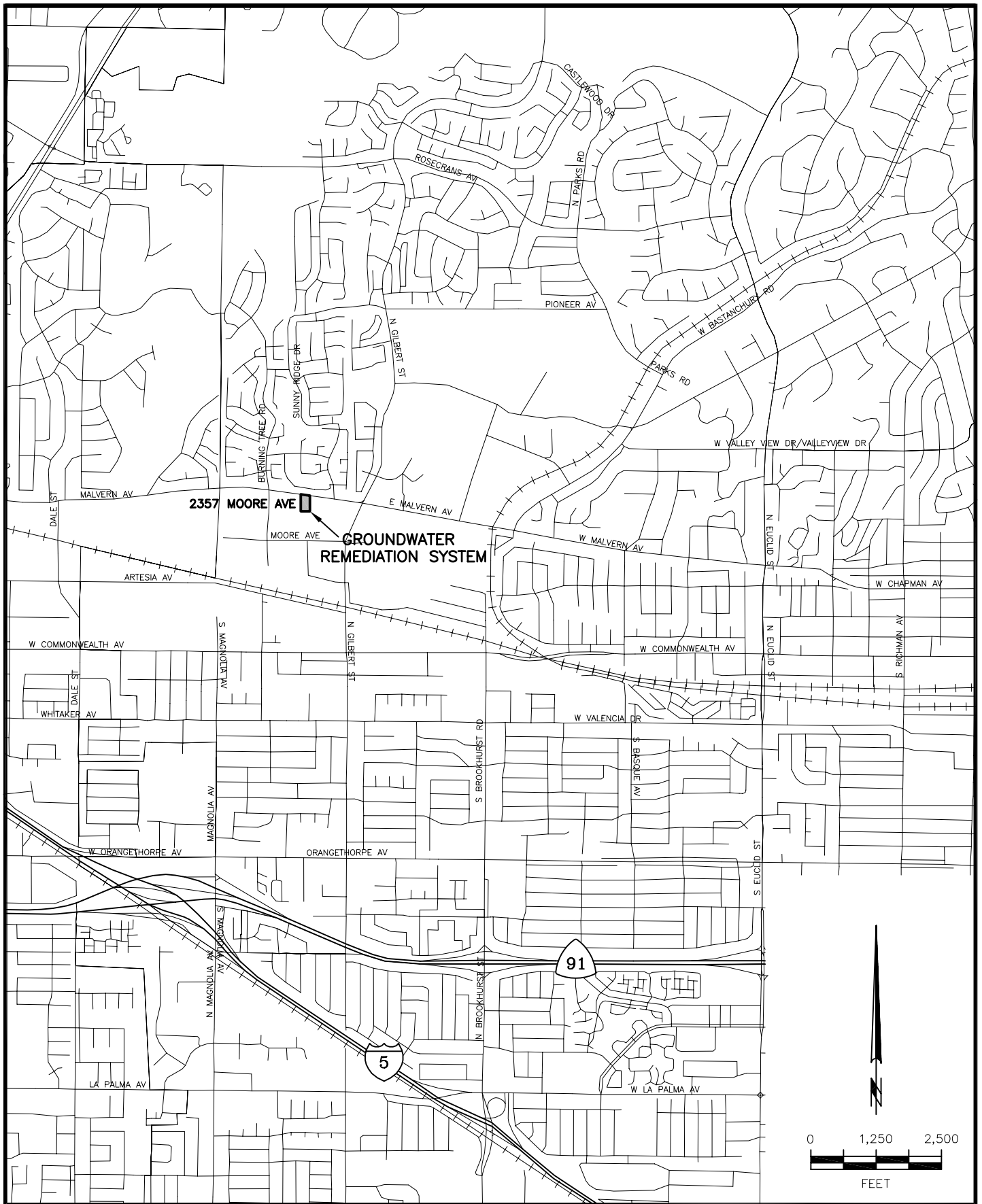
scfm = Standard cubic feet per minute

m<sup>3</sup>/hr = Cubic meter per hour

lb = Pound

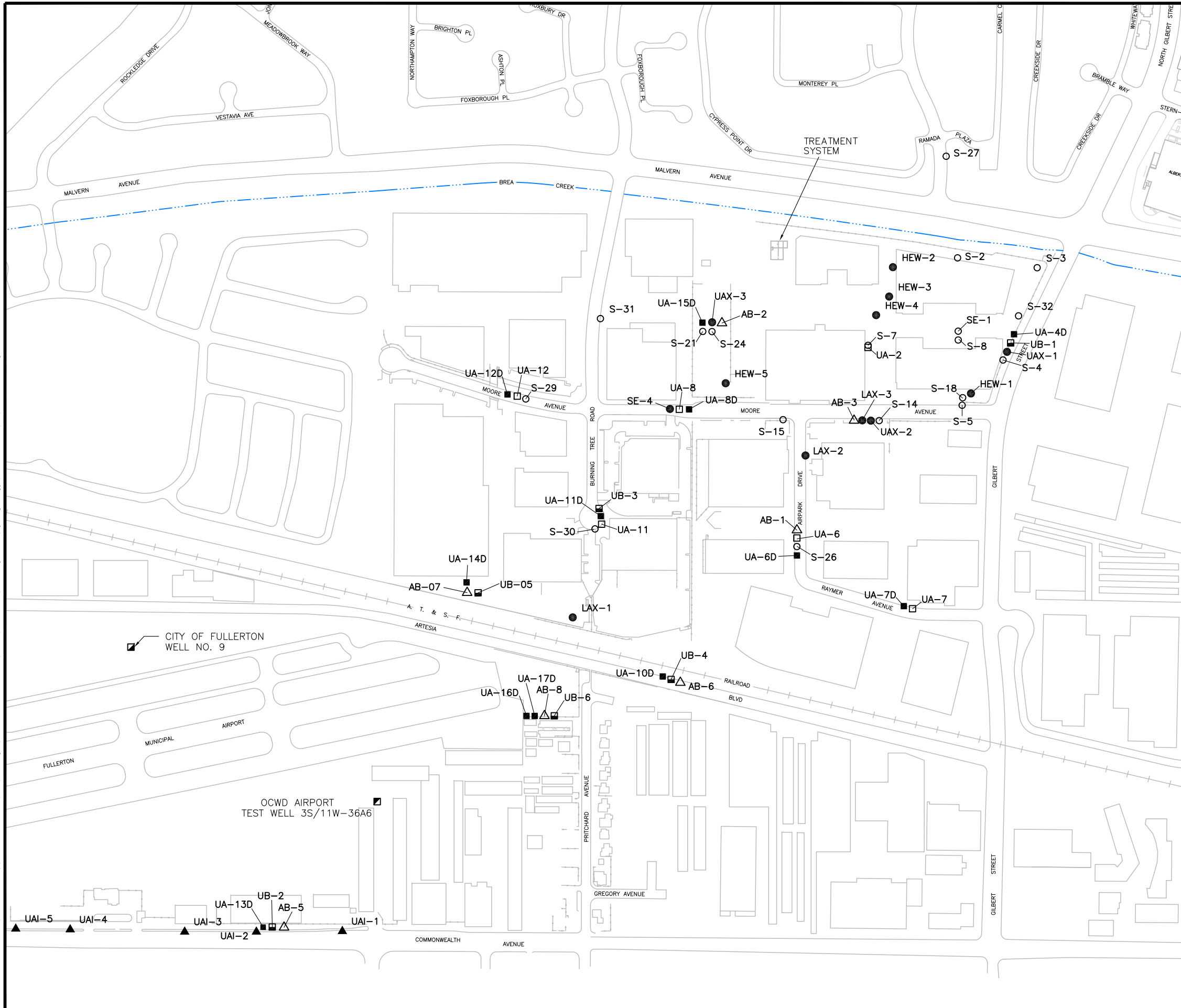
VOCs = Volatile organic compounds

TCE = Trichloroethylene



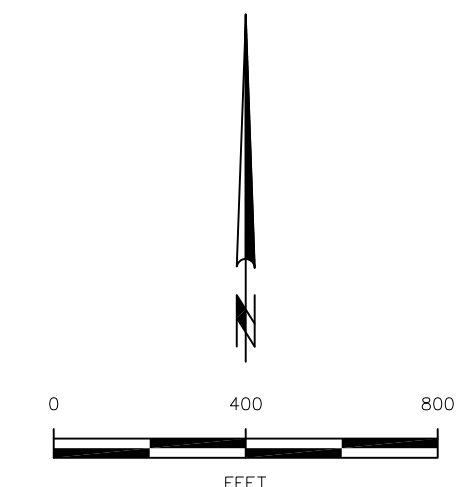
**FIGURE 1. SITE LOCATION**

Mar 13, 2020 - 1:02pm ADH - \\SANDIEGO-F501\dfs\sandiego\H+A\GRAPHIC-FILES\2020\700-799\764-Raytheon\Hydrogeology\H+A-Basemaps\410-10217.dwg



**EXPLANATION**

- S-29 APPROXIMATE LOCATION OF SHALLOW ZONE MONITOR WELL
- HEW-1 APPROXIMATE LOCATION OF EXTRACTION WELL FOR REMEDIATION SYSTEM
- UA-12 APPROXIMATE LOCATION OF UPPER UNIT A MONITOR WELL
- UA-12D APPROXIMATE LOCATION OF LOWER UNIT A MONITOR WELL
- UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- AB-7 APPROXIMATE LOCATION OF A/B AQUITARD MONITOR WELL
- UB-3 APPROXIMATE LOCATION OF UNIT B MONITOR WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- AT & SF RAILROAD



RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**WELL LOCATIONS**

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**HARGIS+ASSOCIATES, INC.**  
Hydrogeology/Engineering

03/20

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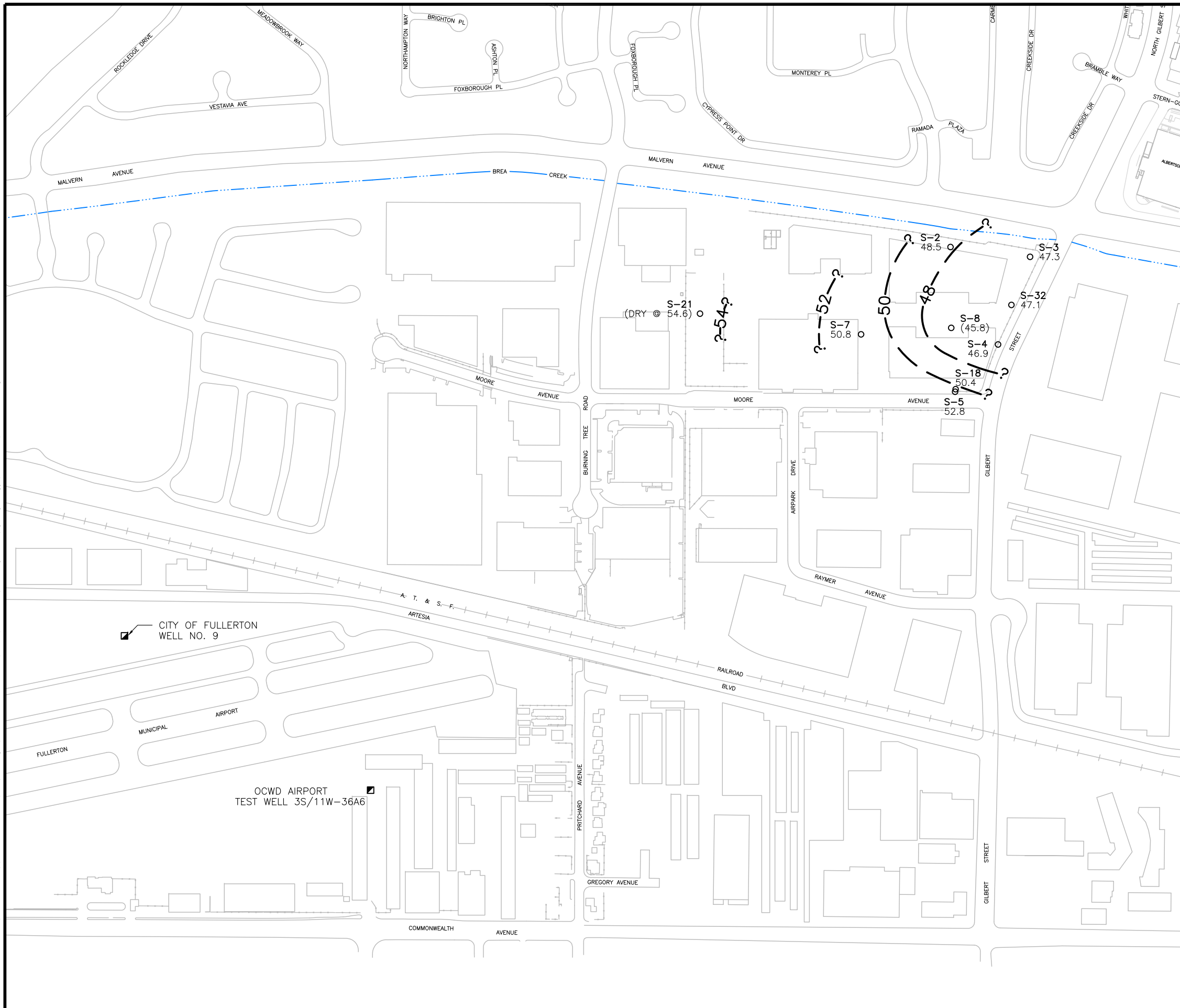
FIGURE 2

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PREP BY TJE REV BY KRP RPT NO. 764.11 410-10217 A



Mar 12, 2020 - 4:08pm ADH - \\SANDIEGO-FS01\dfs\sandiego\H+A GRAPHIC-FILES\2020\700-799\764 Raytheon\Hydrogeology\Water\_Lvl\220-2505.dwg

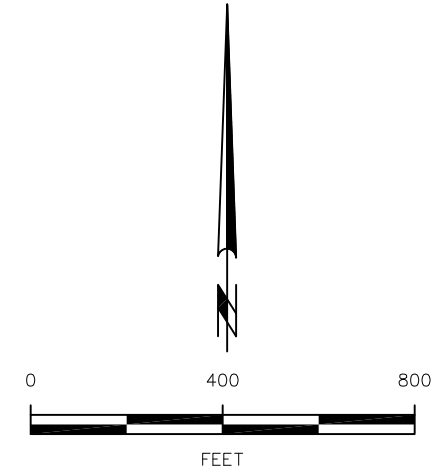



### EXPLANATION

- S-7 APPROXIMATE LOCATION OF SHALLOW ZONE WATER TABLE MONITOR WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- S-2 48.5 WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL
- (45.8) CONCENTRATION NOT CONTOURED
- +—+—+— AT & SF RAILROAD

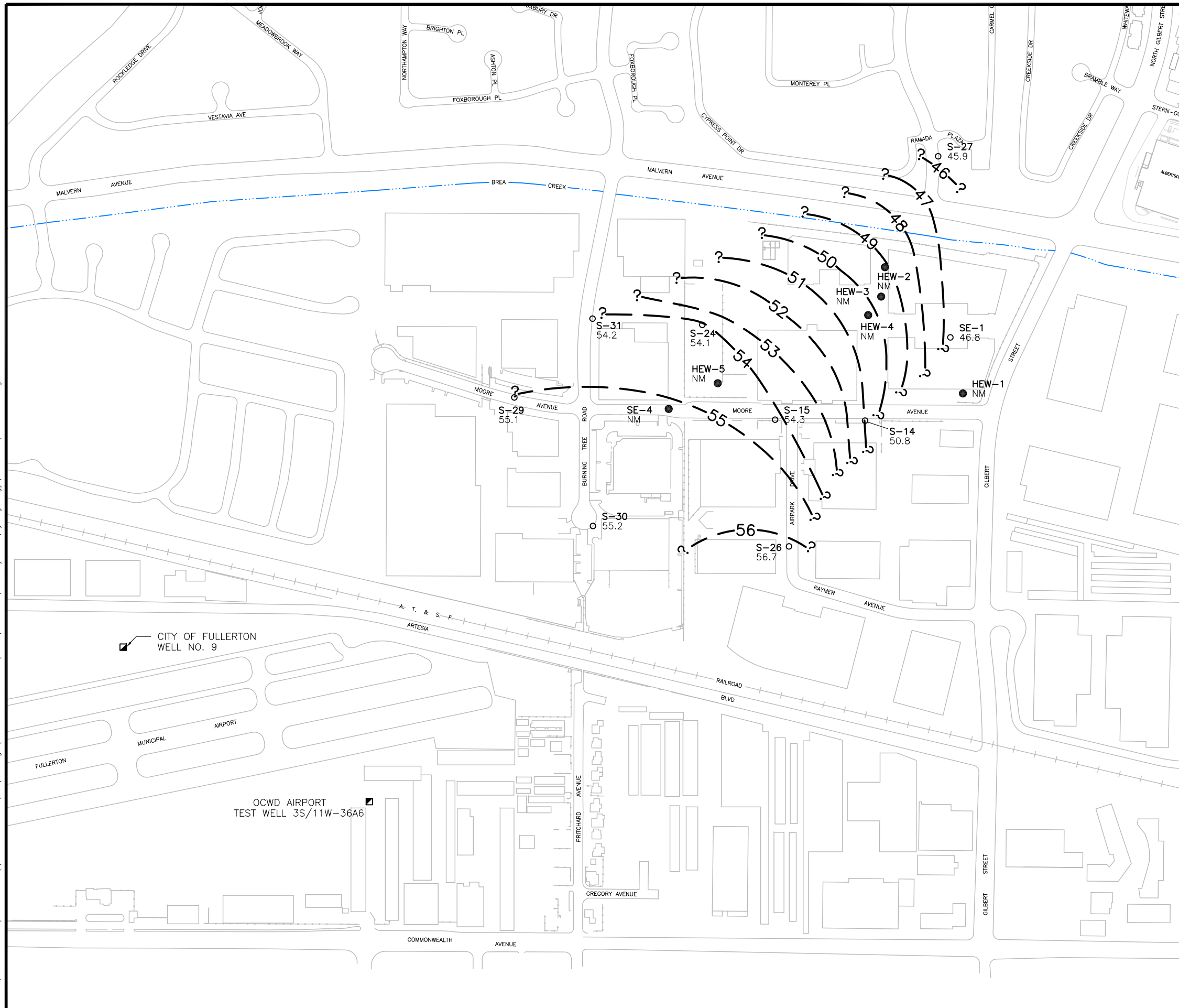
? — 50 — — — ?  
 CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL  
 DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: WATER LEVELS MEASURED AUGUST 27, 2019



RAYTHEON COMPANY FULLERTON, CALIFORNIA	
<b>WATER LEVEL ELEVATIONS SHALLOW ZONE WATER TABLE AUGUST 2019</b>	
 <b>HARGIS+ASSOCIATES, INC</b> Hydrogeology/Engineering	03/20
FIGURE 3	
PREP BY <u>NES</u> REV BY <u>AMJ</u> RPT NO. <u>764.10</u>	220-2505 A

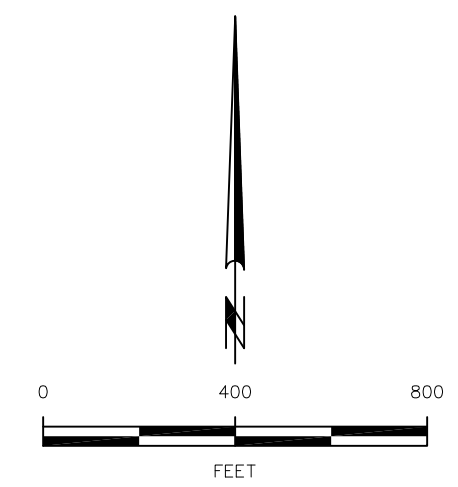
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### EXPLANATION

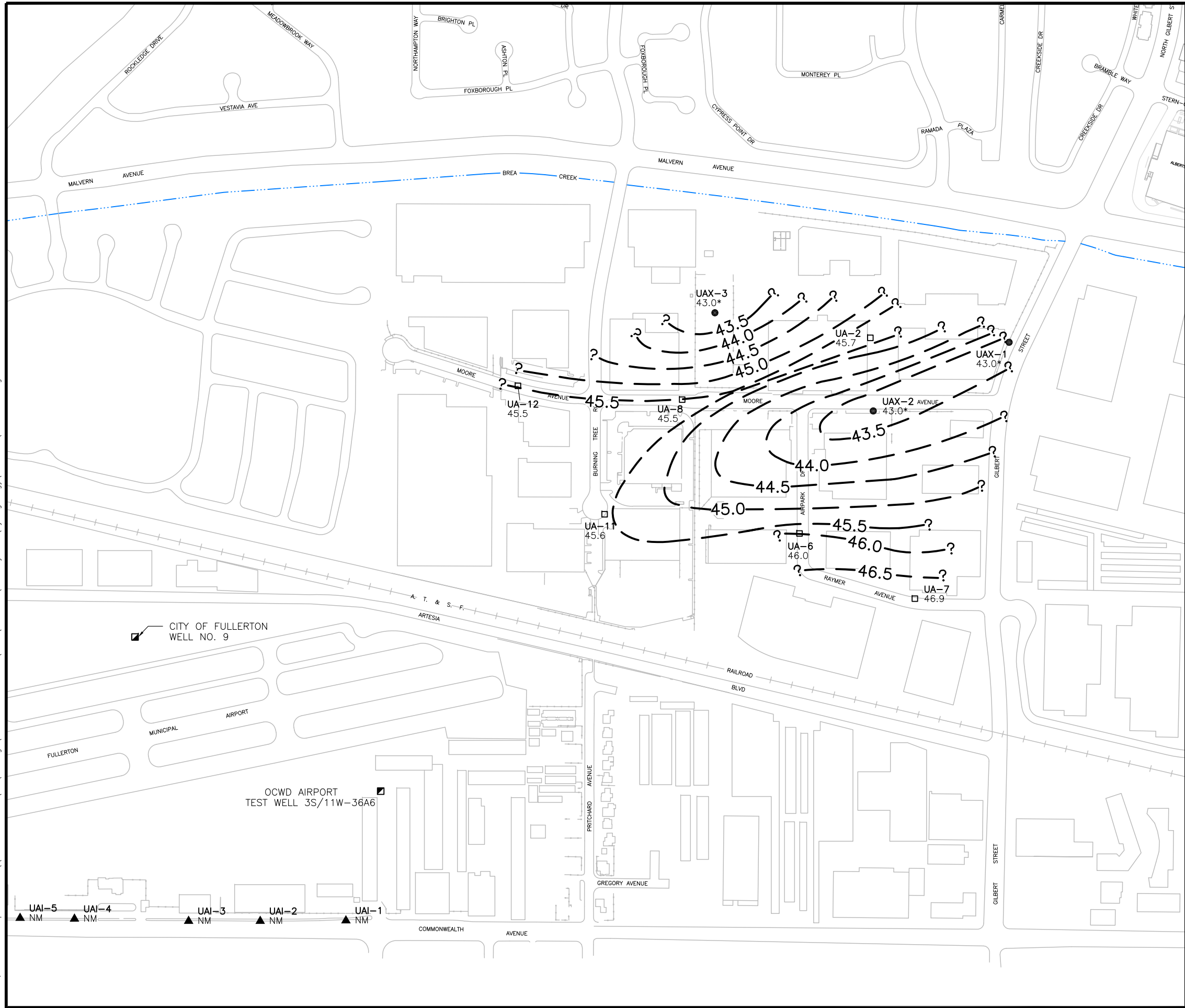
- S-29 APPROXIMATE LOCATION OF DEEPER SHALLOW ZONE MONITOR WELL
- HEW-1 APPROXIMATE LOCATION OF SHALLOW ZONE HORIZONTAL EXTRACTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- S-27 45.9 WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL
- NM NOT MEASURED
- AT & SF RAILROAD

? ——— 48 ——— ?  
 CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED  
 NOTE: WATER LEVELS MEASURED AUGUST 27, 2019



RAYTHEON COMPANY	
FULLERTON, CALIFORNIA	
<b>WATER LEVEL ELEVATIONS DEEPER SHALLOW ZONE AUGUST 2019</b>	
 <b>HARGIS+ASSOCIATES, INC.</b> Hydrogeology/Engineering	03/20
FIGURE 4	
PREP BY <u>NES</u> REV BY <u>AMJ</u> RPT NO. <u>764.10</u>	220-2506   A

Mar 12, 2020 - 4:28pm ADH - \\SANDIEGO-F501\dfs\_sandiego\H+A GRAPHIC-FILES\2020\700-799\764 Raytheon\Hydrogeology\Water\_Lvl\220-2507.dwg



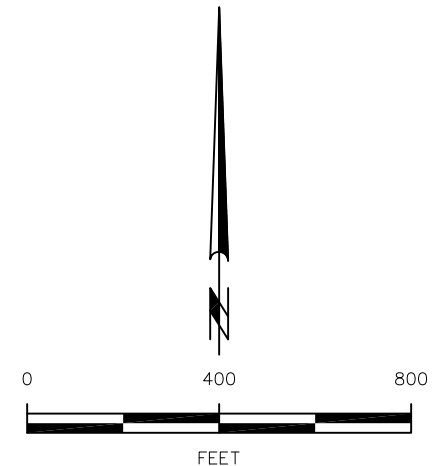
**EXPLANATION**

- UA-12 APPROXIMATE LOCATION OF UPPER UNIT A MONITOR WELL
- UAX-3 APPROXIMATE LOCATION OF UPPER UNIT A EXTRACTION WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UA-12 WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL
- 45.5
- 43.0\*
- NM NOT MEASURED
- +—+—+— AT & SF RAILROAD

? ——— 44.0 ——— ——— ?

CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: WATER LEVELS MEASURED AUGUST 27, 2019



RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**WATER LEVEL ELEVATIONS  
UPPER UNIT A  
AUGUST 2019**

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HARGIS+ASSOCIATES, INC  
Hydrogeology/Engineering
03/20

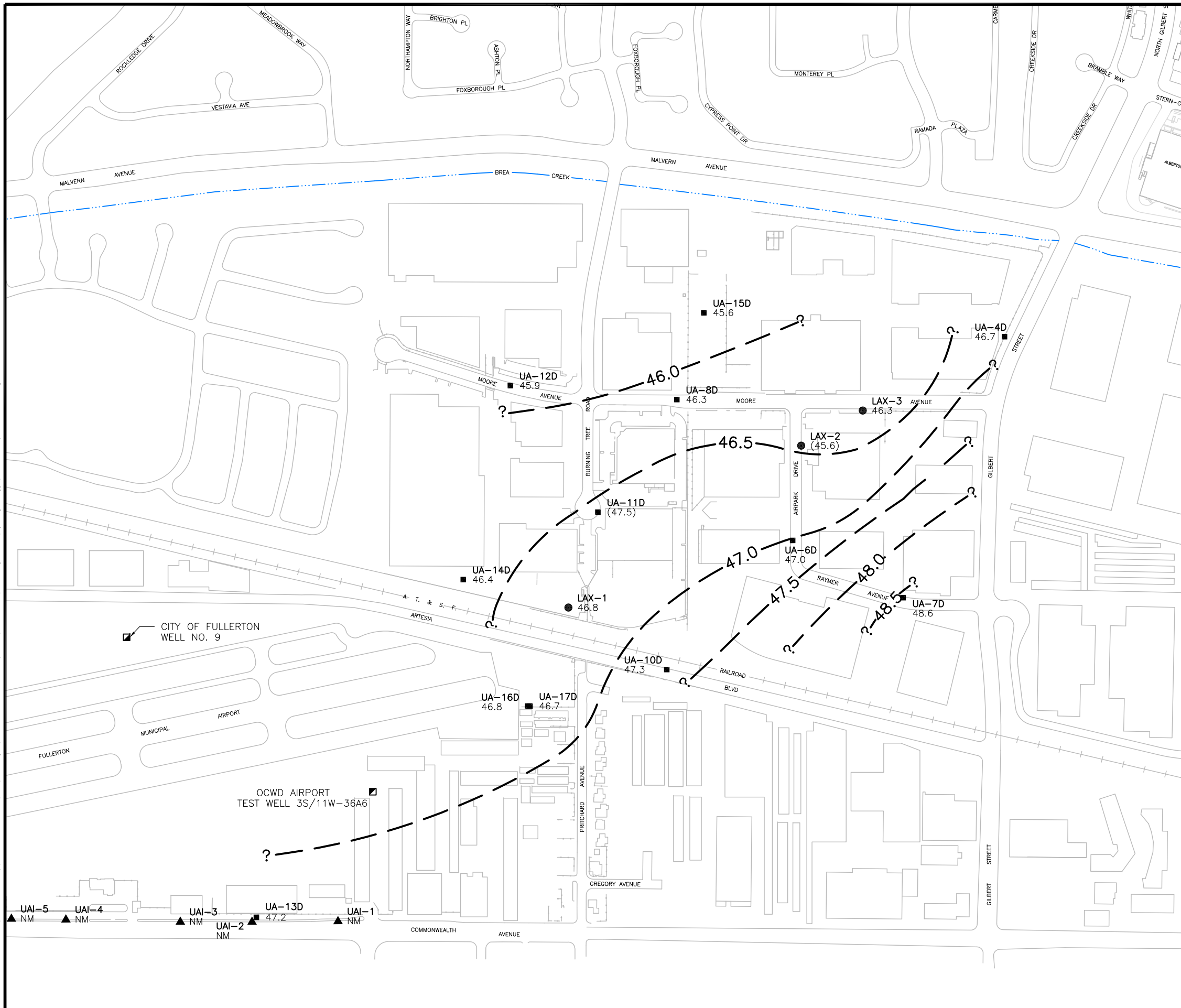
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FIGURE 5

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PREP BY NES REV BY AMJ RPT NO. 764.10 220-2507 | A

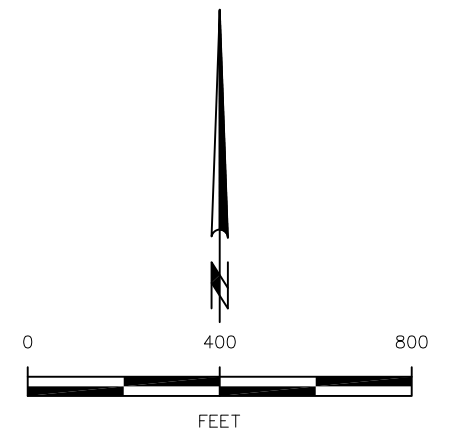
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### EXPLANATION

- UA-6D APPROXIMATE LOCATION OF LOWER UNIT A MONITOR WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- LAX-2 APPROXIMATE LOCATION OF LOWER UNIT A EXTRACTION WELL
- (45.6) CONCENTRATION NOT CONTOURED
- CITY OF FULLERTON APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- ▣ WELL No.9
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UA-6D WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL
- 47.0
- NM WATER LEVEL ELEVATION NOT MEASURED
- +—+—+— AT & SF RAILROAD
- ? ———— 46.0 ———— ?
- CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: WATER LEVELS MEASURED AUGUST 27, 2019




RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**WATER LEVEL ELEVATIONS  
LOWER UNIT A  
AUGUST 2019**

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**HARGIS+ASSOCIATES, INC.**  
Hydrogeology/Engineering

03/20

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FIGURE 6

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PREP BY AMJ REV BY NES RPT NO. 764.10 220-2508 A



Mar 13, 2020 - 1:10pm ADH - \\SANDIEGO-F501\dfs\sandiego\H+A GRAPHIC-FILES\2020\700-799\764 Raytheon Hydrogeology\Water Lvl\220-2509.dwg

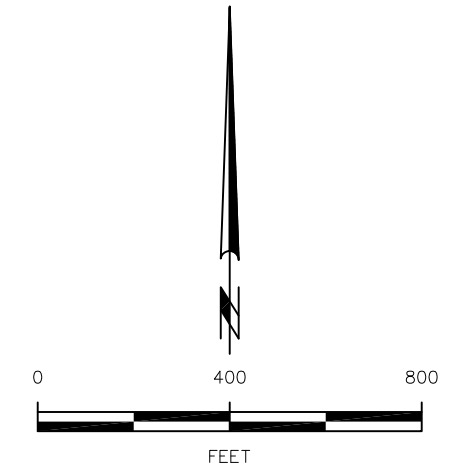
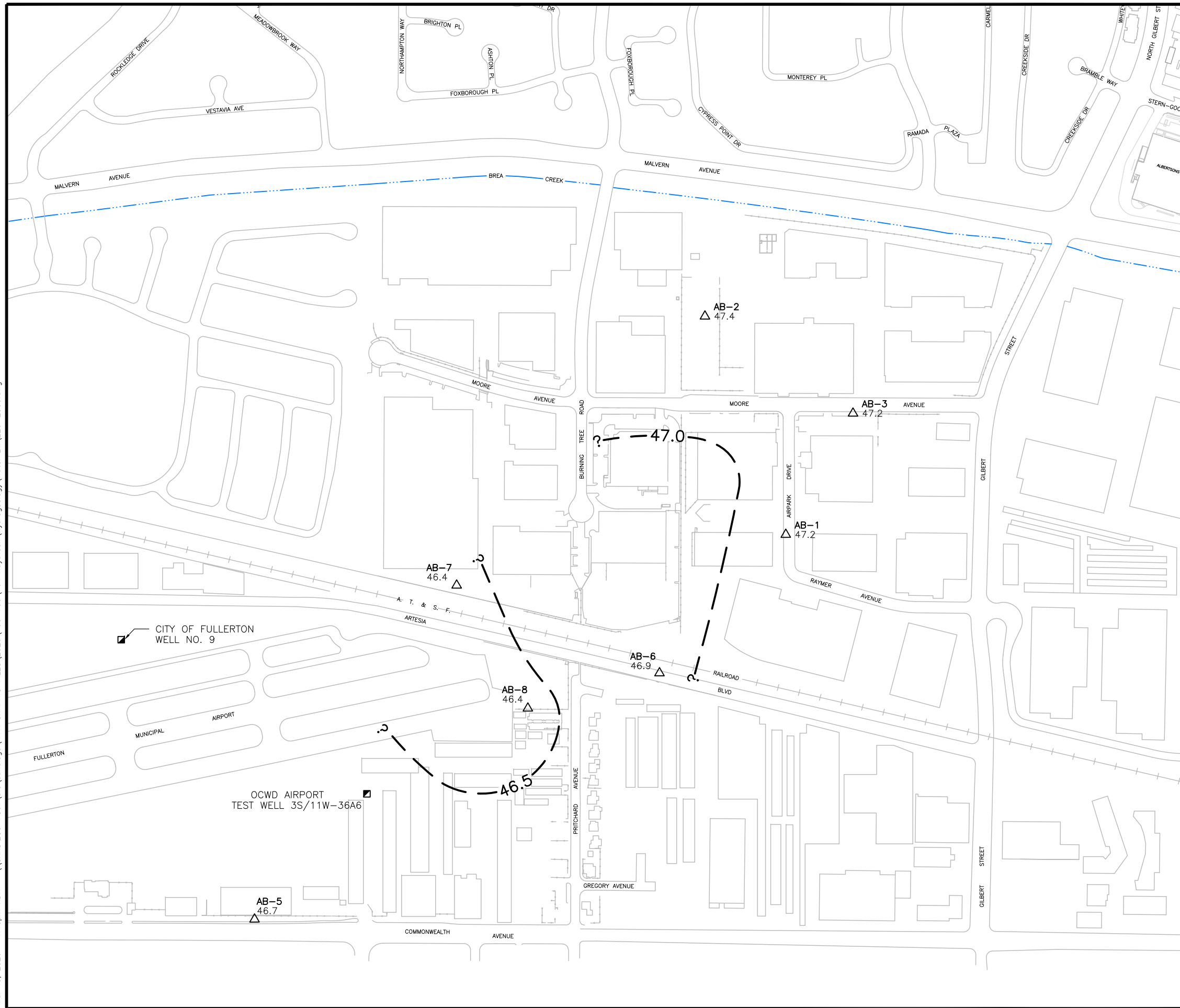
EXPLANATION

- △ AB-7 APPROXIMATE LOCATION OF A/B AQUITARD MONITOR WELL
- CITY OF FULLERTON APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL  
WELL No.9
- OCWD TEST WELL APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL  
3S/11W-36A6
- △ AB-1 WATER LEVEL ELEVATION IN FEET  
47.2
- — — — AT & SF RAILROAD

? ————— 47.0 — — — — ?  
 ? ————— 47.0 — — — — ?  
 ? ————— 47.0 — — — — ?

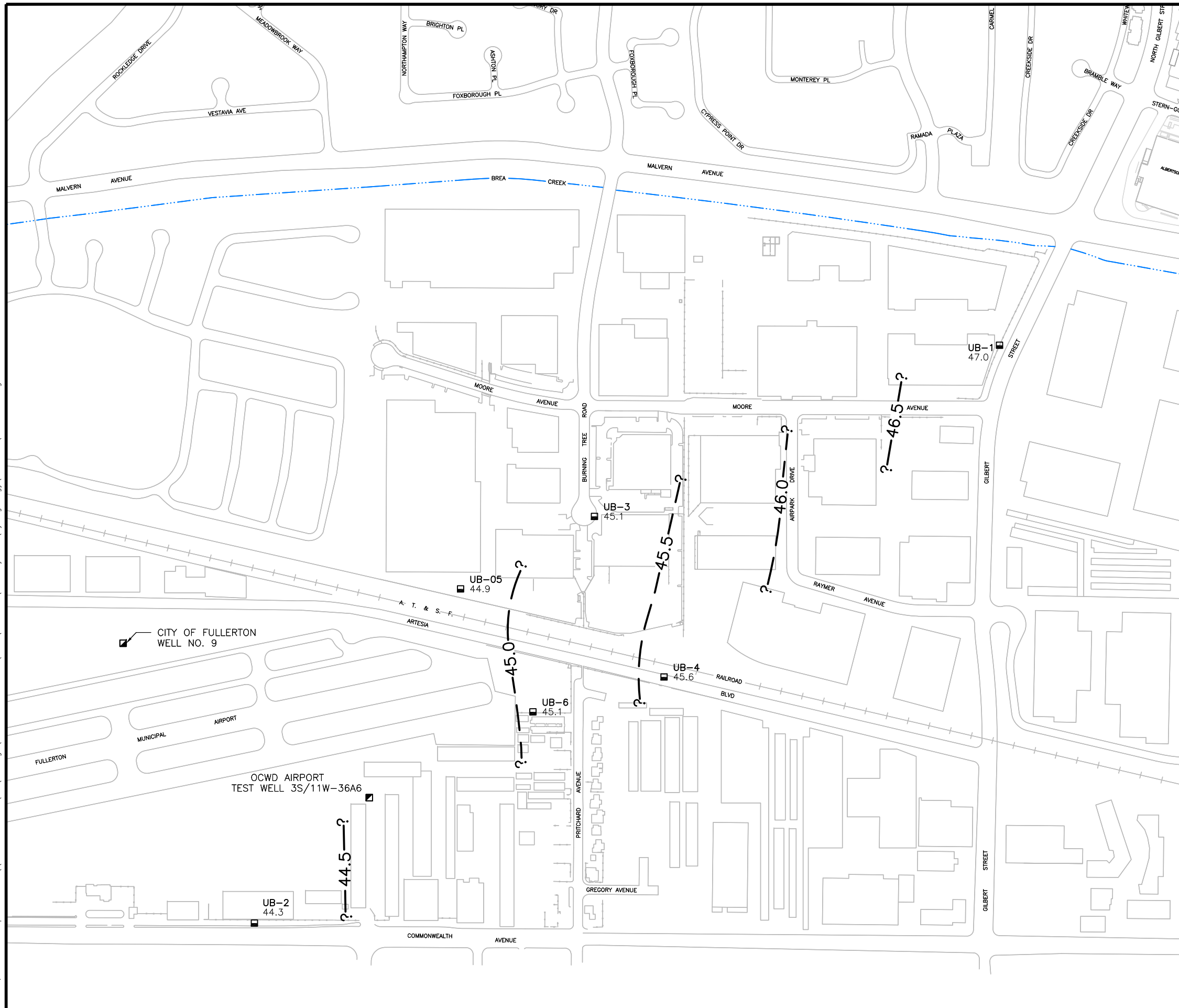
CONTour LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: WATER LEVELS MEASURED AUGUST 27, 2019



<b>RAYTHEON COMPANY</b> FULLERTON, CALIFORNIA		
<b>WATER LEVEL ELEVATIONS A/B AQUITARD AUGUST 2019</b>		
	<b>HARGIS+ASSOCIATES, INC.</b> Hydrogeology/Engineering	03/20
<b>FIGURE 7</b>		
PREP BY <u>AMJ</u> REV BY <u>NES</u> RPT NO. <u>764.10</u>		220-2509 <u>A</u>

Mar 12, 2020 - 4:17pm ADH - \\SANDIEGO-FS01\dfs\sandiego\H+A GRAPHIC-FILES\2020\700-799\764 Raytheon Hydrogeology\Water\_Lvl\220-2510.dwg



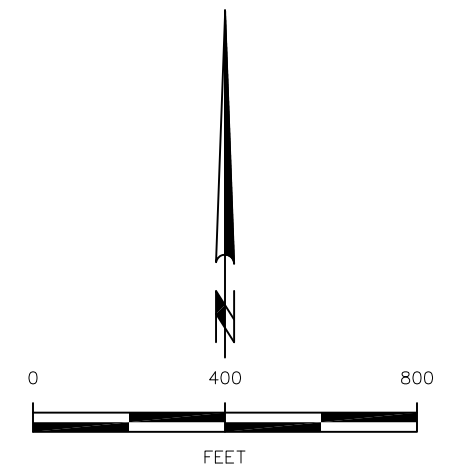
### EXPLANATION

- UB-3 APPROXIMATE LOCATION OF UNIT B MONITOR WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UB-1 WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL
- 47.0
- AT & SF RAILROAD

? ——— 45.0 ——— ——— ?

CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET MEAN SEA LEVEL DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: WATER LEVELS MEASURED AUGUST 27, 2019



RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

## WATER LEVEL ELEVATIONS UNIT B AUGUST 2019



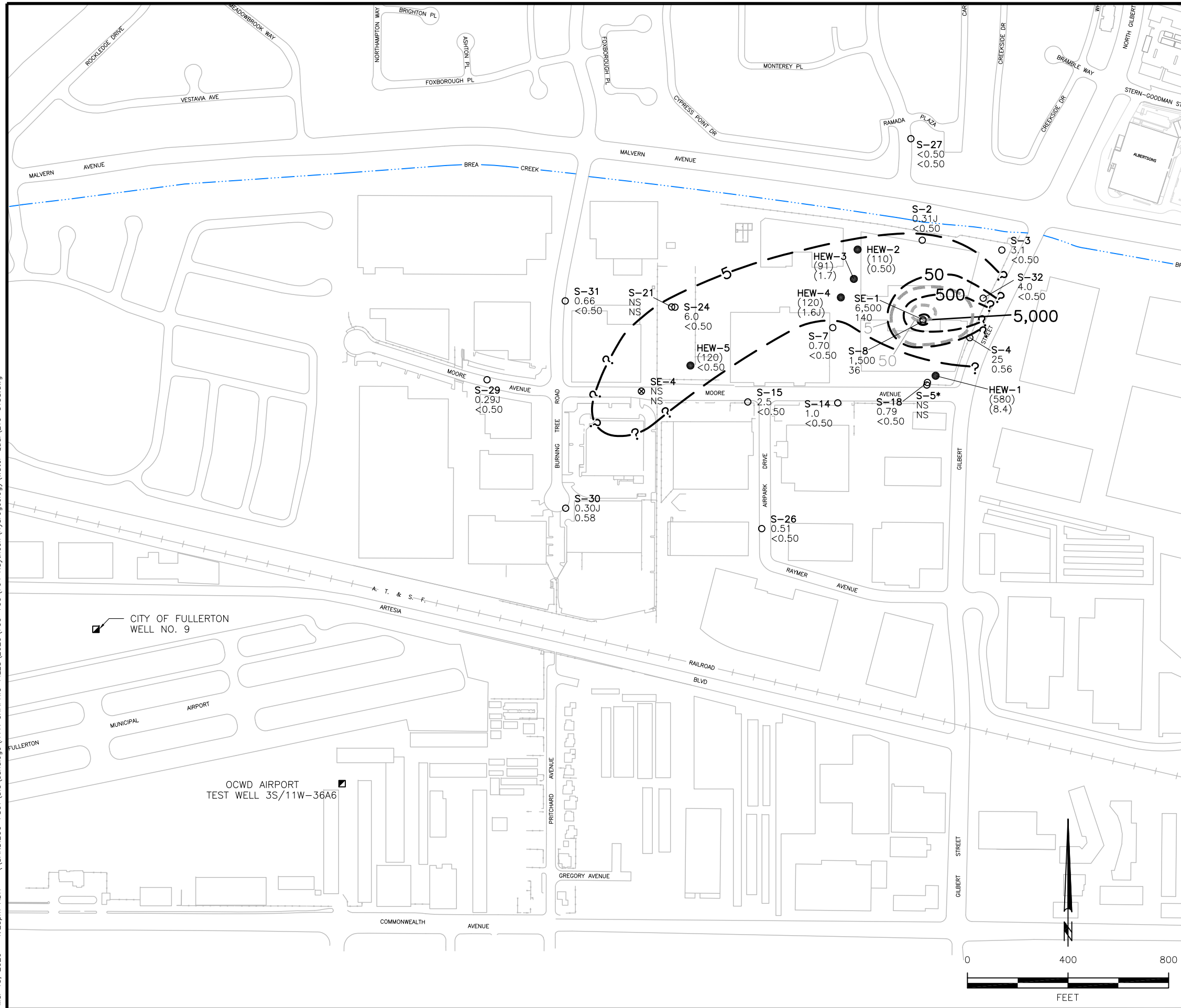
**HARGIS + ASSOCIATES, INC.**  
Hydrogeology/Engineering

03/20

FIGURE 8

PREP BY AMJ REV BY NES RPT NO. 764.10 220-2510 | A

Mar 13, 2020 - 1:23pm ADH - \\SANDIEGO-FS01\dfs\sandiego\H+A GRAPHIC-FILES\700-799\764 Raytheon\Hydrogeology\Water Qual\210-5138.dwg



**EXPLANATION**

- S-29 APPROXIMATE LOCATION OF SHALLOW ZONE MONITOR WELL
- ⊗ SE-4 APPROXIMATE LOCATION OF SHALLOW ZONE EXTRACTION WELL
- HEW-2 APPROXIMATE LOCATION OF SHALLOW ZONE HORIZONTAL EXTRACTION WELL
- (110) CONCENTRATION NOT CONTOURED
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- NS NOT SAMPLED
- \* WELL WAS SCHEDULED TO BE SAMPLED BUT NOT SAMPLED DUE TO INSUFFICIENT VOLUME OF WATER IN THE WELL
- SE-1 6,500 CONCENTRATION OF TRICHLOROETHYLENE (TCE) IN MICROGRAMS PER LITER (ug/l)
- 140 CONCENTRATION OF TETRACHLOROETHYLENE (PCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR THE SPECIFIED ANALYSIS
- J ESTIMATED CONCENTRATION
- +—+—+—+— AT & SF RAILROAD
- ? — — — — 50 — — — — ?  
 CONTOUR LINE OF EQUAL CONCENTRATION OF TCE IN ug/l  
 DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED
- ? — — — — 5 — — — — ?  
 CONTOUR LINE OF EQUAL CONCENTRATION OF PCE IN ug/l  
 DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED
- NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019  
 ANALYSES PERFORMED BY EUROFINIS CALSCIENCE, INC.  
 GARDEN GROVE, CALIFORNIA

RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**TRICHLOROETHYLENE AND  
TETRACHLOROETHYLENE  
SHALLOW ZONE, AUGUST 2019**

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HARGIS+ASSOCIATES, INC.  
Hydrogeology/Engineering
03/20

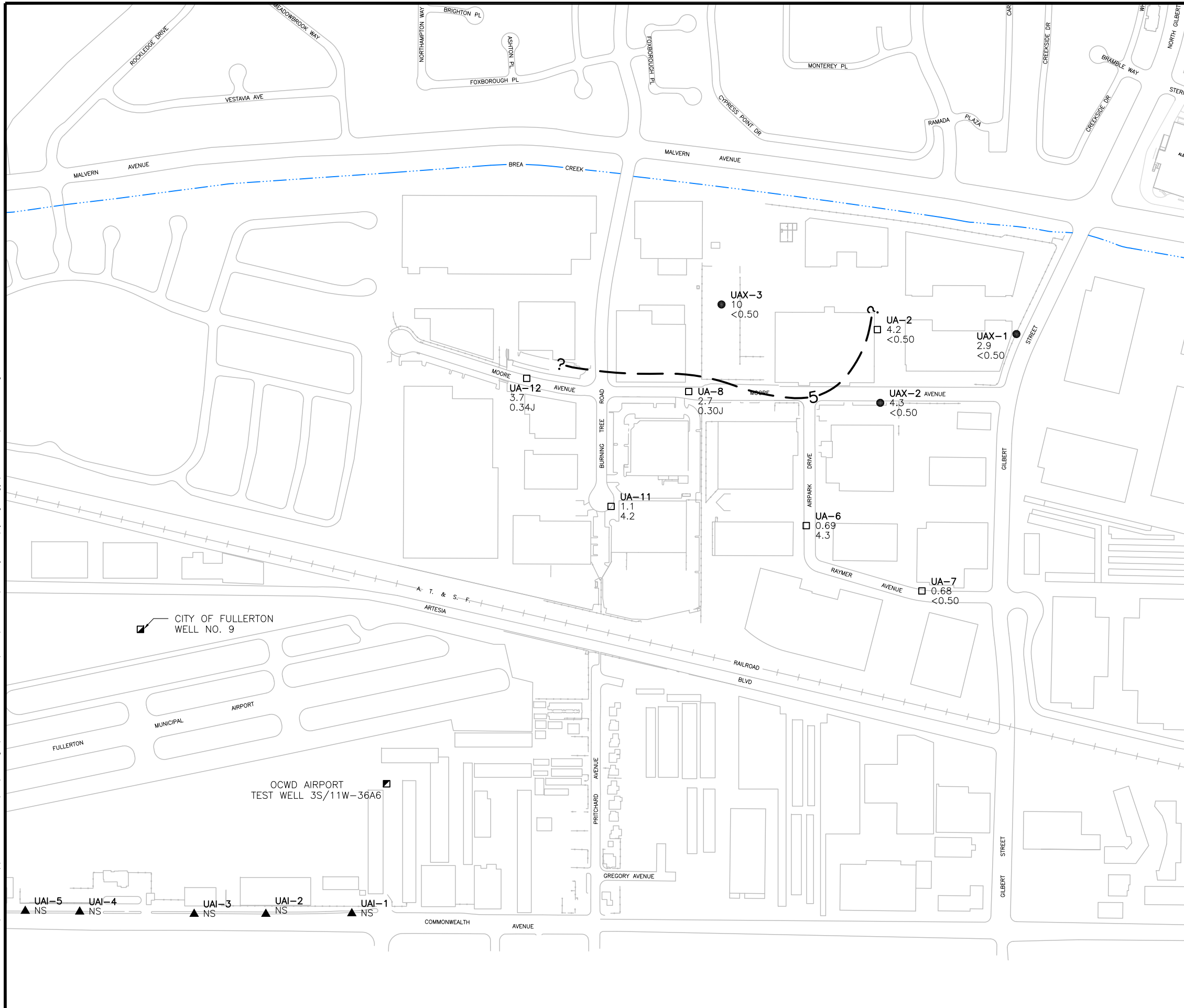
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FIGURE 9

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PREP BY AMJ REV BY TJE RPT NO. 764.11
210-5138
A

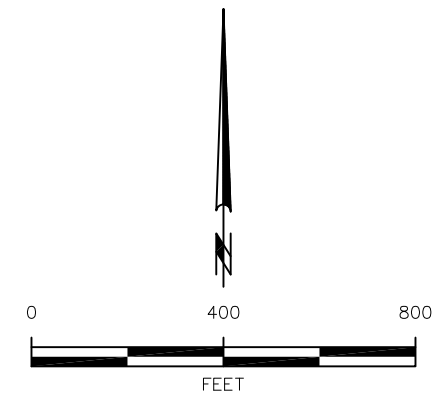
Mar 13, 2020 - 1:27pm ADH - \\SANDIEGO-FS01\dfs\sandiego\H+A GRAPHIC-FILES\2020\700-799\764 Raytheon Hydrogeology\Water Qual\210-5139.dwg



### EXPLANATION

- UA-12 APPROXIMATE LOCATION OF UPPER UNIT A MONITOR WELL
- UAX-3 APPROXIMATE LOCATION OF UPPER UNIT A EXTRACTION WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UA-2 4.2 CONCENTRATION OF TRICHLOROETHYLENE (TCE) IN MICROGRAMS PER LITER (ug/l)
- <0.50 CONCENTRATION OF TETRACHLOROETHYLENE (PCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR THE SPECIFIED ANALYSIS
- NS NOT SAMPLED
- J ESTIMATED CONCENTRATION
- AT & SF RAILROAD
- ? --- 5 --- ? CONTOUR LINE OF EQUAL CONCENTRATION OF TCE IN ug/l  
DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019 ANALYSES PERFORMED BY EUROFINIS CALSCIENCE, INC. GARDEN GROVE, CALIFORNIA



RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**TRICHLOROETHYLENE AND  
TETRACHLOROETHYLENE  
UPPER UNIT A, AUGUST 2019**

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HARGIS + ASSOCIATES, INC.  
 Hydrogeology/Engineering

03/20

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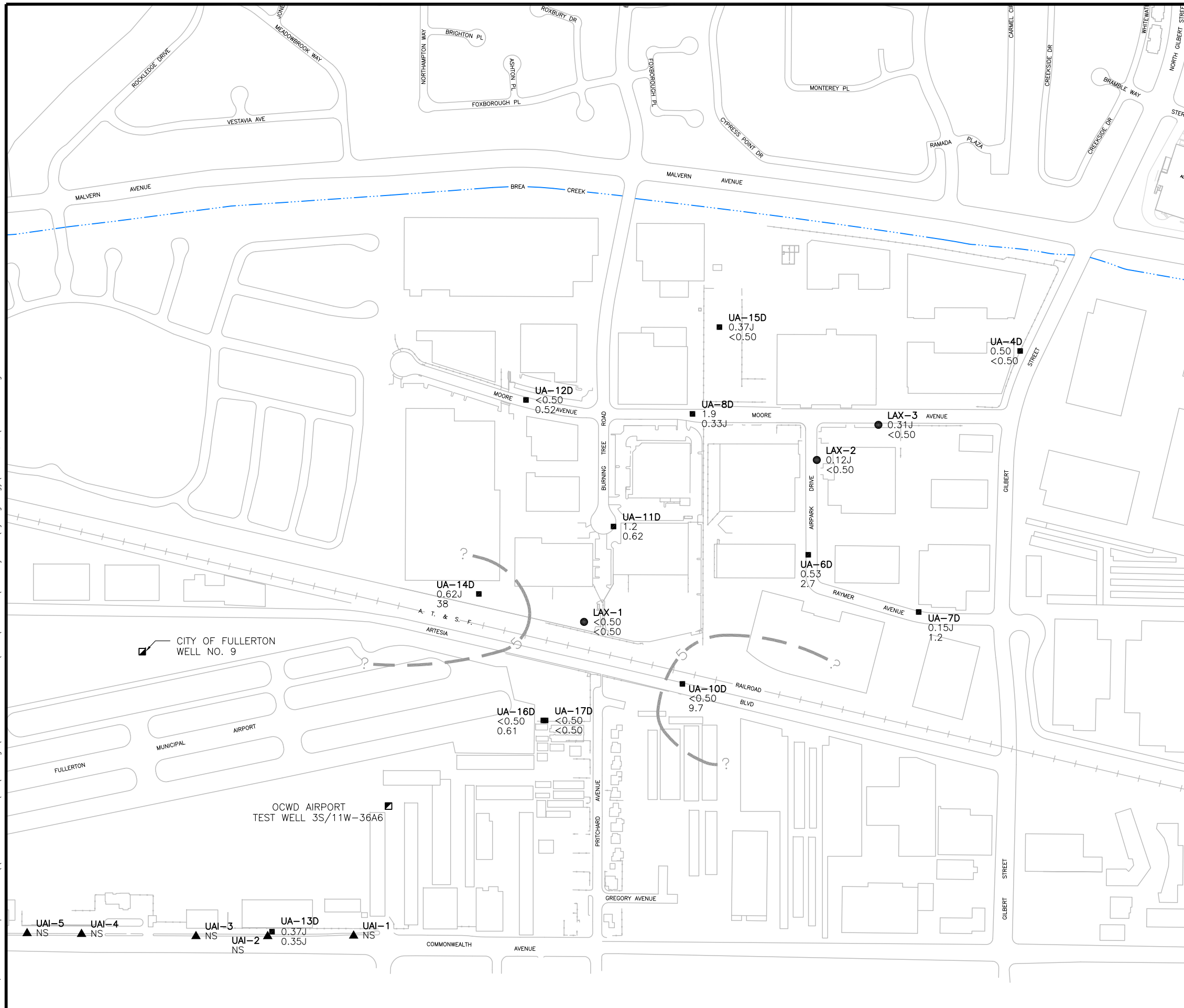
FIGURE 10

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PREP BY AMJ REV BY TJE RPT NO. 764.11 210-5139 A



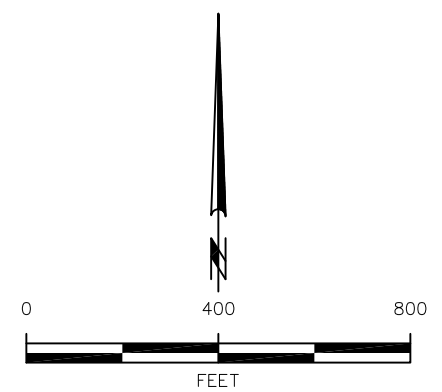
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### EXPLANATION

- UA-6D APPROXIMATE LOCATION OF LOWER UNIT A MONITOR WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- LAX-2 APPROXIMATE LOCATION OF LOWER UNIT A EXTRACTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UA-8D 1.9 CONCENTRATION OF TRICHLOROETHYLENE (TCE) IN MICROGRAMS PER LITER (ug/l)
- 0.33J CONCENTRATION OF TETRACHLOROETHYLENE (PCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR THE SPECIFIED ANALYSIS
- NS NOT SAMPLED
- +—+—+— AT & SF RAILROAD
- ? - - - 5 - - - ? CONTOUR LINE OF EQUAL CONCENTRATION OF PCE IN ug/l  
DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019  
ANALYSES PERFORMED BY EUROFINs CALSCIENCE, INC.  
GARDEN GROVE, CALIFORNIA



RAYTHEON COMPANY  
FULLERTON, CALIFORNIA

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**TRICHLOROETHYLENE AND  
TETRACHLOROETHYLENE  
LOWER UNIT A, AUGUST 2019**

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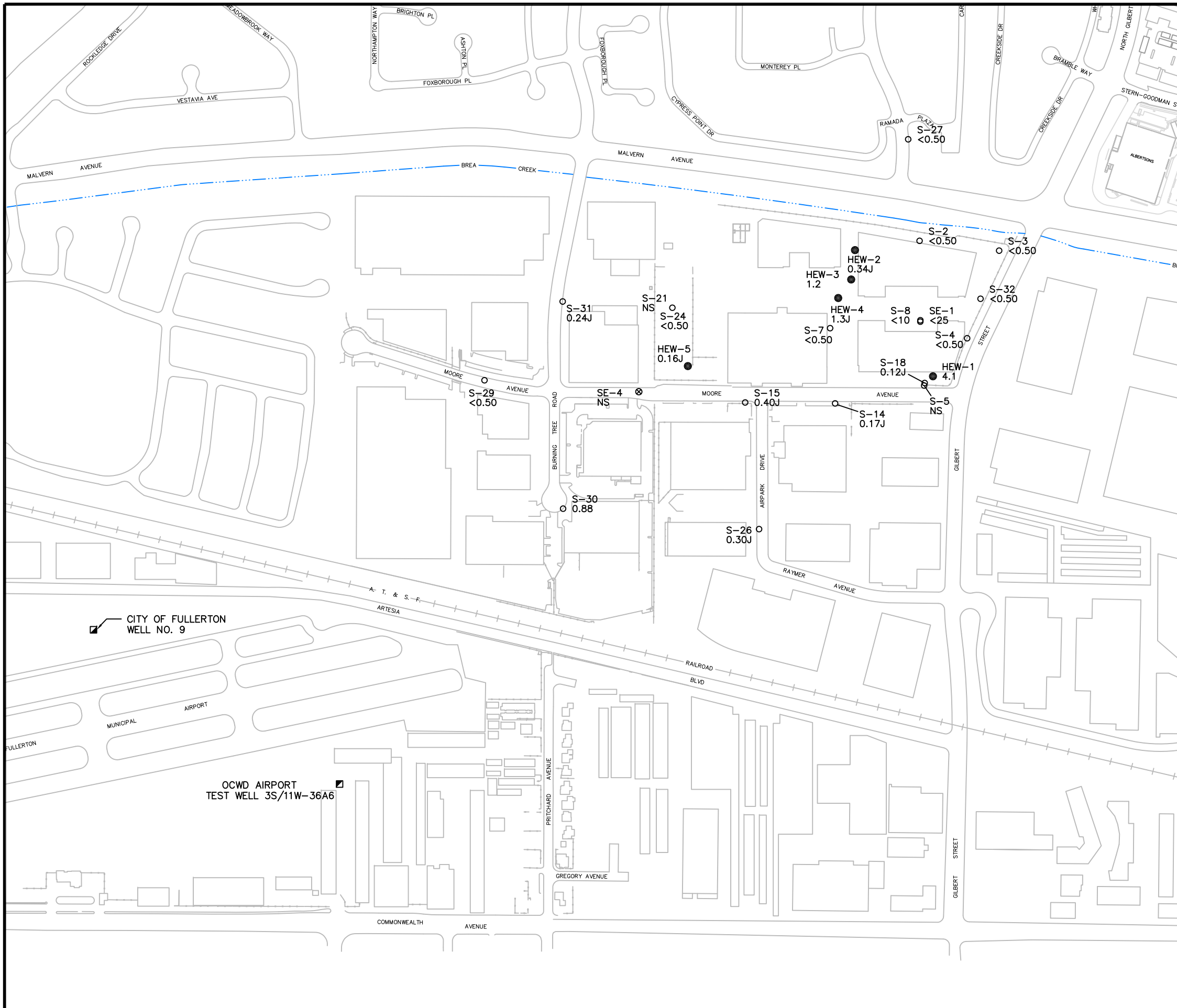
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Hydrogeology/Engineering
03/20

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FIGURE 11

PREP BY AMJ REV BY TJE RPT NO. 764.11 210-5140 A

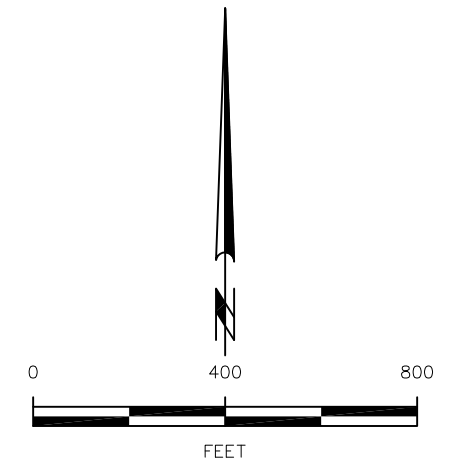
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**EXPLANATION**

- S-29 APPROXIMATE LOCATION OF SHALLOW ZONE MONITOR WELL
- ⊗ SE-4 APPROXIMATE LOCATION OF SHALLOW ZONE EXTRACTION WELL
- HEW-5 APPROXIMATE LOCATION OF SHALLOW ZONE HORIZONTAL EXTRACTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- S-24 <0.50 CONCENTRATION OF 1,1-DICHLOROETHYLENE (1,1-DCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR 1,1-DCE
- NS NOT SAMPLED
- J ESTIMATED CONCENTRATION
- AT & SF RAILROAD

NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019  
 ANALYSES PERFORMED BY EUROFINS CALSCIENCE, INC.  
 GARDEN GROVE, CALIFORNIA



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FULLERTON, CALIFORNIA

**1,1-DICHLOROETHYLENE  
 SHALLOW ZONE  
 AUGUST 2019**



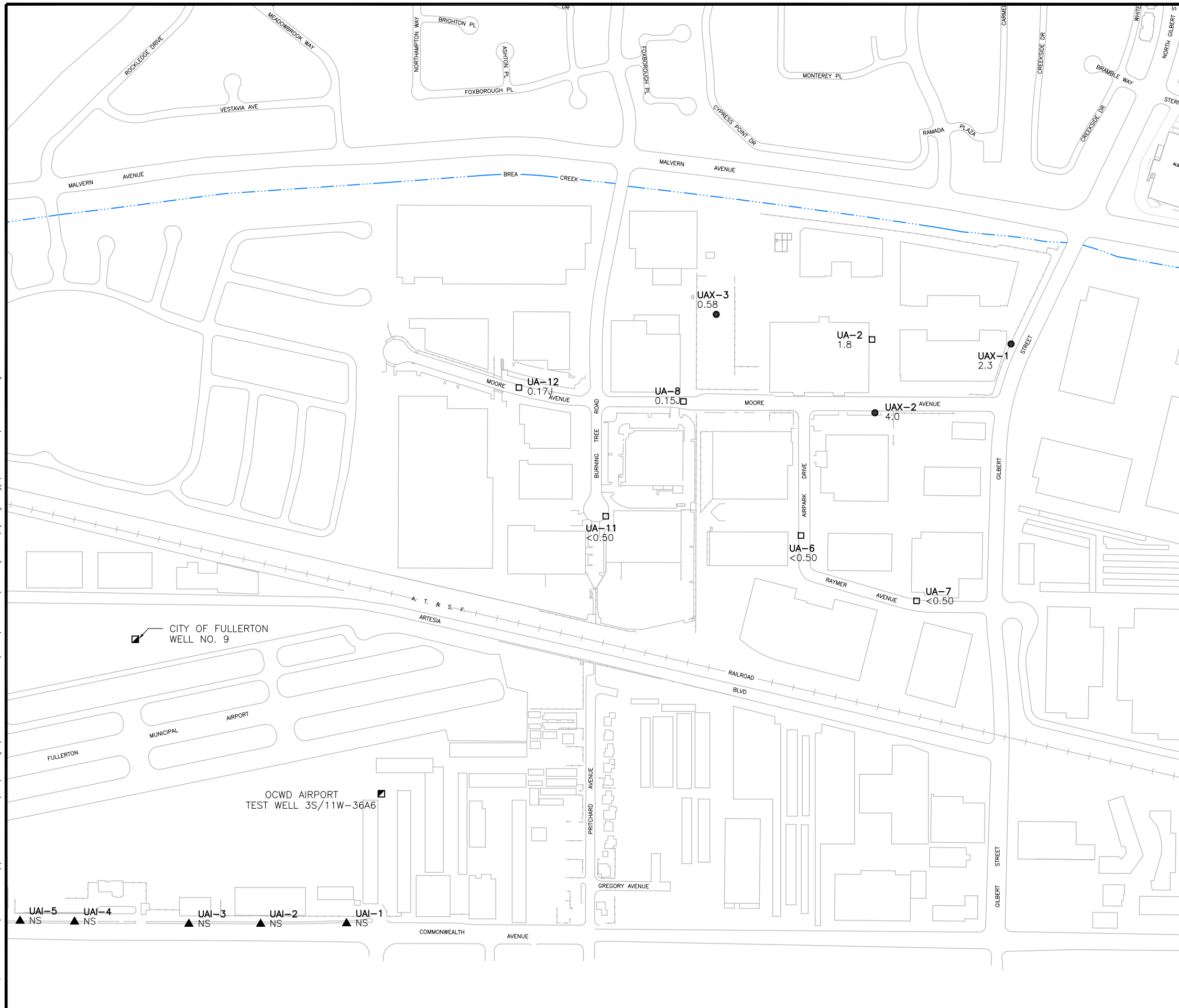
HARGIS+ASSOCIATES, INC.  
 Hydrogeology/Engineering

03/20

FIGURE 12

PREP BY AMJ REV BY TJE RPT NO. 764.11 210-5141 A

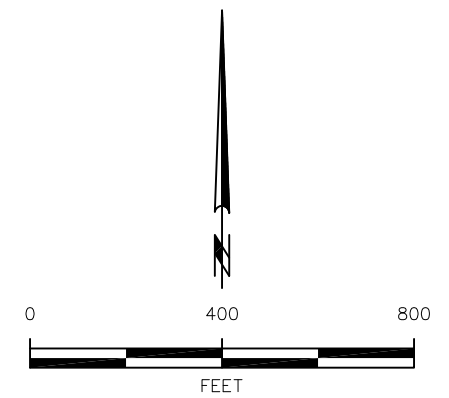
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### EXPLANATION

- UA-12 APPROXIMATE LOCATION OF UPPER UNIT A MONITOR WELL
- UAX-3 APPROXIMATE LOCATION OF UPPER UNIT A EXTRACTION WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- UAX-1 2.3 CONCENTRATION OF 1,1-DICHLOROETHYLENE (1,1-DCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR 1,1-DCE
- NS NOT SAMPLED
- J ESTIMATED CONCENTRATION
- +—+—+—+— AT & SF RAILROAD

NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019  
 ANALYSES PERFORMED BY EUROFINIS CALSCIENCE, INC.  
 GARDEN GROVE, CALIFORNIA



RAYTHEON COMPANY  
 FULLERTON, CALIFORNIA

## 1,1-DICHLOROETHYLENE UPPER UNIT A AUGUST 2019



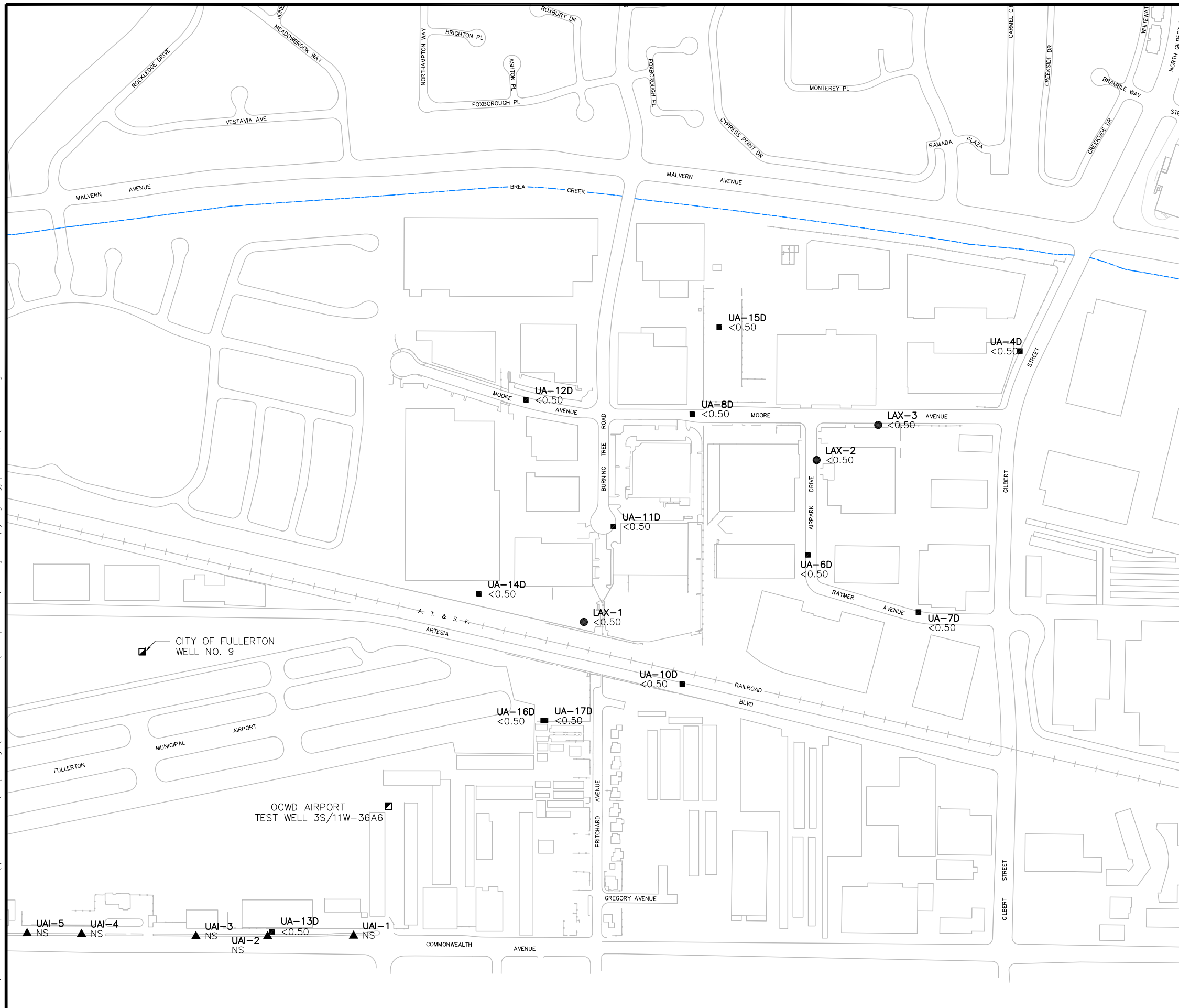
**HARGIS+ASSOCIATES, INC.**  
 Hydrogeology/Engineering

03/20

FIGURE 13

PREP BY AMJ REV BY TJE RPT NO. 764.11 210-5142 A

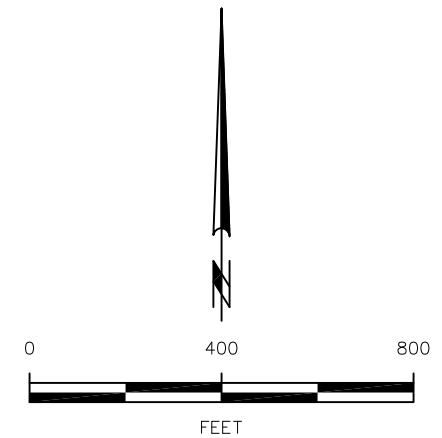
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### EXPLANATION

- UA-6D APPROXIMATE LOCATION OF LOWER UNIT A MONITOR WELL
- ▲ UAI-2 APPROXIMATE LOCATION OF UNIT A INJECTION WELL
- LAX-2 APPROXIMATE LOCATION OF LOWER UNIT A EXTRACTION WELL
- CITY OF FULLERTON WELL No.9 APPROXIMATE LOCATION OF CITY OF FULLERTON PRODUCTION WELL
- OCWD TEST WELL 3S/11W-36A6 APPROXIMATE LOCATION OF ORANGE COUNTY WATER DISTRICT TEST WELL
- LAX-2 <0.50 CONCENTRATION OF 1,1-DICHLOROETHYLENE (1,1-DCE) IN MICROGRAMS PER LITER (ug/l)
- < LESS THAN; NUMERICAL VALUE IS THE REPORTING LIMIT FOR 1,1-DCE
- NS NOT SAMPLED
- +—+—+—+— AT & SF RAILROAD

NOTE: GROUNDWATER SAMPLES COLLECTED AUGUST 2019  
 ANALYSES PERFORMED BY EUROFINS CALSCIENCE, INC.  
 GARDEN GROVE, CALIFORNIA



RAYTHEON COMPANY  
 FULLERTON, CALIFORNIA

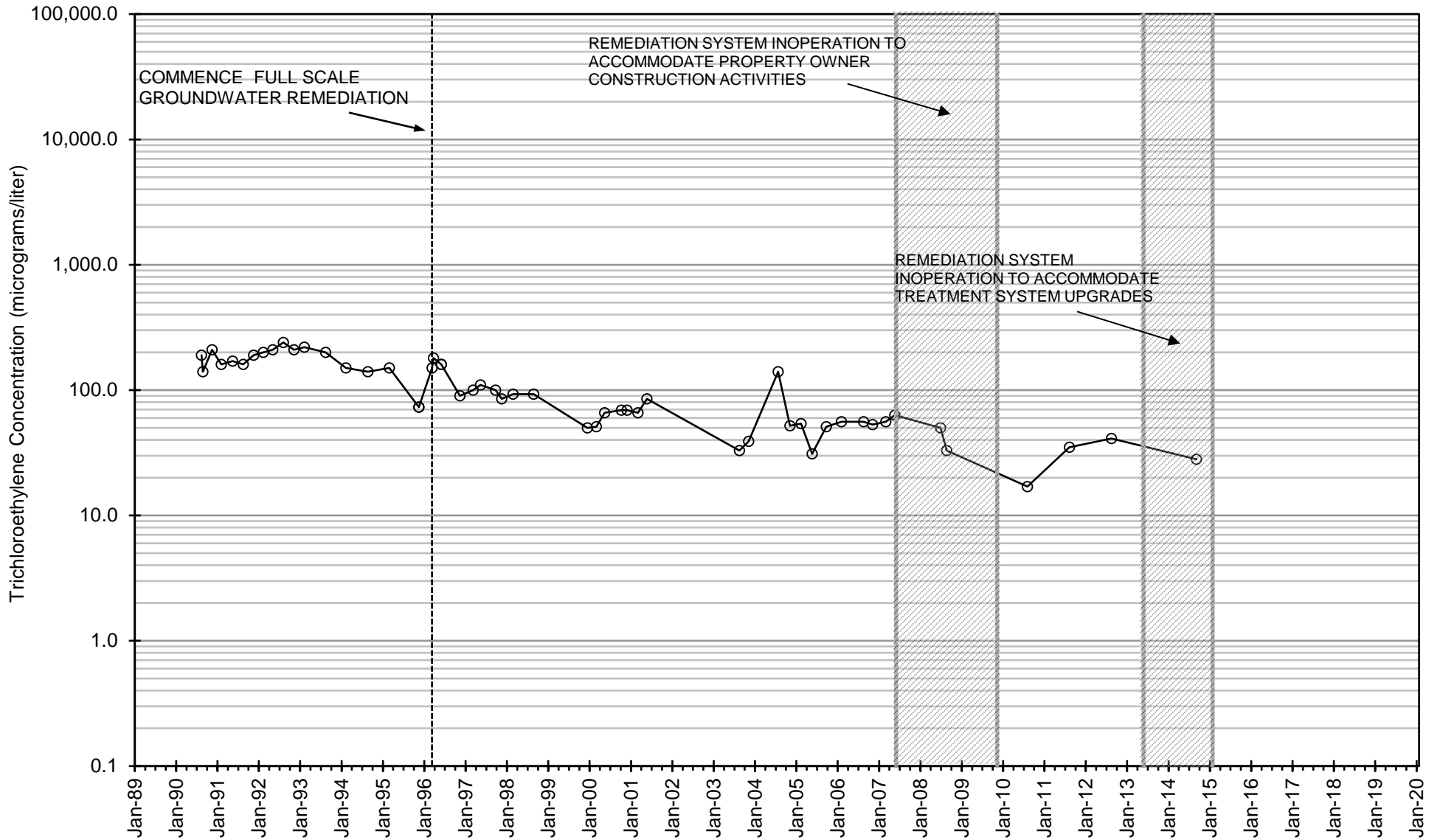
### 1,1-DICHLOROETHYLENE LOWER UNIT A AUGUST 2019



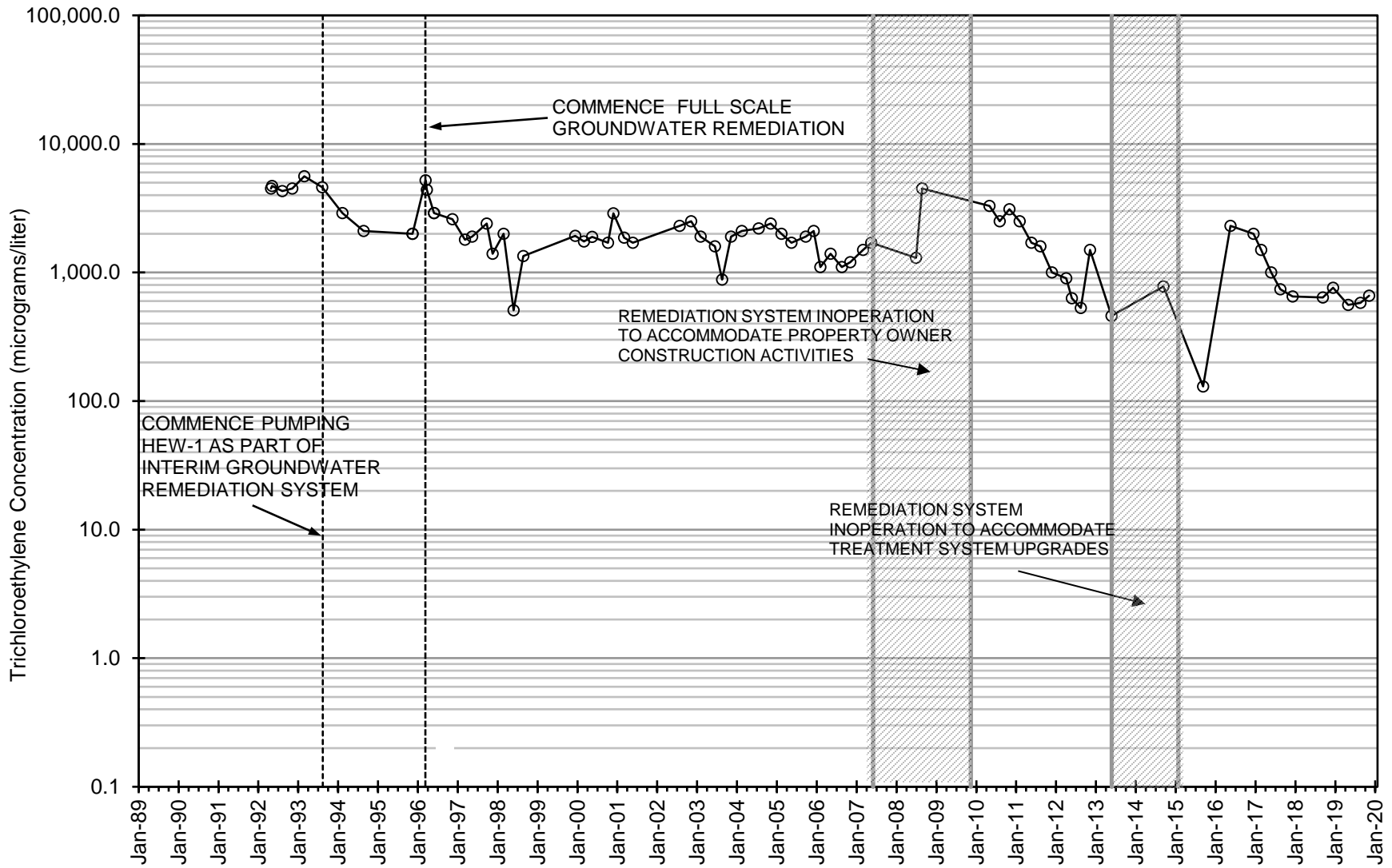
**HARGIS+ASSOCIATES, INC.**  
 Hydrogeology/Engineering

03/20

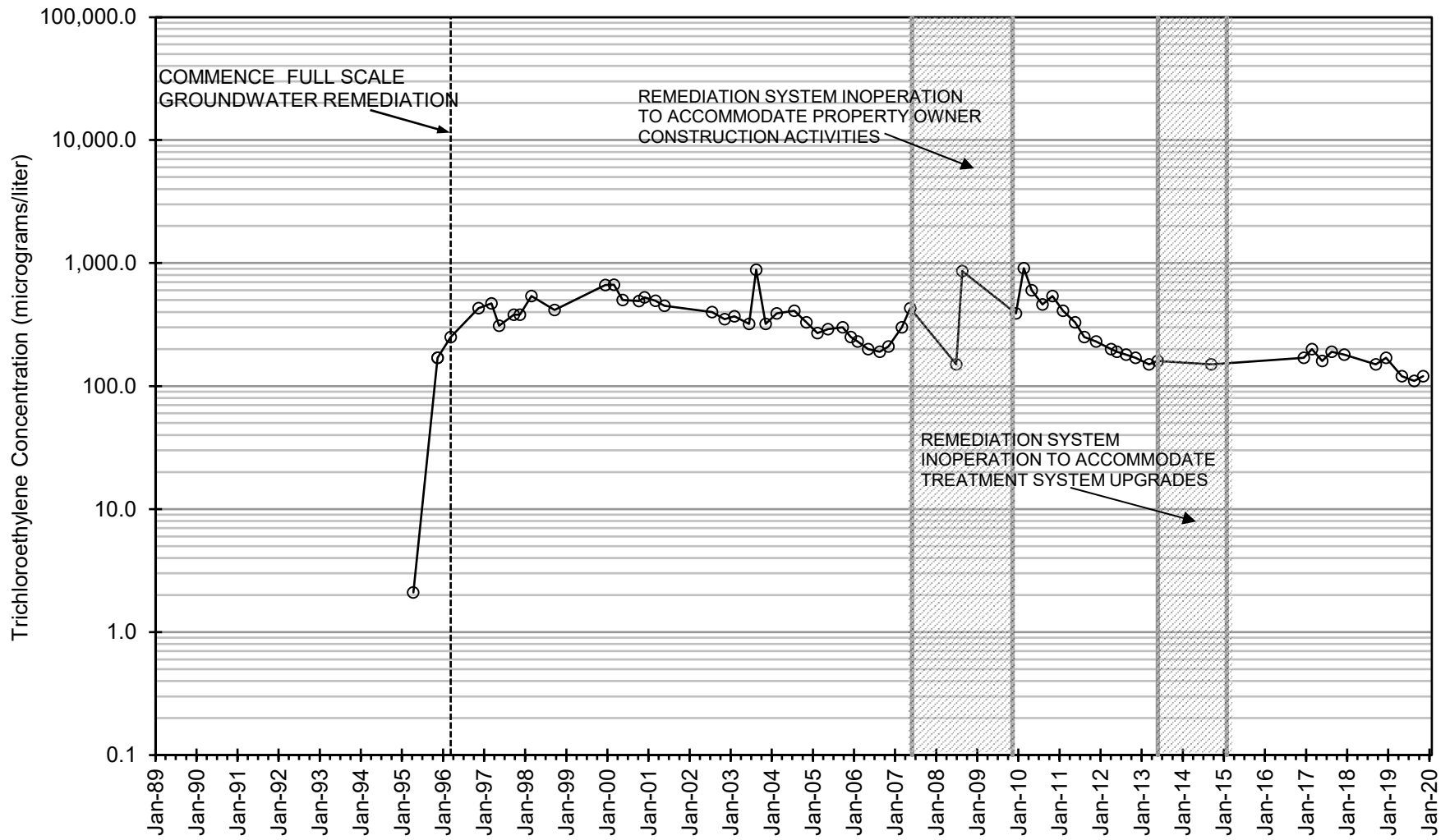
FIGURE 14



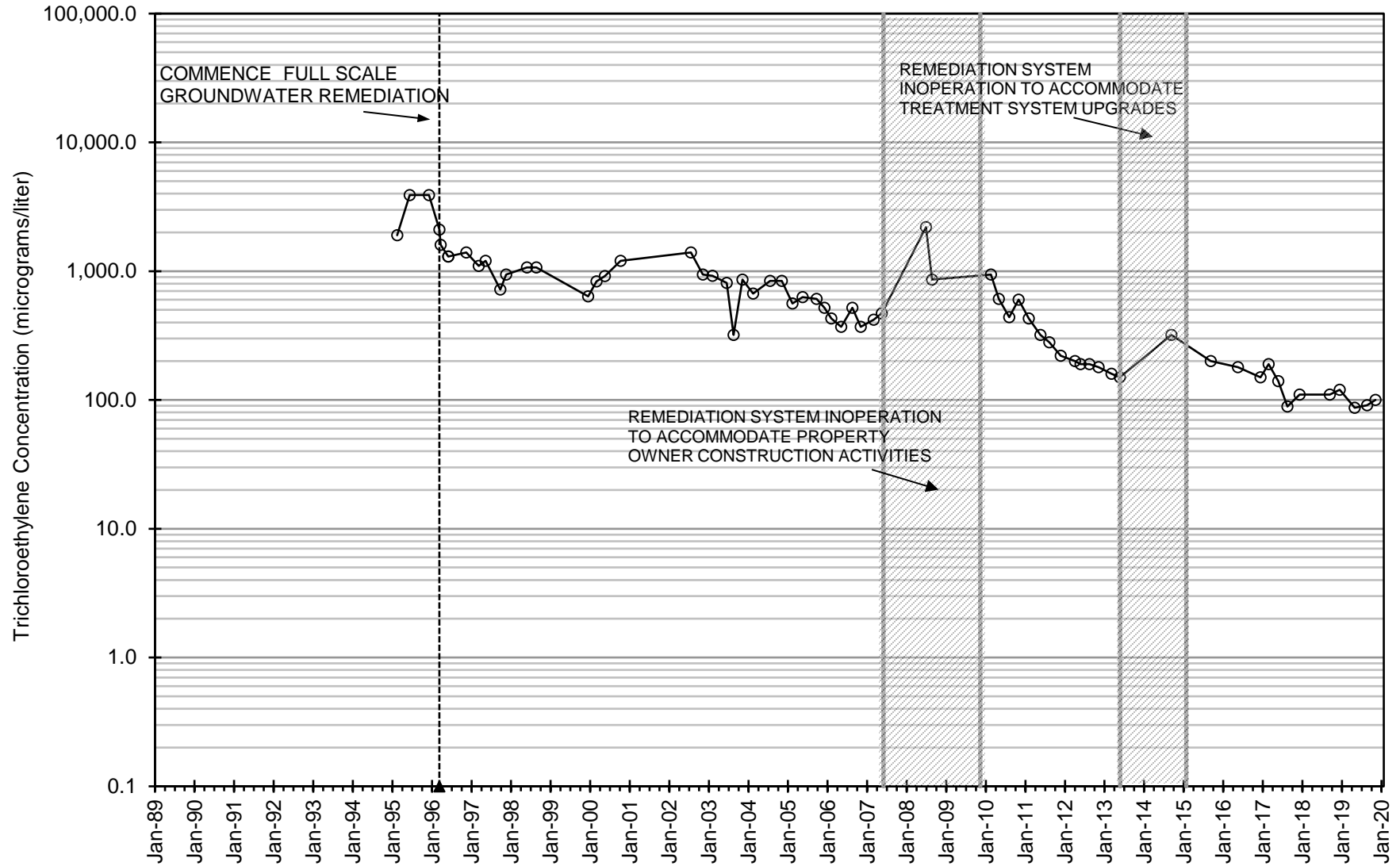
**FIGURE 15. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL SE-04**



**FIGURE 16. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL HEW-01**

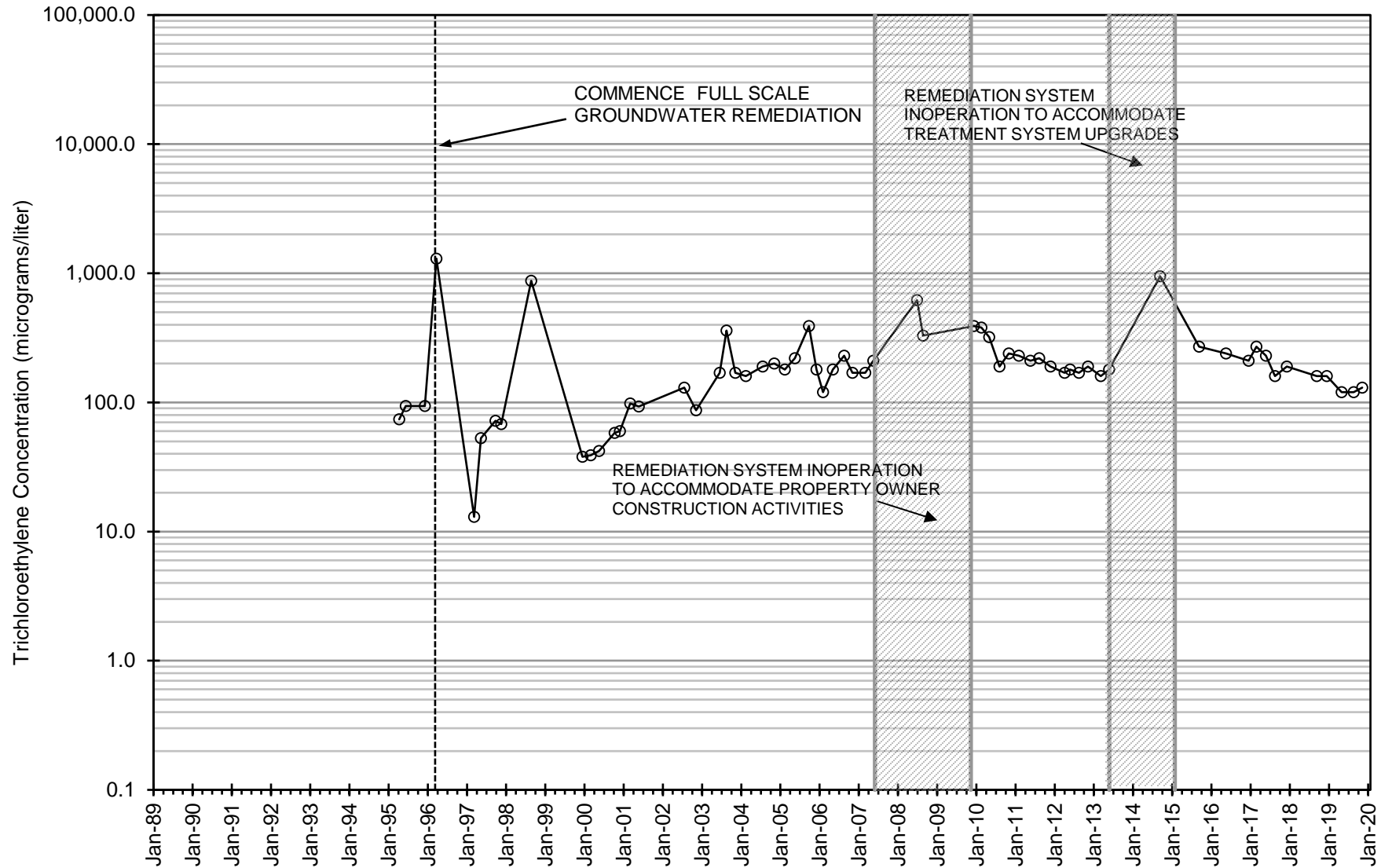


**FIGURE 17. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL HEW-02**

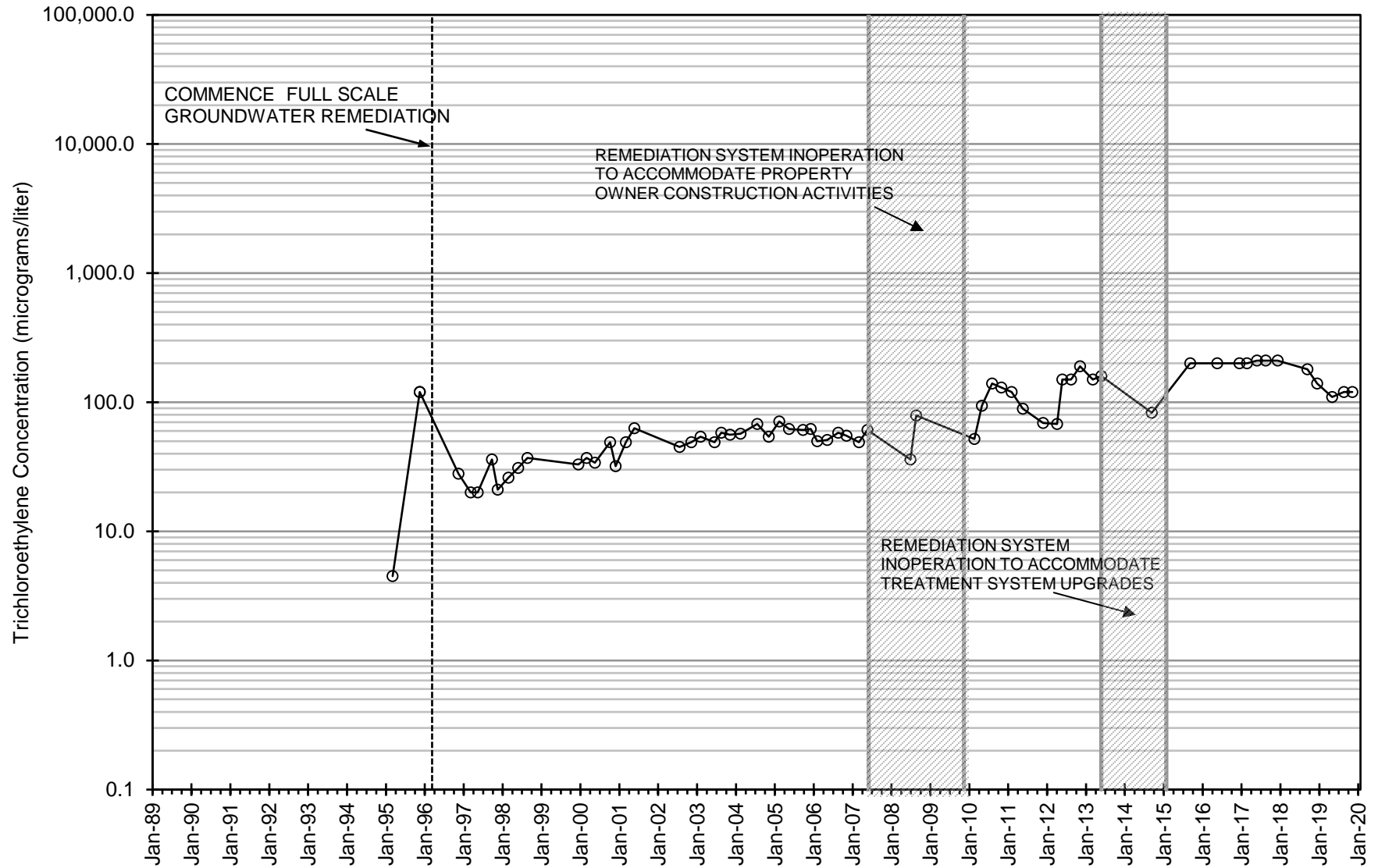


**FIGURE 18. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL HEW-03**

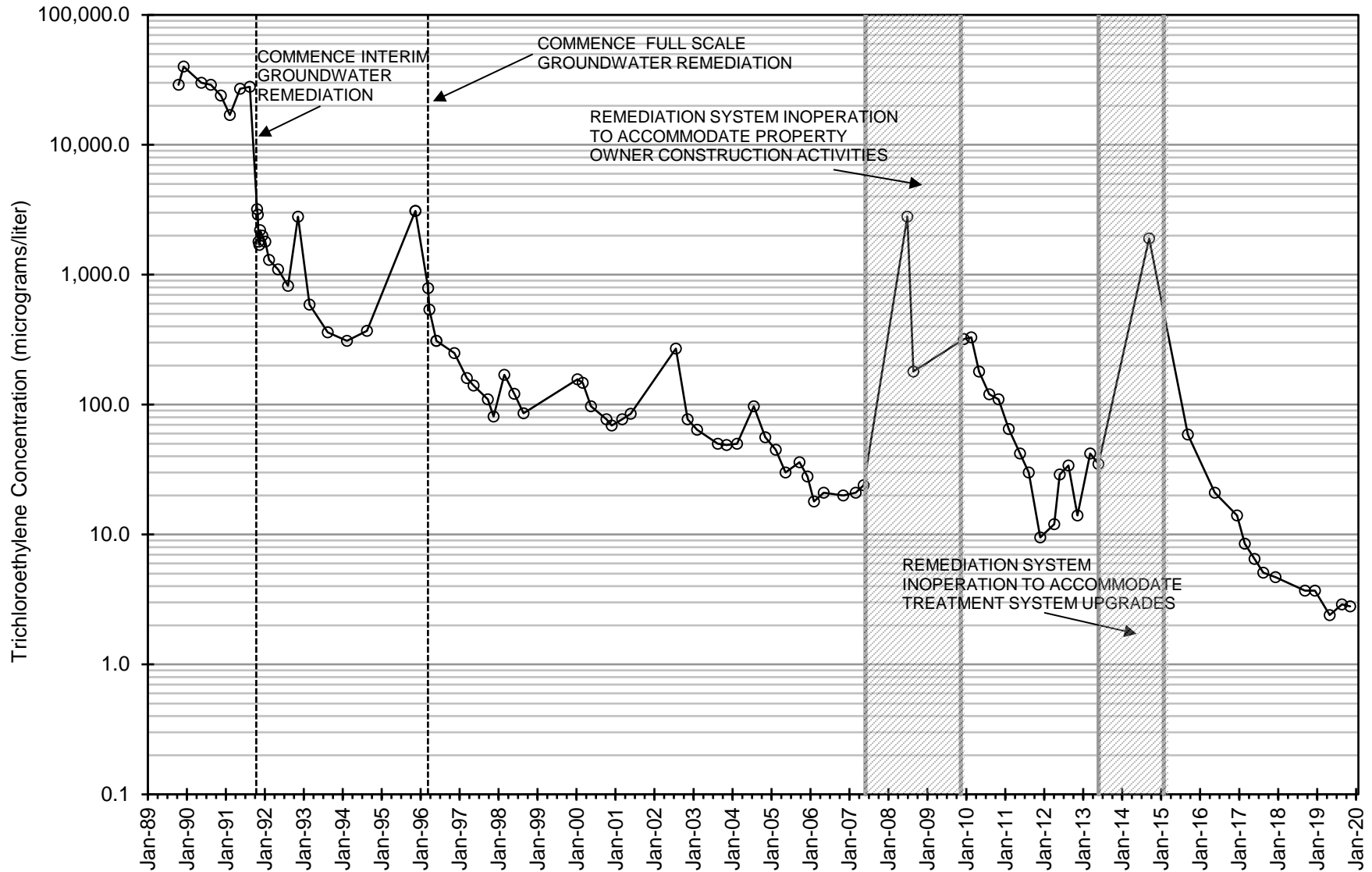




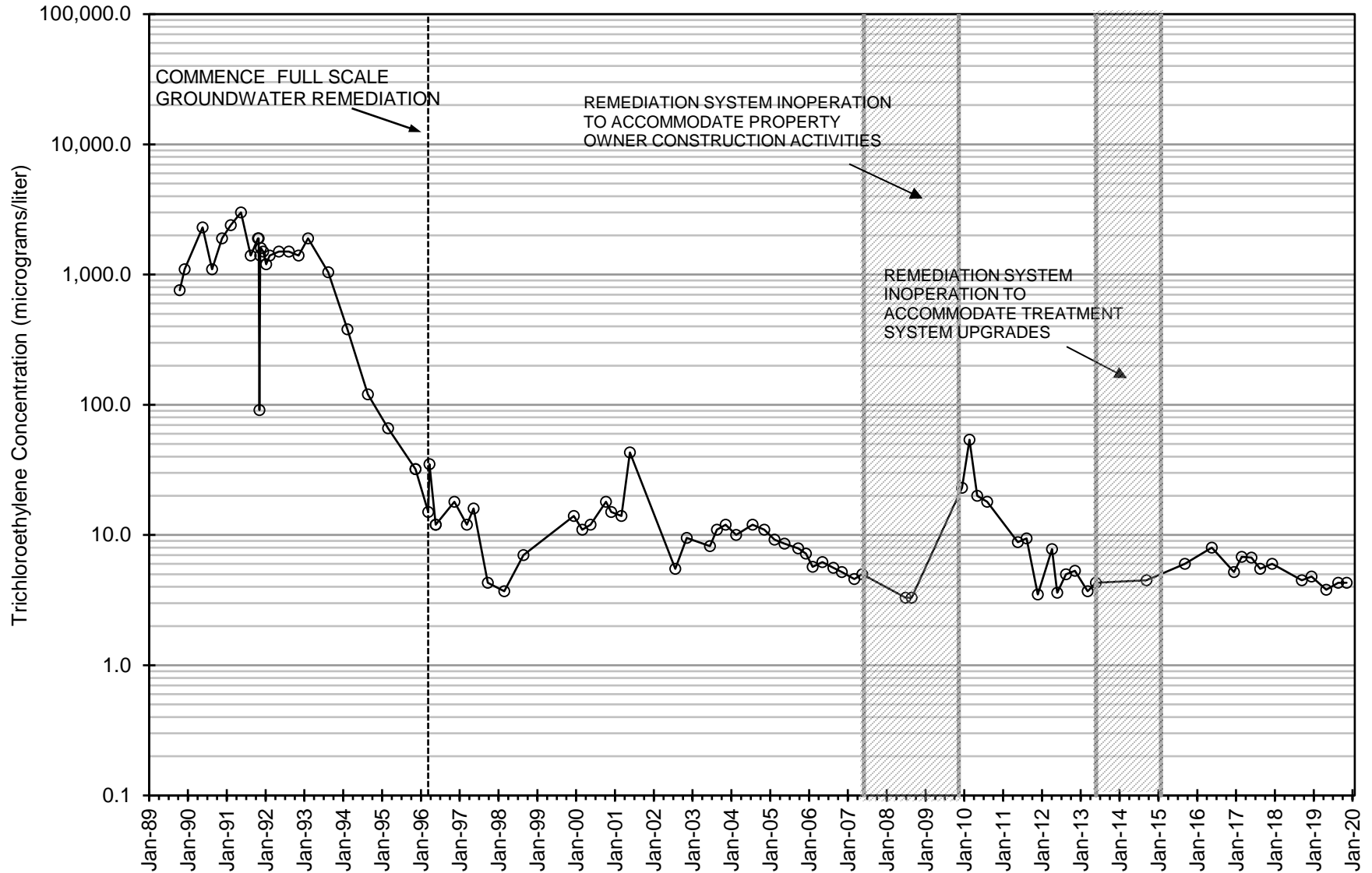
**FIGURE 19. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL HEW-04**



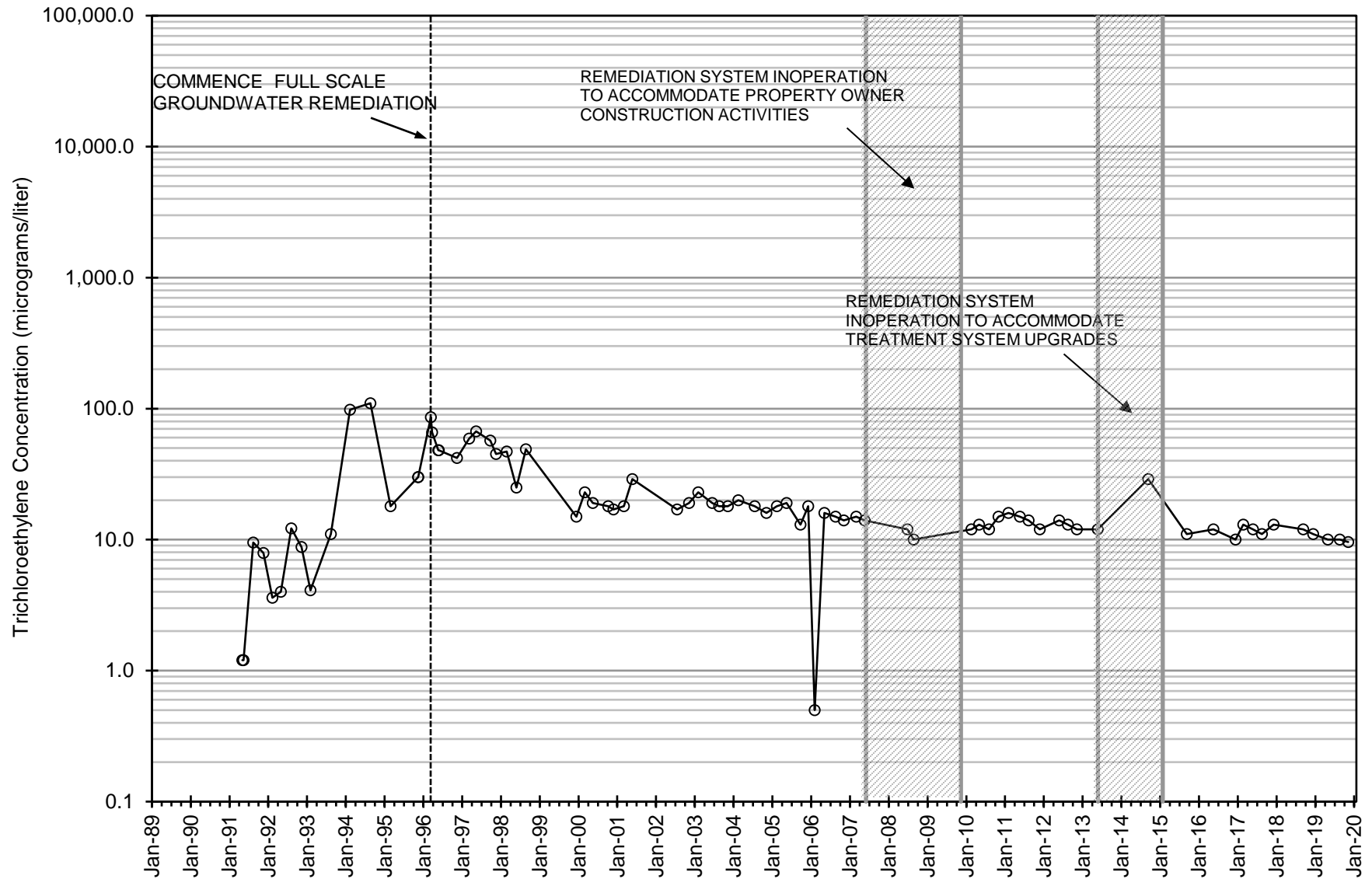
**FIGURE 20. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL HEW-05**



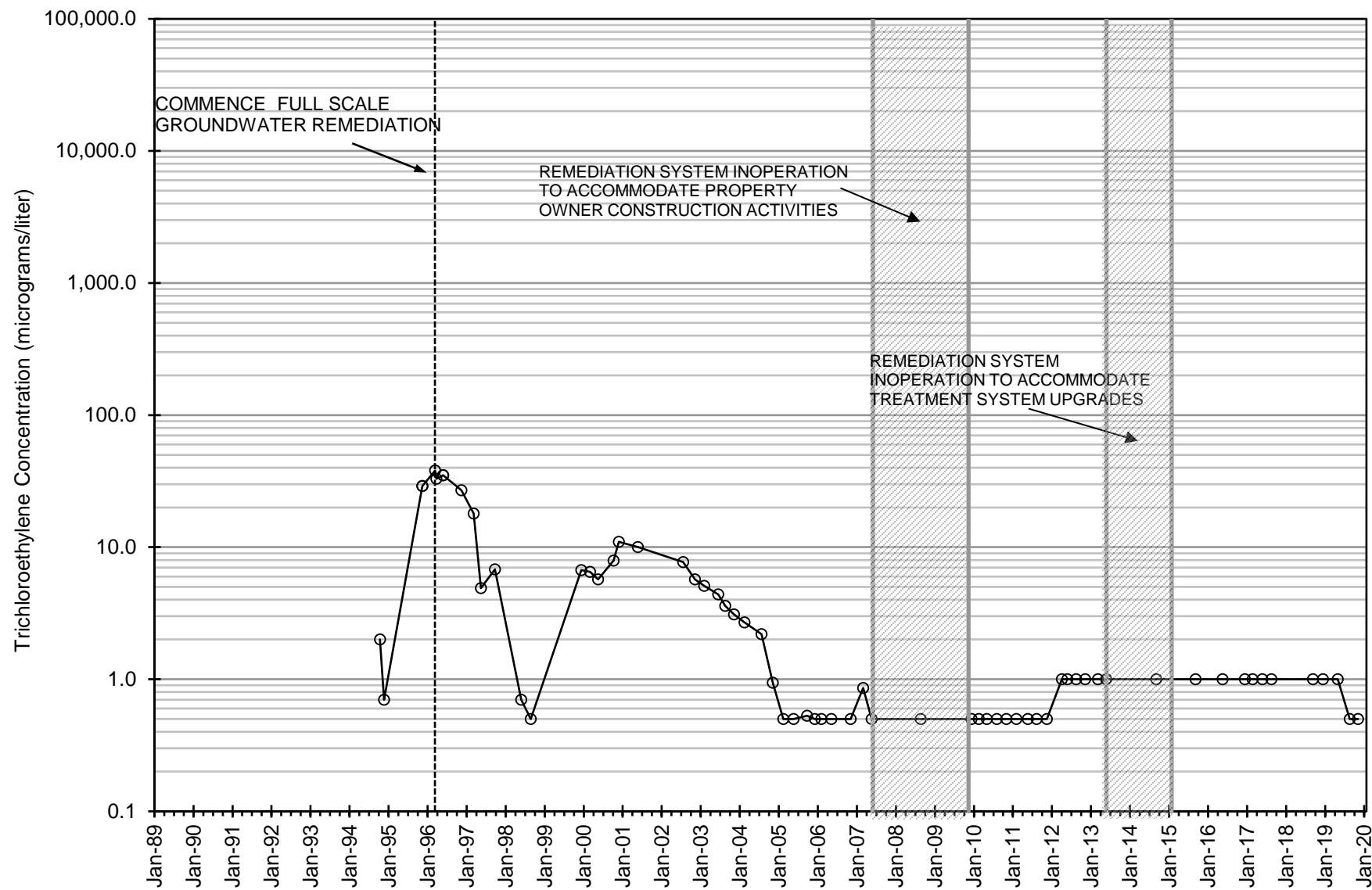
**FIGURE 21. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL UAX-01**



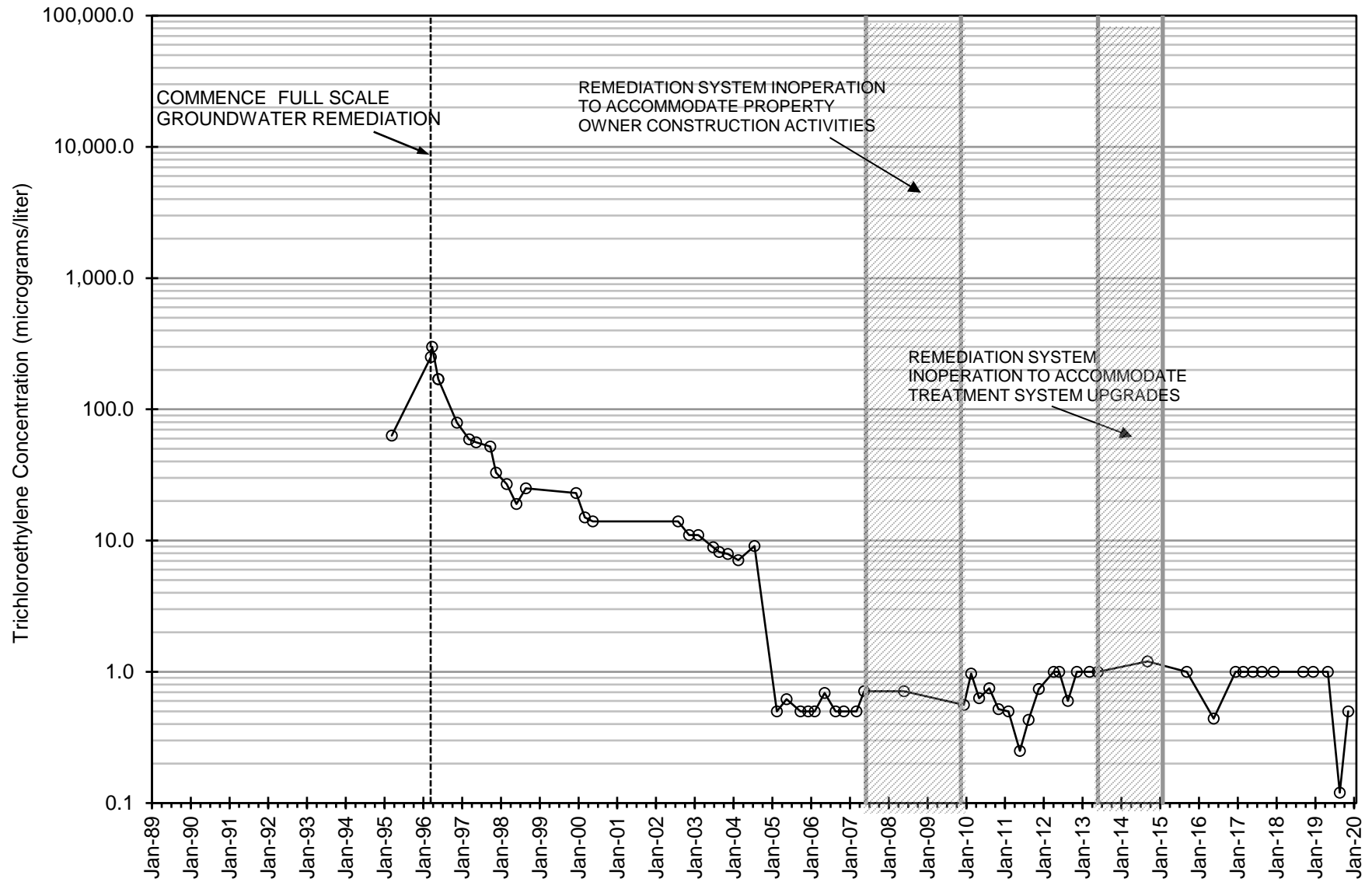
**FIGURE 22. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL UAX-02**



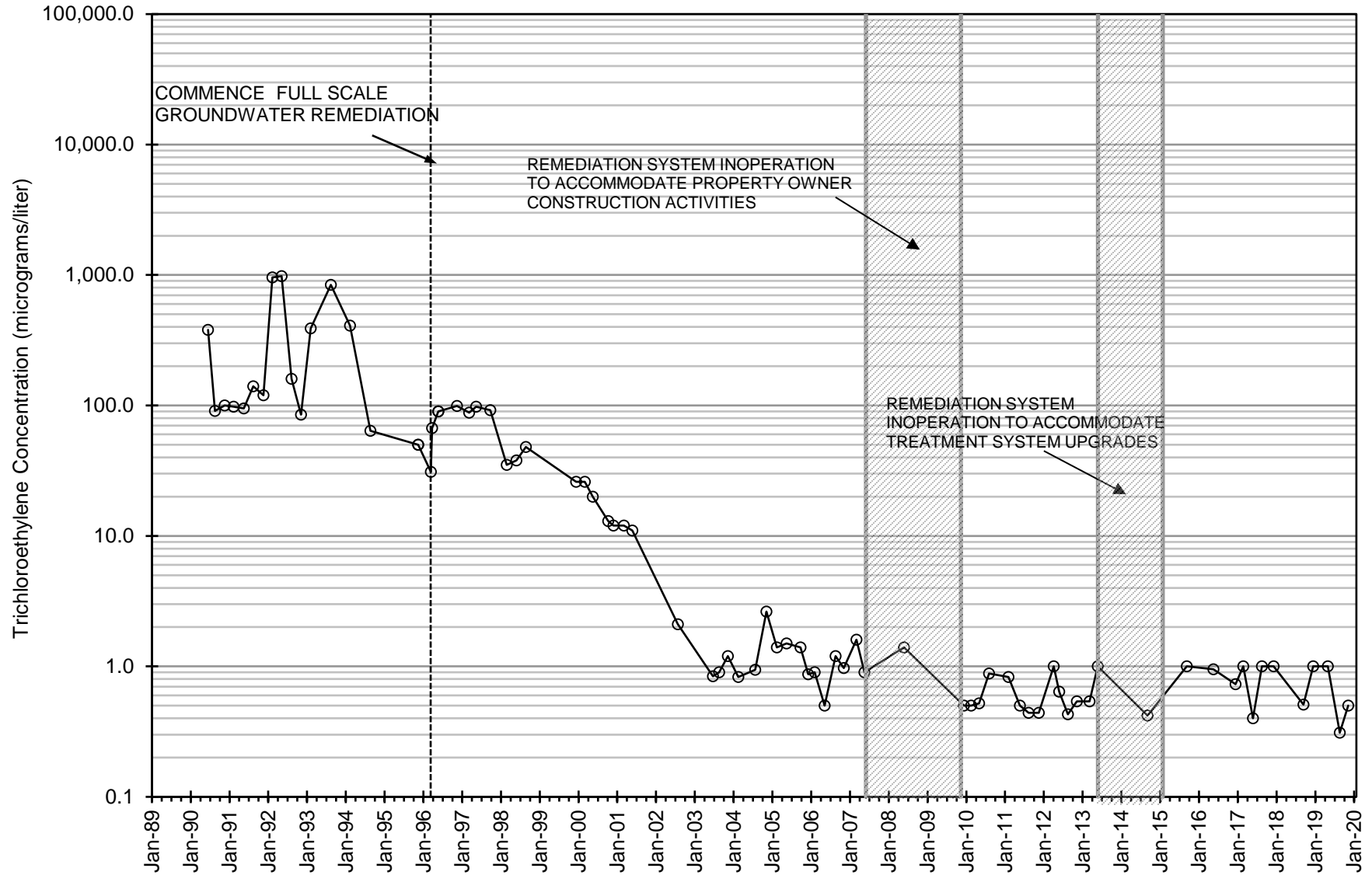
**FIGURE 23. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL UAX-03**



**FIGURE 24. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL LAX-01**



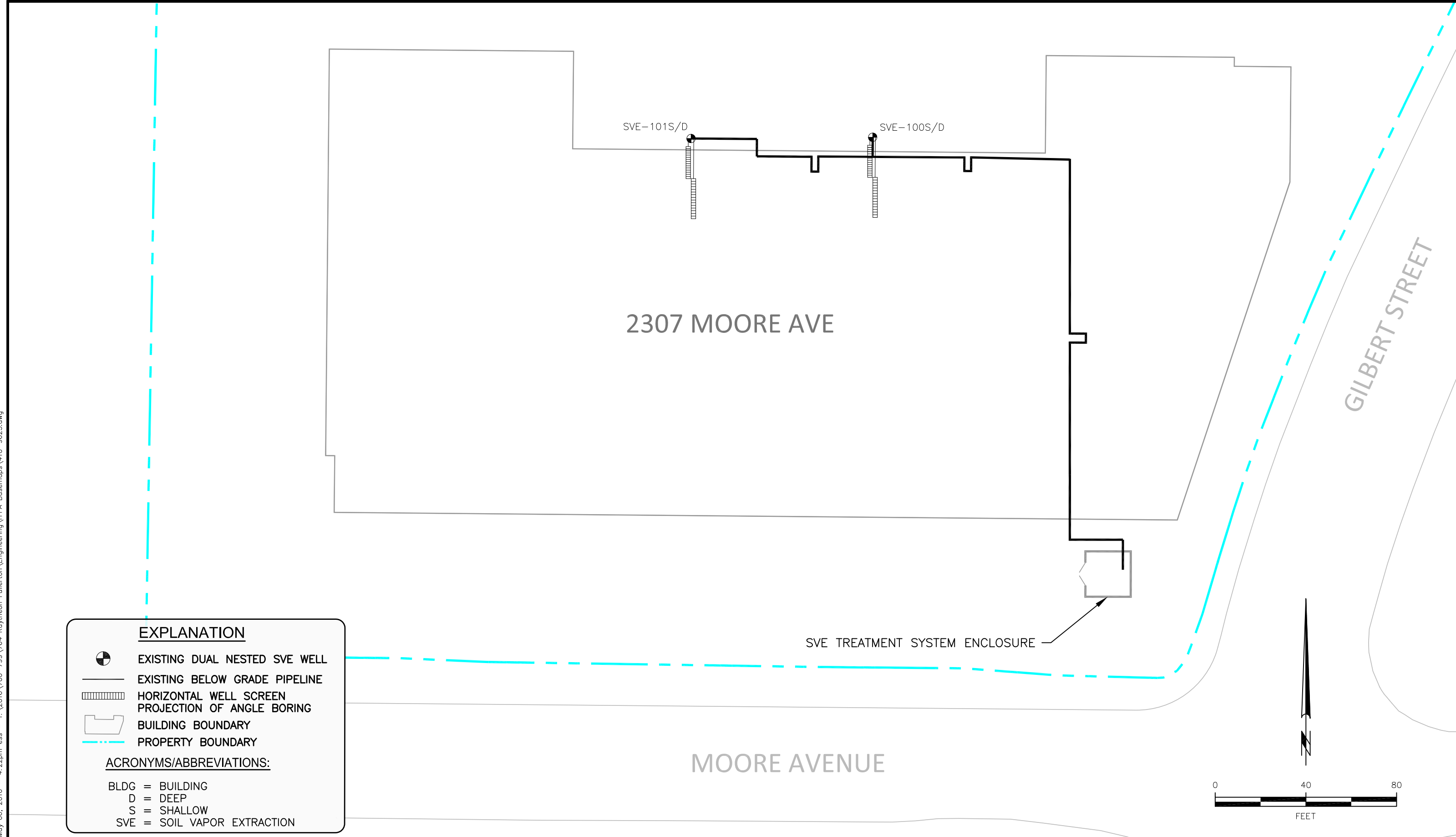
**FIGURE 25. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL LAX-02**



**FIGURE 26. TRICHLOROETHYLENE CONCENTRATIONS IN EXTRACTION WELL LAX-03**



May 06, 2016 - 4:22pm ess - T:\2016\700-799\764 Raytheon Fullerton\Engineering\H+A Basemaps\410-9625.dwg



**EXPLANATION**

- EXISTING DUAL NESTED SVE WELL
- EXISTING BELOW GRADE PIPELINE
- HORIZONTAL WELL SCREEN
- PROJECTION OF ANGLE BORING
- BUILDING BOUNDARY
- PROPERTY BOUNDARY

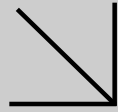
**ACRONYMS/ABBREVIATIONS:**

- BLDG = BUILDING
- D = DEEP
- S = SHALLOW
- SVE = SOIL VAPOR EXTRACTION

A north arrow points upwards. Below it is a graphic scale bar marked in feet, with increments at 0, 40, and 80 feet.

**FIGURE 27. SITE PLAN  
FORMER BUILDING 684 SVE SYSTEM, FULLERTON, CALIFORNIA**

APPENDIX A  
LABORATORY ANALYTICAL DATA



**WORK ORDER NUMBER: 19-05-0708**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Hargis + Associates, Inc.

**Client Project Name:** Building 684 - Raytheon / 764.10

**Attention:** Ken Puentes  
9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122-6215

Approved for release on 05/20/2019 by:  
Virendra Patel  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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 Work Order Number: 19-05-0708

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 05/09/19. They were assigned to Work Order 19-05-0708.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

## Sample Summary

Client: Hargis + Associates, Inc.	Work Order: 19-05-0708
9171 Towne Centre Drive, Suite 375	Project Name: Building 684 - Raytheon / 764.10
San Diego, CA 92122-6215	PO Number:
	Date/Time Received: 05/09/19 15:06
	Number of Containers: 55

Attn: Ken Puentes

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
TB-050819	19-05-0708-1	05/08/19 07:30	2	Aqueous
LAX-01	19-05-0708-2	05/08/19 09:55	4	Aqueous
UAX-03	19-05-0708-3	05/08/19 10:40	6	Aqueous
HEW-04	19-05-0708-4	05/08/19 11:00	4	Aqueous
LAX-03	19-05-0708-5	05/08/19 11:30	4	Aqueous
UAX-02	19-05-0708-6	05/08/19 11:40	4	Aqueous
LAX-02	19-05-0708-7	05/08/19 13:45	4	Aqueous
RB-050819	19-05-0708-8	05/08/19 14:00	3	Aqueous
HEW-01	19-05-0708-9	05/08/19 14:10	4	Aqueous
HEW-0100	19-05-0708-10	05/08/19 14:20	4	Aqueous
HEW-03	19-05-0708-11	05/08/19 14:20	4	Aqueous
UAX-01	19-05-0708-12	05/08/19 14:50	4	Aqueous
HEW-02	19-05-0708-13	05/09/19 07:30	4	Aqueous
HEW-05	19-05-0708-14	05/09/19 07:43	4	Aqueous

## Detections Summary

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

Work Order: 19-05-0708  
 Project Name: Building 684 - Raytheon / 764.10  
 Received: 05/09/19

Attn: Ken Puentes

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### Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
UAX-03 (19-05-0708-3)						
1,1-Dichloroethene	0.61	J	0.22*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	10		1.0	ug/L	EPA 8260B	EPA 5030C
HEW-04 (19-05-0708-4)						
1,1-Dichloroethene	1.4		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.1		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	120		1.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	9.9		1.0	ug/L	EPA 8270C (M) SIM Isotope Dil	EPA 3510C
UAX-02 (19-05-0708-6)						
1,1-Dichloroethene	3.4		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	3.8		1.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	1.9		1.0	ug/L	EPA 8270C (M) SIM Isotope Dil	EPA 3510C
HEW-01 (19-05-0708-9)						
Chloroform	0.40	J	0.18*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	4.6		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	5.0		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	560		10	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	3.0		1.0	ug/L	EPA 8270C (M) SIM Isotope Dil	EPA 3510C
HEW-0100 (19-05-0708-10)						
Chloroform	0.34	J	0.18*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	4.0		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	4.5		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	550		10	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	2.2		1.0	ug/L	EPA 8270C (M) SIM Isotope Dil	EPA 3510C
HEW-03 (19-05-0708-11)						
1,1-Dichloroethene	1.2		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.1		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	87		1.0	ug/L	EPA 8260B	EPA 5030C
UAX-01 (19-05-0708-12)						
1,1-Dichloroethene	2.2		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	2.4		1.0	ug/L	EPA 8260B	EPA 5030C
HEW-02 (19-05-0708-13)						
Chloroform	0.19	J	0.18*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.30	J	0.22*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.29	J	0.24*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	120		1.0	ug/L	EPA 8260B	EPA 5030C

\* MDL is shown

## Detections Summary

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

Work Order: 19-05-0708  
 Project Name: Building 684 - Raytheon / 764.10  
 Received: 05/09/19

Attn: Ken Puentes

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### Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
HEW-05 (19-05-0708-14)						
1,1-Dichloroethene	0.27	J	0.22*	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	1.3		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	110		1.0	ug/L	EPA 8260B	EPA 5030C

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

\* MDL is shown



## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 3510C  
 Method: EPA 8270C (M) SIM Isotope Dil  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-01	19-05-0708-2-D	05/08/19 09:55	Aqueous	GC/MS DDD	05/10/19	05/14/19 07:29	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Nitrobenzene-d5	64	56-123			
1,4-Dioxane-d8(IDS-IS)	20	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-03	19-05-0708-3-F	05/08/19 10:40	Aqueous	GC/MS DDD	05/10/19	05/14/19 07:45	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Nitrobenzene-d5	67	56-123			
1,4-Dioxane-d8(IDS-IS)	19	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-04	19-05-0708-4-D	05/08/19 11:00	Aqueous	GC/MS DDD	05/10/19	05/14/19 08:01	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	9.9	1.0	0.18	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Nitrobenzene-d5	70	56-123			
1,4-Dioxane-d8(IDS-IS)	18	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-03	19-05-0708-5-D	05/08/19 11:30	Aqueous	GC/MS DDD	05/10/19	05/14/19 08:17	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Nitrobenzene-d5	68	56-123			
1,4-Dioxane-d8(IDS-IS)	19	30-120	6		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Hargis + Associates, Inc.	Date Received:	05/09/19
9171 Towne Centre Drive, Suite 375	Work Order:	19-05-0708
San Diego, CA 92122-6215	Preparation:	EPA 3510C
	Method:	EPA 8270C (M) SIM Isotope Dil
	Units:	ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-02	19-05-0708-6-D	05/08/19 11:40	Aqueous	GC/MS DDD	05/10/19	05/14/19 08:33	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.9	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	68	56-123			
1,4-Dioxane-d8(IDS-IS)	21	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-02	19-05-0708-7-D	05/08/19 13:45	Aqueous	GC/MS DDD	05/10/19	05/14/19 08:49	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	70	56-123			
1,4-Dioxane-d8(IDS-IS)	18	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-01	19-05-0708-9-D	05/08/19 14:10	Aqueous	GC/MS DDD	05/10/19	05/14/19 09:05	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	3.0	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	68	56-123			
1,4-Dioxane-d8(IDS-IS)	17	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-0100	19-05-0708-10-D	05/08/19 14:20	Aqueous	GC/MS DDD	05/10/19	05/17/19 12:11	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.2	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	80	56-123			
1,4-Dioxane-d8(IDS-IS)	25	30-120	6		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Hargis + Associates, Inc.	Date Received:	05/09/19
9171 Towne Centre Drive, Suite 375	Work Order:	19-05-0708
San Diego, CA 92122-6215	Preparation:	EPA 3510C
	Method:	EPA 8270C (M) SIM Isotope Dil
	Units:	ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-03	19-05-0708-11-D	05/08/19 14:20	Aqueous	GC/MS DDD	05/10/19	05/14/19 09:37	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	74	56-123			
1,4-Dioxane-d8(IDS-IS)	18	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-01	19-05-0708-12-D	05/08/19 14:50	Aqueous	GC/MS DDD	05/10/19	05/14/19 09:53	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	72	56-123			
1,4-Dioxane-d8(IDS-IS)	18	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-02	19-05-0708-13-D	05/09/19 07:30	Aqueous	GC/MS DDD	05/10/19	05/14/19 10:09	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	64	56-123			
1,4-Dioxane-d8(IDS-IS)	17	30-120	6		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-05	19-05-0708-14-D	05/09/19 07:43	Aqueous	GC/MS DDD	05/10/19	05/14/19 10:25	190510L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	60	56-123			
1,4-Dioxane-d8(IDS-IS)	20	30-120	6		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 3510C  
 Method: EPA 8270C (M) SIM Isotope Dil  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-16-216-1746</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC/MS DDD</b>	<b>05/10/19</b>	<b>05/14/19 06:25</b>	<b>190510L02</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	ND	1.0	0.18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Nitrobenzene-d5	72	56-123			
1,4-Dioxane-d8(IDS-IS)	21	30-120	6		

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TB-050819	19-05-0708-1-A	05/08/19 07:30	Aqueous	GC/MS QQ	05/14/19	05/14/19 16:54	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	101	80-128			
1,2-Dichloroethane-d4	101	80-129			
Toluene-d8	98	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-01	19-05-0708-2-A	05/08/19 09:55	Aqueous	GC/MS QQ	05/14/19	05/14/19 17:23	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	99	80-128			
1,2-Dichloroethane-d4	102	80-129			
Toluene-d8	99	80-120			


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-03	19-05-0708-3-A	05/08/19 10:40	Aqueous	GC/MS QQ	05/14/19	05/14/19 14:30	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	0.61	1.0	0.22	1.00	J
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	10	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	99	77-120			
Dibromofluoromethane	96	80-128			
1,2-Dichloroethane-d4	95	80-129			
Toluene-d8	97	80-120			


  
 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-04	19-05-0708-4-A	05/08/19 11:00	Aqueous	GC/MS QQ	05/14/19	05/14/19 17:52	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	1.4	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	1.1	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	120	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	97	77-120			
Dibromofluoromethane	97	80-128			
1,2-Dichloroethane-d4	104	80-129			
Toluene-d8	100	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-03	19-05-0708-5-A	05/08/19 11:30	Aqueous	GC/MS QQ	05/14/19	05/14/19 18:21	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	97	77-120	
Dibromofluoromethane	101	80-128	
1,2-Dichloroethane-d4	103	80-129	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-02	19-05-0708-6-A	05/08/19 11:40	Aqueous	GC/MS QQ	05/14/19	05/14/19 18:49	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	3.4	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	3.8	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	97	77-120			
Dibromofluoromethane	99	80-128			
1,2-Dichloroethane-d4	105	80-129			
Toluene-d8	100	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LAX-02	19-05-0708-7-A	05/08/19 13:45	Aqueous	GC/MS QQ	05/14/19	05/14/19 19:18	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	101	80-128			
1,2-Dichloroethane-d4	103	80-129			
Toluene-d8	99	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RB-050819	19-05-0708-8-A	05/08/19 14:00	Aqueous	GC/MS QQ	05/14/19	05/14/19 19:47	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	97	77-120	
Dibromofluoromethane	102	80-128	
1,2-Dichloroethane-d4	104	80-129	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-01	19-05-0708-9-A	05/08/19 14:10	Aqueous	GC/MS QQ	05/14/19	05/14/19 20:16	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	0.40	1.0	0.18	1.00	J
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	4.6	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	5.0	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	96	77-120			
Dibromofluoromethane	101	80-128			
1,2-Dichloroethane-d4	105	80-129			
Toluene-d8	100	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Hargis + Associates, Inc.	Date Received:	05/09/19
9171 Towne Centre Drive, Suite 375	Work Order:	19-05-0708
San Diego, CA 92122-6215	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Building 684 - Raytheon / 764.10 Page 19 of 35

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-01	19-05-0708-9-B	05/08/19 14:10	Aqueous	GC/MS RR	05/15/19	05/15/19 20:03	190515L013

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Trichloroethene	560	10	2.4	10.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	97	77-120	
Dibromofluoromethane	111	80-128	
1,2-Dichloroethane-d4	116	80-129	
Toluene-d8	102	80-120	

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-0100	19-05-0708-10-A	05/08/19 14:20	Aqueous	GC/MS QQ	05/14/19	05/15/19 04:53	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	0.34	1.0	0.18	1.00	J
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	4.0	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	4.5	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	100	80-128			
1,2-Dichloroethane-d4	102	80-129			
Toluene-d8	99	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-0100	19-05-0708-10-B	05/08/19 14:20	Aqueous	GC/MS RR	05/15/19	05/15/19 20:32	190515L013

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Trichloroethene	550	10	2.4	10.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	97	77-120	
Dibromofluoromethane	108	80-128	
1,2-Dichloroethane-d4	116	80-129	
Toluene-d8	102	80-120	

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-03	19-05-0708-11-A	05/08/19 14:20	Aqueous	GC/MS QQ	05/14/19	05/15/19 05:22	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	1.2	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	1.1	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	87	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	97	77-120			
Dibromofluoromethane	100	80-128			
1,2-Dichloroethane-d4	104	80-129			
Toluene-d8	100	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
UAX-01	19-05-0708-12-A	05/08/19 14:50	Aqueous	GC/MS QQ	05/14/19	05/15/19 05:50	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	2.2	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	2.4	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	101	80-128			
1,2-Dichloroethane-d4	103	80-129			
Toluene-d8	99	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-02	19-05-0708-13-A	05/09/19 07:30	Aqueous	GC/MS QQ	05/14/19	05/15/19 06:19	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	0.19	1.0	0.18	1.00	J
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	0.30	1.0	0.22	1.00	J
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	0.29	1.0	0.24	1.00	J
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	120	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	96	77-120	
Dibromofluoromethane	101	80-128	
1,2-Dichloroethane-d4	104	80-129	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HEW-05	19-05-0708-14-A	05/09/19 07:43	Aqueous	GC/MS QQ	05/14/19	05/15/19 02:58	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	0.27	1.0	0.22	1.00	J
c-1,2-Dichloroethene	1.3	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	ND	1.0	0.15	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	110	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	98	77-120			
Dibromofluoromethane	101	80-128			
1,2-Dichloroethane-d4	102	80-129			
Toluene-d8	100	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-28769	N/A	Aqueous	GC/MS QQ	05/14/19	05/14/19 11:36	190514L015

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	0.18	1.0	0.15	1.00	J
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	99	77-120	
Dibromofluoromethane	99	80-128	
1,2-Dichloroethane-d4	100	80-129	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-28774	N/A	Aqueous	GC/MS QQ	05/14/19	05/14/19 22:39	190514L019

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	20	10	1.00	
Benzene	ND	1.0	0.14	1.00	
Bromobenzene	ND	1.0	0.19	1.00	
Bromochloromethane	ND	2.0	0.46	1.00	
Bromodichloromethane	ND	1.0	0.23	1.00	
Bromoform	ND	5.0	1.8	1.00	
Bromomethane	ND	50	19	1.00	
2-Butanone	ND	20	6.6	1.00	
n-Butylbenzene	ND	1.0	0.30	1.00	
sec-Butylbenzene	ND	1.0	0.19	1.00	
tert-Butylbenzene	ND	1.0	0.25	1.00	
Carbon Disulfide	ND	10	0.70	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.16	1.00	
Chloroethane	ND	5.0	0.76	1.00	
Chloroform	ND	1.0	0.18	1.00	
Chloromethane	ND	10	0.50	1.00	
2-Chlorotoluene	ND	1.0	0.16	1.00	
4-Chlorotoluene	ND	1.0	0.18	1.00	
Dibromochloromethane	ND	2.0	0.46	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	2.1	1.00	
1,2-Dibromoethane	ND	1.0	0.27	1.00	
Dibromomethane	ND	1.0	0.30	1.00	
1,2-Dichlorobenzene	ND	1.0	0.14	1.00	
1,3-Dichlorobenzene	ND	1.0	0.19	1.00	
1,4-Dichlorobenzene	ND	1.0	0.24	1.00	
Dichlorodifluoromethane	ND	5.0	0.28	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.19	1.00	
1,1-Dichloroethene	ND	1.0	0.22	1.00	
c-1,2-Dichloroethene	ND	1.0	0.27	1.00	
t-1,2-Dichloroethene	ND	1.0	0.40	1.00	
1,2-Dichloropropane	ND	1.0	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.14	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.44	1.00	
1,1-Dichloropropene	ND	1.0	0.17	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.23	1.00	
Ethylbenzene	ND	1.0	0.14	1.00	
2-Hexanone	ND	10	5.3	1.00	
Isopropylbenzene	ND	1.0	0.16	1.00	
p-Isopropyltoluene	ND	1.0	0.22	1.00	
Methylene Chloride	ND	10	4.0	1.00	
4-Methyl-2-Pentanone	ND	10	0.46	1.00	
Naphthalene	ND	10	5.1	1.00	
n-Propylbenzene	ND	1.0	0.18	1.00	
Styrene	0.17	1.0	0.15	1.00	J
1,1,1,2-Tetrachloroethane	ND	2.0	0.43	1.00	
1,1,2,2-Tetrachloroethane	ND	10	0.17	1.00	
Tetrachloroethene	ND	1.0	0.24	1.00	
Toluene	ND	1.0	0.13	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.28	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.34	1.00	
1,1,1-Trichloroethane	ND	1.0	0.31	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.62	1.00	
1,1,2-Trichloroethane	ND	1.0	0.22	1.00	
Trichloroethene	ND	1.0	0.24	1.00	
Trichlorofluoromethane	ND	10	0.28	1.00	
1,2,3-Trichloropropane	ND	5.0	0.22	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.21	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.17	1.00	
Vinyl Acetate	ND	10	2.9	1.00	
Vinyl Chloride	ND	0.50	0.16	1.00	
p/m-Xylene	ND	2.0	0.31	1.00	
o-Xylene	ND	1.0	0.15	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	98	77-120	
Dibromofluoromethane	100	80-128	
1,2-Dichloroethane-d4	101	80-129	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Hargis + Associates, Inc.	Date Received:	05/09/19
9171 Towne Centre Drive, Suite 375	Work Order:	19-05-0708
San Diego, CA 92122-6215	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Building 684 - Raytheon / 764.10 Page 35 of 35

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-14-001-28773</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC/MS RR</b>	<b>05/15/19</b>	<b>05/15/19 12:55</b>	<b>190515L013</b>

Comment(s): - Results were evaluated to the MDL (DL), concentrations  $\geq$  to the MDL (DL) but  $<$  RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Trichloroethene	ND	1.0	0.24	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	96	77-120	
Dibromofluoromethane	111	80-128	
1,2-Dichloroethane-d4	114	80-129	
Toluene-d8	102	80-120	



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 3510C  
Method: EPA 8270C (M) SIM Isotope Dil

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
UAX-03	Sample	Aqueous	GC/MS DDD	05/10/19	05/14/19 07:45	190510S02				
UAX-03	Matrix Spike	Aqueous	GC/MS DDD	05/10/19	05/14/19 06:57	190510S02				
UAX-03	Matrix Spike Duplicate	Aqueous	GC/MS DDD	05/10/19	05/14/19 07:13	190510S02				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	24.99	125	25.72	129	50-130	3	0-20	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits





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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
UAX-03	Sample	Aqueous	GC/MS QQ	05/14/19	05/14/19 14:30	190514S006
UAX-03	Matrix Spike	Aqueous	GC/MS QQ	05/14/19	05/14/19 15:28	190514S006
UAX-03	Matrix Spike Duplicate	Aqueous	GC/MS QQ	05/14/19	05/14/19 15:57	190514S006

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	50.00	43.96	88	44.55	89	34-166	1	0-33	
Benzene	ND	50.00	50.03	100	49.83	100	75-125	0	0-20	
Bromobenzene	ND	50.00	50.04	100	49.64	99	75-125	1	0-20	
Bromochloromethane	ND	50.00	48.40	97	48.38	97	75-125	0	0-20	
Bromodichloromethane	ND	50.00	53.70	107	53.86	108	75-134	0	0-20	
Bromoform	ND	50.00	46.12	92	47.25	95	74-134	2	0-20	
Bromomethane	ND	50.00	60.56	121	51.22	102	20-168	17	0-40	
2-Butanone	ND	50.00	46.43	93	48.73	97	37-157	5	0-20	
n-Butylbenzene	ND	50.00	54.25	108	54.08	108	73-145	0	0-20	
sec-Butylbenzene	ND	50.00	55.13	110	55.29	111	75-135	0	0-20	
tert-Butylbenzene	ND	50.00	55.71	111	56.70	113	75-136	2	0-20	
Carbon Disulfide	ND	50.00	48.56	97	47.33	95	50-152	3	0-27	
Carbon Tetrachloride	ND	50.00	53.42	107	53.38	107	70-154	0	0-20	
Chlorobenzene	ND	50.00	49.38	99	49.41	99	75-125	0	0-20	
Chloroethane	ND	50.00	57.85	116	58.36	117	41-167	1	0-26	
Chloroform	ND	50.00	49.67	99	49.76	100	75-127	0	0-20	
Chloromethane	ND	50.00	37.42	75	39.81	80	41-149	6	0-20	
2-Chlorotoluene	ND	50.00	51.79	104	51.06	102	75-128	1	0-20	
4-Chlorotoluene	ND	50.00	51.83	104	52.43	105	75-125	1	0-20	
Dibromochloromethane	ND	50.00	50.74	101	50.63	101	75-131	0	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	53.91	108	55.75	112	64-142	3	0-20	
1,2-Dibromoethane	ND	50.00	51.54	103	52.43	105	75-129	2	0-20	
Dibromomethane	ND	50.00	51.87	104	51.94	104	75-125	0	0-20	
1,2-Dichlorobenzene	ND	50.00	51.08	102	51.66	103	75-125	1	0-20	
1,3-Dichlorobenzene	ND	50.00	50.07	100	50.67	101	75-125	1	0-20	
1,4-Dichlorobenzene	ND	50.00	49.67	99	50.16	100	75-125	1	0-20	
Dichlorodifluoromethane	ND	50.00	37.26	75	36.91	74	25-157	1	0-26	
1,1-Dichloroethane	ND	50.00	45.39	91	45.49	91	73-139	0	0-20	
1,2-Dichloroethane	ND	50.00	49.98	100	50.17	100	75-125	0	0-20	
1,1-Dichloroethene	ND	50.00	51.28	103	51.24	102	61-145	0	0-20	
c-1,2-Dichloroethene	ND	50.00	50.18	100	50.69	101	75-125	1	0-20	
t-1,2-Dichloroethene	ND	50.00	49.82	100	49.21	98	64-142	1	0-20	
1,2-Dichloropropane	ND	50.00	51.65	103	51.65	103	75-127	0	0-20	
1,3-Dichloropropane	ND	50.00	50.53	101	51.55	103	75-125	2	0-20	
2,2-Dichloropropane	ND	50.00	52.56	105	52.28	105	24-180	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloropropene	ND	50.00	49.49	99	49.89	100	75-135	1	0-20	
c-1,3-Dichloropropene	ND	50.00	51.32	103	51.45	103	75-137	0	0-20	
t-1,3-Dichloropropene	ND	50.00	46.57	93	47.60	95	74-146	2	0-20	
Ethylbenzene	ND	50.00	52.19	104	51.91	104	75-129	1	0-20	
2-Hexanone	ND	50.00	48.71	97	51.23	102	47-161	5	0-20	
Isopropylbenzene	ND	50.00	54.92	110	54.00	108	75-135	2	0-20	
p-Isopropyltoluene	ND	50.00	53.37	107	53.18	106	75-136	0	0-20	
Methylene Chloride	ND	50.00	49.44	99	49.87	100	63-141	1	0-20	
4-Methyl-2-Pentanone	ND	50.00	51.10	102	52.33	105	66-138	2	0-20	
Naphthalene	ND	50.00	49.73	99	52.48	105	59-143	5	0-20	
n-Propylbenzene	ND	50.00	53.66	107	53.06	106	75-133	1	0-20	
Styrene	ND	50.00	51.59	103	51.69	103	70-142	0	0-28	
1,1,1,2-Tetrachloroethane	ND	50.00	53.64	107	53.13	106	75-139	1	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	53.25	107	55.29	111	61-145	4	0-20	
Tetrachloroethene	ND	50.00	33.31	67	32.79	66	47-143	2	0-20	
Toluene	ND	50.00	50.63	101	50.21	100	75-125	1	0-20	
1,2,3-Trichlorobenzene	ND	50.00	52.11	104	52.36	105	73-133	0	0-20	
1,2,4-Trichlorobenzene	ND	50.00	54.50	109	54.99	110	71-137	1	0-20	
1,1,1-Trichloroethane	ND	50.00	51.40	103	50.52	101	75-136	2	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	47.94	96	47.41	95	42-168	1	0-22	
1,1,2-Trichloroethane	ND	50.00	51.88	104	51.73	103	75-125	0	0-20	
Trichloroethene	10.13	50.00	57.90	96	56.93	94	67-139	2	0-20	
Trichlorofluoromethane	ND	50.00	54.59	109	52.98	106	59-155	3	0-20	
1,2,3-Trichloropropane	ND	50.00	50.79	102	51.48	103	75-127	1	0-20	
1,2,4-Trimethylbenzene	ND	50.00	54.45	109	54.92	110	75-133	1	0-20	
1,3,5-Trimethylbenzene	ND	50.00	53.49	107	52.53	105	75-135	2	0-20	
Vinyl Acetate	ND	50.00	55.88	112	58.20	116	54-180	4	0-25	
Vinyl Chloride	ND	50.00	46.38	93	47.13	94	51-153	2	0-20	
p/m-Xylene	ND	100.0	108.0	108	106.1	106	75-133	2	0-20	
o-Xylene	ND	50.00	51.40	103	51.27	103	75-134	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	43.94	88	45.44	91	64-136	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
HEW-05	Sample	Aqueous	GC/MS QQ	05/14/19	05/15/19 02:58	190514S010
HEW-05	Matrix Spike	Aqueous	GC/MS QQ	05/14/19	05/15/19 03:27	190514S010
HEW-05	Matrix Spike Duplicate	Aqueous	GC/MS QQ	05/14/19	05/15/19 03:56	190514S010

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	50.00	39.38	79	40.27	81	34-166	2	0-33	
Benzene	ND	50.00	46.71	93	47.43	95	75-125	2	0-20	
Bromobenzene	ND	50.00	47.46	95	48.31	97	75-125	2	0-20	
Bromochloromethane	ND	50.00	46.90	94	46.60	93	75-125	1	0-20	
Bromodichloromethane	ND	50.00	50.87	102	51.06	102	75-134	0	0-20	
Bromoform	ND	50.00	40.91	82	41.90	84	74-134	2	0-20	
Bromomethane	ND	50.00	49.08	98	46.98	94	20-168	4	0-40	
2-Butanone	ND	50.00	43.44	87	43.76	88	37-157	1	0-20	
n-Butylbenzene	ND	50.00	47.57	95	48.12	96	73-145	1	0-20	
sec-Butylbenzene	ND	50.00	49.74	99	51.44	103	75-135	3	0-20	
tert-Butylbenzene	ND	50.00	51.16	102	52.82	106	75-136	3	0-20	
Carbon Disulfide	ND	50.00	43.42	87	43.58	87	50-152	0	0-27	
Carbon Tetrachloride	ND	50.00	50.56	101	49.69	99	70-154	2	0-20	
Chlorobenzene	ND	50.00	46.22	92	47.09	94	75-125	2	0-20	
Chloroethane	ND	50.00	53.99	108	55.85	112	41-167	3	0-26	
Chloroform	ND	50.00	48.11	96	47.91	96	75-127	0	0-20	
Chloromethane	ND	50.00	37.48	75	39.24	78	41-149	5	0-20	
2-Chlorotoluene	ND	50.00	48.40	97	49.09	98	75-128	1	0-20	
4-Chlorotoluene	ND	50.00	47.23	94	48.40	97	75-125	2	0-20	
Dibromochloromethane	ND	50.00	46.86	94	47.96	96	75-131	2	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	47.69	95	47.87	96	64-142	0	0-20	
1,2-Dibromoethane	ND	50.00	48.38	97	49.55	99	75-129	2	0-20	
Dibromomethane	ND	50.00	49.46	99	49.34	99	75-125	0	0-20	
1,2-Dichlorobenzene	ND	50.00	47.16	94	48.11	96	75-125	2	0-20	
1,3-Dichlorobenzene	ND	50.00	45.23	90	46.10	92	75-125	2	0-20	
1,4-Dichlorobenzene	ND	50.00	45.13	90	45.62	91	75-125	1	0-20	
Dichlorodifluoromethane	ND	50.00	35.84	72	36.86	74	25-157	3	0-26	
1,1-Dichloroethane	ND	50.00	42.82	86	43.62	87	73-139	2	0-20	
1,2-Dichloroethane	ND	50.00	47.90	96	48.75	98	75-125	2	0-20	
1,1-Dichloroethene	ND	50.00	47.46	95	48.07	96	61-145	1	0-20	
c-1,2-Dichloroethene	1.264	50.00	49.41	96	49.55	97	75-125	0	0-20	
t-1,2-Dichloroethene	ND	50.00	46.35	93	46.61	93	64-142	1	0-20	
1,2-Dichloropropane	ND	50.00	48.44	97	49.53	99	75-127	2	0-20	
1,3-Dichloropropane	ND	50.00	48.19	96	49.38	99	75-125	2	0-20	
2,2-Dichloropropane	ND	50.00	46.07	92	46.94	94	24-180	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloropropene	ND	50.00	46.38	93	46.95	94	75-135	1	0-20	
c-1,3-Dichloropropene	ND	50.00	46.02	92	47.66	95	75-137	3	0-20	
t-1,3-Dichloropropene	ND	50.00	42.10	84	43.38	87	74-146	3	0-20	
Ethylbenzene	ND	50.00	48.84	98	49.47	99	75-129	1	0-20	
2-Hexanone	ND	50.00	43.91	88	45.82	92	47-161	4	0-20	
Isopropylbenzene	ND	50.00	50.77	102	51.55	103	75-135	2	0-20	
p-Isopropyltoluene	ND	50.00	47.67	95	48.78	98	75-136	2	0-20	
Methylene Chloride	ND	50.00	47.40	95	47.55	95	63-141	0	0-20	
4-Methyl-2-Pentanone	ND	50.00	45.34	91	47.48	95	66-138	5	0-20	
Naphthalene	ND	50.00	45.48	91	47.15	94	59-143	4	0-20	
n-Propylbenzene	ND	50.00	49.52	99	50.20	100	75-133	1	0-20	
Styrene	ND	50.00	48.59	97	49.44	99	70-142	2	0-28	
1,1,1,2-Tetrachloroethane	ND	50.00	50.46	101	51.06	102	75-139	1	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	49.73	99	51.10	102	61-145	3	0-20	
Tetrachloroethene	ND	50.00	30.66	61	30.69	61	47-143	0	0-20	
Toluene	ND	50.00	47.44	95	47.90	96	75-125	1	0-20	
1,2,3-Trichlorobenzene	ND	50.00	45.45	91	46.16	92	73-133	2	0-20	
1,2,4-Trichlorobenzene	ND	50.00	46.45	93	46.92	94	71-137	1	0-20	
1,1,1-Trichloroethane	ND	50.00	48.38	97	48.52	97	75-136	0	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	44.84	90	44.56	89	42-168	1	0-22	
1,1,2-Trichloroethane	ND	50.00	49.48	99	50.57	101	75-125	2	0-20	
Trichloroethene	109.1	50.00	141.6	65	139.7	61	67-139	1	0-20	3
Trichlorofluoromethane	ND	50.00	52.03	104	51.69	103	59-155	1	0-20	
1,2,3-Trichloropropane	ND	50.00	46.71	93	47.67	95	75-127	2	0-20	
1,2,4-Trimethylbenzene	ND	50.00	49.20	98	50.54	101	75-133	3	0-20	
1,3,5-Trimethylbenzene	ND	50.00	49.43	99	49.95	100	75-135	1	0-20	
Vinyl Acetate	ND	50.00	49.65	99	49.61	99	54-180	0	0-25	
Vinyl Chloride	ND	50.00	43.17	86	45.57	91	51-153	5	0-20	
p/m-Xylene	ND	100.0	100.9	101	101.8	102	75-133	1	0-20	
o-Xylene	ND	50.00	48.73	97	49.37	99	75-134	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	41.22	82	42.27	85	64-136	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
19-05-0528-11	Sample	Aqueous	GC/MS RR	05/15/19	05/15/19 13:24	190515S008
19-05-0528-11	Matrix Spike	Aqueous	GC/MS RR	05/15/19	05/15/19 10:27	190515S008
19-05-0528-11	Matrix Spike Duplicate	Aqueous	GC/MS RR	05/15/19	05/15/19 10:56	190515S008

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	250.0	184.8	74	200.7	80	34-166	8	0-33	
Benzene	64.09	250.0	313.6	100	325.0	104	75-125	4	0-20	
Bromobenzene	ND	250.0	304.6	122	311.2	124	75-125	2	0-20	
Bromochloromethane	ND	250.0	288.4	115	300.9	120	75-125	4	0-20	
Bromodichloromethane	ND	250.0	288.5	115	285.8	114	75-134	1	0-20	
Bromoform	ND	250.0	248.7	99	263.6	105	74-134	6	0-20	
Bromomethane	ND	250.0	302.2	121	284.4	114	20-168	6	0-40	
2-Butanone	ND	250.0	240.6	96	255.6	102	37-157	6	0-20	
n-Butylbenzene	ND	250.0	295.7	118	277.2	111	73-145	6	0-20	
sec-Butylbenzene	ND	250.0	269.9	108	266.3	107	75-135	1	0-20	
tert-Butylbenzene	ND	250.0	270.3	108	272.4	109	75-136	1	0-20	
Carbon Disulfide	ND	250.0	261.9	105	257.4	103	50-152	2	0-27	
Carbon Tetrachloride	ND	250.0	308.3	123	303.4	121	70-154	2	0-20	
Chlorobenzene	ND	250.0	271.8	109	284.3	114	75-125	4	0-20	
Chloroethane	ND	250.0	423.5	169	635.1	254	41-167	40	0-26	3,4
Chloroform	ND	250.0	287.2	115	294.5	118	75-127	3	0-20	
Chloromethane	ND	250.0	274.5	110	276.7	111	41-149	1	0-20	
2-Chlorotoluene	ND	250.0	290.8	116	294.7	118	75-128	1	0-20	
4-Chlorotoluene	ND	250.0	272.3	109	269.9	108	75-125	1	0-20	
Dibromochloromethane	ND	250.0	263.9	106	280.4	112	75-131	6	0-20	
1,2-Dibromo-3-Chloropropane	ND	250.0	235.6	94	260.0	104	64-142	10	0-20	
1,2-Dibromoethane	ND	250.0	251.7	101	261.8	105	75-129	4	0-20	
Dibromomethane	ND	250.0	288.3	115	297.4	119	75-125	3	0-20	
1,2-Dichlorobenzene	ND	250.0	267.3	107	267.0	107	75-125	0	0-20	
1,3-Dichlorobenzene	ND	250.0	265.5	106	266.3	107	75-125	0	0-20	
1,4-Dichlorobenzene	ND	250.0	285.7	114	284.3	114	75-125	0	0-20	
Dichlorodifluoromethane	ND	250.0	251.2	100	228.6	91	25-157	9	0-26	
1,1-Dichloroethane	ND	250.0	245.4	98	248.7	99	73-139	1	0-20	
1,2-Dichloroethane	ND	250.0	282.1	113	283.2	113	75-125	0	0-20	
1,1-Dichloroethene	ND	250.0	288.6	115	283.6	113	61-145	2	0-20	
c-1,2-Dichloroethene	ND	250.0	277.8	111	298.8	120	75-125	7	0-20	
t-1,2-Dichloroethene	ND	250.0	262.5	105	264.4	106	64-142	1	0-20	
1,2-Dichloropropane	ND	250.0	261.8	105	263.5	105	75-127	1	0-20	
1,3-Dichloropropane	ND	250.0	244.5	98	266.9	107	75-125	9	0-20	
2,2-Dichloropropane	ND	250.0	361.4	145	348.5	139	24-180	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloropropene	ND	250.0	284.0	114	288.8	116	75-135	2	0-20	
c-1,3-Dichloropropene	ND	250.0	271.4	109	270.2	108	75-137	0	0-20	
t-1,3-Dichloropropene	ND	250.0	243.2	97	249.2	100	74-146	2	0-20	
Ethylbenzene	ND	250.0	281.7	113	286.4	115	75-129	2	0-20	
2-Hexanone	ND	250.0	224.2	90	269.7	108	47-161	18	0-20	
Isopropylbenzene	ND	250.0	286.9	115	288.6	115	75-135	1	0-20	
p-Isopropyltoluene	ND	250.0	279.4	112	274.0	110	75-136	2	0-20	
Methylene Chloride	ND	250.0	270.6	108	294.2	118	63-141	8	0-20	
4-Methyl-2-Pentanone	ND	250.0	226.1	90	263.7	105	66-138	15	0-20	
Naphthalene	ND	250.0	244.1	98	267.3	107	59-143	9	0-20	
n-Propylbenzene	ND	250.0	301.0	120	298.8	120	75-133	1	0-20	
Styrene	ND	250.0	278.4	111	293.5	117	70-142	5	0-28	
1,1,1,2-Tetrachloroethane	ND	250.0	290.2	116	300.3	120	75-139	3	0-20	
1,1,2,2-Tetrachloroethane	ND	250.0	234.4	94	272.4	109	61-145	15	0-20	
Tetrachloroethene	ND	250.0	168.1	67	161.1	64	47-143	4	0-20	
Toluene	ND	250.0	275.3	110	276.8	111	75-125	1	0-20	
1,2,3-Trichlorobenzene	ND	250.0	262.7	105	267.9	107	73-133	2	0-20	
1,2,4-Trichlorobenzene	ND	250.0	304.5	122	307.4	123	71-137	1	0-20	
1,1,1-Trichloroethane	ND	250.0	304.0	122	305.9	122	75-136	1	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250.0	317.5	127	298.3	119	42-168	6	0-22	
1,1,2-Trichloroethane	ND	250.0	264.8	106	274.7	110	75-125	4	0-20	
Trichloroethene	ND	250.0	246.3	99	262.2	105	67-139	6	0-20	
Trichlorofluoromethane	ND	250.0	394.5	158	364.8	146	59-155	8	0-20	3
1,2,3-Trichloropropane	ND	250.0	252.0	101	274.4	110	75-127	9	0-20	
1,2,4-Trimethylbenzene	ND	250.0	264.9	106	257.3	103	75-133	3	0-20	
1,3,5-Trimethylbenzene	ND	250.0	305.9	122	304.2	122	75-135	1	0-20	
Vinyl Acetate	ND	250.0	490.2	196	479.3	192	54-180	2	0-25	3
Vinyl Chloride	ND	250.0	277.3	111	276.3	111	51-153	0	0-20	
p/m-Xylene	ND	500.0	552.3	110	568.9	114	75-133	3	0-20	
o-Xylene	ND	250.0	273.6	109	279.3	112	75-134	2	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	250.0	206.6	83	219.1	88	64-136	6	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 3510C  
 Method: EPA 8270C (M) SIM Isotope Dil

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-16-216-1746</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC/MS DDD</b>	<b>05/10/19</b>	<b>05/14/19 06:41</b>	<b>190510L02</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
1,4-Dioxane		20.00	25.79	129	50-130	





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## Quality Control - LCS/LCSD

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-001-28769	LCS	Aqueous	GC/MS QQ	05/14/19	05/14/19 09:52	190514L015				
099-14-001-28769	LCSD	Aqueous	GC/MS QQ	05/14/19	05/14/19 10:21	190514L015				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	50.00	46.96	94	48.91	98	53-137	39-151	4	0-21	
Benzene	50.00	49.79	100	50.22	100	79-121	72-128	1	0-20	
Bromobenzene	50.00	49.84	100	50.11	100	80-120	73-127	1	0-20	
Bromochloromethane	50.00	47.77	96	47.49	95	80-122	73-129	1	0-20	
Bromodichloromethane	50.00	52.80	106	53.20	106	80-124	73-131	1	0-20	
Bromoform	50.00	43.12	86	44.45	89	73-127	64-136	3	0-20	
Bromomethane	50.00	49.51	99	48.23	96	50-150	33-167	3	0-26	
2-Butanone	50.00	46.74	93	49.09	98	60-126	49-137	5	0-20	
n-Butylbenzene	50.00	54.59	109	55.35	111	72-138	61-149	1	0-20	
sec-Butylbenzene	50.00	55.33	111	56.19	112	77-131	68-140	2	0-20	
tert-Butylbenzene	50.00	55.03	110	56.62	113	80-125	72-132	3	0-20	
Carbon Disulfide	50.00	48.45	97	48.31	97	50-150	33-167	0	0-22	
Carbon Tetrachloride	50.00	54.04	108	53.31	107	65-143	52-156	1	0-20	
Chlorobenzene	50.00	49.77	100	50.16	100	80-120	73-127	1	0-20	
Chloroethane	50.00	59.15	118	58.80	118	62-128	51-139	1	0-20	
Chloroform	50.00	49.69	99	49.61	99	80-120	73-127	0	0-20	
Chloromethane	50.00	41.94	84	41.94	84	43-133	28-148	0	0-20	
2-Chlorotoluene	50.00	52.24	104	52.43	105	80-121	73-128	0	0-20	
4-Chlorotoluene	50.00	51.95	104	52.65	105	80-120	73-127	1	0-20	
Dibromochloromethane	50.00	49.10	98	50.07	100	80-123	73-130	2	0-20	
1,2-Dibromo-3-Chloropropane	50.00	49.96	100	52.64	105	66-126	56-136	5	0-20	
1,2-Dibromoethane	50.00	49.76	100	51.60	103	80-120	73-127	4	0-20	
Dibromomethane	50.00	49.81	100	50.75	101	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	50.00	50.91	102	50.87	102	80-120	73-127	0	0-20	
1,3-Dichlorobenzene	50.00	50.11	100	50.71	101	80-120	73-127	1	0-20	
1,4-Dichlorobenzene	50.00	49.59	99	49.83	100	80-120	73-127	0	0-20	
Dichlorodifluoromethane	50.00	42.90	86	40.39	81	50-150	33-167	6	0-30	
1,1-Dichloroethane	50.00	46.92	94	46.27	93	72-126	63-135	1	0-20	
1,2-Dichloroethane	50.00	49.98	100	50.12	100	76-120	69-127	0	0-20	
1,1-Dichloroethene	50.00	51.97	104	51.55	103	66-132	55-143	1	0-20	
c-1,2-Dichloroethene	50.00	50.42	101	50.38	101	78-120	71-127	0	0-20	
t-1,2-Dichloroethene	50.00	49.67	99	49.85	100	66-132	55-143	0	0-20	
1,2-Dichloropropane	50.00	51.45	103	51.77	104	80-120	73-127	1	0-20	
1,3-Dichloropropane	50.00	49.91	100	51.15	102	80-120	73-127	2	0-20	
2,2-Dichloropropane	50.00	54.08	108	53.96	108	50-150	33-167	0	0-20	
1,1-Dichloropropene	50.00	50.35	101	50.73	101	75-123	67-131	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits





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## Quality Control - LCS/LCSD

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
c-1,3-Dichloropropene	50.00	51.56	103	52.41	105	77-131	68-140	2	0-20	
t-1,3-Dichloropropene	50.00	47.25	94	47.77	96	76-136	66-146	1	0-20	
Ethylbenzene	50.00	52.66	105	53.19	106	80-120	73-127	1	0-20	
2-Hexanone	50.00	47.40	95	51.39	103	63-123	53-133	8	0-20	
Isopropylbenzene	50.00	54.89	110	55.74	111	80-128	72-136	2	0-20	
p-Isopropyltoluene	50.00	53.83	108	54.40	109	73-133	63-143	1	0-20	
Methylene Chloride	50.00	48.82	98	48.79	98	61-133	49-145	0	0-27	
4-Methyl-2-Pentanone	50.00	46.74	93	50.76	102	65-125	55-135	8	0-20	
Naphthalene	50.00	48.38	97	50.56	101	69-129	59-139	4	0-20	
n-Propylbenzene	50.00	54.32	109	54.41	109	80-128	72-136	0	0-20	
Styrene	50.00	52.31	105	52.59	105	80-126	72-134	1	0-20	
1,1,1,2-Tetrachloroethane	50.00	52.34	105	53.62	107	80-129	72-137	2	0-20	
1,1,2,2-Tetrachloroethane	50.00	50.11	100	52.51	105	74-122	66-130	5	0-20	
Tetrachloroethene	50.00	37.83	76	39.06	78	55-139	41-153	3	0-23	
Toluene	50.00	50.20	100	51.02	102	80-120	73-127	2	0-20	
1,2,3-Trichlorobenzene	50.00	51.44	103	51.80	104	72-132	62-142	1	0-20	
1,2,4-Trichlorobenzene	50.00	54.56	109	54.87	110	74-134	64-144	1	0-20	
1,1,1-Trichloroethane	50.00	51.57	103	51.41	103	76-124	68-132	0	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	48.58	97	48.76	98	54-150	38-166	0	0-30	
1,1,2-Trichloroethane	50.00	50.27	101	51.76	104	80-120	73-127	3	0-20	
Trichloroethene	50.00	48.74	97	49.93	100	79-121	72-128	2	0-20	
Trichlorofluoromethane	50.00	54.91	110	54.46	109	72-132	62-142	1	0-20	
1,2,3-Trichloropropane	50.00	49.13	98	51.26	103	75-123	67-131	4	0-20	
1,2,4-Trimethylbenzene	50.00	54.54	109	55.03	110	74-128	65-137	1	0-20	
1,3,5-Trimethylbenzene	50.00	53.73	107	54.11	108	77-131	68-140	1	0-20	
Vinyl Acetate	50.00	54.20	108	54.95	110	50-150	33-167	1	0-20	
Vinyl Chloride	50.00	49.19	98	48.71	97	63-129	52-140	1	0-20	
p/m-Xylene	100.0	108.9	109	110.1	110	80-122	73-129	1	0-20	
o-Xylene	50.00	51.95	104	52.35	105	80-128	72-136	1	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	44.15	88	44.61	89	69-123	60-132	1	0-20	

Total number of LCS compounds: 66

Total number of ME compounds: 0

Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - LCS

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-14-001-28774</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC/MS QQ</b>	<b>05/14/19</b>	<b>05/14/19 21:42</b>	<b>190514L019</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acetone		50.00	44.80	90	53-137	39-151	
Benzene		50.00	49.05	98	79-121	72-128	
Bromobenzene		50.00	49.08	98	80-120	73-127	
Bromochloromethane		50.00	48.34	97	80-122	73-129	
Bromodichloromethane		50.00	53.03	106	80-124	73-131	
Bromoform		50.00	43.04	86	73-127	64-136	
Bromomethane		50.00	50.28	101	50-150	33-167	
2-Butanone		50.00	47.50	95	60-126	49-137	
n-Butylbenzene		50.00	52.12	104	72-138	61-149	
sec-Butylbenzene		50.00	53.54	107	77-131	68-140	
tert-Butylbenzene		50.00	51.81	104	80-125	72-132	
Carbon Disulfide		50.00	46.20	92	50-150	33-167	
Carbon Tetrachloride		50.00	51.97	104	65-143	52-156	
Chlorobenzene		50.00	48.49	97	80-120	73-127	
Chloroethane		50.00	57.69	115	62-128	51-139	
Chloroform		50.00	49.65	99	80-120	73-127	
Chloromethane		50.00	40.03	80	43-133	28-148	
2-Chlorotoluene		50.00	51.09	102	80-121	73-128	
4-Chlorotoluene		50.00	50.64	101	80-120	73-127	
Dibromochloromethane		50.00	49.51	99	80-123	73-130	
1,2-Dibromo-3-Chloropropane		50.00	50.05	100	66-126	56-136	
1,2-Dibromoethane		50.00	50.39	101	80-120	73-127	
Dibromomethane		50.00	51.30	103	80-120	73-127	
1,2-Dichlorobenzene		50.00	50.33	101	80-120	73-127	
1,3-Dichlorobenzene		50.00	48.73	97	80-120	73-127	
1,4-Dichlorobenzene		50.00	48.45	97	80-120	73-127	
Dichlorodifluoromethane		50.00	40.00	80	50-150	33-167	
1,1-Dichloroethane		50.00	44.93	90	72-126	63-135	
1,2-Dichloroethane		50.00	50.08	100	76-120	69-127	
1,1-Dichloroethene		50.00	49.71	99	66-132	55-143	
c-1,2-Dichloroethene		50.00	49.98	100	78-120	71-127	
t-1,2-Dichloroethene		50.00	48.42	97	66-132	55-143	
1,2-Dichloropropane		50.00	50.55	101	80-120	73-127	
1,3-Dichloropropane		50.00	49.61	99	80-120	73-127	
2,2-Dichloropropane		50.00	50.61	101	50-150	33-167	
1,1-Dichloropropene		50.00	48.41	97	75-123	67-131	
c-1,3-Dichloropropene		50.00	50.18	100	77-131	68-140	
t-1,3-Dichloropropene		50.00	45.55	91	76-136	66-146	

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Ethylbenzene	50.00	51.10	102	80-120	73-127	
2-Hexanone	50.00	47.16	94	63-123	53-133	
Isopropylbenzene	50.00	53.42	107	80-128	72-136	
p-Isopropyltoluene	50.00	51.18	102	73-133	63-143	
Methylene Chloride	50.00	49.14	98	61-133	49-145	
4-Methyl-2-Pentanone	50.00	48.25	96	65-125	55-135	
Naphthalene	50.00	49.79	100	69-129	59-139	
n-Propylbenzene	50.00	52.62	105	80-128	72-136	
Styrene	50.00	51.20	102	80-126	72-134	
1,1,1,2-Tetrachloroethane	50.00	52.77	106	80-129	72-137	
1,1,2,2-Tetrachloroethane	50.00	50.21	100	74-122	66-130	
Tetrachloroethene	50.00	46.12	92	55-139	41-153	
Toluene	50.00	49.54	99	80-120	73-127	
1,2,3-Trichlorobenzene	50.00	50.35	101	72-132	62-142	
1,2,4-Trichlorobenzene	50.00	52.59	105	74-134	64-144	
1,1,1-Trichloroethane	50.00	49.79	100	76-124	68-132	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	46.95	94	54-150	38-166	
1,1,2-Trichloroethane	50.00	51.11	102	80-120	73-127	
Trichloroethene	50.00	48.64	97	79-121	72-128	
Trichlorofluoromethane	50.00	53.20	106	72-132	62-142	
1,2,3-Trichloropropane	50.00	49.78	100	75-123	67-131	
1,2,4-Trimethylbenzene	50.00	52.58	105	74-128	65-137	
1,3,5-Trimethylbenzene	50.00	51.97	104	77-131	68-140	
Vinyl Acetate	50.00	48.30	97	50-150	33-167	
Vinyl Chloride	50.00	47.34	95	63-129	52-140	
p/m-Xylene	100.0	105.7	106	80-122	73-129	
o-Xylene	50.00	50.56	101	80-128	72-136	
Methyl-t-Butyl Ether (MTBE)	50.00	43.34	87	69-123	60-132	

Total number of LCS compounds: 66

Total number of ME compounds: 0

Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - LCS

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

Date Received: 05/09/19  
Work Order: 19-05-0708  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-14-001-28773</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC/MS RR</b>	<b>05/15/19</b>	<b>05/15/19 09:42</b>	<b>190515L013</b>	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Acetone		50.00	48.77	98	53-137	39-151	
Benzene		50.00	50.28	101	79-121	72-128	
Bromobenzene		50.00	57.93	116	80-120	73-127	
Bromochloromethane		50.00	56.93	114	80-122	73-129	
Bromodichloromethane		50.00	56.60	113	80-124	73-131	
Bromoform		50.00	53.55	107	73-127	64-136	
Bromomethane		50.00	54.15	108	50-150	33-167	
2-Butanone		50.00	51.80	104	60-126	49-137	
n-Butylbenzene		50.00	51.53	103	72-138	61-149	
sec-Butylbenzene		50.00	49.90	100	77-131	68-140	
tert-Butylbenzene		50.00	49.12	98	80-125	72-132	
Carbon Disulfide		50.00	53.87	108	50-150	33-167	
Carbon Tetrachloride		50.00	58.07	116	65-143	52-156	
Chlorobenzene		50.00	52.99	106	80-120	73-127	
Chloroethane		50.00	59.39	119	62-128	51-139	
Chloroform		50.00	56.13	112	80-120	73-127	
Chloromethane		50.00	50.18	100	43-133	28-148	
2-Chlorotoluene		50.00	56.24	112	80-121	73-128	
4-Chlorotoluene		50.00	50.95	102	80-120	73-127	
Dibromochloromethane		50.00	52.30	105	80-123	73-130	
1,2-Dibromo-3-Chloropropane		50.00	50.52	101	66-126	56-136	
1,2-Dibromoethane		50.00	51.98	104	80-120	73-127	
Dibromomethane		50.00	57.83	116	80-120	73-127	
1,2-Dichlorobenzene		50.00	52.17	104	80-120	73-127	
1,3-Dichlorobenzene		50.00	52.74	105	80-120	73-127	
1,4-Dichlorobenzene		50.00	53.31	107	80-120	73-127	
Dichlorodifluoromethane		50.00	39.90	80	50-150	33-167	
1,1-Dichloroethane		50.00	53.36	107	72-126	63-135	
1,2-Dichloroethane		50.00	57.01	114	76-120	69-127	
1,1-Dichloroethene		50.00	55.87	112	66-132	55-143	
c-1,2-Dichloroethene		50.00	53.60	107	78-120	71-127	
t-1,2-Dichloroethene		50.00	49.77	100	66-132	55-143	
1,2-Dichloropropane		50.00	53.07	106	80-120	73-127	
1,3-Dichloropropane		50.00	49.85	100	80-120	73-127	
2,2-Dichloropropane		50.00	66.53	133	50-150	33-167	
1,1-Dichloropropene		50.00	53.35	107	75-123	67-131	
c-1,3-Dichloropropene		50.00	55.04	110	77-131	68-140	
t-1,3-Dichloropropene		50.00	50.74	101	76-136	66-146	

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

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

Date Received: 05/09/19  
 Work Order: 19-05-0708  
 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: Building 684 - Raytheon / 764.10

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<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Ethylbenzene	50.00	53.60	107	80-120	73-127	
2-Hexanone	50.00	49.61	99	63-123	53-133	
Isopropylbenzene	50.00	52.68	105	80-128	72-136	
p-Isopropyltoluene	50.00	50.59	101	73-133	63-143	
Methylene Chloride	50.00	54.72	109	61-133	49-145	
4-Methyl-2-Pentanone	50.00	49.39	99	65-125	55-135	
Naphthalene	50.00	50.74	101	69-129	59-139	
n-Propylbenzene	50.00	56.19	112	80-128	72-136	
Styrene	50.00	56.22	112	80-126	72-134	
1,1,1,2-Tetrachloroethane	50.00	55.56	111	80-129	72-137	
1,1,2,2-Tetrachloroethane	50.00	50.63	101	74-122	66-130	
Tetrachloroethene	50.00	31.35	63	55-139	41-153	
Toluene	50.00	53.98	108	80-120	73-127	
1,2,3-Trichlorobenzene	50.00	51.15	102	72-132	62-142	
1,2,4-Trichlorobenzene	50.00	56.42	113	74-134	64-144	
1,1,1-Trichloroethane	50.00	57.10	114	76-124	68-132	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	61.74	123	54-150	38-166	
1,1,2-Trichloroethane	50.00	51.69	103	80-120	73-127	
Trichloroethene	50.00	49.75	100	79-121	72-128	
Trichlorofluoromethane	50.00	64.70	129	72-132	62-142	
1,2,3-Trichloropropane	50.00	54.15	108	75-123	67-131	
1,2,4-Trimethylbenzene	50.00	50.17	100	74-128	65-137	
1,3,5-Trimethylbenzene	50.00	56.87	114	77-131	68-140	
Vinyl Acetate	50.00	99.03	198	50-150	33-167	X
Vinyl Chloride	50.00	47.88	96	63-129	52-140	
p/m-Xylene	100.0	107.0	107	80-122	73-129	
o-Xylene	50.00	51.64	103	80-128	72-136	
Methyl-t-Butyl Ether (MTBE)	50.00	47.54	95	69-123	60-132	

Total number of LCS compounds: 66

Total number of ME compounds: 0

Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

## Sample Analysis Summary Report

Work Order: 19-05-0708

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8260B	EPA 5030C	486	GC/MS QQ	2
EPA 8260B	EPA 5030C	486	GC/MS RR	2
EPA 8270C (M) SIM Isotope Dil	EPA 3510C	1117	GC/MS DDD	1

  
Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

## Glossary of Terms and Qualifiers

Work Order: 19-05-0708

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Date: 5/8/19  
Page 1 of 2

**19-05-0708**

**HARGIS + ASSOCIATES, INC.**  
HYDROGEOLOGY • ENGINEERING

PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	Sampled By:	Date	Time
BCI Fullerton 764.10	<u>Andrew-Dennelly</u> <u>DJ-Seeley R. Seeley</u>	<u>5/8/19</u>	<u>7:30</u>

LAB ID	SAMPLE ID	Date	Time
1	<u>IB-050819</u>	<u>5/8/19</u>	<u>7:30</u>
2	<u>LAX-01</u>	<u>↓</u>	<u>9:55</u>
3	<u>UAX-03</u>	<u>↓</u>	<u>10:40</u>
4	<u>HEW-04</u>	<u>↓</u>	<u>11:00</u>
5	<u>LAX-03</u>	<u>↓</u>	<u>11:20</u>
6	<u>UAX-02</u>	<u>↓</u>	<u>11:40</u>
7	<u>LAX-02</u>	<u>↓</u>	<u>13:45</u>
8	<u>IB-050819</u>	<u>↓</u>	<u>14:00</u>
9	<u>HEW-01</u>	<u>↓</u>	<u>14:10</u>
10	<u>HEW-0100</u>	<u>↓</u>	<u>14:20</u>

MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION	SPECIAL HANDLING	REMARKS
Groundwater	Hydrochloric Acid (HCl)	500 ml Amber	VOCs by EPA 8260B	0-10	Standard TAT	
Lab prepared water		40-ml VOA	1,4-Dioxane by 8270 MOD	10-100		
				>1,000		
						M/MSD Requested

Total No. of Containers: 39

<input type="checkbox"/>	No. of containers correct
<input type="checkbox"/>	Received in good condition
<input type="checkbox"/>	Custody seals secure
<input type="checkbox"/>	Conforms to COC document

Send Results to:  
**Ken Puentes**

9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com

Temperature on receipt

Requisitioned By: / Company:	Date / Time Received By: / Company:
<u>[Signature]</u> / H&A	<u>5-9-19</u> / <u>1245</u>
<u>[Signature]</u> / H&A	<u>5-9-19</u> / <u>1506</u>

Total number of containers per analysis:



Date: 5/8/19  
Page 2 of 2

0708



PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	Sampled By:	SAMPLE COLLECTION	
		Date	Time
BCI Fullerton 764.10	<u>Andrew-Dennelly</u> <u>DJ-Seelee</u>		
LAB ID	SAMPLE ID		
<u>116</u>	<u>HEW-03</u>	<u>5/8/19</u>	<u>1420</u>
<u>125</u>	<u>DAX-01</u>	<u>I</u>	<u>1450</u>
<u>130</u>	<u>HEW-02</u>	<u>5/9/19</u>	<u>730</u>
<u>144</u>	<u>HEW-05</u>	<u>I</u>	<u>743</u>

MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION	SPECIAL HANDLING
Groundwater	Lab prepared water	40-ml VOA	VOCs by EPA 8260B	0-10	Standard TAT
	Hydrochloric Acid (HCl)	500 ml Amber	1,4-Dioxane by 8270 MOD	10-100	
				100-1,000	
				>1,000	
					MSMDS Requested

Total No. of Containers: 16 55

No. of containers correct  
 Received in good condition  
 Custody seals secure  
 Conforms to COC document

Relinquished By: / Company:	Date / Time	Received By: / Company:	Date / Time
<u>[Signature]</u> HRA	<u>5-9-19</u> <u>1245</u>	<u>[Signature]</u>	<u>5-9-19</u> <u>1245</u>
<u>[Signature]</u>	<u>5-9-19</u> <u>1506</u>	<u>[Signature]</u>	<u>5/9/19</u> <u>15:06</u>

Send Results to:  
**Ken Puentes**  
 9171 Towne Centre Drive  
 Suite 375  
 San Diego, CA 92122  
 Ph: 858-455-6500  
 kpuentes@hargis.com

Temperature on receipt \_\_\_\_\_



**SAMPLE RECEIPT CHECKLIST**

COOLER 1 OF 1

CLIENT: Hargis + Associates

DATE: 05/09/2019

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC6 (CF: -0.2°C); Temperature (w/o CF): 3.3 °C (w/ CF): 3.1 °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  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter  
 Checked by: 619

**CUSTODY SEAL:**  
 Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 619  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1163

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** 3 (Trip Blank Lot Number: 190315A)  
**Aqueous:**  VOA  VOAh  VOAna2  100PJ  100PJna2  125AGB  125AGBh  125AGBp  125PB  125PBzanna (pH\_\_9)  
 250AGB  250CGB  250CGBs (pH\_\_2)  250PB  250PBn (pH\_\_2)  500AGB  500AGJ  500AGJs (pH\_\_2)  500PB  
 1AGB  1AGBna2  1AGBs (pH\_\_2)  1AGBs (O&G)  1PB  1PBna (pH\_\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
**Solid:**  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (\_\_\_\_)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
**Air:**  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ **Other Matrix** (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag  
 Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO<sub>3</sub>, **na** = NaOH, **na2** = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, **p** = H<sub>3</sub>PO<sub>4</sub>, **s** = H<sub>2</sub>SO<sub>4</sub>, **u** = ultra-pure, **x** = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, **zanna** = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH  
 Labeled/Checked by: 1163  
 Reviewed by: 8/16

**SAMPLE ANOMALY REPORT**

**DATE: 05/09/2019**

**SAMPLES, CONTAINERS, AND LABELS:**

- Sample(s) NOT RECEIVED but listed on COC
  - Sample(s) received but NOT LISTED on COC
  - Holding time expired (list client or ECI sample ID and analysis)
  - Insufficient sample amount for requested analysis (list analysis)
  - Improper container(s) used (list analysis)
  - Improper preservative used (list analysis)
  - pH outside acceptable range (list analysis)
  - No preservative noted on COC or label (list analysis and notify lab)
  - Sample container(s) not labeled
  - Client sample label(s) illegible (list container type and analysis)
  - Client sample label(s) do not match COC (comment)
    - Project information
    - Client sample ID
    - Sampling date and/or time
    - Number of container(s)
    - Requested analysis
  - Sample container(s) compromised (comment)
    - Broken
    - Water present in sample container
  - Air sample container(s) compromised (comment)
    - Flat
    - Very low in volume
    - Leaking (not transferred; duplicate bag submitted)
    - Leaking (transferred into ECI Tedlar™ bags\*)
    - Leaking (transferred into client's Tedlar™ bags\*)
- \* Transferred at client's request.

**Comments**

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**MISCELLANEOUS: (Describe)**

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**Comments**

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**HEADSPACE:**

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**
6	C	3			
9,10,12	B,C	3			
11	A,B,C	3			

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: \_\_\_\_\_

\_\_\_\_\_

Reported by: 1163  
 Reviewed by: [Signature]

\*\* Record the total number of containers (i.e., vials or bottles) for the affected sample.



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

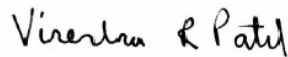
Laboratory Job ID: 570-5961-1

Client Project/Site: Raytheon Building 684 / 764.10

**For:**

Hargis + Associates, Inc.  
La Jolla Gateway  
9171 Towne Centre Drive  
Suite 375  
San Diego, California 92122

Attn: Julie Kelly



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Authorized for release by:  
9/12/2019 4:03:17 PM

Virendra Patel, Project Manager I  
(714)895-5494  
[virendrapatel@eurofinsus.com](mailto:virendrapatel@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

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**Job ID: 570-5961-1**

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**Laboratory: Eurofins Calscience LLC**

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## Narrative

### Job Narrative 570-5961-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/28/2019 5:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: TB-082719

Lab Sample ID: 570-5961-1

No Detections.

## Client Sample ID: LAX-01

Lab Sample ID: 570-5961-2

No Detections.

## Client Sample ID: UAX-03

Lab Sample ID: 570-5961-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.58		0.50	0.10	ug/L	1		8260B	Total/NA
Chloroform	0.094	J	0.50	0.062	ug/L	1		8260B	Total/NA
Trichloroethene	10		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: HEW-04

Lab Sample ID: 570-5961-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.3	J	2.5	0.51	ug/L	5		8260B	Total/NA
Tetrachloroethene	1.6	J	2.5	1.2	ug/L	5		8260B	Total/NA
Trichloroethene	120		2.5	0.51	ug/L	5		8260B	Total/NA
1,4-Dioxane	9.1		0.50	0.18	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: HEW-0400

Lab Sample ID: 570-5961-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.4	J	2.5	0.51	ug/L	5		8260B	Total/NA
Tetrachloroethene	1.5	J	2.5	1.2	ug/L	5		8260B	Total/NA
Trichloroethene	120		2.5	0.51	ug/L	5		8260B	Total/NA
1,4-Dioxane	6.6		0.50	0.18	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: LAX-02

Lab Sample ID: 570-5961-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene - RA	0.12	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-16D

Lab Sample ID: 570-5961-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.61		0.50	0.24	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-17D

Lab Sample ID: 570-5961-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.41	J	10	0.39	ug/L	1		8260B	Total/NA
Methyl-t-Butyl Ether (MTBE)	1.6		0.50	0.067	ug/L	1		8260B	Total/NA

## Client Sample ID: RB-082819A

Lab Sample ID: 570-5961-9

No Detections.

## Client Sample ID: UA-13D

Lab Sample ID: 570-5961-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.35	J	0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	0.37	J	0.50	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-10D

## Lab Sample ID: 570-5961-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.7		0.50	0.24	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-07D

## Lab Sample ID: 570-5961-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.66		0.50	0.060	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.2		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	0.15	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-07

## Lab Sample ID: 570-5961-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.085	J	0.50	0.084	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	4.0		0.50	0.060	ug/L	1		8260B	Total/NA
Trichloroethene	0.68		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: RB-082819B

## Lab Sample ID: 570-5961-14

No Detections.

## Client Sample ID: S-26

## Lab Sample ID: 570-5961-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.088	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.30	J	0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene	0.51		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-06D

## Lab Sample ID: 570-5961-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.7		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	0.53		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-06

## Lab Sample ID: 570-5961-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	4.3		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	0.69		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-14D

## Lab Sample ID: 570-5961-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	38		1.0	0.48	ug/L	2		8260B	Total/NA
Trichloroethene	0.62	J	1.0	0.20	ug/L	2		8260B	Total/NA

## Client Sample ID: UA-08D

## Lab Sample ID: 570-5961-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.33	J	0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	1.9		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-08

## Lab Sample ID: 570-5961-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.064	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.15	J	0.50	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-08 (Continued)

Lab Sample ID: 570-5961-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.30	J	0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	2.7		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-29

Lab Sample ID: 570-5961-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.29	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-12D

Lab Sample ID: 570-5961-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.52		0.50	0.24	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-12

Lab Sample ID: 570-5961-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.17	J	0.50	0.10	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.34	J	0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	3.7		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-30

Lab Sample ID: 570-5961-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.17	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.88		0.50	0.10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.46	J	0.50	0.11	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.58		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	0.30	J	0.50	0.10	ug/L	1		8260B	Total/NA
Vinyl chloride	0.15	J	0.50	0.078	ug/L	1		8260B	Total/NA

## Client Sample ID: HEW-02

Lab Sample ID: 570-5961-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.34	J	0.50	0.10	ug/L	1		8260B	Total/NA
Chloroform	0.27	J	0.50	0.062	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.50		0.50	0.24	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	0.12	J	0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene - DL	110		5.0	1.0	ug/L	10		8260B	Total/NA

## Client Sample ID: HEW-05

Lab Sample ID: 570-5961-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.080	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.16	J	0.50	0.10	ug/L	1		8260B	Total/NA
Benzene	0.073	J	0.50	0.072	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	5.9		0.50	0.11	ug/L	1		8260B	Total/NA
Chloroform	0.14	J	0.50	0.062	ug/L	1		8260B	Total/NA
Vinyl chloride	0.079	J	0.50	0.078	ug/L	1		8260B	Total/NA
Trichloroethene - DL	120		5.0	1.0	ug/L	10		8260B	Total/NA

## Client Sample ID: UA-15D

Lab Sample ID: 570-5961-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.076	J	0.50	0.072	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-15D (Continued)

Lab Sample ID: 570-5961-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene - RA	0.37	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-24

Lab Sample ID: 570-5961-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.31	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethene	6.0		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-11D

Lab Sample ID: 570-5961-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.62		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	1.2		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: RB-082819C

Lab Sample ID: 570-5961-30

No Detections.

## Client Sample ID: S-31

Lab Sample ID: 570-5961-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.068	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.24	J	0.50	0.10	ug/L	1		8260B	Total/NA
Methyl-t-Butyl Ether (MTBE)	0.35	J	0.50	0.067	ug/L	1		8260B	Total/NA
Trichloroethene	0.66		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-15

Lab Sample ID: 570-5961-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.19	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.40	J	0.50	0.10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.26	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethene	2.5		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-07

Lab Sample ID: 570-5961-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.70		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-02

Lab Sample ID: 570-5961-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.081	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	1.8		0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene	4.2		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: LAX-03

Lab Sample ID: 570-5961-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.31	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-14

Lab Sample ID: 570-5961-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.30	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.17	J	0.50	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: S-14 (Continued)

Lab Sample ID: 570-5961-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.12	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethene	1.0		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UAX-02

Lab Sample ID: 570-5961-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.19	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	4.0		0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene	4.3		0.50	0.10	ug/L	1		8260B	Total/NA
1,4-Dioxane	2.1		0.50	0.18	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: UAX-0200

Lab Sample ID: 570-5961-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.18	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	4.1		0.50	0.10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.13	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethene	4.5		0.50	0.10	ug/L	1		8260B	Total/NA
1,4-Dioxane	2.4		0.50	0.18	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: S-02

Lab Sample ID: 570-5961-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.31	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-0200

Lab Sample ID: 570-5961-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.31	J	0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-03

Lab Sample ID: 570-5961-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.39	J	0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	3.1		0.50	0.10	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	0.70		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-27

Lab Sample ID: 570-5961-42

No Detections.

## Client Sample ID: HEW-01

Lab Sample ID: 570-5961-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.17	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	4.1		0.50	0.10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.34	J	0.50	0.11	ug/L	1		8260B	Total/NA
Chloroform	0.47	J	0.50	0.062	ug/L	1		8260B	Total/NA
Tetrachloroethene	8.4		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene - DL	580		25	5.1	ug/L	50		8260B	Total/NA
1,4-Dioxane	1.3		0.50	0.18	ug/L	1		8270C SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: S-18

## Lab Sample ID: 570-5961-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.099	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.12	J	0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene - RA	0.79		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: UA-11

## Lab Sample ID: 570-5961-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	4.2		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene - RA	1.1		0.50	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: TB-082719**  
**Date Collected: 08/27/19 07:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 17:07	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 17:07	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 17:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 17:07	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 17:07	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 17:07	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 17:07	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 17:07	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 17:07	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 17:07	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 17:07	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 17:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 17:07	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 17:07	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 17:07	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 17:07	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 17:07	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 17:07	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 17:07	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 17:07	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 17:07	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 17:07	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 17:07	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 17:07	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 17:07	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 17:07	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 17:07	1
Acetone	ND		10	4.0	ug/L			09/07/19 17:07	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 17:07	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 17:07	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 17:07	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 17:07	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 17:07	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 17:07	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 17:07	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 17:07	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 17:07	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 17:07	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 17:07	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 17:07	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 17:07	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 17:07	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 17:07	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 17:07	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 17:07	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 17:07	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 17:07	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 17:07	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 17:07	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB-082719**  
**Date Collected: 08/27/19 07:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 17:07	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 17:07	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 17:07	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 17:07	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 17:07	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 17:07	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 17:07	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 17:07	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 17:07	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 17:07	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 17:07	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 17:07	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 17:07	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 17:07	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 17:07	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 17:07	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 128		09/07/19 17:07	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/07/19 17:07	1
Dibromofluoromethane	97		80 - 127		09/07/19 17:07	1
Toluene-d8 (Surr)	98		80 - 120		09/07/19 17:07	1

**Client Sample ID: LAX-01**  
**Date Collected: 08/27/19 10:28**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 17:32	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 17:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 17:32	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 17:32	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 17:32	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 17:32	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 17:32	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 17:32	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 17:32	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 17:32	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 17:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 17:32	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 17:32	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 17:32	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 17:32	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 17:32	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 17:32	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 17:32	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 17:32	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 17:32	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 17:32	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-01**  
**Date Collected: 08/27/19 10:28**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 17:32	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 17:32	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 17:32	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 17:32	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 17:32	1
Acetone	ND		10	4.0	ug/L			09/07/19 17:32	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 17:32	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 17:32	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 17:32	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 17:32	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 17:32	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 17:32	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 17:32	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 17:32	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 17:32	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 17:32	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 17:32	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 17:32	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 17:32	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 17:32	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 17:32	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 17:32	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 17:32	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 17:32	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 17:32	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 17:32	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 17:32	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 17:32	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 17:32	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 17:32	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 17:32	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 17:32	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 17:32	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 17:32	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 17:32	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 17:32	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 17:32	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 17:32	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 17:32	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 17:32	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 17:32	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 17:32	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 17:32	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/07/19 17:32	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/07/19 17:32	1
Dibromofluoromethane	101		80 - 127		09/07/19 17:32	1
Toluene-d8 (Surr)	100		80 - 120		09/07/19 17:32	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UAX-03**  
**Date Collected: 08/27/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 17:58	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 17:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 17:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 17:58	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 17:58	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 17:58	1
<b>1,1-Dichloroethene</b>	<b>0.58</b>		0.50	0.10	ug/L			09/07/19 17:58	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 17:58	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 17:58	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 17:58	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 17:58	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 17:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 17:58	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 17:58	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 17:58	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 17:58	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 17:58	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 17:58	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 17:58	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 17:58	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 17:58	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 17:58	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 17:58	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 17:58	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 17:58	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 17:58	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 17:58	1
Acetone	ND		10	4.0	ug/L			09/07/19 17:58	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 17:58	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 17:58	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 17:58	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 17:58	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 17:58	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 17:58	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 17:58	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 17:58	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 17:58	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 17:58	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 17:58	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 17:58	1
<b>Chloroform</b>	<b>0.094</b>	<b>J</b>	0.50	0.062	ug/L			09/07/19 17:58	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 17:58	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 17:58	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 17:58	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 17:58	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 17:58	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 17:58	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 17:58	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 17:58	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-03**  
**Date Collected: 08/27/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 17:58	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 17:58	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 17:58	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 17:58	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 17:58	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 17:58	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 17:58	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 17:58	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 17:58	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 17:58	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 17:58	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 17:58	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 17:58	1
<b>Trichloroethene</b>	<b>10</b>		0.50	0.10	ug/L			09/07/19 17:58	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 17:58	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 17:58	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 128		09/07/19 17:58	1
4-Bromofluorobenzene (Surr)	90		68 - 120		09/07/19 17:58	1
Dibromofluoromethane	102		80 - 127		09/07/19 17:58	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 17:58	1

**Client Sample ID: HEW-04**  
**Date Collected: 08/27/19 12:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/07/19 18:23	5
1,1,1-Trichloroethane	ND		2.5	0.42	ug/L			09/07/19 18:23	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.43	ug/L			09/07/19 18:23	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	0.63	ug/L			09/07/19 18:23	5
1,1,2-Trichloroethane	ND		2.5	0.35	ug/L			09/07/19 18:23	5
1,1-Dichloroethane	ND		2.5	0.30	ug/L			09/07/19 18:23	5
<b>1,1-Dichloroethene</b>	<b>1.3</b>	<b>J</b>	2.5	0.51	ug/L			09/07/19 18:23	5
1,1-Dichloropropene	ND		2.5	0.35	ug/L			09/07/19 18:23	5
1,2,3-Trichlorobenzene	ND		2.5	0.59	ug/L			09/07/19 18:23	5
1,2,3-Trichloropropane	ND		5.0	0.38	ug/L			09/07/19 18:23	5
1,2,4-Trichlorobenzene	ND		2.5	0.45	ug/L			09/07/19 18:23	5
1,2,4-Trimethylbenzene	ND		2.5	0.34	ug/L			09/07/19 18:23	5
1,2-Dibromo-3-Chloropropane	ND		25	2.6	ug/L			09/07/19 18:23	5
1,2-Dibromoethane	ND		2.5	0.30	ug/L			09/07/19 18:23	5
1,2-Dichlorobenzene	ND		2.5	0.41	ug/L			09/07/19 18:23	5
1,2-Dichloroethane	ND		2.5	0.37	ug/L			09/07/19 18:23	5
1,2-Dichloropropane	ND		2.5	0.49	ug/L			09/07/19 18:23	5
1,3,5-Trimethylbenzene	ND		2.5	0.39	ug/L			09/07/19 18:23	5
1,3-Dichlorobenzene	ND		2.5	0.49	ug/L			09/07/19 18:23	5
1,3-Dichloropropane	ND		5.0	0.41	ug/L			09/07/19 18:23	5
1,4-Dichlorobenzene	ND		2.5	0.37	ug/L			09/07/19 18:23	5
2,2-Dichloropropane	ND		5.0	1.9	ug/L			09/07/19 18:23	5

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-04**  
**Date Collected: 08/27/19 12:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		25	2.3	ug/L			09/07/19 18:23	5
2-Chlorotoluene	ND		2.5	0.29	ug/L			09/07/19 18:23	5
2-Hexanone	ND		50	2.5	ug/L			09/07/19 18:23	5
4-Chlorotoluene	ND		2.5	0.46	ug/L			09/07/19 18:23	5
4-Methyl-2-pentanone	ND		25	2.1	ug/L			09/07/19 18:23	5
Acetone	ND		50	20	ug/L			09/07/19 18:23	5
Benzene	ND		2.5	0.36	ug/L			09/07/19 18:23	5
Bromobenzene	ND		2.5	0.31	ug/L			09/07/19 18:23	5
Bromochloromethane	ND		5.0	0.41	ug/L			09/07/19 18:23	5
Bromodichloromethane	ND		2.5	0.26	ug/L			09/07/19 18:23	5
Bromoform	ND		2.5	0.48	ug/L			09/07/19 18:23	5
Bromomethane	ND		10	5.0	ug/L			09/07/19 18:23	5
cis-1,2-Dichloroethene	ND		2.5	0.54	ug/L			09/07/19 18:23	5
cis-1,3-Dichloropropene	ND		2.5	0.48	ug/L			09/07/19 18:23	5
Carbon disulfide	ND		50	1.9	ug/L			09/07/19 18:23	5
Carbon tetrachloride	ND		2.5	0.28	ug/L			09/07/19 18:23	5
Chlorobenzene	ND		2.5	0.44	ug/L			09/07/19 18:23	5
Chloroethane	ND		2.5	0.59	ug/L			09/07/19 18:23	5
Chloroform	ND		2.5	0.31	ug/L			09/07/19 18:23	5
Chloromethane	ND		25	9.8	ug/L			09/07/19 18:23	5
Dibromochloromethane	ND		2.5	0.32	ug/L			09/07/19 18:23	5
Dibromomethane	ND		2.5	0.63	ug/L			09/07/19 18:23	5
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			09/07/19 18:23	5
Ethylbenzene	ND		2.5	0.44	ug/L			09/07/19 18:23	5
Isopropylbenzene	ND		2.5	0.38	ug/L			09/07/19 18:23	5
Methylene Chloride	ND		5.0	0.21	ug/L			09/07/19 18:23	5
Methyl-t-Butyl Ether (MTBE)	ND		2.5	0.33	ug/L			09/07/19 18:23	5
Naphthalene	ND		5.0	0.48	ug/L			09/07/19 18:23	5
n-Butylbenzene	ND		2.5	0.54	ug/L			09/07/19 18:23	5
N-Propylbenzene	ND		2.5	0.38	ug/L			09/07/19 18:23	5
o-Xylene	ND		2.5	0.43	ug/L			09/07/19 18:23	5
m,p-Xylene	ND		5.0	0.74	ug/L			09/07/19 18:23	5
p-Isopropyltoluene	ND		2.5	0.37	ug/L			09/07/19 18:23	5
sec-Butylbenzene	ND		2.5	0.48	ug/L			09/07/19 18:23	5
Styrene	ND		2.5	0.29	ug/L			09/07/19 18:23	5
trans-1,2-Dichloroethene	ND		2.5	0.41	ug/L			09/07/19 18:23	5
trans-1,3-Dichloropropene	ND		2.5	0.27	ug/L			09/07/19 18:23	5
tert-Butylbenzene	ND		2.5	0.41	ug/L			09/07/19 18:23	5
<b>Tetrachloroethene</b>	<b>1.6</b>	<b>J</b>	2.5	1.2	ug/L			09/07/19 18:23	5
Toluene	ND		2.5	0.46	ug/L			09/07/19 18:23	5
<b>Trichloroethene</b>	<b>120</b>		2.5	0.51	ug/L			09/07/19 18:23	5
Trichlorofluoromethane	ND		2.5	0.52	ug/L			09/07/19 18:23	5
Vinyl acetate	ND		25	3.5	ug/L			09/07/19 18:23	5
Vinyl chloride	ND		2.5	0.39	ug/L			09/07/19 18:23	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 128		09/07/19 18:23	5
4-Bromofluorobenzene (Surr)	89		68 - 120		09/07/19 18:23	5
Dibromofluoromethane	103		80 - 127		09/07/19 18:23	5
Toluene-d8 (Surr)	98		80 - 120		09/07/19 18:23	5

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-0400**  
**Date Collected: 08/27/19 12:45**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/07/19 18:49	5
1,1,1-Trichloroethane	ND		2.5	0.42	ug/L			09/07/19 18:49	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.43	ug/L			09/07/19 18:49	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	0.63	ug/L			09/07/19 18:49	5
1,1,2-Trichloroethane	ND		2.5	0.35	ug/L			09/07/19 18:49	5
1,1-Dichloroethane	ND		2.5	0.30	ug/L			09/07/19 18:49	5
<b>1,1-Dichloroethene</b>	<b>1.4</b>	<b>J</b>	2.5	0.51	ug/L			09/07/19 18:49	5
1,1-Dichloropropene	ND		2.5	0.35	ug/L			09/07/19 18:49	5
1,2,3-Trichlorobenzene	ND		2.5	0.59	ug/L			09/07/19 18:49	5
1,2,3-Trichloropropane	ND		5.0	0.38	ug/L			09/07/19 18:49	5
1,2,4-Trichlorobenzene	ND		2.5	0.45	ug/L			09/07/19 18:49	5
1,2,4-Trimethylbenzene	ND		2.5	0.34	ug/L			09/07/19 18:49	5
1,2-Dibromo-3-Chloropropane	ND		25	2.6	ug/L			09/07/19 18:49	5
1,2-Dibromoethane	ND		2.5	0.30	ug/L			09/07/19 18:49	5
1,2-Dichlorobenzene	ND		2.5	0.41	ug/L			09/07/19 18:49	5
1,2-Dichloroethane	ND		2.5	0.37	ug/L			09/07/19 18:49	5
1,2-Dichloropropane	ND		2.5	0.49	ug/L			09/07/19 18:49	5
1,3,5-Trimethylbenzene	ND		2.5	0.39	ug/L			09/07/19 18:49	5
1,3-Dichlorobenzene	ND		2.5	0.49	ug/L			09/07/19 18:49	5
1,3-Dichloropropane	ND		5.0	0.41	ug/L			09/07/19 18:49	5
1,4-Dichlorobenzene	ND		2.5	0.37	ug/L			09/07/19 18:49	5
2,2-Dichloropropane	ND		5.0	1.9	ug/L			09/07/19 18:49	5
2-Butanone	ND		25	2.3	ug/L			09/07/19 18:49	5
2-Chlorotoluene	ND		2.5	0.29	ug/L			09/07/19 18:49	5
2-Hexanone	ND		50	2.5	ug/L			09/07/19 18:49	5
4-Chlorotoluene	ND		2.5	0.46	ug/L			09/07/19 18:49	5
4-Methyl-2-pentanone	ND		25	2.1	ug/L			09/07/19 18:49	5
Acetone	ND		50	20	ug/L			09/07/19 18:49	5
Benzene	ND		2.5	0.36	ug/L			09/07/19 18:49	5
Bromobenzene	ND		2.5	0.31	ug/L			09/07/19 18:49	5
Bromochloromethane	ND		5.0	0.41	ug/L			09/07/19 18:49	5
Bromodichloromethane	ND		2.5	0.26	ug/L			09/07/19 18:49	5
Bromoform	ND		2.5	0.48	ug/L			09/07/19 18:49	5
Bromomethane	ND		10	5.0	ug/L			09/07/19 18:49	5
cis-1,2-Dichloroethene	ND		2.5	0.54	ug/L			09/07/19 18:49	5
cis-1,3-Dichloropropane	ND		2.5	0.48	ug/L			09/07/19 18:49	5
Carbon disulfide	ND		50	1.9	ug/L			09/07/19 18:49	5
Carbon tetrachloride	ND		2.5	0.28	ug/L			09/07/19 18:49	5
Chlorobenzene	ND		2.5	0.44	ug/L			09/07/19 18:49	5
Chloroethane	ND		2.5	0.59	ug/L			09/07/19 18:49	5
Chloroform	ND		2.5	0.31	ug/L			09/07/19 18:49	5
Chloromethane	ND		25	9.8	ug/L			09/07/19 18:49	5
Dibromochloromethane	ND		2.5	0.32	ug/L			09/07/19 18:49	5
Dibromomethane	ND		2.5	0.63	ug/L			09/07/19 18:49	5
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			09/07/19 18:49	5
Ethylbenzene	ND		2.5	0.44	ug/L			09/07/19 18:49	5
Isopropylbenzene	ND		2.5	0.38	ug/L			09/07/19 18:49	5
Methylene Chloride	ND		5.0	0.21	ug/L			09/07/19 18:49	5
Methyl-t-Butyl Ether (MTBE)	ND		2.5	0.33	ug/L			09/07/19 18:49	5

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-0400**  
**Date Collected: 08/27/19 12:45**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0	0.48	ug/L			09/07/19 18:49	5
n-Butylbenzene	ND		2.5	0.54	ug/L			09/07/19 18:49	5
N-Propylbenzene	ND		2.5	0.38	ug/L			09/07/19 18:49	5
o-Xylene	ND		2.5	0.43	ug/L			09/07/19 18:49	5
m,p-Xylene	ND		5.0	0.74	ug/L			09/07/19 18:49	5
p-Isopropyltoluene	ND		2.5	0.37	ug/L			09/07/19 18:49	5
sec-Butylbenzene	ND		2.5	0.48	ug/L			09/07/19 18:49	5
Styrene	ND		2.5	0.29	ug/L			09/07/19 18:49	5
trans-1,2-Dichloroethene	ND		2.5	0.41	ug/L			09/07/19 18:49	5
trans-1,3-Dichloropropene	ND		2.5	0.27	ug/L			09/07/19 18:49	5
tert-Butylbenzene	ND		2.5	0.41	ug/L			09/07/19 18:49	5
<b>Tetrachloroethene</b>	<b>1.5</b>	<b>J</b>	2.5	1.2	ug/L			09/07/19 18:49	5
Toluene	ND		2.5	0.46	ug/L			09/07/19 18:49	5
<b>Trichloroethene</b>	<b>120</b>		2.5	0.51	ug/L			09/07/19 18:49	5
Trichlorofluoromethane	ND		2.5	0.52	ug/L			09/07/19 18:49	5
Vinyl acetate	ND		25	3.5	ug/L			09/07/19 18:49	5
Vinyl chloride	ND		2.5	0.39	ug/L			09/07/19 18:49	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 128		09/07/19 18:49	5
4-Bromofluorobenzene (Surr)	88		68 - 120		09/07/19 18:49	5
Dibromofluoromethane	103		80 - 127		09/07/19 18:49	5
Toluene-d8 (Surr)	100		80 - 120		09/07/19 18:49	5

**Client Sample ID: LAX-02**  
**Date Collected: 08/27/19 13:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 19:14	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 19:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 19:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 19:14	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 19:14	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 19:14	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 19:14	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 19:14	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 19:14	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 19:14	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 19:14	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 19:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 19:14	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 19:14	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 19:14	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 19:14	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 19:14	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 19:14	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 19:14	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 19:14	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 19:14	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 19:14	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-02**  
**Date Collected: 08/27/19 13:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 19:14	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 19:14	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 19:14	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 19:14	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 19:14	1
Acetone	ND		10	4.0	ug/L			09/07/19 19:14	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 19:14	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 19:14	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 19:14	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 19:14	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 19:14	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 19:14	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 19:14	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 19:14	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 19:14	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 19:14	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 19:14	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 19:14	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 19:14	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 19:14	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 19:14	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 19:14	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 19:14	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 19:14	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 19:14	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 19:14	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 19:14	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 19:14	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 19:14	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 19:14	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 19:14	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 19:14	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 19:14	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 19:14	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 19:14	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 19:14	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 19:14	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 19:14	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 19:14	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 19:14	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 19:14	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 19:14	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 128		09/07/19 19:14	1
4-Bromofluorobenzene (Surr)	90		68 - 120		09/07/19 19:14	1
Dibromofluoromethane	106		80 - 127		09/07/19 19:14	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 19:14	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-16D**  
**Date Collected: 08/28/19 08:01**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 19:40	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 19:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 19:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 19:40	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 19:40	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 19:40	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 19:40	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 19:40	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 19:40	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 19:40	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 19:40	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 19:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 19:40	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 19:40	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 19:40	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 19:40	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 19:40	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 19:40	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 19:40	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 19:40	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 19:40	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 19:40	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 19:40	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 19:40	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 19:40	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 19:40	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 19:40	1
Acetone	ND		10	4.0	ug/L			09/07/19 19:40	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 19:40	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 19:40	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 19:40	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 19:40	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 19:40	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 19:40	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 19:40	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 19:40	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 19:40	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 19:40	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 19:40	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 19:40	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 19:40	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 19:40	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 19:40	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 19:40	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 19:40	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 19:40	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 19:40	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 19:40	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 19:40	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-16D**  
**Date Collected: 08/28/19 08:01**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 19:40	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 19:40	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 19:40	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 19:40	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 19:40	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 19:40	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 19:40	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 19:40	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 19:40	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 19:40	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 19:40	1
<b>Tetrachloroethene</b>	<b>0.61</b>		0.50	0.24	ug/L			09/07/19 19:40	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 19:40	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 19:40	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 19:40	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 19:40	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 128		09/07/19 19:40	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/07/19 19:40	1
Dibromofluoromethane	107		80 - 127		09/07/19 19:40	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 19:40	1

**Client Sample ID: UA-17D**  
**Date Collected: 08/28/19 08:08**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 20:05	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 20:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 20:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 20:05	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 20:05	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 20:05	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 20:05	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 20:05	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 20:05	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 20:05	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 20:05	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 20:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 20:05	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 20:05	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 20:05	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 20:05	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 20:05	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 20:05	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 20:05	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 20:05	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 20:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 20:05	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-17D**  
**Date Collected: 08/28/19 08:08**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 20:05	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 20:05	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 20:05	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 20:05	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 20:05	1
Acetone	ND		10	4.0	ug/L			09/07/19 20:05	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 20:05	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 20:05	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 20:05	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 20:05	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 20:05	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 20:05	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 20:05	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 20:05	1
<b>Carbon disulfide</b>	<b>0.41</b>	<b>J</b>	10	0.39	ug/L			09/07/19 20:05	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 20:05	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 20:05	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 20:05	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 20:05	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 20:05	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 20:05	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 20:05	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 20:05	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 20:05	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 20:05	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 20:05	1
<b>Methyl-t-Butyl Ether (MTBE)</b>	<b>1.6</b>		0.50	0.067	ug/L			09/07/19 20:05	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 20:05	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 20:05	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 20:05	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 20:05	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 20:05	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 20:05	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 20:05	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 20:05	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 20:05	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 20:05	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 20:05	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 20:05	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 20:05	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 20:05	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 20:05	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 20:05	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		80 - 128		09/07/19 20:05	1
<i>4-Bromofluorobenzene (Surr)</i>	90		68 - 120		09/07/19 20:05	1
<i>Dibromofluoromethane</i>	108		80 - 127		09/07/19 20:05	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		09/07/19 20:05	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: RB-082819A**  
**Date Collected: 08/28/19 08:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 20:31	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 20:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 20:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 20:31	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 20:31	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 20:31	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 20:31	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 20:31	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 20:31	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 20:31	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 20:31	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 20:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 20:31	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 20:31	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 20:31	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 20:31	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 20:31	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 20:31	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 20:31	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 20:31	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 20:31	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 20:31	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 20:31	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 20:31	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 20:31	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 20:31	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 20:31	1
Acetone	ND		10	4.0	ug/L			09/07/19 20:31	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 20:31	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 20:31	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 20:31	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 20:31	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 20:31	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 20:31	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 20:31	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 20:31	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 20:31	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 20:31	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 20:31	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 20:31	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 20:31	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 20:31	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 20:31	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 20:31	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 20:31	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 20:31	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 20:31	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 20:31	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 20:31	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RB-082819A**  
**Date Collected: 08/28/19 08:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 20:31	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 20:31	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 20:31	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 20:31	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 20:31	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 20:31	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 20:31	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 20:31	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 20:31	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 20:31	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 20:31	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 20:31	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 20:31	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 20:31	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 20:31	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 20:31	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 128		09/07/19 20:31	1
4-Bromofluorobenzene (Surr)	90		68 - 120		09/07/19 20:31	1
Dibromofluoromethane	108		80 - 127		09/07/19 20:31	1
Toluene-d8 (Surr)	98		80 - 120		09/07/19 20:31	1

**Client Sample ID: UA-13D**  
**Date Collected: 08/28/19 08:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 20:56	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 20:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 20:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 20:56	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 20:56	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 20:56	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 20:56	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 20:56	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 20:56	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 20:56	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 20:56	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 20:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 20:56	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 20:56	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 20:56	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 20:56	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 20:56	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 20:56	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 20:56	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 20:56	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 20:56	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 20:56	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-13D**  
**Date Collected: 08/28/19 08:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 20:56	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 20:56	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 20:56	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 20:56	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 20:56	1
Acetone	ND		10	4.0	ug/L			09/07/19 20:56	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 20:56	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 20:56	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 20:56	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 20:56	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 20:56	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 20:56	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 20:56	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 20:56	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 20:56	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 20:56	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 20:56	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 20:56	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 20:56	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 20:56	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 20:56	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 20:56	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 20:56	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 20:56	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 20:56	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 20:56	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 20:56	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 20:56	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 20:56	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 20:56	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 20:56	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 20:56	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 20:56	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 20:56	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 20:56	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 20:56	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 20:56	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 20:56	1
<b>Tetrachloroethene</b>	<b>0.35</b>	<b>J</b>	0.50	0.24	ug/L			09/07/19 20:56	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 20:56	1
<b>Trichloroethene</b>	<b>0.37</b>	<b>J</b>	0.50	0.10	ug/L			09/07/19 20:56	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 20:56	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 20:56	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 20:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		80 - 128		09/07/19 20:56	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120		09/07/19 20:56	1
<i>Dibromofluoromethane</i>	105		80 - 127		09/07/19 20:56	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/07/19 20:56	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-10D**  
**Date Collected: 08/28/19 08:53**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 21:22	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 21:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 21:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 21:22	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 21:22	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 21:22	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 21:22	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 21:22	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 21:22	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 21:22	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 21:22	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 21:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 21:22	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 21:22	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 21:22	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 21:22	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 21:22	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 21:22	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 21:22	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 21:22	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 21:22	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 21:22	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 21:22	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 21:22	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 21:22	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 21:22	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 21:22	1
Acetone	ND		10	4.0	ug/L			09/07/19 21:22	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 21:22	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 21:22	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 21:22	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 21:22	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 21:22	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 21:22	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 21:22	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 21:22	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 21:22	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 21:22	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 21:22	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 21:22	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 21:22	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 21:22	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 21:22	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 21:22	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 21:22	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 21:22	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 21:22	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 21:22	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 21:22	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-10D**  
**Date Collected: 08/28/19 08:53**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 21:22	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 21:22	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 21:22	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 21:22	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 21:22	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 21:22	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 21:22	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 21:22	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 21:22	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 21:22	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 21:22	1
<b>Tetrachloroethene</b>	<b>9.7</b>		0.50	0.24	ug/L			09/07/19 21:22	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 21:22	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 21:22	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 21:22	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 21:22	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 21:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 128		09/07/19 21:22	1
4-Bromofluorobenzene (Surr)	87		68 - 120		09/07/19 21:22	1
Dibromofluoromethane	105		80 - 127		09/07/19 21:22	1
Toluene-d8 (Surr)	101		80 - 120		09/07/19 21:22	1

**Client Sample ID: UA-07D**  
**Date Collected: 08/28/19 09:13**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-12**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 21:47	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 21:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 21:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 21:47	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 21:47	1
<b>1,1-Dichloroethane</b>	<b>0.66</b>		0.50	0.060	ug/L			09/07/19 21:47	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 21:47	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 21:47	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 21:47	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 21:47	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 21:47	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 21:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 21:47	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 21:47	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 21:47	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 21:47	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 21:47	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 21:47	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 21:47	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 21:47	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 21:47	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 21:47	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-07D**  
**Date Collected: 08/28/19 09:13**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-12**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 21:47	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 21:47	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 21:47	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 21:47	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 21:47	1
Acetone	ND		10	4.0	ug/L			09/07/19 21:47	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 21:47	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 21:47	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 21:47	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 21:47	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 21:47	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 21:47	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 21:47	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 21:47	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 21:47	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 21:47	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 21:47	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 21:47	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 21:47	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 21:47	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 21:47	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 21:47	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 21:47	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 21:47	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 21:47	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 21:47	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 21:47	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 21:47	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 21:47	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 21:47	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 21:47	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 21:47	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 21:47	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 21:47	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 21:47	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 21:47	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 21:47	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 21:47	1
<b>Tetrachloroethene</b>	<b>1.2</b>		0.50	0.24	ug/L			09/07/19 21:47	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 21:47	1
<b>Trichloroethene</b>	<b>0.15</b>	<b>J</b>	0.50	0.10	ug/L			09/07/19 21:47	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 21:47	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 21:47	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 21:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 128		09/07/19 21:47	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/07/19 21:47	1
Dibromofluoromethane	105		80 - 127		09/07/19 21:47	1
Toluene-d8 (Surr)	100		80 - 120		09/07/19 21:47	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-07**  
**Date Collected: 08/28/19 09:21**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-13**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 22:13	1
<b>1,1,1-Trichloroethane</b>	<b>0.085</b>	<b>J</b>	0.50	0.084	ug/L			09/07/19 22:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 22:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 22:13	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 22:13	1
<b>1,1-Dichloroethane</b>	<b>4.0</b>		0.50	0.060	ug/L			09/07/19 22:13	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 22:13	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 22:13	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 22:13	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 22:13	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 22:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 22:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 22:13	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 22:13	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 22:13	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 22:13	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 22:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 22:13	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 22:13	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 22:13	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 22:13	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 22:13	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 22:13	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 22:13	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 22:13	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 22:13	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 22:13	1
Acetone	ND		10	4.0	ug/L			09/07/19 22:13	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 22:13	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 22:13	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 22:13	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 22:13	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 22:13	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 22:13	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 22:13	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 22:13	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 22:13	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 22:13	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 22:13	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 22:13	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 22:13	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 22:13	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 22:13	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 22:13	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 22:13	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 22:13	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 22:13	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 22:13	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 22:13	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-07**  
**Date Collected: 08/28/19 09:21**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-13**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 22:13	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 22:13	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 22:13	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 22:13	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 22:13	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 22:13	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 22:13	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 22:13	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 22:13	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 22:13	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 22:13	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 22:13	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 22:13	1
<b>Trichloroethene</b>	<b>0.68</b>		0.50	0.10	ug/L			09/07/19 22:13	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 22:13	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 22:13	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 22:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 128		09/07/19 22:13	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/07/19 22:13	1
Dibromofluoromethane	104		80 - 127		09/07/19 22:13	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 22:13	1

**Client Sample ID: RB-082819B**  
**Date Collected: 08/28/19 09:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 22:38	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 22:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 22:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 22:38	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 22:38	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 22:38	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 22:38	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 22:38	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 22:38	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 22:38	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 22:38	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 22:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 22:38	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 22:38	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 22:38	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 22:38	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 22:38	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 22:38	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 22:38	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 22:38	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 22:38	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 22:38	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RB-082819B**  
**Date Collected: 08/28/19 09:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 22:38	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 22:38	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 22:38	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 22:38	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 22:38	1
Acetone	ND		10	4.0	ug/L			09/07/19 22:38	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 22:38	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 22:38	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 22:38	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 22:38	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 22:38	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 22:38	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 22:38	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 22:38	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 22:38	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 22:38	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 22:38	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 22:38	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 22:38	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 22:38	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 22:38	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 22:38	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 22:38	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 22:38	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 22:38	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 22:38	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 22:38	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 22:38	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 22:38	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 22:38	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 22:38	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 22:38	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 22:38	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 22:38	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 22:38	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 22:38	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 22:38	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 22:38	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 22:38	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 22:38	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 22:38	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 22:38	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 22:38	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128		09/07/19 22:38	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/07/19 22:38	1
<i>Dibromofluoromethane</i>	108		80 - 127		09/07/19 22:38	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		09/07/19 22:38	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-26**  
**Date Collected: 08/28/19 09:42**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 23:04	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 23:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 23:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 23:04	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 23:04	1
<b>1,1-Dichloroethane</b>	<b>0.088</b>	<b>J</b>	0.50	0.060	ug/L			09/07/19 23:04	1
<b>1,1-Dichloroethene</b>	<b>0.30</b>	<b>J</b>	0.50	0.10	ug/L			09/07/19 23:04	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 23:04	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 23:04	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 23:04	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 23:04	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 23:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 23:04	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 23:04	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 23:04	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 23:04	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 23:04	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 23:04	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 23:04	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 23:04	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 23:04	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 23:04	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 23:04	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 23:04	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 23:04	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 23:04	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 23:04	1
Acetone	ND		10	4.0	ug/L			09/07/19 23:04	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 23:04	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 23:04	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 23:04	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 23:04	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 23:04	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 23:04	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 23:04	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 23:04	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 23:04	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 23:04	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 23:04	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 23:04	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 23:04	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 23:04	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 23:04	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 23:04	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 23:04	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 23:04	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 23:04	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 23:04	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 23:04	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-26**  
**Date Collected: 08/28/19 09:42**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 23:04	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 23:04	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 23:04	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 23:04	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 23:04	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 23:04	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 23:04	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 23:04	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 23:04	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 23:04	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 23:04	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 23:04	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 23:04	1
<b>Trichloroethene</b>	<b>0.51</b>		0.50	0.10	ug/L			09/07/19 23:04	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 23:04	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 23:04	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 128		09/07/19 23:04	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/07/19 23:04	1
Dibromofluoromethane	104		80 - 127		09/07/19 23:04	1
Toluene-d8 (Surr)	98		80 - 120		09/07/19 23:04	1

**Client Sample ID: UA-06D**  
**Date Collected: 08/28/19 09:51**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-16**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 23:29	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 23:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 23:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 23:29	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 23:29	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 23:29	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 23:29	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 23:29	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 23:29	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 23:29	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 23:29	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 23:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 23:29	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 23:29	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 23:29	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 23:29	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 23:29	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 23:29	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 23:29	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 23:29	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 23:29	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 23:29	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-06D**  
**Date Collected: 08/28/19 09:51**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-16**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 23:29	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 23:29	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 23:29	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 23:29	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 23:29	1
Acetone	ND		10	4.0	ug/L			09/07/19 23:29	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 23:29	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 23:29	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 23:29	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 23:29	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 23:29	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 23:29	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 23:29	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 23:29	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 23:29	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 23:29	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 23:29	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 23:29	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 23:29	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 23:29	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 23:29	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 23:29	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 23:29	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 23:29	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 23:29	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 23:29	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 23:29	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 23:29	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 23:29	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 23:29	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 23:29	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 23:29	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 23:29	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 23:29	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 23:29	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 23:29	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 23:29	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 23:29	1
<b>Tetrachloroethene</b>	<b>2.7</b>		0.50	0.24	ug/L			09/07/19 23:29	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 23:29	1
<b>Trichloroethene</b>	<b>0.53</b>		0.50	0.10	ug/L			09/07/19 23:29	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 23:29	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 23:29	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 128		09/07/19 23:29	1
4-Bromofluorobenzene (Surr)	86		68 - 120		09/07/19 23:29	1
Dibromofluoromethane	104		80 - 127		09/07/19 23:29	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 23:29	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-06**  
**Date Collected: 08/28/19 09:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-17**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 23:54	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 23:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 23:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 23:54	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 23:54	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 23:54	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 23:54	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 23:54	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 23:54	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 23:54	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 23:54	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 23:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 23:54	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 23:54	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 23:54	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 23:54	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 23:54	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 23:54	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 23:54	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 23:54	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 23:54	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 23:54	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 23:54	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 23:54	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 23:54	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 23:54	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 23:54	1
Acetone	ND		10	4.0	ug/L			09/07/19 23:54	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 23:54	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 23:54	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 23:54	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 23:54	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 23:54	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 23:54	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 23:54	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/07/19 23:54	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 23:54	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 23:54	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 23:54	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 23:54	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 23:54	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 23:54	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 23:54	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 23:54	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 23:54	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 23:54	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 23:54	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 23:54	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 23:54	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-06**  
**Date Collected: 08/28/19 09:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-17**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 23:54	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 23:54	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 23:54	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 23:54	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 23:54	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 23:54	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 23:54	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 23:54	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 23:54	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 23:54	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 23:54	1
<b>Tetrachloroethene</b>	<b>4.3</b>		0.50	0.24	ug/L			09/07/19 23:54	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 23:54	1
<b>Trichloroethene</b>	<b>0.69</b>		0.50	0.10	ug/L			09/07/19 23:54	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 23:54	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 23:54	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 128		09/07/19 23:54	1
4-Bromofluorobenzene (Surr)	85		68 - 120		09/07/19 23:54	1
Dibromofluoromethane	110		80 - 127		09/07/19 23:54	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 23:54	1

**Client Sample ID: UA-14D**  
**Date Collected: 08/28/19 10:12**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-18**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.14	ug/L			09/08/19 00:20	2
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			09/08/19 00:20	2
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			09/08/19 00:20	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.25	ug/L			09/08/19 00:20	2
1,1,2-Trichloroethane	ND		1.0	0.14	ug/L			09/08/19 00:20	2
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/08/19 00:20	2
1,1-Dichloroethene	ND		1.0	0.21	ug/L			09/08/19 00:20	2
1,1-Dichloropropene	ND		1.0	0.14	ug/L			09/08/19 00:20	2
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			09/08/19 00:20	2
1,2,3-Trichloropropane	ND		2.0	0.15	ug/L			09/08/19 00:20	2
1,2,4-Trichlorobenzene	ND		1.0	0.18	ug/L			09/08/19 00:20	2
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			09/08/19 00:20	2
1,2-Dibromo-3-Chloropropane	ND		10	1.0	ug/L			09/08/19 00:20	2
1,2-Dibromoethane	ND		1.0	0.12	ug/L			09/08/19 00:20	2
1,2-Dichlorobenzene	ND		1.0	0.16	ug/L			09/08/19 00:20	2
1,2-Dichloroethane	ND		1.0	0.15	ug/L			09/08/19 00:20	2
1,2-Dichloropropane	ND		1.0	0.20	ug/L			09/08/19 00:20	2
1,3,5-Trimethylbenzene	ND		1.0	0.16	ug/L			09/08/19 00:20	2
1,3-Dichlorobenzene	ND		1.0	0.20	ug/L			09/08/19 00:20	2
1,3-Dichloropropane	ND		2.0	0.16	ug/L			09/08/19 00:20	2
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			09/08/19 00:20	2
2,2-Dichloropropane	ND		2.0	0.75	ug/L			09/08/19 00:20	2

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-14D**  
**Date Collected: 08/28/19 10:12**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-18**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		10	0.92	ug/L			09/08/19 00:20	2
2-Chlorotoluene	ND		1.0	0.12	ug/L			09/08/19 00:20	2
2-Hexanone	ND		20	1.0	ug/L			09/08/19 00:20	2
4-Chlorotoluene	ND		1.0	0.18	ug/L			09/08/19 00:20	2
4-Methyl-2-pentanone	ND		10	0.83	ug/L			09/08/19 00:20	2
Acetone	ND		20	8.0	ug/L			09/08/19 00:20	2
Benzene	ND		1.0	0.14	ug/L			09/08/19 00:20	2
Bromobenzene	ND		1.0	0.12	ug/L			09/08/19 00:20	2
Bromochloromethane	ND		2.0	0.16	ug/L			09/08/19 00:20	2
Bromodichloromethane	ND		1.0	0.11	ug/L			09/08/19 00:20	2
Bromoform	ND		1.0	0.19	ug/L			09/08/19 00:20	2
Bromomethane	ND		4.0	2.0	ug/L			09/08/19 00:20	2
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			09/08/19 00:20	2
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/08/19 00:20	2
Carbon disulfide	ND		20	0.77	ug/L			09/08/19 00:20	2
Carbon tetrachloride	ND		1.0	0.11	ug/L			09/08/19 00:20	2
Chlorobenzene	ND		1.0	0.18	ug/L			09/08/19 00:20	2
Chloroethane	ND		1.0	0.23	ug/L			09/08/19 00:20	2
Chloroform	ND		1.0	0.12	ug/L			09/08/19 00:20	2
Chloromethane	ND		10	3.9	ug/L			09/08/19 00:20	2
Dibromochloromethane	ND		1.0	0.13	ug/L			09/08/19 00:20	2
Dibromomethane	ND		1.0	0.25	ug/L			09/08/19 00:20	2
Dichlorodifluoromethane	ND		2.0	0.20	ug/L			09/08/19 00:20	2
Ethylbenzene	ND		1.0	0.17	ug/L			09/08/19 00:20	2
Isopropylbenzene	ND		1.0	0.15	ug/L			09/08/19 00:20	2
Methylene Chloride	ND		2.0	0.085	ug/L			09/08/19 00:20	2
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.13	ug/L			09/08/19 00:20	2
Naphthalene	ND		2.0	0.19	ug/L			09/08/19 00:20	2
n-Butylbenzene	ND		1.0	0.22	ug/L			09/08/19 00:20	2
N-Propylbenzene	ND		1.0	0.15	ug/L			09/08/19 00:20	2
o-Xylene	ND		1.0	0.17	ug/L			09/08/19 00:20	2
m,p-Xylene	ND		2.0	0.30	ug/L			09/08/19 00:20	2
p-Isopropyltoluene	ND		1.0	0.15	ug/L			09/08/19 00:20	2
sec-Butylbenzene	ND		1.0	0.19	ug/L			09/08/19 00:20	2
Styrene	ND		1.0	0.12	ug/L			09/08/19 00:20	2
trans-1,2-Dichloroethene	ND		1.0	0.16	ug/L			09/08/19 00:20	2
trans-1,3-Dichloropropene	ND		1.0	0.11	ug/L			09/08/19 00:20	2
tert-Butylbenzene	ND		1.0	0.16	ug/L			09/08/19 00:20	2
<b>Tetrachloroethene</b>	<b>38</b>		1.0	0.48	ug/L			09/08/19 00:20	2
Toluene	ND		1.0	0.19	ug/L			09/08/19 00:20	2
<b>Trichloroethene</b>	<b>0.62 J</b>		1.0	0.20	ug/L			09/08/19 00:20	2
Trichlorofluoromethane	ND		1.0	0.21	ug/L			09/08/19 00:20	2
Vinyl acetate	ND		10	1.4	ug/L			09/08/19 00:20	2
Vinyl chloride	ND		1.0	0.16	ug/L			09/08/19 00:20	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 128		09/08/19 00:20	2
4-Bromofluorobenzene (Surr)	89		68 - 120		09/08/19 00:20	2
Dibromofluoromethane	107		80 - 127		09/08/19 00:20	2
Toluene-d8 (Surr)	101		80 - 120		09/08/19 00:20	2

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-08D**  
**Date Collected: 08/28/19 10:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-19**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 00:45	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 00:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 00:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 00:45	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 00:45	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 00:45	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 00:45	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 00:45	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 00:45	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 00:45	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 00:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 00:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 00:45	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 00:45	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 00:45	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 00:45	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 00:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 00:45	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 00:45	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 00:45	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 00:45	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 00:45	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 00:45	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 00:45	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 00:45	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 00:45	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 00:45	1
Acetone	ND		10	4.0	ug/L			09/08/19 00:45	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 00:45	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 00:45	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 00:45	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 00:45	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 00:45	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 00:45	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 00:45	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 00:45	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 00:45	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 00:45	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 00:45	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 00:45	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 00:45	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 00:45	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 00:45	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 00:45	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 00:45	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 00:45	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 00:45	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 00:45	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 00:45	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-08D**  
**Date Collected: 08/28/19 10:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-19**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 00:45	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 00:45	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 00:45	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 00:45	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 00:45	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 00:45	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 00:45	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 00:45	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 00:45	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 00:45	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 00:45	1
<b>Tetrachloroethene</b>	<b>0.33</b>	<b>J</b>	0.50	0.24	ug/L			09/08/19 00:45	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 00:45	1
<b>Trichloroethene</b>	<b>1.9</b>		0.50	0.10	ug/L			09/08/19 00:45	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 00:45	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 00:45	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128		09/08/19 00:45	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/08/19 00:45	1
<i>Dibromofluoromethane</i>	110		80 - 127		09/08/19 00:45	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		09/08/19 00:45	1

**Client Sample ID: UA-08**  
**Date Collected: 08/28/19 10:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-20**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 01:11	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 01:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 01:11	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 01:11	1
<b>1,1-Dichloroethane</b>	<b>0.064</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 01:11	1
<b>1,1-Dichloroethene</b>	<b>0.15</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 01:11	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 01:11	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 01:11	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 01:11	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 01:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 01:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 01:11	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 01:11	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 01:11	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 01:11	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 01:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 01:11	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 01:11	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 01:11	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 01:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 01:11	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-08**  
**Date Collected: 08/28/19 10:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-20**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 01:11	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 01:11	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 01:11	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 01:11	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 01:11	1
Acetone	ND		10	4.0	ug/L			09/08/19 01:11	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 01:11	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 01:11	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 01:11	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 01:11	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 01:11	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 01:11	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 01:11	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 01:11	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 01:11	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 01:11	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 01:11	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 01:11	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 01:11	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 01:11	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 01:11	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 01:11	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 01:11	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 01:11	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 01:11	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 01:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 01:11	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 01:11	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 01:11	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 01:11	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 01:11	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 01:11	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 01:11	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 01:11	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 01:11	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 01:11	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 01:11	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 01:11	1
<b>Tetrachloroethene</b>	<b>0.30</b>	<b>J</b>	0.50	0.24	ug/L			09/08/19 01:11	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 01:11	1
<b>Trichloroethene</b>	<b>2.7</b>		0.50	0.10	ug/L			09/08/19 01:11	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 01:11	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 01:11	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 01:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 128					09/08/19 01:11	1
4-Bromofluorobenzene (Surr)	90		68 - 120					09/08/19 01:11	1
Dibromofluoromethane	106		80 - 127					09/08/19 01:11	1
Toluene-d8 (Surr)	99		80 - 120					09/08/19 01:11	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-29**  
**Date Collected: 08/28/19 10:46**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-21**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 04:34	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 04:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 04:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 04:34	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 04:34	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 04:34	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 04:34	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 04:34	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 04:34	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 04:34	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 04:34	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 04:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 04:34	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 04:34	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 04:34	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 04:34	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 04:34	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 04:34	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 04:34	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 04:34	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 04:34	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 04:34	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 04:34	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 04:34	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 04:34	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 04:34	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 04:34	1
Acetone	ND		10	4.0	ug/L			09/08/19 04:34	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 04:34	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 04:34	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 04:34	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 04:34	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 04:34	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 04:34	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 04:34	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 04:34	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 04:34	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 04:34	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 04:34	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 04:34	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 04:34	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 04:34	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 04:34	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 04:34	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 04:34	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 04:34	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 04:34	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 04:34	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 04:34	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-29**  
**Date Collected: 08/28/19 10:46**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-21**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 04:34	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 04:34	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 04:34	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 04:34	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 04:34	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 04:34	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 04:34	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 04:34	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 04:34	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 04:34	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 04:34	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 04:34	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 04:34	1
<b>Trichloroethene</b>	<b>0.29</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 04:34	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 04:34	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 04:34	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 128		09/08/19 04:34	1
4-Bromofluorobenzene (Surr)	90		68 - 120		09/08/19 04:34	1
Dibromofluoromethane	103		80 - 127		09/08/19 04:34	1
Toluene-d8 (Surr)	98		80 - 120		09/08/19 04:34	1

**Client Sample ID: UA-12D**  
**Date Collected: 08/28/19 10:52**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-22**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 04:59	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 04:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 04:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 04:59	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 04:59	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 04:59	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 04:59	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 04:59	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 04:59	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 04:59	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 04:59	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 04:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 04:59	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 04:59	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 04:59	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 04:59	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 04:59	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 04:59	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 04:59	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 04:59	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 04:59	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 04:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-12D**  
**Date Collected: 08/28/19 10:52**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-22**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 04:59	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 04:59	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 04:59	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 04:59	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 04:59	1
Acetone	ND		10	4.0	ug/L			09/08/19 04:59	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 04:59	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 04:59	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 04:59	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 04:59	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 04:59	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 04:59	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 04:59	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 04:59	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 04:59	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 04:59	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 04:59	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 04:59	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 04:59	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 04:59	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 04:59	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 04:59	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 04:59	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 04:59	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 04:59	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 04:59	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 04:59	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 04:59	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 04:59	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 04:59	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 04:59	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 04:59	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 04:59	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 04:59	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 04:59	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 04:59	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 04:59	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 04:59	1
<b>Tetrachloroethene</b>	<b>0.52</b>		0.50	0.24	ug/L			09/08/19 04:59	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 04:59	1
Trichloroethene	ND		0.50	0.10	ug/L			09/08/19 04:59	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 04:59	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 04:59	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 04:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	111		80 - 128		09/08/19 04:59	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/08/19 04:59	1
<i>Dibromofluoromethane</i>	108		80 - 127		09/08/19 04:59	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		09/08/19 04:59	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-12**  
**Date Collected: 08/28/19 11:00**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-23**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 05:24	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 05:24	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 05:24	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 05:24	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 05:24	1
<b>1,1-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 05:24	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 05:24	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 05:24	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 05:24	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 05:24	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 05:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 05:24	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 05:24	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 05:24	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 05:24	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 05:24	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 05:24	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 05:24	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 05:24	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 05:24	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 05:24	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 05:24	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 05:24	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 05:24	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 05:24	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 05:24	1
Acetone	ND		10	4.0	ug/L			09/08/19 05:24	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 05:24	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 05:24	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 05:24	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 05:24	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 05:24	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 05:24	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 05:24	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 05:24	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 05:24	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 05:24	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 05:24	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 05:24	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 05:24	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 05:24	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 05:24	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 05:24	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 05:24	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 05:24	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 05:24	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 05:24	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 05:24	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-12**  
**Date Collected: 08/28/19 11:00**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-23**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 05:24	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 05:24	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 05:24	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 05:24	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 05:24	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 05:24	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 05:24	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 05:24	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 05:24	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 05:24	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 05:24	1
<b>Tetrachloroethene</b>	<b>0.34</b>	<b>J</b>	0.50	0.24	ug/L			09/08/19 05:24	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 05:24	1
<b>Trichloroethene</b>	<b>3.7</b>		0.50	0.10	ug/L			09/08/19 05:24	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 05:24	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 05:24	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 05:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 128		09/08/19 05:24	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/08/19 05:24	1
Dibromofluoromethane	106		80 - 127		09/08/19 05:24	1
Toluene-d8 (Surr)	100		80 - 120		09/08/19 05:24	1

**Client Sample ID: S-30**  
**Date Collected: 08/28/19 11:53**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-24**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 05:50	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 05:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 05:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 05:50	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 05:50	1
<b>1,1-Dichloroethane</b>	<b>0.17</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 05:50	1
<b>1,1-Dichloroethene</b>	<b>0.88</b>		0.50	0.10	ug/L			09/08/19 05:50	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 05:50	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 05:50	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 05:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 05:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 05:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 05:50	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 05:50	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 05:50	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 05:50	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 05:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 05:50	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 05:50	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 05:50	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 05:50	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 05:50	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-30**  
**Date Collected: 08/28/19 11:53**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-24**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 05:50	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 05:50	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 05:50	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 05:50	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 05:50	1
Acetone	ND		10	4.0	ug/L			09/08/19 05:50	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 05:50	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 05:50	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 05:50	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 05:50	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 05:50	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 05:50	1
<b>cis-1,2-Dichloroethene</b>	<b>0.46</b>	<b>J</b>	0.50	0.11	ug/L			09/08/19 05:50	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 05:50	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 05:50	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 05:50	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 05:50	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 05:50	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 05:50	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 05:50	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 05:50	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 05:50	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 05:50	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 05:50	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 05:50	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 05:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 05:50	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 05:50	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 05:50	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 05:50	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 05:50	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 05:50	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 05:50	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 05:50	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 05:50	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 05:50	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 05:50	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 05:50	1
<b>Tetrachloroethene</b>	<b>0.58</b>		0.50	0.24	ug/L			09/08/19 05:50	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 05:50	1
<b>Trichloroethene</b>	<b>0.30</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 05:50	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 05:50	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 05:50	1
<b>Vinyl chloride</b>	<b>0.15</b>	<b>J</b>	0.50	0.078	ug/L			09/08/19 05:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		09/08/19 05:50	1
<i>4-Bromofluorobenzene (Surr)</i>	89		68 - 120		09/08/19 05:50	1
<i>Dibromofluoromethane</i>	104		80 - 127		09/08/19 05:50	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		09/08/19 05:50	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-02**  
**Date Collected: 08/28/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-25**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 06:15	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 06:15	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 06:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 06:15	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 06:15	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 06:15	1
<b>1,1-Dichloroethene</b>	<b>0.34</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 06:15	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 06:15	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 06:15	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 06:15	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 06:15	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 06:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 06:15	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 06:15	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 06:15	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 06:15	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 06:15	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 06:15	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 06:15	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 06:15	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 06:15	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 06:15	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 06:15	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 06:15	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 06:15	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 06:15	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 06:15	1
Acetone	ND		10	4.0	ug/L			09/08/19 06:15	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 06:15	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 06:15	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 06:15	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 06:15	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 06:15	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 06:15	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 06:15	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 06:15	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 06:15	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 06:15	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 06:15	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 06:15	1
<b>Chloroform</b>	<b>0.27</b>	<b>J</b>	0.50	0.062	ug/L			09/08/19 06:15	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 06:15	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 06:15	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 06:15	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 06:15	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 06:15	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 06:15	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 06:15	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 06:15	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-02**  
**Date Collected: 08/28/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-25**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 06:15	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 06:15	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 06:15	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 06:15	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 06:15	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 06:15	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 06:15	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 06:15	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 06:15	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 06:15	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 06:15	1
<b>Tetrachloroethene</b>	<b>0.50</b>		0.50	0.24	ug/L			09/08/19 06:15	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 06:15	1
<b>Trichlorofluoromethane</b>	<b>0.12</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 06:15	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 06:15	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		80 - 128		09/08/19 06:15	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120		09/08/19 06:15	1
<i>Dibromofluoromethane</i>	106		80 - 127		09/08/19 06:15	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/08/19 06:15	1

**Client Sample ID: HEW-05**  
**Date Collected: 08/28/19 12:15**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-26**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 06:41	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 06:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 06:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 06:41	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 06:41	1
<b>1,1-Dichloroethane</b>	<b>0.080</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 06:41	1
<b>1,1-Dichloroethene</b>	<b>0.16</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 06:41	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 06:41	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 06:41	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 06:41	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 06:41	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 06:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 06:41	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 06:41	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 06:41	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 06:41	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 06:41	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 06:41	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 06:41	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 06:41	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 06:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 06:41	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 06:41	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-05**  
**Date Collected: 08/28/19 12:15**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-26**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 06:41	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 06:41	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 06:41	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 06:41	1
Acetone	ND		10	4.0	ug/L			09/08/19 06:41	1
<b>Benzene</b>	<b>0.073</b>	<b>J</b>	0.50	0.072	ug/L			09/08/19 06:41	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 06:41	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 06:41	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 06:41	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 06:41	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 06:41	1
<b>cis-1,2-Dichloroethene</b>	<b>5.9</b>		0.50	0.11	ug/L			09/08/19 06:41	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 06:41	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 06:41	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 06:41	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 06:41	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 06:41	1
<b>Chloroform</b>	<b>0.14</b>	<b>J</b>	0.50	0.062	ug/L			09/08/19 06:41	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 06:41	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 06:41	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 06:41	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 06:41	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 06:41	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 06:41	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 06:41	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 06:41	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 06:41	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 06:41	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 06:41	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 06:41	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 06:41	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 06:41	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 06:41	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 06:41	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 06:41	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 06:41	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 06:41	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 06:41	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 06:41	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 06:41	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 06:41	1
<b>Vinyl chloride</b>	<b>0.079</b>	<b>J</b>	0.50	0.078	ug/L			09/08/19 06:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128					09/08/19 06:41	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120					09/08/19 06:41	1
<i>Dibromofluoromethane</i>	104		80 - 127					09/08/19 06:41	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120					09/08/19 06:41	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-15D**  
**Date Collected: 08/28/19 12:36**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-27**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 07:06	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 07:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 07:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 07:06	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 07:06	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 07:06	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 07:06	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 07:06	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 07:06	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 07:06	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 07:06	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 07:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 07:06	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 07:06	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 07:06	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 07:06	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 07:06	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 07:06	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 07:06	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 07:06	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 07:06	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 07:06	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 07:06	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 07:06	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 07:06	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 07:06	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 07:06	1
Acetone	ND		10	4.0	ug/L			09/08/19 07:06	1
<b>Benzene</b>	<b>0.076</b>	<b>J</b>	0.50	0.072	ug/L			09/08/19 07:06	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 07:06	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 07:06	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 07:06	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 07:06	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 07:06	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 07:06	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 07:06	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 07:06	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 07:06	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 07:06	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 07:06	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 07:06	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 07:06	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 07:06	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 07:06	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 07:06	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 07:06	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 07:06	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 07:06	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 07:06	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-15D**  
**Date Collected: 08/28/19 12:36**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-27**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 07:06	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 07:06	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 07:06	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 07:06	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 07:06	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 07:06	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 07:06	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 07:06	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 07:06	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 07:06	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 07:06	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 07:06	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 07:06	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 07:06	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 07:06	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 07:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		80 - 128		09/08/19 07:06	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120		09/08/19 07:06	1
<i>Dibromofluoromethane</i>	107		80 - 127		09/08/19 07:06	1
<i>Toluene-d8 (Surr)</i>	98		80 - 120		09/08/19 07:06	1

**Client Sample ID: S-24**  
**Date Collected: 08/28/19 12:43**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-28**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 07:31	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 07:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 07:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 07:31	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 07:31	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 07:31	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 07:31	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 07:31	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 07:31	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 07:31	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 07:31	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 07:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 07:31	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 07:31	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 07:31	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 07:31	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 07:31	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 07:31	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 07:31	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 07:31	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 07:31	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 07:31	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 07:31	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-24**  
**Date Collected: 08/28/19 12:43**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-28**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 07:31	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 07:31	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 07:31	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 07:31	1
Acetone	ND		10	4.0	ug/L			09/08/19 07:31	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 07:31	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 07:31	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 07:31	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 07:31	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 07:31	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 07:31	1
<b>cis-1,2-Dichloroethene</b>	<b>0.31</b>	<b>J</b>	0.50	0.11	ug/L			09/08/19 07:31	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 07:31	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 07:31	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 07:31	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 07:31	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 07:31	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 07:31	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 07:31	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 07:31	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 07:31	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 07:31	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 07:31	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 07:31	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 07:31	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 07:31	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 07:31	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 07:31	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 07:31	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 07:31	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 07:31	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 07:31	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 07:31	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 07:31	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 07:31	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 07:31	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 07:31	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 07:31	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 07:31	1
<b>Trichloroethene</b>	<b>6.0</b>		0.50	0.10	ug/L			09/08/19 07:31	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 07:31	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 07:31	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 128		09/08/19 07:31	1
4-Bromofluorobenzene (Surr)	87		68 - 120		09/08/19 07:31	1
Dibromofluoromethane	104		80 - 127		09/08/19 07:31	1
Toluene-d8 (Surr)	100		80 - 120		09/08/19 07:31	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-11D**  
**Date Collected: 08/28/19 13:02**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-29**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 07:57	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 07:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 07:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 07:57	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 07:57	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 07:57	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 07:57	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 07:57	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 07:57	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 07:57	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 07:57	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 07:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 07:57	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 07:57	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 07:57	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 07:57	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 07:57	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 07:57	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 07:57	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 07:57	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 07:57	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 07:57	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 07:57	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 07:57	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 07:57	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 07:57	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 07:57	1
Acetone	ND		10	4.0	ug/L			09/08/19 07:57	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 07:57	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 07:57	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 07:57	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 07:57	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 07:57	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 07:57	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 07:57	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 07:57	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 07:57	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 07:57	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 07:57	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 07:57	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 07:57	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 07:57	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 07:57	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 07:57	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 07:57	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 07:57	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 07:57	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 07:57	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 07:57	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-11D**  
**Date Collected: 08/28/19 13:02**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-29**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 07:57	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 07:57	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 07:57	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 07:57	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 07:57	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 07:57	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 07:57	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 07:57	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 07:57	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 07:57	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 07:57	1
<b>Tetrachloroethene</b>	<b>0.62</b>		0.50	0.24	ug/L			09/08/19 07:57	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 07:57	1
<b>Trichloroethene</b>	<b>1.2</b>		0.50	0.10	ug/L			09/08/19 07:57	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 07:57	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 07:57	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 07:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		80 - 128		09/08/19 07:57	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120		09/08/19 07:57	1
<i>Dibromofluoromethane</i>	107		80 - 127		09/08/19 07:57	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/08/19 07:57	1

**Client Sample ID: RB-082819C**  
**Date Collected: 08/28/19 13:13**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-30**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 08:22	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 08:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 08:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 08:22	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 08:22	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 08:22	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 08:22	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 08:22	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 08:22	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 08:22	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 08:22	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 08:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 08:22	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 08:22	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 08:22	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 08:22	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 08:22	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 08:22	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 08:22	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 08:22	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 08:22	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 08:22	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RB-082819C**  
**Date Collected: 08/28/19 13:13**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-30**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 08:22	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 08:22	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 08:22	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 08:22	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 08:22	1
Acetone	ND		10	4.0	ug/L			09/08/19 08:22	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 08:22	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 08:22	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 08:22	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 08:22	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 08:22	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 08:22	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 08:22	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 08:22	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 08:22	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 08:22	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 08:22	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 08:22	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 08:22	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 08:22	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 08:22	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 08:22	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 08:22	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 08:22	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 08:22	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 08:22	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 08:22	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 08:22	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 08:22	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 08:22	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 08:22	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 08:22	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 08:22	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 08:22	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 08:22	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 08:22	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 08:22	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 08:22	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 08:22	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 08:22	1
Trichloroethene	ND		0.50	0.10	ug/L			09/08/19 08:22	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 08:22	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 08:22	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 08:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	111		80 - 128		09/08/19 08:22	1
<i>4-Bromofluorobenzene (Surr)</i>	89		68 - 120		09/08/19 08:22	1
<i>Dibromofluoromethane</i>	108		80 - 127		09/08/19 08:22	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		09/08/19 08:22	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-31**  
**Date Collected: 08/28/19 13:22**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-31**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 08:48	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 08:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 08:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 08:48	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 08:48	1
<b>1,1-Dichloroethane</b>	<b>0.068</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 08:48	1
<b>1,1-Dichloroethene</b>	<b>0.24</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 08:48	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 08:48	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 08:48	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 08:48	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 08:48	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 08:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 08:48	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 08:48	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 08:48	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 08:48	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 08:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 08:48	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 08:48	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 08:48	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 08:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 08:48	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 08:48	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 08:48	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 08:48	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 08:48	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 08:48	1
Acetone	ND		10	4.0	ug/L			09/08/19 08:48	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 08:48	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 08:48	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 08:48	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 08:48	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 08:48	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 08:48	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 08:48	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 08:48	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 08:48	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 08:48	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 08:48	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 08:48	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 08:48	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 08:48	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 08:48	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 08:48	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 08:48	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 08:48	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 08:48	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 08:48	1
<b>Methyl-t-Butyl Ether (MTBE)</b>	<b>0.35</b>	<b>J</b>	0.50	0.067	ug/L			09/08/19 08:48	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-31**  
**Date Collected: 08/28/19 13:22**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-31**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 08:48	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 08:48	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 08:48	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 08:48	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 08:48	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 08:48	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 08:48	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 08:48	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 08:48	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 08:48	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 08:48	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 08:48	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 08:48	1
<b>Trichloroethene</b>	<b>0.66</b>		0.50	0.10	ug/L			09/08/19 08:48	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 08:48	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 08:48	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 08:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 128		09/08/19 08:48	1
4-Bromofluorobenzene (Surr)	87		68 - 120		09/08/19 08:48	1
Dibromofluoromethane	105		80 - 127		09/08/19 08:48	1
Toluene-d8 (Surr)	101		80 - 120		09/08/19 08:48	1

**Client Sample ID: S-15**  
**Date Collected: 08/28/19 13:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-32**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 09:13	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 09:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 09:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 09:13	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 09:13	1
<b>1,1-Dichloroethane</b>	<b>0.19</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 09:13	1
<b>1,1-Dichloroethene</b>	<b>0.40</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 09:13	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 09:13	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 09:13	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 09:13	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 09:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 09:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 09:13	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 09:13	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 09:13	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 09:13	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 09:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 09:13	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 09:13	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 09:13	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 09:13	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 09:13	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-15**  
**Date Collected: 08/28/19 13:35**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-32**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 09:13	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 09:13	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 09:13	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 09:13	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 09:13	1
Acetone	ND		10	4.0	ug/L			09/08/19 09:13	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 09:13	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 09:13	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 09:13	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 09:13	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 09:13	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 09:13	1
<b>cis-1,2-Dichloroethene</b>	<b>0.26</b>	<b>J</b>	0.50	0.11	ug/L			09/08/19 09:13	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 09:13	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 09:13	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 09:13	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 09:13	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 09:13	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 09:13	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 09:13	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 09:13	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 09:13	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 09:13	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 09:13	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 09:13	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 09:13	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 09:13	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 09:13	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 09:13	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 09:13	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 09:13	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 09:13	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 09:13	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 09:13	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 09:13	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 09:13	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 09:13	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 09:13	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 09:13	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 09:13	1
<b>Trichloroethene</b>	<b>2.5</b>		0.50	0.10	ug/L			09/08/19 09:13	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 09:13	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 09:13	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 09:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		80 - 128		09/08/19 09:13	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/08/19 09:13	1
<i>Dibromofluoromethane</i>	105		80 - 127		09/08/19 09:13	1
<i>Toluene-d8 (Surr)</i>	98		80 - 120		09/08/19 09:13	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-07**  
**Date Collected: 08/28/19 13:47**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-33**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 09:39	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 09:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 09:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 09:39	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 09:39	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 09:39	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 09:39	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 09:39	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 09:39	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 09:39	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 09:39	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 09:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 09:39	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 09:39	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 09:39	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 09:39	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 09:39	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 09:39	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 09:39	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 09:39	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 09:39	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 09:39	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 09:39	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 09:39	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 09:39	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 09:39	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 09:39	1
Acetone	ND		10	4.0	ug/L			09/08/19 09:39	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 09:39	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 09:39	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 09:39	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 09:39	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 09:39	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 09:39	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 09:39	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 09:39	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 09:39	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 09:39	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 09:39	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 09:39	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 09:39	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 09:39	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 09:39	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 09:39	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 09:39	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 09:39	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 09:39	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 09:39	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 09:39	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-07**  
**Date Collected: 08/28/19 13:47**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-33**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 09:39	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 09:39	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 09:39	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 09:39	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 09:39	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 09:39	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 09:39	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 09:39	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 09:39	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 09:39	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 09:39	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 09:39	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 09:39	1
<b>Trichloroethene</b>	<b>0.70</b>		0.50	0.10	ug/L			09/08/19 09:39	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 09:39	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 09:39	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 09:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 128		09/08/19 09:39	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/08/19 09:39	1
Dibromofluoromethane	105		80 - 127		09/08/19 09:39	1
Toluene-d8 (Surr)	99		80 - 120		09/08/19 09:39	1

**Client Sample ID: UA-02**  
**Date Collected: 08/28/19 13:56**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-34**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 10:04	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 10:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 10:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 10:04	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 10:04	1
<b>1,1-Dichloroethane</b>	<b>0.081</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 10:04	1
<b>1,1-Dichloroethene</b>	<b>1.8</b>		0.50	0.10	ug/L			09/08/19 10:04	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 10:04	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 10:04	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 10:04	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 10:04	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 10:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 10:04	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 10:04	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 10:04	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 10:04	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 10:04	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 10:04	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 10:04	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 10:04	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 10:04	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 10:04	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-02**  
**Date Collected: 08/28/19 13:56**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-34**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 10:04	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 10:04	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 10:04	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 10:04	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 10:04	1
Acetone	ND		10	4.0	ug/L			09/08/19 10:04	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 10:04	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 10:04	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 10:04	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 10:04	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 10:04	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 10:04	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 10:04	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 10:04	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 10:04	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 10:04	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 10:04	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 10:04	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 10:04	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 10:04	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 10:04	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 10:04	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 10:04	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 10:04	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 10:04	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 10:04	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 10:04	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 10:04	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 10:04	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 10:04	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 10:04	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 10:04	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 10:04	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 10:04	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 10:04	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 10:04	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 10:04	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 10:04	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 10:04	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 10:04	1
<b>Trichloroethene</b>	<b>4.2</b>		0.50	0.10	ug/L			09/08/19 10:04	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 10:04	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 10:04	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 10:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		09/08/19 10:04	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/08/19 10:04	1
<i>Dibromofluoromethane</i>	107		80 - 127		09/08/19 10:04	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		09/08/19 10:04	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: LAX-03**  
**Date Collected: 08/28/19 14:12**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-35**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 10:29	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 10:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 10:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 10:29	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 10:29	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 10:29	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 10:29	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 10:29	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 10:29	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 10:29	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 10:29	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 10:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 10:29	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 10:29	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 10:29	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 10:29	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 10:29	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 10:29	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 10:29	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 10:29	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 10:29	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 10:29	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 10:29	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 10:29	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 10:29	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 10:29	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 10:29	1
Acetone	ND		10	4.0	ug/L			09/08/19 10:29	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 10:29	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 10:29	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 10:29	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 10:29	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 10:29	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 10:29	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 10:29	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 10:29	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 10:29	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 10:29	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 10:29	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 10:29	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 10:29	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 10:29	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 10:29	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 10:29	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 10:29	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 10:29	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 10:29	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 10:29	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 10:29	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-03**  
**Date Collected: 08/28/19 14:12**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-35**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 10:29	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 10:29	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 10:29	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 10:29	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 10:29	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 10:29	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 10:29	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 10:29	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 10:29	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 10:29	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 10:29	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 10:29	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 10:29	1
<b>Trichloroethene</b>	<b>0.31</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 10:29	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 10:29	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 10:29	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 10:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 128		09/08/19 10:29	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/08/19 10:29	1
Dibromofluoromethane	107		80 - 127		09/08/19 10:29	1
Toluene-d8 (Surr)	101		80 - 120		09/08/19 10:29	1

**Client Sample ID: S-14**  
**Date Collected: 08/28/19 14:22**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-36**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 10:55	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 10:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 10:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 10:55	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 10:55	1
<b>1,1-Dichloroethane</b>	<b>0.30</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 10:55	1
<b>1,1-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 10:55	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 10:55	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 10:55	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 10:55	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 10:55	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 10:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 10:55	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 10:55	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 10:55	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 10:55	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 10:55	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 10:55	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 10:55	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 10:55	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 10:55	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 10:55	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-14**  
**Date Collected: 08/28/19 14:22**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-36**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 10:55	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 10:55	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 10:55	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 10:55	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 10:55	1
Acetone	ND		10	4.0	ug/L			09/08/19 10:55	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 10:55	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 10:55	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 10:55	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 10:55	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 10:55	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 10:55	1
<b>cis-1,2-Dichloroethene</b>	<b>0.12</b>	<b>J</b>	0.50	0.11	ug/L			09/08/19 10:55	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 10:55	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 10:55	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 10:55	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 10:55	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 10:55	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 10:55	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 10:55	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 10:55	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 10:55	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 10:55	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 10:55	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 10:55	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 10:55	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 10:55	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 10:55	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 10:55	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 10:55	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 10:55	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 10:55	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 10:55	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 10:55	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 10:55	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 10:55	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 10:55	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 10:55	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 10:55	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 10:55	1
<b>Trichloroethene</b>	<b>1.0</b>		0.50	0.10	ug/L			09/08/19 10:55	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 10:55	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 10:55	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 10:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 128		09/08/19 10:55	1
4-Bromofluorobenzene (Surr)	86		68 - 120		09/08/19 10:55	1
Dibromofluoromethane	105		80 - 127		09/08/19 10:55	1
Toluene-d8 (Surr)	99		80 - 120		09/08/19 10:55	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UAX-02**  
**Date Collected: 08/28/19 14:33**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-37**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 11:20	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 11:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 11:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 11:20	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 11:20	1
<b>1,1-Dichloroethane</b>	<b>0.19</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 11:20	1
<b>1,1-Dichloroethene</b>	<b>4.0</b>		0.50	0.10	ug/L			09/08/19 11:20	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 11:20	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 11:20	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 11:20	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 11:20	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 11:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 11:20	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 11:20	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 11:20	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 11:20	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 11:20	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 11:20	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 11:20	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 11:20	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 11:20	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 11:20	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 11:20	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 11:20	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 11:20	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 11:20	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 11:20	1
Acetone	ND		10	4.0	ug/L			09/08/19 11:20	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 11:20	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 11:20	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 11:20	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 11:20	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 11:20	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 11:20	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 11:20	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 11:20	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 11:20	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 11:20	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 11:20	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 11:20	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 11:20	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 11:20	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 11:20	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 11:20	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 11:20	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 11:20	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 11:20	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 11:20	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 11:20	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-02**  
**Date Collected: 08/28/19 14:33**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-37**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 11:20	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 11:20	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 11:20	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 11:20	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 11:20	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 11:20	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 11:20	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 11:20	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 11:20	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 11:20	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 11:20	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 11:20	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 11:20	1
<b>Trichloroethene</b>	<b>4.3</b>		0.50	0.10	ug/L			09/08/19 11:20	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 11:20	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 11:20	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 11:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 128		09/08/19 11:20	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/08/19 11:20	1
Dibromofluoromethane	106		80 - 127		09/08/19 11:20	1
Toluene-d8 (Surr)	99		80 - 120		09/08/19 11:20	1

**Client Sample ID: UAX-0200**  
**Date Collected: 08/28/19 14:38**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-38**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 11:46	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 11:46	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 11:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 11:46	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 11:46	1
<b>1,1-Dichloroethane</b>	<b>0.18</b>	<b>J</b>	0.50	0.060	ug/L			09/08/19 11:46	1
<b>1,1-Dichloroethene</b>	<b>4.1</b>		0.50	0.10	ug/L			09/08/19 11:46	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 11:46	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 11:46	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 11:46	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 11:46	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 11:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 11:46	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 11:46	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 11:46	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 11:46	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 11:46	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 11:46	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 11:46	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 11:46	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 11:46	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 11:46	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-0200**  
**Date Collected: 08/28/19 14:38**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-38**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 11:46	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 11:46	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 11:46	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 11:46	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 11:46	1
Acetone	ND		10	4.0	ug/L			09/08/19 11:46	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 11:46	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 11:46	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 11:46	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 11:46	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 11:46	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 11:46	1
<b>cis-1,2-Dichloroethene</b>	<b>0.13</b>	<b>J</b>	0.50	0.11	ug/L			09/08/19 11:46	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 11:46	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 11:46	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 11:46	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 11:46	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 11:46	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 11:46	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 11:46	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 11:46	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 11:46	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 11:46	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 11:46	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 11:46	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 11:46	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 11:46	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 11:46	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 11:46	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 11:46	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 11:46	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 11:46	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 11:46	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 11:46	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 11:46	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 11:46	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 11:46	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 11:46	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 11:46	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 11:46	1
<b>Trichloroethene</b>	<b>4.5</b>		0.50	0.10	ug/L			09/08/19 11:46	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 11:46	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 11:46	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 11:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	114		80 - 128		09/08/19 11:46	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/08/19 11:46	1
<i>Dibromofluoromethane</i>	105		80 - 127		09/08/19 11:46	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/08/19 11:46	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-02**  
**Date Collected: 08/28/19 14:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-39**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 12:11	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 12:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 12:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 12:11	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 12:11	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 12:11	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 12:11	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 12:11	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 12:11	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 12:11	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 12:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 12:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 12:11	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 12:11	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 12:11	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 12:11	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 12:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 12:11	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 12:11	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 12:11	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 12:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 12:11	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 12:11	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 12:11	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 12:11	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 12:11	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 12:11	1
Acetone	ND		10	4.0	ug/L			09/08/19 12:11	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 12:11	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 12:11	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 12:11	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 12:11	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 12:11	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 12:11	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 12:11	1
cis-1,3-Dichloropropane	ND		0.50	0.096	ug/L			09/08/19 12:11	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 12:11	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 12:11	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 12:11	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 12:11	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 12:11	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 12:11	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 12:11	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 12:11	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 12:11	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 12:11	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 12:11	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 12:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 12:11	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-02**  
**Date Collected: 08/28/19 14:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-39**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 12:11	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 12:11	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 12:11	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 12:11	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 12:11	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 12:11	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 12:11	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 12:11	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 12:11	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 12:11	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 12:11	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 12:11	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 12:11	1
<b>Trichloroethene</b>	<b>0.31</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 12:11	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 12:11	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 12:11	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 128		09/08/19 12:11	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/08/19 12:11	1
Dibromofluoromethane	108		80 - 127		09/08/19 12:11	1
Toluene-d8 (Surr)	100		80 - 120		09/08/19 12:11	1

**Client Sample ID: S-0200**  
**Date Collected: 08/28/19 15:00**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-40**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 12:36	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 12:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 12:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 12:36	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 12:36	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 12:36	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 12:36	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 12:36	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 12:36	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 12:36	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 12:36	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 12:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 12:36	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 12:36	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 12:36	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 12:36	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 12:36	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 12:36	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 12:36	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 12:36	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 12:36	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 12:36	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-0200**  
**Date Collected: 08/28/19 15:00**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-40**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 12:36	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 12:36	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 12:36	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 12:36	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 12:36	1
Acetone	ND		10	4.0	ug/L			09/08/19 12:36	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 12:36	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 12:36	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 12:36	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 12:36	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 12:36	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 12:36	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 12:36	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 12:36	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 12:36	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 12:36	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 12:36	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 12:36	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 12:36	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 12:36	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 12:36	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 12:36	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 12:36	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 12:36	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 12:36	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 12:36	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 12:36	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 12:36	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 12:36	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 12:36	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 12:36	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 12:36	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 12:36	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 12:36	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 12:36	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 12:36	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 12:36	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 12:36	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 12:36	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 12:36	1
<b>Trichloroethene</b>	<b>0.31</b>	<b>J</b>	0.50	0.10	ug/L			09/08/19 12:36	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 12:36	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 12:36	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 128		09/08/19 12:36	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/08/19 12:36	1
Dibromofluoromethane	106		80 - 127		09/08/19 12:36	1
Toluene-d8 (Surr)	101		80 - 120		09/08/19 12:36	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-03**  
**Date Collected: 08/28/19 15:10**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-41**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/10/19 22:33	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/10/19 22:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/10/19 22:33	1
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>0.39</b>	<b>J</b>	0.50	0.13	ug/L			09/10/19 22:33	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/10/19 22:33	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/10/19 22:33	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/10/19 22:33	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/10/19 22:33	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/10/19 22:33	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/10/19 22:33	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/10/19 22:33	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/10/19 22:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/10/19 22:33	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/10/19 22:33	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/10/19 22:33	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/10/19 22:33	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/10/19 22:33	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/10/19 22:33	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/10/19 22:33	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/10/19 22:33	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/10/19 22:33	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/10/19 22:33	1
2-Butanone	ND		5.0	0.46	ug/L			09/10/19 22:33	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/10/19 22:33	1
2-Hexanone	ND		10	0.50	ug/L			09/10/19 22:33	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/10/19 22:33	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/10/19 22:33	1
Acetone	ND		10	4.0	ug/L			09/10/19 22:33	1
Benzene	ND		0.50	0.072	ug/L			09/10/19 22:33	1
Bromobenzene	ND		0.50	0.061	ug/L			09/10/19 22:33	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/10/19 22:33	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/10/19 22:33	1
Bromoform	ND		0.50	0.096	ug/L			09/10/19 22:33	1
Bromomethane	ND		2.0	0.99	ug/L			09/10/19 22:33	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/10/19 22:33	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/10/19 22:33	1
Carbon disulfide	ND		10	0.39	ug/L			09/10/19 22:33	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/10/19 22:33	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/10/19 22:33	1
Chloroethane	ND		0.50	0.12	ug/L			09/10/19 22:33	1
Chloroform	ND		0.50	0.062	ug/L			09/10/19 22:33	1
Chloromethane	ND		5.0	2.0	ug/L			09/10/19 22:33	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/10/19 22:33	1
Dibromomethane	ND		0.50	0.13	ug/L			09/10/19 22:33	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/10/19 22:33	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/10/19 22:33	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/10/19 22:33	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/10/19 22:33	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/10/19 22:33	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-03**  
**Date Collected: 08/28/19 15:10**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-41**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/10/19 22:33	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/10/19 22:33	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/10/19 22:33	1
o-Xylene	ND		0.50	0.086	ug/L			09/10/19 22:33	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/10/19 22:33	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/10/19 22:33	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/10/19 22:33	1
Styrene	ND		0.50	0.059	ug/L			09/10/19 22:33	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/10/19 22:33	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/10/19 22:33	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/10/19 22:33	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/10/19 22:33	1
Toluene	ND		0.50	0.093	ug/L			09/10/19 22:33	1
<b>Trichloroethene</b>	<b>3.1</b>		0.50	0.10	ug/L			09/10/19 22:33	1
<b>Trichlorofluoromethane</b>	<b>0.70</b>		0.50	0.10	ug/L			09/10/19 22:33	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/10/19 22:33	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/10/19 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128		09/10/19 22:33	1
<i>4-Bromofluorobenzene (Surr)</i>	88		68 - 120		09/10/19 22:33	1
<i>Dibromofluoromethane</i>	105		80 - 127		09/10/19 22:33	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		09/10/19 22:33	1

**Client Sample ID: S-27**  
**Date Collected: 08/28/19 15:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-42**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/10/19 22:59	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/10/19 22:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/10/19 22:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/10/19 22:59	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/10/19 22:59	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/10/19 22:59	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/10/19 22:59	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/10/19 22:59	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/10/19 22:59	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/10/19 22:59	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/10/19 22:59	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/10/19 22:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/10/19 22:59	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/10/19 22:59	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/10/19 22:59	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/10/19 22:59	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/10/19 22:59	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/10/19 22:59	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/10/19 22:59	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/10/19 22:59	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/10/19 22:59	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/10/19 22:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-27**  
**Date Collected: 08/28/19 15:27**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-42**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/10/19 22:59	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/10/19 22:59	1
2-Hexanone	ND		10	0.50	ug/L			09/10/19 22:59	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/10/19 22:59	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/10/19 22:59	1
Acetone	ND		10	4.0	ug/L			09/10/19 22:59	1
Benzene	ND		0.50	0.072	ug/L			09/10/19 22:59	1
Bromobenzene	ND		0.50	0.061	ug/L			09/10/19 22:59	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/10/19 22:59	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/10/19 22:59	1
Bromoform	ND		0.50	0.096	ug/L			09/10/19 22:59	1
Bromomethane	ND		2.0	0.99	ug/L			09/10/19 22:59	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/10/19 22:59	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/10/19 22:59	1
Carbon disulfide	ND		10	0.39	ug/L			09/10/19 22:59	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/10/19 22:59	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/10/19 22:59	1
Chloroethane	ND		0.50	0.12	ug/L			09/10/19 22:59	1
Chloroform	ND		0.50	0.062	ug/L			09/10/19 22:59	1
Chloromethane	ND		5.0	2.0	ug/L			09/10/19 22:59	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/10/19 22:59	1
Dibromomethane	ND		0.50	0.13	ug/L			09/10/19 22:59	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/10/19 22:59	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/10/19 22:59	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/10/19 22:59	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/10/19 22:59	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/10/19 22:59	1
Naphthalene	ND		1.0	0.097	ug/L			09/10/19 22:59	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/10/19 22:59	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/10/19 22:59	1
o-Xylene	ND		0.50	0.086	ug/L			09/10/19 22:59	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/10/19 22:59	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/10/19 22:59	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/10/19 22:59	1
Styrene	ND		0.50	0.059	ug/L			09/10/19 22:59	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/10/19 22:59	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/10/19 22:59	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/10/19 22:59	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/10/19 22:59	1
Toluene	ND		0.50	0.093	ug/L			09/10/19 22:59	1
Trichloroethene	ND		0.50	0.10	ug/L			09/10/19 22:59	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/10/19 22:59	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/10/19 22:59	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/10/19 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 128		09/10/19 22:59	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/10/19 22:59	1
Dibromofluoromethane	111		80 - 127		09/10/19 22:59	1
Toluene-d8 (Surr)	100		80 - 120		09/10/19 22:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-01**  
**Date Collected: 08/28/19 15:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-43**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/10/19 23:24	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/10/19 23:24	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/10/19 23:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/10/19 23:24	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/10/19 23:24	1
<b>1,1-Dichloroethane</b>	<b>0.17</b>	<b>J</b>	0.50	0.060	ug/L			09/10/19 23:24	1
<b>1,1-Dichloroethene</b>	<b>4.1</b>		0.50	0.10	ug/L			09/10/19 23:24	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/10/19 23:24	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/10/19 23:24	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/10/19 23:24	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/10/19 23:24	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/10/19 23:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/10/19 23:24	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/10/19 23:24	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/10/19 23:24	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/10/19 23:24	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/10/19 23:24	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/10/19 23:24	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/10/19 23:24	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/10/19 23:24	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/10/19 23:24	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/10/19 23:24	1
2-Butanone	ND		5.0	0.46	ug/L			09/10/19 23:24	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/10/19 23:24	1
2-Hexanone	ND		10	0.50	ug/L			09/10/19 23:24	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/10/19 23:24	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/10/19 23:24	1
Acetone	ND		10	4.0	ug/L			09/10/19 23:24	1
Benzene	ND		0.50	0.072	ug/L			09/10/19 23:24	1
Bromobenzene	ND		0.50	0.061	ug/L			09/10/19 23:24	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/10/19 23:24	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/10/19 23:24	1
Bromoform	ND		0.50	0.096	ug/L			09/10/19 23:24	1
Bromomethane	ND		2.0	0.99	ug/L			09/10/19 23:24	1
<b>cis-1,2-Dichloroethene</b>	<b>0.34</b>	<b>J</b>	0.50	0.11	ug/L			09/10/19 23:24	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/10/19 23:24	1
Carbon disulfide	ND		10	0.39	ug/L			09/10/19 23:24	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/10/19 23:24	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/10/19 23:24	1
Chloroethane	ND		0.50	0.12	ug/L			09/10/19 23:24	1
<b>Chloroform</b>	<b>0.47</b>	<b>J</b>	0.50	0.062	ug/L			09/10/19 23:24	1
Chloromethane	ND		5.0	2.0	ug/L			09/10/19 23:24	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/10/19 23:24	1
Dibromomethane	ND		0.50	0.13	ug/L			09/10/19 23:24	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/10/19 23:24	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/10/19 23:24	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/10/19 23:24	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/10/19 23:24	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/10/19 23:24	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-01**  
**Date Collected: 08/28/19 15:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-43**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/10/19 23:24	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/10/19 23:24	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/10/19 23:24	1
o-Xylene	ND		0.50	0.086	ug/L			09/10/19 23:24	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/10/19 23:24	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/10/19 23:24	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/10/19 23:24	1
Styrene	ND		0.50	0.059	ug/L			09/10/19 23:24	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/10/19 23:24	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/10/19 23:24	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/10/19 23:24	1
<b>Tetrachloroethene</b>	<b>8.4</b>		0.50	0.24	ug/L			09/10/19 23:24	1
Toluene	ND		0.50	0.093	ug/L			09/10/19 23:24	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/10/19 23:24	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/10/19 23:24	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/10/19 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		09/10/19 23:24	1
<i>4-Bromofluorobenzene (Surr)</i>	86		68 - 120		09/10/19 23:24	1
<i>Dibromofluoromethane</i>	109		80 - 127		09/10/19 23:24	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/10/19 23:24	1

**Client Sample ID: S-18**  
**Date Collected: 08/28/19 16:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-44**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/10/19 23:50	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/10/19 23:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/10/19 23:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/10/19 23:50	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/10/19 23:50	1
<b>1,1-Dichloroethane</b>	<b>0.099</b>	<b>J</b>	0.50	0.060	ug/L			09/10/19 23:50	1
<b>1,1-Dichloroethene</b>	<b>0.12</b>	<b>J</b>	0.50	0.10	ug/L			09/10/19 23:50	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/10/19 23:50	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/10/19 23:50	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/10/19 23:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/10/19 23:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/10/19 23:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/10/19 23:50	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/10/19 23:50	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/10/19 23:50	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/10/19 23:50	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/10/19 23:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/10/19 23:50	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/10/19 23:50	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/10/19 23:50	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/10/19 23:50	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/10/19 23:50	1
2-Butanone	ND		5.0	0.46	ug/L			09/10/19 23:50	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-18**  
**Date Collected: 08/28/19 16:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-44**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/10/19 23:50	1
2-Hexanone	ND		10	0.50	ug/L			09/10/19 23:50	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/10/19 23:50	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/10/19 23:50	1
Acetone	ND		10	4.0	ug/L			09/10/19 23:50	1
Benzene	ND		0.50	0.072	ug/L			09/10/19 23:50	1
Bromobenzene	ND		0.50	0.061	ug/L			09/10/19 23:50	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/10/19 23:50	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/10/19 23:50	1
Bromoform	ND		0.50	0.096	ug/L			09/10/19 23:50	1
Bromomethane	ND		2.0	0.99	ug/L			09/10/19 23:50	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/10/19 23:50	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/10/19 23:50	1
Carbon disulfide	ND		10	0.39	ug/L			09/10/19 23:50	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/10/19 23:50	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/10/19 23:50	1
Chloroethane	ND		0.50	0.12	ug/L			09/10/19 23:50	1
Chloroform	ND		0.50	0.062	ug/L			09/10/19 23:50	1
Chloromethane	ND		5.0	2.0	ug/L			09/10/19 23:50	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/10/19 23:50	1
Dibromomethane	ND		0.50	0.13	ug/L			09/10/19 23:50	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/10/19 23:50	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/10/19 23:50	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/10/19 23:50	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/10/19 23:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/10/19 23:50	1
Naphthalene	ND		1.0	0.097	ug/L			09/10/19 23:50	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/10/19 23:50	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/10/19 23:50	1
o-Xylene	ND		0.50	0.086	ug/L			09/10/19 23:50	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/10/19 23:50	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/10/19 23:50	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/10/19 23:50	1
Styrene	ND		0.50	0.059	ug/L			09/10/19 23:50	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/10/19 23:50	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/10/19 23:50	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/10/19 23:50	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/10/19 23:50	1
Toluene	ND		0.50	0.093	ug/L			09/10/19 23:50	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/10/19 23:50	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/10/19 23:50	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/10/19 23:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	111		80 - 128					09/10/19 23:50	1
<i>4-Bromofluorobenzene (Surr)</i>	86		68 - 120					09/10/19 23:50	1
<i>Dibromofluoromethane</i>	106		80 - 127					09/10/19 23:50	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120					09/10/19 23:50	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-11**  
**Date Collected: 08/28/19 13:10**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-45**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/11/19 00:15	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/11/19 00:15	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/11/19 00:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/11/19 00:15	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/11/19 00:15	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/11/19 00:15	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/11/19 00:15	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/11/19 00:15	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/11/19 00:15	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/11/19 00:15	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/11/19 00:15	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/11/19 00:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/11/19 00:15	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/11/19 00:15	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/11/19 00:15	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/11/19 00:15	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/11/19 00:15	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/11/19 00:15	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/11/19 00:15	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/11/19 00:15	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/11/19 00:15	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/11/19 00:15	1
2-Butanone	ND		5.0	0.46	ug/L			09/11/19 00:15	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/11/19 00:15	1
2-Hexanone	ND		10	0.50	ug/L			09/11/19 00:15	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/11/19 00:15	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/11/19 00:15	1
Acetone	ND		10	4.0	ug/L			09/11/19 00:15	1
Benzene	ND		0.50	0.072	ug/L			09/11/19 00:15	1
Bromobenzene	ND		0.50	0.061	ug/L			09/11/19 00:15	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/11/19 00:15	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/11/19 00:15	1
Bromoform	ND		0.50	0.096	ug/L			09/11/19 00:15	1
Bromomethane	ND		2.0	0.99	ug/L			09/11/19 00:15	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/11/19 00:15	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/11/19 00:15	1
Carbon disulfide	ND		10	0.39	ug/L			09/11/19 00:15	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/11/19 00:15	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/11/19 00:15	1
Chloroethane	ND		0.50	0.12	ug/L			09/11/19 00:15	1
Chloroform	ND		0.50	0.062	ug/L			09/11/19 00:15	1
Chloromethane	ND		5.0	2.0	ug/L			09/11/19 00:15	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/11/19 00:15	1
Dibromomethane	ND		0.50	0.13	ug/L			09/11/19 00:15	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/11/19 00:15	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/11/19 00:15	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/11/19 00:15	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/11/19 00:15	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/11/19 00:15	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-11**  
**Date Collected: 08/28/19 13:10**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-45**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/11/19 00:15	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/11/19 00:15	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/11/19 00:15	1
o-Xylene	ND		0.50	0.086	ug/L			09/11/19 00:15	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/11/19 00:15	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/11/19 00:15	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/11/19 00:15	1
Styrene	ND		0.50	0.059	ug/L			09/11/19 00:15	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/11/19 00:15	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/11/19 00:15	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/11/19 00:15	1
<b>Tetrachloroethene</b>	<b>4.2</b>		0.50	0.24	ug/L			09/11/19 00:15	1
Toluene	ND		0.50	0.093	ug/L			09/11/19 00:15	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/11/19 00:15	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/11/19 00:15	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/11/19 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		09/11/19 00:15	1
<i>4-Bromofluorobenzene (Surr)</i>	87		68 - 120		09/11/19 00:15	1
<i>Dibromofluoromethane</i>	111		80 - 127		09/11/19 00:15	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/11/19 00:15	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

**Client Sample ID: HEW-02**  
**Date Collected: 08/28/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-25**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>110</b>		5.0	1.0	ug/L			09/10/19 21:43	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	110		80 - 128					09/10/19 21:43	10
4-Bromofluorobenzene (Surr)	89		68 - 120					09/10/19 21:43	10
Dibromofluoromethane	105		80 - 127					09/10/19 21:43	10
Toluene-d8 (Surr)	99		80 - 120					09/10/19 21:43	10

**Client Sample ID: HEW-05**  
**Date Collected: 08/28/19 12:15**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-26**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>120</b>		5.0	1.0	ug/L			09/10/19 22:08	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		80 - 128					09/10/19 22:08	10
4-Bromofluorobenzene (Surr)	89		68 - 120					09/10/19 22:08	10
Dibromofluoromethane	104		80 - 127					09/10/19 22:08	10
Toluene-d8 (Surr)	100		80 - 120					09/10/19 22:08	10

**Client Sample ID: HEW-01**  
**Date Collected: 08/28/19 15:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-43**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>580</b>		25	5.1	ug/L			09/11/19 20:24	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		80 - 128					09/11/19 20:24	50
4-Bromofluorobenzene (Surr)	89		68 - 120					09/11/19 20:24	50
Dibromofluoromethane	106		80 - 127					09/11/19 20:24	50
Toluene-d8 (Surr)	102		80 - 120					09/11/19 20:24	50

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

**Client Sample ID: LAX-02**  
**Date Collected: 08/27/19 13:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.12	J	0.50	0.10	ug/L			09/10/19 20:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	94		80 - 128					09/10/19 20:52	1
4-Bromofluorobenzene (Surr)	85		68 - 120					09/10/19 20:52	1
Dibromofluoromethane	100		80 - 127					09/10/19 20:52	1
Toluene-d8 (Surr)	99		80 - 120					09/10/19 20:52	1

**Client Sample ID: UA-15D**  
**Date Collected: 08/28/19 12:36**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-27**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.37	J	0.50	0.10	ug/L			09/10/19 21:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		80 - 128					09/10/19 21:17	1
4-Bromofluorobenzene (Surr)	87		68 - 120					09/10/19 21:17	1
Dibromofluoromethane	103		80 - 127					09/10/19 21:17	1
Toluene-d8 (Surr)	97		80 - 120					09/10/19 21:17	1

**Client Sample ID: S-18**  
**Date Collected: 08/28/19 16:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-44**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.79		0.50	0.10	ug/L			09/11/19 19:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		80 - 128					09/11/19 19:33	1
4-Bromofluorobenzene (Surr)	90		68 - 120					09/11/19 19:33	1
Dibromofluoromethane	102		80 - 127					09/11/19 19:33	1
Toluene-d8 (Surr)	99		80 - 120					09/11/19 19:33	1

**Client Sample ID: UA-11**  
**Date Collected: 08/28/19 13:10**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-45**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.1		0.50	0.10	ug/L			09/11/19 19:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		80 - 128					09/11/19 19:59	1
4-Bromofluorobenzene (Surr)	88		68 - 120					09/11/19 19:59	1
Dibromofluoromethane	108		80 - 127					09/11/19 19:59	1
Toluene-d8 (Surr)	99		80 - 120					09/11/19 19:59	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8270C SIM ID - Semivolatle Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: LAX-01**  
**Date Collected: 08/27/19 10:28**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 16:25	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	42		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	118		56 - 123						

**Client Sample ID: UAX-03**  
**Date Collected: 08/27/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 17:10	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	37		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	116		56 - 123						

**Client Sample ID: HEW-04**  
**Date Collected: 08/27/19 12:30**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,4-Dioxane</b>	<b>9.1</b>		0.50	0.18	ug/L		08/29/19 17:08	09/05/19 13:28	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	36		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	110		56 - 123						

**Client Sample ID: HEW-0400**  
**Date Collected: 08/27/19 12:45**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,4-Dioxane</b>	<b>6.6</b>		0.50	0.18	ug/L		08/29/19 17:08	09/05/19 14:31	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	37		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	118		56 - 123						

**Client Sample ID: LAX-02**  
**Date Collected: 08/27/19 13:57**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 17:57	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	36		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	101		56 - 123						

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8270C SIM ID - Semivolatle Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: HEW-02**  
**Date Collected: 08/28/19 12:05**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-25**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 18:13	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	37		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	113		56 - 123						

**Client Sample ID: HEW-05**  
**Date Collected: 08/28/19 12:15**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-26**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 18:29	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	41		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	109		56 - 123						

**Client Sample ID: LAX-03**  
**Date Collected: 08/28/19 14:12**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-35**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 18:45	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	38		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	110		56 - 123						

**Client Sample ID: UAX-02**  
**Date Collected: 08/28/19 14:33**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-37**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,4-Dioxane</b>	<b>2.1</b>		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 19:01	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	38		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	101		56 - 123						

**Client Sample ID: UAX-0200**  
**Date Collected: 08/28/19 14:38**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-38**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,4-Dioxane</b>	<b>2.4</b>		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 19:16	1
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	35		15 - 45						
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	100		56 - 123						

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: HEW-01**  
**Date Collected: 08/28/19 15:55**  
**Date Received: 08/28/19 17:15**

**Lab Sample ID: 570-5961-43**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,4-Dioxane</b>	<b>1.3</b>		0.50	0.18	ug/L		08/29/19 17:08	08/30/19 19:32	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,4-Dioxane-d8</i>	39		15 - 45				08/29/19 17:08	08/30/19 19:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Nitrobenzene-d5</i>	102		56 - 123				08/29/19 17:08	08/30/19 19:32	1

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# Surrogate Summary

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

**Matrix: Water**

**Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-128)	BFB (68-120)	DBFM (80-127)	TOL (80-120)
570-5961-1	TB-082719	98	88	97	98
570-5961-2	LAX-01	105	89	101	100
570-5961-3	UAX-03	108	90	102	99
570-5961-4	HEW-04	109	89	103	98
570-5961-5	HEW-0400	107	88	103	100
570-5961-6	LAX-02	110	90	106	99
570-5961-6 - RA	LAX-02	94	85	100	99
570-5961-7	UA-16D	109	88	107	99
570-5961-8	UA-17D	109	90	108	101
570-5961-9	RB-082819A	111	90	108	98
570-5961-10	UA-13D	112	88	105	100
570-5961-11	UA-10D	109	87	105	101
570-5961-12	UA-07D	111	89	105	100
570-5961-13	UA-07	112	89	104	99
570-5961-14	RB-082819B	110	87	108	99
570-5961-15	S-26	111	88	104	98
570-5961-16	UA-06D	110	86	104	99
570-5961-17	UA-06	108	85	110	99
570-5961-18	UA-14D	109	89	107	101
570-5961-19	UA-08D	110	87	110	101
570-5961-20	UA-08	110	90	106	99
570-5961-21	S-29	112	90	103	98
570-5961-22	UA-12D	111	87	108	99
570-5961-23	UA-12	110	88	106	100
570-5961-24	S-30	113	89	104	99
570-5961-25	HEW-02	107	88	106	100
570-5961-25 - DL	HEW-02	110	89	105	99
570-5961-26	HEW-05	110	88	104	100
570-5961-26 - DL	HEW-05	108	89	104	100
570-5961-27	UA-15D	112	88	107	98
570-5961-27 - RA	UA-15D	103	87	103	97
570-5961-28	S-24	112	87	104	100
570-5961-29	UA-11D	112	88	107	100
570-5961-30	RB-082819C	111	89	108	101
570-5961-31	S-31	114	87	105	101
570-5961-32	S-15	112	87	105	98
570-5961-33	S-07	114	89	105	99
570-5961-34	UA-02	113	87	107	99
570-5961-35	LAX-03	113	89	107	101
570-5961-36	S-14	113	86	105	99
570-5961-37	UAX-02	113	88	106	99
570-5961-38	UAX-0200	114	87	105	100
570-5961-39	S-02	114	89	108	100
570-5961-40	S-0200	114	89	106	101
570-5961-41	S-03	110	88	105	99
570-5961-42	S-27	112	88	111	100
570-5961-43	HEW-01	113	86	109	100
570-5961-43 - DL	HEW-01	108	89	106	102
570-5961-44	S-18	111	86	106	99

# Surrogate Summary

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-128)	BFB (68-120)	DBFM (80-127)	TOL (80-120)
570-5961-44 - RA	S-18	109	90	102	99
570-5961-45	UA-11	113	87	111	100
570-5961-45 - RA	UA-11	109	88	108	99
LCS 570-17765/4	Lab Control Sample	94	101	98	99
LCS 570-17814/3	Lab Control Sample	98	101	101	101
LCS 570-18205/4	Lab Control Sample	94	100	98	101
LCS 570-18532/4	Lab Control Sample	99	102	101	101
LCSD 570-17765/5	Lab Control Sample Dup	95	101	97	100
LCSD 570-17814/4	Lab Control Sample Dup	97	102	100	100
LCSD 570-18205/5	Lab Control Sample Dup	97	101	100	99
LCSD 570-18532/5	Lab Control Sample Dup	98	103	101	100
MB 570-17765/8	Method Blank	105	88	99	99
MB 570-17814/7	Method Blank	108	88	102	99
MB 570-18205/8	Method Blank	105	88	100	99
MB 570-18532/7	Method Blank	106	89	101	101

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane  
 TOL = Toluene-d8 (Surr)

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NBZ
		(56-123)
570-5961-2	LAX-01	118
570-5961-2 MS	LAX-01	94
570-5961-2 MSD	LAX-01	110
570-5961-3	UAX-03	116
570-5961-4	HEW-04	110
570-5961-5	HEW-0400	118
570-5961-6	LAX-02	101
570-5961-25	HEW-02	113
570-5961-26	HEW-05	109
570-5961-35	LAX-03	110
570-5961-37	UAX-02	101
570-5961-38	UAX-0200	100
570-5961-43	HEW-01	102
LCS 570-16033/2-A	Lab Control Sample	112
MB 570-16033/1-A	Method Blank	114

#### Surrogate Legend

NBZ = Nitrobenzene-d5



# Isotope Dilution Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (15-45)
570-5961-2	LAX-01	42
570-5961-2 MS	LAX-01	35
570-5961-2 MSD	LAX-01	41
570-5961-3	UAX-03	37
570-5961-4	HEW-04	36
570-5961-5	HEW-0400	37
570-5961-6	LAX-02	36
570-5961-25	HEW-02	37
570-5961-26	HEW-05	41
570-5961-35	LAX-03	38
570-5961-37	UAX-02	38
570-5961-38	UAX-0200	35
570-5961-43	HEW-01	39
LCS 570-16033/2-A	Lab Control Sample	37

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (30-120)
MB 570-16033/1-A	Method Blank	40

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-17765/8**  
**Matrix: Water**  
**Analysis Batch: 17765**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/07/19 16:35	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/07/19 16:35	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/07/19 16:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/07/19 16:35	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/07/19 16:35	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/07/19 16:35	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/07/19 16:35	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/07/19 16:35	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/07/19 16:35	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/07/19 16:35	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/07/19 16:35	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/07/19 16:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/07/19 16:35	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/07/19 16:35	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/07/19 16:35	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/07/19 16:35	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/07/19 16:35	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/07/19 16:35	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/07/19 16:35	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/07/19 16:35	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/07/19 16:35	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/07/19 16:35	1
2-Butanone	ND		5.0	0.46	ug/L			09/07/19 16:35	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/07/19 16:35	1
2-Hexanone	ND		10	0.50	ug/L			09/07/19 16:35	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/07/19 16:35	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/07/19 16:35	1
Acetone	ND		10	4.0	ug/L			09/07/19 16:35	1
Benzene	ND		0.50	0.072	ug/L			09/07/19 16:35	1
Bromobenzene	ND		0.50	0.061	ug/L			09/07/19 16:35	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/07/19 16:35	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/07/19 16:35	1
Bromoform	ND		0.50	0.096	ug/L			09/07/19 16:35	1
Bromomethane	ND		2.0	0.99	ug/L			09/07/19 16:35	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/07/19 16:35	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/07/19 16:35	1
Carbon disulfide	ND		10	0.39	ug/L			09/07/19 16:35	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/07/19 16:35	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/07/19 16:35	1
Chloroethane	ND		0.50	0.12	ug/L			09/07/19 16:35	1
Chloroform	ND		0.50	0.062	ug/L			09/07/19 16:35	1
Chloromethane	ND		5.0	2.0	ug/L			09/07/19 16:35	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/07/19 16:35	1
Dibromomethane	ND		0.50	0.13	ug/L			09/07/19 16:35	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/07/19 16:35	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/07/19 16:35	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/07/19 16:35	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/07/19 16:35	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17765/8**  
**Matrix: Water**  
**Analysis Batch: 17765**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/07/19 16:35	1
Naphthalene	ND		1.0	0.097	ug/L			09/07/19 16:35	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/07/19 16:35	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/07/19 16:35	1
o-Xylene	ND		0.50	0.086	ug/L			09/07/19 16:35	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/07/19 16:35	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/07/19 16:35	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/07/19 16:35	1
Styrene	ND		0.50	0.059	ug/L			09/07/19 16:35	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/07/19 16:35	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/07/19 16:35	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/07/19 16:35	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/07/19 16:35	1
Toluene	ND		0.50	0.093	ug/L			09/07/19 16:35	1
Trichloroethene	ND		0.50	0.10	ug/L			09/07/19 16:35	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/07/19 16:35	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/07/19 16:35	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/07/19 16:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/07/19 16:35	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/07/19 16:35	1
Dibromofluoromethane	99		80 - 127		09/07/19 16:35	1
Toluene-d8 (Surr)	99		80 - 120		09/07/19 16:35	1

**Lab Sample ID: LCS 570-17765/4**  
**Matrix: Water**  
**Analysis Batch: 17765**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	10.0	10.31		ug/L		103	80 - 120
1,2-Dichlorobenzene	10.0	10.46		ug/L		105	80 - 120
1,2-Dichloroethane	10.0	9.789		ug/L		98	80 - 122
Benzene	10.0	10.49		ug/L		105	80 - 120
Carbon tetrachloride	10.0	9.704		ug/L		97	80 - 129
Chlorobenzene	10.0	10.59		ug/L		106	80 - 120
Ethylbenzene	10.0	10.87		ug/L		109	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.55		ug/L		106	75 - 123
o-Xylene	10.0	11.02		ug/L		110	80 - 120
m,p-Xylene	20.0	21.96		ug/L		110	80 - 120
Toluene	10.0	10.43		ug/L		104	80 - 120
Trichloroethene	10.0	10.27		ug/L		103	80 - 120
Vinyl chloride	10.0	9.662		ug/L		97	63 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	94		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-17765/4**  
**Matrix: Water**  
**Analysis Batch: 17765**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane	98		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: LCSD 570-17765/5**  
**Matrix: Water**  
**Analysis Batch: 17765**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limit
							Limits	RPD		
1,1-Dichloroethene	10.0	9.383		ug/L		94	77 - 120	1	26	
1,2-Dibromoethane	10.0	10.35		ug/L		103	80 - 120	0	32	
1,2-Dichlorobenzene	10.0	10.52		ug/L		105	80 - 120	1	30	
1,2-Dichloroethane	10.0	10.29		ug/L		103	80 - 122	5	23	
Benzene	10.0	10.44		ug/L		104	80 - 120	0	22	
Carbon tetrachloride	10.0	9.435		ug/L		94	80 - 129	3	36	
Chlorobenzene	10.0	10.41		ug/L		104	80 - 120	2	29	
Ethylbenzene	10.0	10.70		ug/L		107	80 - 120	2	25	
Methyl-t-Butyl Ether (MTBE)	10.0	10.74		ug/L		107	75 - 123	2	27	
o-Xylene	10.0	10.91		ug/L		109	80 - 120	1	30	
m,p-Xylene	20.0	21.74		ug/L		109	80 - 120	1	30	
Toluene	10.0	10.46		ug/L		105	80 - 120	0	28	
Trichloroethene	10.0	10.46		ug/L		105	80 - 120	2	25	
Vinyl chloride	10.0	9.445		ug/L		94	63 - 135	2	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	95		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	97		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: MB 570-17814/7**  
**Matrix: Water**  
**Analysis Batch: 17814**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/08/19 04:08	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/08/19 04:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/08/19 04:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/08/19 04:08	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/08/19 04:08	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/08/19 04:08	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/08/19 04:08	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/08/19 04:08	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/08/19 04:08	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/08/19 04:08	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/08/19 04:08	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/08/19 04:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/08/19 04:08	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/08/19 04:08	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17814/7**  
**Matrix: Water**  
**Analysis Batch: 17814**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/08/19 04:08	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/08/19 04:08	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/08/19 04:08	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/08/19 04:08	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/08/19 04:08	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/08/19 04:08	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/08/19 04:08	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/08/19 04:08	1
2-Butanone	ND		5.0	0.46	ug/L			09/08/19 04:08	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/08/19 04:08	1
2-Hexanone	ND		10	0.50	ug/L			09/08/19 04:08	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/08/19 04:08	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/08/19 04:08	1
Acetone	ND		10	4.0	ug/L			09/08/19 04:08	1
Benzene	ND		0.50	0.072	ug/L			09/08/19 04:08	1
Bromobenzene	ND		0.50	0.061	ug/L			09/08/19 04:08	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/08/19 04:08	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/08/19 04:08	1
Bromoform	ND		0.50	0.096	ug/L			09/08/19 04:08	1
Bromomethane	ND		2.0	0.99	ug/L			09/08/19 04:08	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/08/19 04:08	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/08/19 04:08	1
Carbon disulfide	ND		10	0.39	ug/L			09/08/19 04:08	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/08/19 04:08	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/08/19 04:08	1
Chloroethane	ND		0.50	0.12	ug/L			09/08/19 04:08	1
Chloroform	ND		0.50	0.062	ug/L			09/08/19 04:08	1
Chloromethane	ND		5.0	2.0	ug/L			09/08/19 04:08	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/08/19 04:08	1
Dibromomethane	ND		0.50	0.13	ug/L			09/08/19 04:08	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/08/19 04:08	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/08/19 04:08	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/08/19 04:08	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/08/19 04:08	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/08/19 04:08	1
Naphthalene	ND		1.0	0.097	ug/L			09/08/19 04:08	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/08/19 04:08	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/08/19 04:08	1
o-Xylene	ND		0.50	0.086	ug/L			09/08/19 04:08	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/08/19 04:08	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/08/19 04:08	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/08/19 04:08	1
Styrene	ND		0.50	0.059	ug/L			09/08/19 04:08	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/08/19 04:08	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/08/19 04:08	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/08/19 04:08	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/08/19 04:08	1
Toluene	ND		0.50	0.093	ug/L			09/08/19 04:08	1
Trichloroethene	ND		0.50	0.10	ug/L			09/08/19 04:08	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-17814/7

Matrix: Water

Analysis Batch: 17814

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/08/19 04:08	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/08/19 04:08	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/08/19 04:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108		80 - 128		09/08/19 04:08	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/08/19 04:08	1
Dibromofluoromethane	102		80 - 127		09/08/19 04:08	1
Toluene-d8 (Surr)	99		80 - 120		09/08/19 04:08	1

Lab Sample ID: LCS 570-17814/3

Matrix: Water

Analysis Batch: 17814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1-Dichloroethene	10.0	9.398		ug/L		94	77 - 120
1,2-Dibromoethane	10.0	10.37		ug/L		104	80 - 120
1,2-Dichlorobenzene	10.0	10.86		ug/L		109	80 - 120
1,2-Dichloroethane	10.0	10.55		ug/L		105	80 - 122
Benzene	10.0	11.03		ug/L		110	80 - 120
Carbon tetrachloride	10.0	9.466		ug/L		95	80 - 129
Chlorobenzene	10.0	10.87		ug/L		109	80 - 120
Ethylbenzene	10.0	10.91		ug/L		109	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	9.929		ug/L		99	75 - 123
o-Xylene	10.0	11.33		ug/L		113	80 - 120
m,p-Xylene	20.0	22.35		ug/L		112	80 - 120
Toluene	10.0	10.88		ug/L		109	80 - 120
Trichloroethene	10.0	10.38		ug/L		104	80 - 120
Vinyl chloride	10.0	9.605		ug/L		96	63 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: LCSD 570-17814/4

Matrix: Water

Analysis Batch: 17814

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
1,1-Dichloroethene	10.0	9.112		ug/L		91	77 - 120	3	26
1,2-Dibromoethane	10.0	10.42		ug/L		104	80 - 120	1	32
1,2-Dichlorobenzene	10.0	10.67		ug/L		107	80 - 120	2	30
1,2-Dichloroethane	10.0	10.52		ug/L		105	80 - 122	0	23
Benzene	10.0	10.84		ug/L		108	80 - 120	2	22
Carbon tetrachloride	10.0	9.253		ug/L		93	80 - 129	2	36
Chlorobenzene	10.0	10.84		ug/L		108	80 - 120	0	29

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-17814/4**  
**Matrix: Water**  
**Analysis Batch: 17814**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	10.94		ug/L		109	80 - 120	0	25
Methyl-t-Butyl Ether (MTBE)	10.0	10.27		ug/L		103	75 - 123	3	27
o-Xylene	10.0	11.23		ug/L		112	80 - 120	1	30
m,p-Xylene	20.0	22.07		ug/L		110	80 - 120	1	30
Toluene	10.0	10.68		ug/L		107	80 - 120	2	28
Trichloroethene	10.0	10.12		ug/L		101	80 - 120	3	25
Vinyl chloride	10.0	9.318		ug/L		93	63 - 135	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120
Dibromofluoromethane	100		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: MB 570-18205/8**  
**Matrix: Water**  
**Analysis Batch: 18205**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/10/19 19:12	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/10/19 19:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/10/19 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/10/19 19:12	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/10/19 19:12	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/10/19 19:12	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/10/19 19:12	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/10/19 19:12	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/10/19 19:12	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/10/19 19:12	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/10/19 19:12	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/10/19 19:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/10/19 19:12	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/10/19 19:12	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/10/19 19:12	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/10/19 19:12	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/10/19 19:12	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/10/19 19:12	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/10/19 19:12	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/10/19 19:12	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/10/19 19:12	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/10/19 19:12	1
2-Butanone	ND		5.0	0.46	ug/L			09/10/19 19:12	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/10/19 19:12	1
2-Hexanone	ND		10	0.50	ug/L			09/10/19 19:12	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/10/19 19:12	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/10/19 19:12	1
Acetone	ND		10	4.0	ug/L			09/10/19 19:12	1
Benzene	ND		0.50	0.072	ug/L			09/10/19 19:12	1

Eurofins Calscience LLC



# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-18205/8**  
**Matrix: Water**  
**Analysis Batch: 18205**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50	0.061	ug/L			09/10/19 19:12	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/10/19 19:12	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/10/19 19:12	1
Bromoform	ND		0.50	0.096	ug/L			09/10/19 19:12	1
Bromomethane	ND		2.0	0.99	ug/L			09/10/19 19:12	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/10/19 19:12	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/10/19 19:12	1
Carbon disulfide	ND		10	0.39	ug/L			09/10/19 19:12	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/10/19 19:12	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/10/19 19:12	1
Chloroethane	ND		0.50	0.12	ug/L			09/10/19 19:12	1
Chloroform	ND		0.50	0.062	ug/L			09/10/19 19:12	1
Chloromethane	ND		5.0	2.0	ug/L			09/10/19 19:12	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/10/19 19:12	1
Dibromomethane	ND		0.50	0.13	ug/L			09/10/19 19:12	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/10/19 19:12	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/10/19 19:12	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/10/19 19:12	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/10/19 19:12	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/10/19 19:12	1
Naphthalene	ND		1.0	0.097	ug/L			09/10/19 19:12	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/10/19 19:12	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/10/19 19:12	1
o-Xylene	ND		0.50	0.086	ug/L			09/10/19 19:12	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/10/19 19:12	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/10/19 19:12	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/10/19 19:12	1
Styrene	ND		0.50	0.059	ug/L			09/10/19 19:12	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/10/19 19:12	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/10/19 19:12	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/10/19 19:12	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/10/19 19:12	1
Toluene	ND		0.50	0.093	ug/L			09/10/19 19:12	1
Trichloroethene	ND		0.50	0.10	ug/L			09/10/19 19:12	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/10/19 19:12	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/10/19 19:12	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/10/19 19:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/10/19 19:12	1
4-Bromofluorobenzene (Surr)	88		68 - 120		09/10/19 19:12	1
Dibromofluoromethane	100		80 - 127		09/10/19 19:12	1
Toluene-d8 (Surr)	99		80 - 120		09/10/19 19:12	1



# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-18205/4**  
**Matrix: Water**  
**Analysis Batch: 18205**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.893		ug/L		99	77 - 120
1,2-Dibromoethane	10.0	10.27		ug/L		103	80 - 120
1,2-Dichlorobenzene	10.0	10.72		ug/L		107	80 - 120
1,2-Dichloroethane	10.0	10.19		ug/L		102	80 - 122
Benzene	10.0	11.00		ug/L		110	80 - 120
Carbon tetrachloride	10.0	10.70		ug/L		107	80 - 129
Chlorobenzene	10.0	10.56		ug/L		106	80 - 120
Ethylbenzene	10.0	11.19		ug/L		112	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.75		ug/L		107	75 - 123
o-Xylene	10.0	11.25		ug/L		112	80 - 120
m,p-Xylene	20.0	22.48		ug/L		112	80 - 120
Toluene	10.0	11.00		ug/L		110	80 - 120
Trichloroethene	10.0	10.94		ug/L		109	80 - 120
Vinyl chloride	10.0	9.621		ug/L		96	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	98		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-18205/5**  
**Matrix: Water**  
**Analysis Batch: 18205**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	10.0	9.906		ug/L		99	77 - 120	0	26
1,2-Dibromoethane	10.0	10.37		ug/L		104	80 - 120	1	32
1,2-Dichlorobenzene	10.0	10.62		ug/L		106	80 - 120	1	30
1,2-Dichloroethane	10.0	10.01		ug/L		100	80 - 122	2	23
Benzene	10.0	10.82		ug/L		108	80 - 120	2	22
Carbon tetrachloride	10.0	10.59		ug/L		106	80 - 129	1	36
Chlorobenzene	10.0	10.49		ug/L		105	80 - 120	1	29
Ethylbenzene	10.0	10.96		ug/L		110	80 - 120	2	25
Methyl-t-Butyl Ether (MTBE)	10.0	10.79		ug/L		108	75 - 123	0	27
o-Xylene	10.0	11.00		ug/L		110	80 - 120	2	30
m,p-Xylene	20.0	21.98		ug/L		110	80 - 120	2	30
Toluene	10.0	10.72		ug/L		107	80 - 120	3	28
Trichloroethene	10.0	10.79		ug/L		108	80 - 120	1	25
Vinyl chloride	10.0	9.653		ug/L		97	63 - 135	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	100		80 - 127
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-18532/7**  
**Matrix: Water**  
**Analysis Batch: 18532**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/11/19 19:08	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/11/19 19:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/11/19 19:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/11/19 19:08	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/11/19 19:08	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/11/19 19:08	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/11/19 19:08	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/11/19 19:08	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/11/19 19:08	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/11/19 19:08	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/11/19 19:08	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/11/19 19:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/11/19 19:08	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/11/19 19:08	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/11/19 19:08	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/11/19 19:08	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/11/19 19:08	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/11/19 19:08	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/11/19 19:08	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/11/19 19:08	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/11/19 19:08	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/11/19 19:08	1
2-Butanone	ND		5.0	0.46	ug/L			09/11/19 19:08	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/11/19 19:08	1
2-Hexanone	ND		10	0.50	ug/L			09/11/19 19:08	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/11/19 19:08	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/11/19 19:08	1
Acetone	ND		10	4.0	ug/L			09/11/19 19:08	1
Benzene	ND		0.50	0.072	ug/L			09/11/19 19:08	1
Bromobenzene	ND		0.50	0.061	ug/L			09/11/19 19:08	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/11/19 19:08	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/11/19 19:08	1
Bromoform	ND		0.50	0.096	ug/L			09/11/19 19:08	1
Bromomethane	ND		2.0	0.99	ug/L			09/11/19 19:08	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/11/19 19:08	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/11/19 19:08	1
Carbon disulfide	ND		10	0.39	ug/L			09/11/19 19:08	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/11/19 19:08	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/11/19 19:08	1
Chloroethane	ND		0.50	0.12	ug/L			09/11/19 19:08	1
Chloroform	ND		0.50	0.062	ug/L			09/11/19 19:08	1
Chloromethane	ND		5.0	2.0	ug/L			09/11/19 19:08	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/11/19 19:08	1
Dibromomethane	ND		0.50	0.13	ug/L			09/11/19 19:08	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/11/19 19:08	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/11/19 19:08	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/11/19 19:08	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/11/19 19:08	1

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-18532/7**  
**Matrix: Water**  
**Analysis Batch: 18532**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/11/19 19:08	1
Naphthalene	ND		1.0	0.097	ug/L			09/11/19 19:08	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/11/19 19:08	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/11/19 19:08	1
o-Xylene	ND		0.50	0.086	ug/L			09/11/19 19:08	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/11/19 19:08	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/11/19 19:08	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/11/19 19:08	1
Styrene	ND		0.50	0.059	ug/L			09/11/19 19:08	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/11/19 19:08	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/11/19 19:08	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/11/19 19:08	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/11/19 19:08	1
Toluene	ND		0.50	0.093	ug/L			09/11/19 19:08	1
Trichloroethene	ND		0.50	0.10	ug/L			09/11/19 19:08	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/11/19 19:08	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/11/19 19:08	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/11/19 19:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 128		09/11/19 19:08	1
4-Bromofluorobenzene (Surr)	89		68 - 120		09/11/19 19:08	1
Dibromofluoromethane	101		80 - 127		09/11/19 19:08	1
Toluene-d8 (Surr)	101		80 - 120		09/11/19 19:08	1

**Lab Sample ID: LCS 570-18532/4**  
**Matrix: Water**  
**Analysis Batch: 18532**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.987		ug/L		100	77 - 120
1,2-Dibromoethane	10.0	10.55		ug/L		105	80 - 120
1,2-Dichlorobenzene	10.0	10.85		ug/L		108	80 - 120
1,2-Dichloroethane	10.0	10.39		ug/L		104	80 - 122
Benzene	10.0	11.24		ug/L		112	80 - 120
Carbon tetrachloride	10.0	11.43		ug/L		114	80 - 129
Chlorobenzene	10.0	10.96		ug/L		110	80 - 120
Ethylbenzene	10.0	11.54		ug/L		115	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.73		ug/L		107	75 - 123
o-Xylene	10.0	11.62		ug/L		116	80 - 120
m,p-Xylene	20.0	23.06		ug/L		115	80 - 120
Toluene	10.0	11.07		ug/L		111	80 - 120
Trichloroethene	10.0	10.91		ug/L		109	80 - 120
Vinyl chloride	10.0	9.625		ug/L		96	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-18532/4**  
**Matrix: Water**  
**Analysis Batch: 18532**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-18532/5**  
**Matrix: Water**  
**Analysis Batch: 18532**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
1,1-Dichloroethene	10.0	9.314		ug/L		93	77 - 120	7	26	
1,2-Dibromoethane	10.0	10.58		ug/L		106	80 - 120	0	32	
1,2-Dichlorobenzene	10.0	10.67		ug/L		107	80 - 120	2	30	
1,2-Dichloroethane	10.0	10.37		ug/L		104	80 - 122	0	23	
Benzene	10.0	10.73		ug/L		107	80 - 120	5	22	
Carbon tetrachloride	10.0	10.66		ug/L		107	80 - 129	7	36	
Chlorobenzene	10.0	10.79		ug/L		108	80 - 120	2	29	
Ethylbenzene	10.0	11.16		ug/L		112	80 - 120	3	25	
Methyl-t-Butyl Ether (MTBE)	10.0	10.81		ug/L		108	75 - 123	1	27	
o-Xylene	10.0	11.26		ug/L		113	80 - 120	3	30	
m,p-Xylene	20.0	22.37		ug/L		112	80 - 120	3	30	
Toluene	10.0	10.63		ug/L		106	80 - 120	4	28	
Trichloroethene	10.0	10.61		ug/L		106	80 - 120	3	25	
Vinyl chloride	10.0	9.053		ug/L		91	63 - 135	6	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	103		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	100		80 - 120

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 570-16033/1-A**  
**Matrix: Water**  
**Analysis Batch: 16262**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 16033**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	ND		0.50	0.18	ug/L		08/29/19 17:04	08/30/19 15:22	1
Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,4-Dioxane-d8	40		30 - 120	08/29/19 17:04	08/30/19 15:22	1			
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
Nitrobenzene-d5	114		56 - 123	08/29/19 17:04	08/30/19 15:22	1			

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

**Lab Sample ID: LCS 570-16033/2-A**  
**Matrix: Water**  
**Analysis Batch: 16262**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 16033**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane		20.0	14.14		ug/L		71	50 - 130
<b>Isotope Dilution</b>								
	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>					
1,4-Dioxane-d8	37		15 - 45					
<b>Surrogate</b>								
	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>					
Nitrobenzene-d5	112		56 - 123					

**Lab Sample ID: 570-5961-2 MS**  
**Matrix: Water**  
**Analysis Batch: 16262**

**Client Sample ID: LAX-01**  
**Prep Type: Total/NA**  
**Prep Batch: 16033**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		20.0	14.57		ug/L		73	50 - 130
<b>Isotope Dilution</b>									
	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
1,4-Dioxane-d8	35		15 - 45						
<b>Surrogate</b>									
	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Nitrobenzene-d5	94		56 - 123						

**Lab Sample ID: 570-5961-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 16262**

**Client Sample ID: LAX-01**  
**Prep Type: Total/NA**  
**Prep Batch: 16033**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		20.0	14.13		ug/L		71	50 - 130	3	20
<b>Isotope Dilution</b>											
	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
1,4-Dioxane-d8	41		15 - 45								
<b>Surrogate</b>											
	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Nitrobenzene-d5	110		56 - 123								

# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## GC/MS VOA

### Analysis Batch: 17765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-1	TB-082719	Total/NA	Water	8260B	
570-5961-2	LAX-01	Total/NA	Water	8260B	
570-5961-3	UAX-03	Total/NA	Water	8260B	
570-5961-4	HEW-04	Total/NA	Water	8260B	
570-5961-5	HEW-0400	Total/NA	Water	8260B	
570-5961-6	LAX-02	Total/NA	Water	8260B	
570-5961-7	UA-16D	Total/NA	Water	8260B	
570-5961-8	UA-17D	Total/NA	Water	8260B	
570-5961-9	RB-082819A	Total/NA	Water	8260B	
570-5961-10	UA-13D	Total/NA	Water	8260B	
570-5961-11	UA-10D	Total/NA	Water	8260B	
570-5961-12	UA-07D	Total/NA	Water	8260B	
570-5961-13	UA-07	Total/NA	Water	8260B	
570-5961-14	RB-082819B	Total/NA	Water	8260B	
570-5961-15	S-26	Total/NA	Water	8260B	
570-5961-16	UA-06D	Total/NA	Water	8260B	
570-5961-17	UA-06	Total/NA	Water	8260B	
570-5961-18	UA-14D	Total/NA	Water	8260B	
570-5961-19	UA-08D	Total/NA	Water	8260B	
570-5961-20	UA-08	Total/NA	Water	8260B	
MB 570-17765/8	Method Blank	Total/NA	Water	8260B	
LCS 570-17765/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-17765/5	Lab Control Sample Dup	Total/NA	Water	8260B	

### Analysis Batch: 17814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-21	S-29	Total/NA	Water	8260B	
570-5961-22	UA-12D	Total/NA	Water	8260B	
570-5961-23	UA-12	Total/NA	Water	8260B	
570-5961-24	S-30	Total/NA	Water	8260B	
570-5961-25	HEW-02	Total/NA	Water	8260B	
570-5961-26	HEW-05	Total/NA	Water	8260B	
570-5961-27	UA-15D	Total/NA	Water	8260B	
570-5961-28	S-24	Total/NA	Water	8260B	
570-5961-29	UA-11D	Total/NA	Water	8260B	
570-5961-30	RB-082819C	Total/NA	Water	8260B	
570-5961-31	S-31	Total/NA	Water	8260B	
570-5961-32	S-15	Total/NA	Water	8260B	
570-5961-33	S-07	Total/NA	Water	8260B	
570-5961-34	UA-02	Total/NA	Water	8260B	
570-5961-35	LAX-03	Total/NA	Water	8260B	
570-5961-36	S-14	Total/NA	Water	8260B	
570-5961-37	UAX-02	Total/NA	Water	8260B	
570-5961-38	UAX-0200	Total/NA	Water	8260B	
570-5961-39	S-02	Total/NA	Water	8260B	
570-5961-40	S-0200	Total/NA	Water	8260B	
MB 570-17814/7	Method Blank	Total/NA	Water	8260B	
LCS 570-17814/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-17814/4	Lab Control Sample Dup	Total/NA	Water	8260B	

# QC Association Summary

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## GC/MS VOA

### Analysis Batch: 18205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-6 - RA	LAX-02	Total/NA	Water	8260B	
570-5961-25 - DL	HEW-02	Total/NA	Water	8260B	
570-5961-26 - DL	HEW-05	Total/NA	Water	8260B	
570-5961-27 - RA	UA-15D	Total/NA	Water	8260B	
570-5961-41	S-03	Total/NA	Water	8260B	
570-5961-42	S-27	Total/NA	Water	8260B	
570-5961-43	HEW-01	Total/NA	Water	8260B	
570-5961-44	S-18	Total/NA	Water	8260B	
570-5961-45	UA-11	Total/NA	Water	8260B	
MB 570-18205/8	Method Blank	Total/NA	Water	8260B	
LCS 570-18205/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-18205/5	Lab Control Sample Dup	Total/NA	Water	8260B	

### Analysis Batch: 18532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-43 - DL	HEW-01	Total/NA	Water	8260B	
570-5961-44 - RA	S-18	Total/NA	Water	8260B	
570-5961-45 - RA	UA-11	Total/NA	Water	8260B	
MB 570-18532/7	Method Blank	Total/NA	Water	8260B	
LCS 570-18532/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-18532/5	Lab Control Sample Dup	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 16033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-2	LAX-01	Total/NA	Water	3510C	
570-5961-3	UAX-03	Total/NA	Water	3510C	
570-5961-4	HEW-04	Total/NA	Water	3510C	
570-5961-5	HEW-0400	Total/NA	Water	3510C	
570-5961-6	LAX-02	Total/NA	Water	3510C	
570-5961-25	HEW-02	Total/NA	Water	3510C	
570-5961-26	HEW-05	Total/NA	Water	3510C	
570-5961-35	LAX-03	Total/NA	Water	3510C	
570-5961-37	UAX-02	Total/NA	Water	3510C	
570-5961-38	UAX-0200	Total/NA	Water	3510C	
570-5961-43	HEW-01	Total/NA	Water	3510C	
MB 570-16033/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-16033/2-A	Lab Control Sample	Total/NA	Water	3510C	
570-5961-2 MS	LAX-01	Total/NA	Water	3510C	
570-5961-2 MSD	LAX-01	Total/NA	Water	3510C	

### Analysis Batch: 16262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-2	LAX-01	Total/NA	Water	8270C SIM ID	16033
570-5961-3	UAX-03	Total/NA	Water	8270C SIM ID	16033
570-5961-6	LAX-02	Total/NA	Water	8270C SIM ID	16033
570-5961-25	HEW-02	Total/NA	Water	8270C SIM ID	16033
570-5961-26	HEW-05	Total/NA	Water	8270C SIM ID	16033
570-5961-35	LAX-03	Total/NA	Water	8270C SIM ID	16033
570-5961-37	UAX-02	Total/NA	Water	8270C SIM ID	16033

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# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 16262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-38	UAX-0200	Total/NA	Water	8270C SIM ID	16033
570-5961-43	HEW-01	Total/NA	Water	8270C SIM ID	16033
MB 570-16033/1-A	Method Blank	Total/NA	Water	8270C SIM ID	16033
LCS 570-16033/2-A	Lab Control Sample	Total/NA	Water	8270C SIM ID	16033
570-5961-2 MS	LAX-01	Total/NA	Water	8270C SIM ID	16033
570-5961-2 MSD	LAX-01	Total/NA	Water	8270C SIM ID	16033

### Analysis Batch: 17194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-5961-4	HEW-04	Total/NA	Water	8270C SIM ID	16033
570-5961-5	HEW-0400	Total/NA	Water	8270C SIM ID	16033



# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: TB-082719

Date Collected: 08/27/19 07:30

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 17:07	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: LAX-01

Date Collected: 08/27/19 10:28

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 17:32	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 16:25	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: UAX-03

Date Collected: 08/27/19 12:05

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 17:58	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 17:10	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-04

Date Collected: 08/27/19 12:30

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	20 mL	20 mL	17765	09/07/19 18:23	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			17194	09/05/19 13:28	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-0400

Date Collected: 08/27/19 12:45

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	20 mL	20 mL	17765	09/07/19 18:49	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			17194	09/05/19 14:31	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

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# Lab Chronicle

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: LAX-02

Date Collected: 08/27/19 13:57

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 19:14	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	RA	1	20 mL	20 mL	18205	09/10/19 20:52	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 17:57	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: UA-16D

Date Collected: 08/28/19 08:01

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 19:40	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-17D

Date Collected: 08/28/19 08:08

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 20:05	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: RB-082819A

Date Collected: 08/28/19 08:27

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 20:31	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-13D

Date Collected: 08/28/19 08:35

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 20:56	UX77	ECL 2
Instrument ID: GCMSUU										

# Lab Chronicle

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-10D

Date Collected: 08/28/19 08:53

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 21:22	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-07D

Date Collected: 08/28/19 09:13

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 21:47	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-07

Date Collected: 08/28/19 09:21

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 22:13	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: RB-082819B

Date Collected: 08/28/19 09:30

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 22:38	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-26

Date Collected: 08/28/19 09:42

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 23:04	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-06D

Date Collected: 08/28/19 09:51

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 23:29	UX77	ECL 2
Instrument ID: GCMSUU										

# Lab Chronicle

Client: Hargis + Associates, Inc.  
 Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-06

Date Collected: 08/28/19 09:57

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/07/19 23:54	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-14D

Date Collected: 08/28/19 10:12

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	20 mL	20 mL	17765	09/08/19 00:20	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-08D

Date Collected: 08/28/19 10:27

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/08/19 00:45	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-08

Date Collected: 08/28/19 10:35

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17765	09/08/19 01:11	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-29

Date Collected: 08/28/19 10:46

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 04:34	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-12D

Date Collected: 08/28/19 10:52

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 04:59	UX77	ECL 2
Instrument ID: GCMSUU										

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-12

Date Collected: 08/28/19 11:00

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 05:24	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-30

Date Collected: 08/28/19 11:53

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 05:50	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: HEW-02

Date Collected: 08/28/19 12:05

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 06:15	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	DL	10	20 mL	20 mL	18205	09/10/19 21:43	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 18:13	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-05

Date Collected: 08/28/19 12:15

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 06:41	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	DL	10	20 mL	20 mL	18205	09/10/19 22:08	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 18:29	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: UA-15D

Date Collected: 08/28/19 12:36

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 07:06	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	RA	1	20 mL	20 mL	18205	09/10/19 21:17	UX77	ECL 2
Instrument ID: GCMSUU										

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# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: S-24

Date Collected: 08/28/19 12:43

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 07:31	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-11D

Date Collected: 08/28/19 13:02

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 07:57	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: RB-082819C

Date Collected: 08/28/19 13:13

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 08:22	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-31

Date Collected: 08/28/19 13:22

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-31

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 08:48	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-15

Date Collected: 08/28/19 13:35

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-32

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 09:13	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-07

Date Collected: 08/28/19 13:47

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 09:39	UX77	ECL 2
Instrument ID: GCMSUU										

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: UA-02

Date Collected: 08/28/19 13:56

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-34

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 10:04	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: LAX-03

Date Collected: 08/28/19 14:12

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 10:29	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 18:45	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: S-14

Date Collected: 08/28/19 14:22

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 10:55	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UAX-02

Date Collected: 08/28/19 14:33

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-37

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 11:20	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 19:01	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: UAX-0200

Date Collected: 08/28/19 14:38

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-38

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 11:46	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 19:16	AJ2Q	ECL 1
Instrument ID: GCMSDDD										



# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: S-02

Date Collected: 08/28/19 14:55

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 12:11	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-0200

Date Collected: 08/28/19 15:00

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17814	09/08/19 12:36	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-03

Date Collected: 08/28/19 15:10

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-41

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	18205	09/10/19 22:33	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: S-27

Date Collected: 08/28/19 15:27

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	18205	09/10/19 22:59	UX77	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: HEW-01

Date Collected: 08/28/19 15:55

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-43

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	18205	09/10/19 23:24	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	DL	50	20 mL	20 mL	18532	09/11/19 20:24	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	16033	08/29/19 17:08	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16262	08/30/19 19:32	AJ2Q	ECL 1
Instrument ID: GCMSDDD										



# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Client Sample ID: S-18

Date Collected: 08/28/19 16:05

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-44

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	18205	09/10/19 23:50	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	RA	1	20 mL	20 mL	18532	09/11/19 19:33	UJHB	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: UA-11

Date Collected: 08/28/19 13:10

Date Received: 08/28/19 17:15

## Lab Sample ID: 570-5961-45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	18205	09/11/19 00:15	UX77	ECL 2
Instrument ID: GCMSUU										
Total/NA	Analysis	8260B	RA	1	20 mL	20 mL	18532	09/11/19 19:59	UJHB	ECL 2
Instrument ID: GCMSUU										

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19

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# Method Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

Job ID: 570-5961-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8270C SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Hargis + Associates, Inc.  
Project/Site: Raytheon Building 684 / 764.10

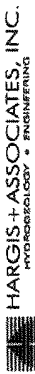
Job ID: 570-5961-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-5961-1	TB-082719	Water	08/27/19 07:30	08/28/19 17:15	
570-5961-2	LAX-01	Water	08/27/19 10:28	08/28/19 17:15	
570-5961-3	UAX-03	Water	08/27/19 12:05	08/28/19 17:15	
570-5961-4	HEW-04	Water	08/27/19 12:30	08/28/19 17:15	
570-5961-5	HEW-0400	Water	08/27/19 12:45	08/28/19 17:15	
570-5961-6	LAX-02	Water	08/27/19 13:57	08/28/19 17:15	
570-5961-7	UA-16D	Water	08/28/19 08:01	08/28/19 17:15	
570-5961-8	UA-17D	Water	08/28/19 08:08	08/28/19 17:15	
570-5961-9	RB-082819A	Water	08/28/19 08:27	08/28/19 17:15	
570-5961-10	UA-13D	Water	08/28/19 08:35	08/28/19 17:15	
570-5961-11	UA-10D	Water	08/28/19 08:53	08/28/19 17:15	
570-5961-12	UA-07D	Water	08/28/19 09:13	08/28/19 17:15	
570-5961-13	UA-07	Water	08/28/19 09:21	08/28/19 17:15	
570-5961-14	RB-082819B	Water	08/28/19 09:30	08/28/19 17:15	
570-5961-15	S-26	Water	08/28/19 09:42	08/28/19 17:15	
570-5961-16	UA-06D	Water	08/28/19 09:51	08/28/19 17:15	
570-5961-17	UA-06	Water	08/28/19 09:57	08/28/19 17:15	
570-5961-18	UA-14D	Water	08/28/19 10:12	08/28/19 17:15	
570-5961-19	UA-08D	Water	08/28/19 10:27	08/28/19 17:15	
570-5961-20	UA-08	Water	08/28/19 10:35	08/28/19 17:15	
570-5961-21	S-29	Water	08/28/19 10:46	08/28/19 17:15	
570-5961-22	UA-12D	Water	08/28/19 10:52	08/28/19 17:15	
570-5961-23	UA-12	Water	08/28/19 11:00	08/28/19 17:15	
570-5961-24	S-30	Water	08/28/19 11:53	08/28/19 17:15	
570-5961-25	HEW-02	Water	08/28/19 12:05	08/28/19 17:15	
570-5961-26	HEW-05	Water	08/28/19 12:15	08/28/19 17:15	
570-5961-27	UA-15D	Water	08/28/19 12:36	08/28/19 17:15	
570-5961-28	S-24	Water	08/28/19 12:43	08/28/19 17:15	
570-5961-29	UA-11D	Water	08/28/19 13:02	08/28/19 17:15	
570-5961-30	RB-082819C	Water	08/28/19 13:13	08/28/19 17:15	
570-5961-31	S-31	Water	08/28/19 13:22	08/28/19 17:15	
570-5961-32	S-15	Water	08/28/19 13:35	08/28/19 17:15	
570-5961-33	S-07	Water	08/28/19 13:47	08/28/19 17:15	
570-5961-34	UA-02	Water	08/28/19 13:56	08/28/19 17:15	
570-5961-35	LAX-03	Water	08/28/19 14:12	08/28/19 17:15	
570-5961-36	S-14	Water	08/28/19 14:22	08/28/19 17:15	
570-5961-37	UAX-02	Water	08/28/19 14:33	08/28/19 17:15	
570-5961-38	UAX-0200	Water	08/28/19 14:38	08/28/19 17:15	
570-5961-39	S-02	Water	08/28/19 14:55	08/28/19 17:15	
570-5961-40	S-0200	Water	08/28/19 15:00	08/28/19 17:15	
570-5961-41	S-03	Water	08/28/19 15:10	08/28/19 17:15	
570-5961-42	S-27	Water	08/28/19 15:27	08/28/19 17:15	
570-5961-43	HEW-01	Water	08/28/19 15:55	08/28/19 17:15	
570-5961-44	S-18	Water	08/28/19 16:05	08/28/19 17:15	
570-5961-45	UA-11	Water	08/28/19 13:10	08/28/19 17:15	



570-5961 Chain of Custody

Date: 8/27/19  
Page 1 of 4



PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION				SPECIAL HANDLING	REMARKS
			Date	Time					>1,000	100-1,000	10-100	0-10		
BCI Fullerton 764.10		A. Janson T. EVANS			Groundwater									
	1	1B-082719	8/27/19	0730	Lab prepared water	Hydrochloric Acid (HCl)	500 mL Amber	VOCs by EPA 8260B	1,4-Dioxane by 8270 MOD					
	2	LAX-01		1028	X	X	X	X	X	X	X	Standard TAT		
	3	UAX-03		1205	X	X	X	X	X	X	X			
	4	HEW-04		1230	X	X	X	X	X	X	X			
	5	HEW-0400		1245	X	X	X	X	X	X	X			
	6	LAX-02		1357	X	X	X	X	X	X	X			
	7	UA-16D	8/28/19	0801	X	X	X	X	X	X	X			
	8	UA-17D		0808	X	X	X	X	X	X	X			
	9	PB-082819A		0827	X	X	X	X	X	X	X			
	10	UA-13D		0835	X	X	X	X	X	X	X			
	11	UA-10D		0853	X	X	X	X	X	X	X			
	12	UA-07D		0913	X	X	X	X	X	X	X			
	13	UA-07		0921	X	X	X	X	X	X	X			
Total number of containers per analysis:													Total No. of Containers:	
Relinquished By: / Company:	Date / Time	Received By: / Company	Date / Time											
<u>Ken Puentes</u>	8/28/19 1635	<u>Santos, Gork</u>	08/29/19											
Relinquished By: / Company:	Date / Time	Received By: / Company	Date / Time											
<u>Santos, Gork</u>	08/28/19 17:15	<u>Ken Puentes</u>	08/29/19 17:15											

No. of containers correct  
Received in good condition  
Custody seals secure  
Conforms to COC document

Send Results to:  
**Ken Puentes**  
9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com

Temperature on receipt

3.1°C / 3.3°C / 5.4°C

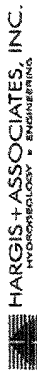








Date: 8/28/19  
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PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	Sampled By:	SAMPLE COLLECTION	
		Date	Time
BCI Fullerton 764.10	<u>AJENZON TYLERS</u>	<u>8/28/19</u>	<u>1605</u>
LAB ID	SAMPLE ID		
<u>44</u>	<u>S-18</u>		
<u>45</u>	<u>VA-11</u>		<u>1310</u>

MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION	SPECIAL HANDLING
Groundwater	Hydrochloric Acid (HCl)	40-ml VOA	VOCs by EPA 8260B	0-10	Standard TAT
Lab prepared water		500 mL Amber	1,4-Dioxane by 8270 MOD	10-100	
				100-1,000	
				>1,000	MS/MSD Requested

Total No. of Containers: 16:36

No. of containers correct  
Received in good condition  
Custody seals secure  
Conforms to COC document

Send Results to:  
**Ken Puentes**  
9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com

Temperature on receipt 71:15





## Login Sample Receipt Checklist

Client: Hargis + Associates, Inc.

Job Number: 570-5961-1

**Login Number: 5961**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Liao, Gineyau**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-6073-1

Client Project/Site: Building 684 -Raytheon / 764.10

**For:**

Hargis + Associates, Inc.  
La Jolla Gateway  
9171 Towne Centre Drive  
Suite 375  
San Diego, California 92122

Attn: Julie Kelly

*Virendra R Patel*

---

Authorized for release by:  
9/12/2019 10:35:53 AM

Virendra Patel, Project Manager I  
(714)895-5494  
[virendrapatel@eurofinsus.com](mailto:virendrapatel@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

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## Job ID: 570-6073-1

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### Laboratory: Eurofins Calscience LLC

#### Narrative

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#### Job Narrative 570-6073-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/29/2019 11:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Client Sample ID: TB-082919

Lab Sample ID: 570-6073-1

No Detections.

## Client Sample ID: UA-04D

Lab Sample ID: 570-6073-2

No Detections.

## Client Sample ID: UA-0400

Lab Sample ID: 570-6073-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.075	J	0.50	0.068	ug/L	1		8260B	Total/NA

## Client Sample ID: S-04

Lab Sample ID: 570-6073-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.11	J	0.50	0.062	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.56		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene	25		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: RB-082919

Lab Sample ID: 570-6073-5

No Detections.

## Client Sample ID: UAX-01

Lab Sample ID: 570-6073-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.071	J	0.50	0.060	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	2.3		0.50	0.10	ug/L	1		8260B	Total/NA
Trichloroethene	2.9		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-32

Lab Sample ID: 570-6073-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.070	J	1.0	0.043	ug/L	1		8260B	Total/NA
Trichloroethene	4.0		0.50	0.10	ug/L	1		8260B	Total/NA

## Client Sample ID: S-08

Lab Sample ID: 570-6073-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	36		10	4.8	ug/L	20		8260B	Total/NA
Trichloroethene - DL	1500		40	8.1	ug/L	80		8260B	Total/NA

## Client Sample ID: S-0800

Lab Sample ID: 570-6073-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	34		10	4.8	ug/L	20		8260B	Total/NA
Trichloroethene - DL	1500		40	8.1	ug/L	80		8260B	Total/NA

## Client Sample ID: SE-01

Lab Sample ID: 570-6073-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.9	J	25	3.1	ug/L	50		8260B	Total/NA
Tetrachloroethene	140		25	12	ug/L	50		8260B	Total/NA
Trichloroethene - DL	6500		200	41	ug/L	400		8260B	Total/NA

## Client Sample ID: HEW-03

Lab Sample ID: 570-6073-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.2		0.50	0.10	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

**Client Sample ID: HEW-03 (Continued)**

**Lab Sample ID: 570-6073-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.14	J	0.50	0.11	ug/L	1		8260B	Total/NA
Chloroform	0.11	J	0.50	0.062	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.7		0.50	0.24	ug/L	1		8260B	Total/NA
Trichloroethene - DL	91		2.0	0.41	ug/L	4		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: TB-082919**  
**Date Collected: 08/29/19 07:30**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 15:30	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 15:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 15:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 15:30	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 15:30	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 15:30	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 15:30	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 15:30	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 15:30	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 15:30	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 15:30	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 15:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 15:30	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 15:30	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 15:30	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 15:30	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 15:30	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 15:30	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 15:30	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 15:30	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 15:30	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 15:30	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 15:30	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 15:30	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 15:30	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 15:30	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 15:30	1
Acetone	ND		10	4.0	ug/L			09/06/19 15:30	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 15:30	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 15:30	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 15:30	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 15:30	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 15:30	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 15:30	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 15:30	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 15:30	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 15:30	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 15:30	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 15:30	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 15:30	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 15:30	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 15:30	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 15:30	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 15:30	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 15:30	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 15:30	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 15:30	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 15:30	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 15:30	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB-082919**  
**Date Collected: 08/29/19 07:30**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 15:30	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 15:30	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 15:30	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 15:30	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 15:30	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 15:30	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 15:30	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 15:30	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 15:30	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 15:30	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 15:30	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 15:30	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 15:30	1
Trichloroethene	ND		0.50	0.10	ug/L			09/06/19 15:30	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 15:30	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 15:30	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 128		09/06/19 15:30	1
4-Bromofluorobenzene (Surr)	94		68 - 120		09/06/19 15:30	1
Dibromofluoromethane	97		80 - 127		09/06/19 15:30	1
Toluene-d8 (Surr)	100		80 - 120		09/06/19 15:30	1

**Client Sample ID: UA-04D**  
**Date Collected: 08/29/19 07:55**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 16:00	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 16:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 16:00	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 16:00	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 16:00	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 16:00	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 16:00	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 16:00	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 16:00	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 16:00	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 16:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 16:00	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 16:00	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 16:00	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 16:00	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 16:00	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 16:00	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 16:00	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 16:00	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 16:00	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 16:00	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-04D**  
**Date Collected: 08/29/19 07:55**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 16:00	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 16:00	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 16:00	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 16:00	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 16:00	1
Acetone	ND		10	4.0	ug/L			09/06/19 16:00	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 16:00	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 16:00	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 16:00	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 16:00	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 16:00	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 16:00	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 16:00	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 16:00	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 16:00	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 16:00	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 16:00	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 16:00	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 16:00	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 16:00	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 16:00	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 16:00	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 16:00	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 16:00	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 16:00	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 16:00	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 16:00	1
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 16:00	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 16:00	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 16:00	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 16:00	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 16:00	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 16:00	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 16:00	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 16:00	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 16:00	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 16:00	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 16:00	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 16:00	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 16:00	1
Trichloroethene	ND		0.50	0.10	ug/L			09/06/19 16:00	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 16:00	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 16:00	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 128		09/06/19 16:00	1
4-Bromofluorobenzene (Surr)	92		68 - 120		09/06/19 16:00	1
Dibromofluoromethane	100		80 - 127		09/06/19 16:00	1
Toluene-d8 (Surr)	100		80 - 120		09/06/19 16:00	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UA-0400**  
**Date Collected: 08/29/19 08:00**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 16:30	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 16:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 16:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 16:30	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 16:30	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 16:30	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 16:30	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 16:30	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 16:30	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 16:30	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 16:30	1
<b>1,2,4-Trimethylbenzene</b>	<b>0.075</b>	<b>J</b>	0.50	0.068	ug/L			09/06/19 16:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 16:30	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 16:30	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 16:30	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 16:30	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 16:30	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 16:30	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 16:30	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 16:30	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 16:30	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 16:30	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 16:30	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 16:30	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 16:30	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 16:30	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 16:30	1
Acetone	ND		10	4.0	ug/L			09/06/19 16:30	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 16:30	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 16:30	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 16:30	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 16:30	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 16:30	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 16:30	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 16:30	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 16:30	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 16:30	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 16:30	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 16:30	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 16:30	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 16:30	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 16:30	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 16:30	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 16:30	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 16:30	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 16:30	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 16:30	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 16:30	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 16:30	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UA-0400**  
**Date Collected: 08/29/19 08:00**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 16:30	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 16:30	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 16:30	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 16:30	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 16:30	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 16:30	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 16:30	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 16:30	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 16:30	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 16:30	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 16:30	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 16:30	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 16:30	1
Trichloroethene	ND		0.50	0.10	ug/L			09/06/19 16:30	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 16:30	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 16:30	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/06/19 16:30	1
4-Bromofluorobenzene (Surr)	93		68 - 120		09/06/19 16:30	1
Dibromofluoromethane	101		80 - 127		09/06/19 16:30	1
Toluene-d8 (Surr)	99		80 - 120		09/06/19 16:30	1

**Client Sample ID: S-04**  
**Date Collected: 08/29/19 08:06**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 16:59	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 16:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 16:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 16:59	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 16:59	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 16:59	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 16:59	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 16:59	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 16:59	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 16:59	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 16:59	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 16:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 16:59	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 16:59	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 16:59	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 16:59	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 16:59	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 16:59	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 16:59	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 16:59	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 16:59	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 16:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-04**  
**Date Collected: 08/29/19 08:06**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 16:59	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 16:59	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 16:59	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 16:59	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 16:59	1
Acetone	ND		10	4.0	ug/L			09/06/19 16:59	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 16:59	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 16:59	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 16:59	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 16:59	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 16:59	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 16:59	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 16:59	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 16:59	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 16:59	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 16:59	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 16:59	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 16:59	1
<b>Chloroform</b>	<b>0.11</b>	<b>J</b>	0.50	0.062	ug/L			09/06/19 16:59	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 16:59	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 16:59	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 16:59	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 16:59	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 16:59	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 16:59	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 16:59	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 16:59	1
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 16:59	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 16:59	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 16:59	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 16:59	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 16:59	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 16:59	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 16:59	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 16:59	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 16:59	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 16:59	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 16:59	1
<b>Tetrachloroethene</b>	<b>0.56</b>		0.50	0.24	ug/L			09/06/19 16:59	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 16:59	1
<b>Trichloroethene</b>	<b>25</b>		0.50	0.10	ug/L			09/06/19 16:59	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 16:59	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 16:59	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128		09/06/19 16:59	1
<i>4-Bromofluorobenzene (Surr)</i>	95		68 - 120		09/06/19 16:59	1
<i>Dibromofluoromethane</i>	100		80 - 127		09/06/19 16:59	1
<i>Toluene-d8 (Surr)</i>	102		80 - 120		09/06/19 16:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: RB-082919**  
**Date Collected: 08/29/19 08:10**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/09/19 12:50	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/09/19 12:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/09/19 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/09/19 12:50	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/09/19 12:50	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/09/19 12:50	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/09/19 12:50	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/09/19 12:50	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/09/19 12:50	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/09/19 12:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/09/19 12:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/09/19 12:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/09/19 12:50	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/09/19 12:50	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/09/19 12:50	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/09/19 12:50	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/09/19 12:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/09/19 12:50	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/09/19 12:50	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/09/19 12:50	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/09/19 12:50	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/09/19 12:50	1
2-Butanone	ND		5.0	0.46	ug/L			09/09/19 12:50	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/09/19 12:50	1
2-Hexanone	ND		10	0.50	ug/L			09/09/19 12:50	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/09/19 12:50	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/09/19 12:50	1
Acetone	ND		10	4.0	ug/L			09/09/19 12:50	1
Benzene	ND		0.50	0.072	ug/L			09/09/19 12:50	1
Bromobenzene	ND		0.50	0.061	ug/L			09/09/19 12:50	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/09/19 12:50	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/09/19 12:50	1
Bromoform	ND		0.50	0.096	ug/L			09/09/19 12:50	1
Bromomethane	ND		2.0	0.99	ug/L			09/09/19 12:50	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/09/19 12:50	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/09/19 12:50	1
Carbon disulfide	ND		10	0.39	ug/L			09/09/19 12:50	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/09/19 12:50	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/09/19 12:50	1
Chloroethane	ND		0.50	0.12	ug/L			09/09/19 12:50	1
Chloroform	ND		0.50	0.062	ug/L			09/09/19 12:50	1
Chloromethane	ND		5.0	2.0	ug/L			09/09/19 12:50	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/09/19 12:50	1
Dibromomethane	ND		0.50	0.13	ug/L			09/09/19 12:50	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/09/19 12:50	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/09/19 12:50	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/09/19 12:50	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/09/19 12:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/09/19 12:50	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RB-082919**  
**Date Collected: 08/29/19 08:10**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/09/19 12:50	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/09/19 12:50	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/09/19 12:50	1
o-Xylene	ND		0.50	0.086	ug/L			09/09/19 12:50	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/09/19 12:50	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/09/19 12:50	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/09/19 12:50	1
Styrene	ND		0.50	0.059	ug/L			09/09/19 12:50	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/09/19 12:50	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/09/19 12:50	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/09/19 12:50	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/09/19 12:50	1
Toluene	ND		0.50	0.093	ug/L			09/09/19 12:50	1
Trichloroethene	ND		0.50	0.10	ug/L			09/09/19 12:50	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/09/19 12:50	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/09/19 12:50	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/09/19 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 128		09/09/19 12:50	1
4-Bromofluorobenzene (Surr)	91		68 - 120		09/09/19 12:50	1
Dibromofluoromethane	99		80 - 127		09/09/19 12:50	1
Toluene-d8 (Surr)	102		80 - 120		09/09/19 12:50	1

**Client Sample ID: UAX-01**  
**Date Collected: 08/29/19 08:18**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 17:59	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 17:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 17:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 17:59	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 17:59	1
<b>1,1-Dichloroethane</b>	<b>0.071</b>	<b>J</b>	0.50	0.060	ug/L			09/06/19 17:59	1
<b>1,1-Dichloroethene</b>	<b>2.3</b>		0.50	0.10	ug/L			09/06/19 17:59	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 17:59	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 17:59	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 17:59	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 17:59	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 17:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 17:59	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 17:59	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 17:59	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 17:59	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 17:59	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 17:59	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 17:59	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 17:59	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 17:59	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 17:59	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-01**  
**Date Collected: 08/29/19 08:18**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 17:59	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 17:59	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 17:59	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 17:59	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 17:59	1
Acetone	ND		10	4.0	ug/L			09/06/19 17:59	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 17:59	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 17:59	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 17:59	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 17:59	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 17:59	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 17:59	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 17:59	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 17:59	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 17:59	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 17:59	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 17:59	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 17:59	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 17:59	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 17:59	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 17:59	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 17:59	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 17:59	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 17:59	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 17:59	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 17:59	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 17:59	1
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 17:59	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 17:59	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 17:59	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 17:59	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 17:59	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 17:59	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 17:59	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 17:59	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 17:59	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 17:59	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 17:59	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 17:59	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 17:59	1
<b>Trichloroethene</b>	<b>2.9</b>		0.50	0.10	ug/L			09/06/19 17:59	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 17:59	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 17:59	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 17:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 128		09/06/19 17:59	1
4-Bromofluorobenzene (Surr)	93		68 - 120		09/06/19 17:59	1
Dibromofluoromethane	101		80 - 127		09/06/19 17:59	1
Toluene-d8 (Surr)	100		80 - 120		09/06/19 17:59	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-32**  
**Date Collected: 08/29/19 08:31**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 13:02	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 13:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 13:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 13:02	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 13:02	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 13:02	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 13:02	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 13:02	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 13:02	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 13:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 13:02	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 13:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 13:02	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 13:02	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 13:02	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 13:02	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 13:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 13:02	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 13:02	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 13:02	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 13:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 13:02	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 13:02	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 13:02	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 13:02	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 13:02	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 13:02	1
Acetone	ND		10	4.0	ug/L			09/06/19 13:02	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 13:02	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 13:02	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 13:02	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 13:02	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 13:02	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 13:02	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 13:02	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 13:02	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 13:02	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 13:02	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 13:02	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 13:02	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 13:02	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 13:02	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 13:02	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 13:02	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 13:02	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 13:02	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 13:02	1
<b>Methylene Chloride</b>	<b>0.070</b>	<b>J</b>	1.0	0.043	ug/L			09/06/19 13:02	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 13:02	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-32**  
**Date Collected: 08/29/19 08:31**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 13:02	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 13:02	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 13:02	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 13:02	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 13:02	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 13:02	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 13:02	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 13:02	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 13:02	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 13:02	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 13:02	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 13:02	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 13:02	1
<b>Trichloroethene</b>	<b>4.0</b>		0.50	0.10	ug/L			09/06/19 13:02	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 13:02	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 13:02	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 128		09/06/19 13:02	1
4-Bromofluorobenzene (Surr)	92		68 - 120		09/06/19 13:02	1
Dibromofluoromethane	101		80 - 127		09/06/19 13:02	1
Toluene-d8 (Surr)	97		80 - 120		09/06/19 13:02	1

**Client Sample ID: S-08**  
**Date Collected: 08/29/19 08:44**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	1.4	ug/L			09/06/19 18:28	20
1,1,1-Trichloroethane	ND		10	1.7	ug/L			09/06/19 18:28	20
1,1,2,2-Tetrachloroethane	ND		10	1.7	ug/L			09/06/19 18:28	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	2.5	ug/L			09/06/19 18:28	20
1,1,2-Trichloroethane	ND		10	1.4	ug/L			09/06/19 18:28	20
1,1-Dichloroethane	ND		10	1.2	ug/L			09/06/19 18:28	20
1,1-Dichloroethene	ND		10	2.1	ug/L			09/06/19 18:28	20
1,1-Dichloropropene	ND		10	1.4	ug/L			09/06/19 18:28	20
1,2,3-Trichlorobenzene	ND		10	2.4	ug/L			09/06/19 18:28	20
1,2,3-Trichloropropane	ND		20	1.5	ug/L			09/06/19 18:28	20
1,2,4-Trichlorobenzene	ND		10	1.8	ug/L			09/06/19 18:28	20
1,2,4-Trimethylbenzene	ND		10	1.4	ug/L			09/06/19 18:28	20
1,2-Dibromo-3-Chloropropane	ND		100	10	ug/L			09/06/19 18:28	20
1,2-Dibromoethane	ND		10	1.2	ug/L			09/06/19 18:28	20
1,2-Dichlorobenzene	ND		10	1.6	ug/L			09/06/19 18:28	20
1,2-Dichloroethane	ND		10	1.5	ug/L			09/06/19 18:28	20
1,2-Dichloropropane	ND		10	2.0	ug/L			09/06/19 18:28	20
1,3,5-Trimethylbenzene	ND		10	1.6	ug/L			09/06/19 18:28	20
1,3-Dichlorobenzene	ND		10	2.0	ug/L			09/06/19 18:28	20
1,3-Dichloropropane	ND		20	1.6	ug/L			09/06/19 18:28	20
1,4-Dichlorobenzene	ND		10	1.5	ug/L			09/06/19 18:28	20
2,2-Dichloropropane	ND		20	7.5	ug/L			09/06/19 18:28	20

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-08**  
**Date Collected: 08/29/19 08:44**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		100	9.2	ug/L			09/06/19 18:28	20
2-Chlorotoluene	ND		10	1.2	ug/L			09/06/19 18:28	20
2-Hexanone	ND		200	10	ug/L			09/06/19 18:28	20
4-Chlorotoluene	ND		10	1.8	ug/L			09/06/19 18:28	20
4-Methyl-2-pentanone	ND		100	8.3	ug/L			09/06/19 18:28	20
Acetone	ND		200	80	ug/L			09/06/19 18:28	20
Benzene	ND		10	1.4	ug/L			09/06/19 18:28	20
Bromobenzene	ND		10	1.2	ug/L			09/06/19 18:28	20
Bromochloromethane	ND		20	1.6	ug/L			09/06/19 18:28	20
Bromodichloromethane	ND		10	1.1	ug/L			09/06/19 18:28	20
Bromoform	ND		10	1.9	ug/L			09/06/19 18:28	20
Bromomethane	ND		40	20	ug/L			09/06/19 18:28	20
cis-1,2-Dichloroethene	ND		10	2.2	ug/L			09/06/19 18:28	20
cis-1,3-Dichloropropene	ND		10	1.9	ug/L			09/06/19 18:28	20
Carbon disulfide	ND		200	7.7	ug/L			09/06/19 18:28	20
Carbon tetrachloride	ND		10	1.1	ug/L			09/06/19 18:28	20
Chlorobenzene	ND		10	1.8	ug/L			09/06/19 18:28	20
Chloroethane	ND		10	2.3	ug/L			09/06/19 18:28	20
Chloroform	ND		10	1.2	ug/L			09/06/19 18:28	20
Chloromethane	ND		100	39	ug/L			09/06/19 18:28	20
Dibromochloromethane	ND		10	1.3	ug/L			09/06/19 18:28	20
Dibromomethane	ND		10	2.5	ug/L			09/06/19 18:28	20
Dichlorodifluoromethane	ND		20	2.0	ug/L			09/06/19 18:28	20
Ethylbenzene	ND		10	1.7	ug/L			09/06/19 18:28	20
Isopropylbenzene	ND		10	1.5	ug/L			09/06/19 18:28	20
Methylene Chloride	ND		20	0.85	ug/L			09/06/19 18:28	20
Methyl-t-Butyl Ether (MTBE)	ND		10	1.3	ug/L			09/06/19 18:28	20
Naphthalene	ND		20	1.9	ug/L			09/06/19 18:28	20
n-Butylbenzene	ND		10	2.2	ug/L			09/06/19 18:28	20
N-Propylbenzene	ND		10	1.5	ug/L			09/06/19 18:28	20
o-Xylene	ND		10	1.7	ug/L			09/06/19 18:28	20
m,p-Xylene	ND		20	3.0	ug/L			09/06/19 18:28	20
p-Isopropyltoluene	ND		10	1.5	ug/L			09/06/19 18:28	20
sec-Butylbenzene	ND		10	1.9	ug/L			09/06/19 18:28	20
Styrene	ND		10	1.2	ug/L			09/06/19 18:28	20
trans-1,2-Dichloroethene	ND		10	1.6	ug/L			09/06/19 18:28	20
trans-1,3-Dichloropropene	ND		10	1.1	ug/L			09/06/19 18:28	20
tert-Butylbenzene	ND		10	1.6	ug/L			09/06/19 18:28	20
<b>Tetrachloroethene</b>	<b>36</b>		10	4.8	ug/L			09/06/19 18:28	20
Toluene	ND		10	1.9	ug/L			09/06/19 18:28	20
Trichlorofluoromethane	ND		10	2.1	ug/L			09/06/19 18:28	20
Vinyl acetate	ND		100	14	ug/L			09/06/19 18:28	20
Vinyl chloride	ND		10	1.6	ug/L			09/06/19 18:28	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/06/19 18:28	20
4-Bromofluorobenzene (Surr)	93		68 - 120		09/06/19 18:28	20
Dibromofluoromethane	102		80 - 127		09/06/19 18:28	20
Toluene-d8 (Surr)	100		80 - 120		09/06/19 18:28	20

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: S-0800**  
**Date Collected: 08/29/19 08:46**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	1.4	ug/L			09/06/19 18:58	20
1,1,1-Trichloroethane	ND		10	1.7	ug/L			09/06/19 18:58	20
1,1,2,2-Tetrachloroethane	ND		10	1.7	ug/L			09/06/19 18:58	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	2.5	ug/L			09/06/19 18:58	20
1,1,2-Trichloroethane	ND		10	1.4	ug/L			09/06/19 18:58	20
1,1-Dichloroethane	ND		10	1.2	ug/L			09/06/19 18:58	20
1,1-Dichloroethene	ND		10	2.1	ug/L			09/06/19 18:58	20
1,1-Dichloropropene	ND		10	1.4	ug/L			09/06/19 18:58	20
1,2,3-Trichlorobenzene	ND		10	2.4	ug/L			09/06/19 18:58	20
1,2,3-Trichloropropane	ND		20	1.5	ug/L			09/06/19 18:58	20
1,2,4-Trichlorobenzene	ND		10	1.8	ug/L			09/06/19 18:58	20
1,2,4-Trimethylbenzene	ND		10	1.4	ug/L			09/06/19 18:58	20
1,2-Dibromo-3-Chloropropane	ND		100	10	ug/L			09/06/19 18:58	20
1,2-Dibromoethane	ND		10	1.2	ug/L			09/06/19 18:58	20
1,2-Dichlorobenzene	ND		10	1.6	ug/L			09/06/19 18:58	20
1,2-Dichloroethane	ND		10	1.5	ug/L			09/06/19 18:58	20
1,2-Dichloropropane	ND		10	2.0	ug/L			09/06/19 18:58	20
1,3,5-Trimethylbenzene	ND		10	1.6	ug/L			09/06/19 18:58	20
1,3-Dichlorobenzene	ND		10	2.0	ug/L			09/06/19 18:58	20
1,3-Dichloropropane	ND		20	1.6	ug/L			09/06/19 18:58	20
1,4-Dichlorobenzene	ND		10	1.5	ug/L			09/06/19 18:58	20
2,2-Dichloropropane	ND		20	7.5	ug/L			09/06/19 18:58	20
2-Butanone	ND		100	9.2	ug/L			09/06/19 18:58	20
2-Chlorotoluene	ND		10	1.2	ug/L			09/06/19 18:58	20
2-Hexanone	ND		200	10	ug/L			09/06/19 18:58	20
4-Chlorotoluene	ND		10	1.8	ug/L			09/06/19 18:58	20
4-Methyl-2-pentanone	ND		100	8.3	ug/L			09/06/19 18:58	20
Acetone	ND		200	80	ug/L			09/06/19 18:58	20
Benzene	ND		10	1.4	ug/L			09/06/19 18:58	20
Bromobenzene	ND		10	1.2	ug/L			09/06/19 18:58	20
Bromochloromethane	ND		20	1.6	ug/L			09/06/19 18:58	20
Bromodichloromethane	ND		10	1.1	ug/L			09/06/19 18:58	20
Bromoform	ND		10	1.9	ug/L			09/06/19 18:58	20
Bromomethane	ND		40	20	ug/L			09/06/19 18:58	20
cis-1,2-Dichloroethene	ND		10	2.2	ug/L			09/06/19 18:58	20
cis-1,3-Dichloropropane	ND		10	1.9	ug/L			09/06/19 18:58	20
Carbon disulfide	ND		200	7.7	ug/L			09/06/19 18:58	20
Carbon tetrachloride	ND		10	1.1	ug/L			09/06/19 18:58	20
Chlorobenzene	ND		10	1.8	ug/L			09/06/19 18:58	20
Chloroethane	ND		10	2.3	ug/L			09/06/19 18:58	20
Chloroform	ND		10	1.2	ug/L			09/06/19 18:58	20
Chloromethane	ND		100	39	ug/L			09/06/19 18:58	20
Dibromochloromethane	ND		10	1.3	ug/L			09/06/19 18:58	20
Dibromomethane	ND		10	2.5	ug/L			09/06/19 18:58	20
Dichlorodifluoromethane	ND		20	2.0	ug/L			09/06/19 18:58	20
Ethylbenzene	ND		10	1.7	ug/L			09/06/19 18:58	20
Isopropylbenzene	ND		10	1.5	ug/L			09/06/19 18:58	20
Methylene Chloride	ND		20	0.85	ug/L			09/06/19 18:58	20
Methyl-t-Butyl Ether (MTBE)	ND		10	1.3	ug/L			09/06/19 18:58	20

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: S-0800**  
**Date Collected: 08/29/19 08:46**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		20	1.9	ug/L			09/06/19 18:58	20
n-Butylbenzene	ND		10	2.2	ug/L			09/06/19 18:58	20
N-Propylbenzene	ND		10	1.5	ug/L			09/06/19 18:58	20
o-Xylene	ND		10	1.7	ug/L			09/06/19 18:58	20
m,p-Xylene	ND		20	3.0	ug/L			09/06/19 18:58	20
p-Isopropyltoluene	ND		10	1.5	ug/L			09/06/19 18:58	20
sec-Butylbenzene	ND		10	1.9	ug/L			09/06/19 18:58	20
Styrene	ND		10	1.2	ug/L			09/06/19 18:58	20
trans-1,2-Dichloroethene	ND		10	1.6	ug/L			09/06/19 18:58	20
trans-1,3-Dichloropropene	ND		10	1.1	ug/L			09/06/19 18:58	20
tert-Butylbenzene	ND		10	1.6	ug/L			09/06/19 18:58	20
<b>Tetrachloroethene</b>	<b>34</b>		10	4.8	ug/L			09/06/19 18:58	20
Toluene	ND		10	1.9	ug/L			09/06/19 18:58	20
Trichlorofluoromethane	ND		10	2.1	ug/L			09/06/19 18:58	20
Vinyl acetate	ND		100	14	ug/L			09/06/19 18:58	20
Vinyl chloride	ND		10	1.6	ug/L			09/06/19 18:58	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 128		09/06/19 18:58	20
4-Bromofluorobenzene (Surr)	94		68 - 120		09/06/19 18:58	20
Dibromofluoromethane	102		80 - 127		09/06/19 18:58	20
Toluene-d8 (Surr)	101		80 - 120		09/06/19 18:58	20

**Client Sample ID: SE-01**  
**Date Collected: 08/29/19 08:53**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		25	3.5	ug/L			09/06/19 22:54	50
1,1,1-Trichloroethane	ND		25	4.2	ug/L			09/06/19 22:54	50
1,1,2,2-Tetrachloroethane	ND		25	4.3	ug/L			09/06/19 22:54	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25	6.3	ug/L			09/06/19 22:54	50
1,1,2-Trichloroethane	ND		25	3.5	ug/L			09/06/19 22:54	50
1,1-Dichloroethane	ND		25	3.0	ug/L			09/06/19 22:54	50
1,1-Dichloroethene	ND		25	5.1	ug/L			09/06/19 22:54	50
1,1-Dichloropropene	ND		25	3.5	ug/L			09/06/19 22:54	50
1,2,3-Trichlorobenzene	ND		25	5.9	ug/L			09/06/19 22:54	50
1,2,3-Trichloropropane	ND		50	3.8	ug/L			09/06/19 22:54	50
1,2,4-Trichlorobenzene	ND		25	4.5	ug/L			09/06/19 22:54	50
1,2,4-Trimethylbenzene	ND		25	3.4	ug/L			09/06/19 22:54	50
1,2-Dibromo-3-Chloropropane	ND		250	26	ug/L			09/06/19 22:54	50
1,2-Dibromoethane	ND		25	3.0	ug/L			09/06/19 22:54	50
1,2-Dichlorobenzene	ND		25	4.1	ug/L			09/06/19 22:54	50
1,2-Dichloroethane	ND		25	3.7	ug/L			09/06/19 22:54	50
1,2-Dichloropropane	ND		25	4.9	ug/L			09/06/19 22:54	50
1,3,5-Trimethylbenzene	ND		25	3.9	ug/L			09/06/19 22:54	50
1,3-Dichlorobenzene	ND		25	4.9	ug/L			09/06/19 22:54	50
1,3-Dichloropropane	ND		50	4.1	ug/L			09/06/19 22:54	50
1,4-Dichlorobenzene	ND		25	3.7	ug/L			09/06/19 22:54	50
2,2-Dichloropropane	ND		50	19	ug/L			09/06/19 22:54	50
2-Butanone	ND		250	23	ug/L			09/06/19 22:54	50

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SE-01**  
**Date Collected: 08/29/19 08:53**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		25	2.9	ug/L			09/06/19 22:54	50
2-Hexanone	ND		500	25	ug/L			09/06/19 22:54	50
4-Chlorotoluene	ND		25	4.6	ug/L			09/06/19 22:54	50
4-Methyl-2-pentanone	ND		250	21	ug/L			09/06/19 22:54	50
Acetone	ND		500	200	ug/L			09/06/19 22:54	50
Benzene	ND		25	3.6	ug/L			09/06/19 22:54	50
Bromobenzene	ND		25	3.1	ug/L			09/06/19 22:54	50
Bromochloromethane	ND		50	4.1	ug/L			09/06/19 22:54	50
Bromodichloromethane	ND		25	2.6	ug/L			09/06/19 22:54	50
Bromoform	ND		25	4.8	ug/L			09/06/19 22:54	50
Bromomethane	ND		100	50	ug/L			09/06/19 22:54	50
cis-1,2-Dichloroethene	ND		25	5.4	ug/L			09/06/19 22:54	50
cis-1,3-Dichloropropene	ND		25	4.8	ug/L			09/06/19 22:54	50
Carbon disulfide	ND		500	19	ug/L			09/06/19 22:54	50
Carbon tetrachloride	ND		25	2.8	ug/L			09/06/19 22:54	50
Chlorobenzene	ND		25	4.4	ug/L			09/06/19 22:54	50
Chloroethane	ND		25	5.9	ug/L			09/06/19 22:54	50
<b>Chloroform</b>	<b>3.9</b>	<b>J</b>	25	3.1	ug/L			09/06/19 22:54	50
Chloromethane	ND		250	98	ug/L			09/06/19 22:54	50
Dibromochloromethane	ND		25	3.2	ug/L			09/06/19 22:54	50
Dibromomethane	ND		25	6.3	ug/L			09/06/19 22:54	50
Dichlorodifluoromethane	ND		50	5.0	ug/L			09/06/19 22:54	50
Ethylbenzene	ND		25	4.4	ug/L			09/06/19 22:54	50
Isopropylbenzene	ND		25	3.8	ug/L			09/06/19 22:54	50
Methylene Chloride	ND		50	2.1	ug/L			09/06/19 22:54	50
Methyl-t-Butyl Ether (MTBE)	ND		25	3.3	ug/L			09/06/19 22:54	50
Naphthalene	ND		50	4.8	ug/L			09/06/19 22:54	50
n-Butylbenzene	ND		25	5.4	ug/L			09/06/19 22:54	50
N-Propylbenzene	ND		25	3.8	ug/L			09/06/19 22:54	50
o-Xylene	ND		25	4.3	ug/L			09/06/19 22:54	50
m,p-Xylene	ND		50	7.4	ug/L			09/06/19 22:54	50
p-Isopropyltoluene	ND		25	3.7	ug/L			09/06/19 22:54	50
sec-Butylbenzene	ND		25	4.8	ug/L			09/06/19 22:54	50
Styrene	ND		25	2.9	ug/L			09/06/19 22:54	50
trans-1,2-Dichloroethene	ND		25	4.1	ug/L			09/06/19 22:54	50
trans-1,3-Dichloropropene	ND		25	2.7	ug/L			09/06/19 22:54	50
tert-Butylbenzene	ND		25	4.1	ug/L			09/06/19 22:54	50
<b>Tetrachloroethene</b>	<b>140</b>		25	12	ug/L			09/06/19 22:54	50
Toluene	ND		25	4.6	ug/L			09/06/19 22:54	50
Trichlorofluoromethane	ND		25	5.2	ug/L			09/06/19 22:54	50
Vinyl acetate	ND		250	35	ug/L			09/06/19 22:54	50
Vinyl chloride	ND		25	3.9	ug/L			09/06/19 22:54	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	102		80 - 128		09/06/19 22:54	50
<i>4-Bromofluorobenzene (Surr)</i>	93		68 - 120		09/06/19 22:54	50
<i>Dibromofluoromethane</i>	101		80 - 127		09/06/19 22:54	50
<i>Toluene-d8 (Surr)</i>	103		80 - 120		09/06/19 22:54	50



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-03**  
**Date Collected: 08/29/19 09:05**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 19:27	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 19:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 19:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 19:27	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 19:27	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 19:27	1
<b>1,1-Dichloroethene</b>	<b>1.2</b>		0.50	0.10	ug/L			09/06/19 19:27	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 19:27	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 19:27	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 19:27	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 19:27	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 19:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 19:27	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 19:27	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 19:27	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 19:27	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 19:27	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 19:27	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 19:27	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 19:27	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 19:27	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 19:27	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 19:27	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 19:27	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 19:27	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 19:27	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 19:27	1
Acetone	ND		10	4.0	ug/L			09/06/19 19:27	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 19:27	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 19:27	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 19:27	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 19:27	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 19:27	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 19:27	1
<b>cis-1,2-Dichloroethene</b>	<b>0.14 J</b>		0.50	0.11	ug/L			09/06/19 19:27	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 19:27	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 19:27	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 19:27	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 19:27	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 19:27	1
<b>Chloroform</b>	<b>0.11 J</b>		0.50	0.062	ug/L			09/06/19 19:27	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 19:27	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 19:27	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 19:27	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 19:27	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 19:27	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 19:27	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 19:27	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 19:27	1

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-03**  
**Date Collected: 08/29/19 09:05**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 19:27	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 19:27	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 19:27	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 19:27	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 19:27	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 19:27	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 19:27	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 19:27	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 19:27	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 19:27	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 19:27	1
<b>Tetrachloroethene</b>	<b>1.7</b>		0.50	0.24	ug/L			09/06/19 19:27	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 19:27	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 19:27	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 19:27	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		80 - 128		09/06/19 19:27	1
<i>4-Bromofluorobenzene (Surr)</i>	93		68 - 120		09/06/19 19:27	1
<i>Dibromofluoromethane</i>	102		80 - 127		09/06/19 19:27	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		09/06/19 19:27	1



# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

**Client Sample ID: S-08**  
**Date Collected: 08/29/19 08:44**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1500		40	8.1	ug/L			09/09/19 13:19	80
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	102		80 - 128					09/09/19 13:19	80
4-Bromofluorobenzene (Surr)	94		68 - 120					09/09/19 13:19	80
Dibromofluoromethane	101		80 - 127					09/09/19 13:19	80
Toluene-d8 (Surr)	102		80 - 120					09/09/19 13:19	80

**Client Sample ID: S-0800**  
**Date Collected: 08/29/19 08:46**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1500		40	8.1	ug/L			09/09/19 13:49	80
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		80 - 128					09/09/19 13:49	80
4-Bromofluorobenzene (Surr)	92		68 - 120					09/09/19 13:49	80
Dibromofluoromethane	102		80 - 127					09/09/19 13:49	80
Toluene-d8 (Surr)	99		80 - 120					09/09/19 13:49	80

**Client Sample ID: SE-01**  
**Date Collected: 08/29/19 08:53**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	6500		200	41	ug/L			09/09/19 14:18	400
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		80 - 128					09/09/19 14:18	400
4-Bromofluorobenzene (Surr)	93		68 - 120					09/09/19 14:18	400
Dibromofluoromethane	102		80 - 127					09/09/19 14:18	400
Toluene-d8 (Surr)	102		80 - 120					09/09/19 14:18	400

**Client Sample ID: HEW-03**  
**Date Collected: 08/29/19 09:05**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	91		2.0	0.41	ug/L			09/09/19 14:48	4
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		80 - 128					09/09/19 14:48	4
4-Bromofluorobenzene (Surr)	93		68 - 120					09/09/19 14:48	4
Dibromofluoromethane	103		80 - 127					09/09/19 14:48	4
Toluene-d8 (Surr)	100		80 - 120					09/09/19 14:48	4

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: UAX-01**  
**Date Collected: 08/29/19 08:18**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/30/19 19:07	09/03/19 18:04	1
<i>Isotope Dilution</i>		<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8		38		15 - 150			08/30/19 19:07	09/03/19 18:04	1
<i>Surrogate</i>		<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrobenzene-d5		97		56 - 123			08/30/19 19:07	09/03/19 18:04	1

**Client Sample ID: HEW-03**  
**Date Collected: 08/29/19 09:05**  
**Date Received: 08/29/19 11:50**

**Lab Sample ID: 570-6073-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/30/19 19:07	09/03/19 18:20	1
<i>Isotope Dilution</i>		<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8		38		15 - 150			08/30/19 19:07	09/03/19 18:20	1
<i>Surrogate</i>		<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrobenzene-d5		105		56 - 123			08/30/19 19:07	09/03/19 18:20	1

# Surrogate Summary

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-128)	BFB (68-120)	DBFM (80-127)	TOL (80-120)
570-6073-1	TB-082919	101	94	97	100
570-6073-2	UA-04D	100	92	100	100
570-6073-3	UA-0400	105	93	101	99
570-6073-4	S-04	110	95	100	102
570-6073-5	RB-082919	100	91	99	102
570-6073-6	UAX-01	108	93	101	100
570-6073-7	S-32	100	92	101	97
570-6073-7 MS	S-32	99	100	103	99
570-6073-7 MSD	S-32	97	100	99	99
570-6073-8	S-08	105	93	102	100
570-6073-8 - DL	S-08	102	94	101	102
570-6073-9	S-0800	105	94	102	101
570-6073-9 - DL	S-0800	105	92	102	99
570-6073-10	SE-01	102	93	101	103
570-6073-10 - DL	SE-01	107	93	102	102
570-6073-10 MS	SE-01	98	102	99	100
570-6073-10 MSD	SE-01	98	102	100	99
570-6073-11	HEW-03	109	93	102	100
570-6073-11 - DL	HEW-03	107	93	103	100
LCS 570-17549/3	Lab Control Sample	97	100	99	100
LCS 570-17674/3	Lab Control Sample	99	100	101	101
LCS 570-17895/3	Lab Control Sample	95	101	99	99
LCSD 570-17549/4	Lab Control Sample Dup	98	100	100	100
LCSD 570-17674/4	Lab Control Sample Dup	100	102	100	101
LCSD 570-17895/4	Lab Control Sample Dup	98	100	101	100
MB 570-17549/6	Method Blank	99	95	98	98
MB 570-17674/6	Method Blank	103	92	100	100
MB 570-17895/6	Method Blank	101	93	101	99

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane  
 TOL = Toluene-d8 (Surr)

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NBZ
		(56-123)
570-6073-6	UAX-01	97
570-6073-11	HEW-03	105
570-6105-H-3-F MS	Matrix Spike	100
570-6105-H-3-G MSD	Matrix Spike Duplicate	101
LCS 570-16379/2-A	Lab Control Sample	98
MB 570-16379/1-A	Method Blank	103

#### Surrogate Legend

NBZ = Nitrobenzene-d5

# Isotope Dilution Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

**Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (15-150)
570-6073-6	UAX-01	38
570-6073-11	HEW-03	38
570-6105-H-3-F MS	Matrix Spike	35
570-6105-H-3-G MSD	Matrix Spike Duplicate	42
LCS 570-16379/2-A	Lab Control Sample	37
MB 570-16379/1-A	Method Blank	40

### Surrogate Legend

DXE = 1,4-Dioxane-d8

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-17549/6**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 10:48	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 10:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 10:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 10:48	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 10:48	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 10:48	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 10:48	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 10:48	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 10:48	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 10:48	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 10:48	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 10:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 10:48	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 10:48	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 10:48	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 10:48	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 10:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 10:48	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 10:48	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 10:48	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 10:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 10:48	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 10:48	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 10:48	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 10:48	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 10:48	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 10:48	1
Acetone	ND		10	4.0	ug/L			09/06/19 10:48	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 10:48	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 10:48	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 10:48	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 10:48	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 10:48	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 10:48	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 10:48	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 10:48	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 10:48	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 10:48	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 10:48	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 10:48	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 10:48	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 10:48	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 10:48	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 10:48	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 10:48	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 10:48	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 10:48	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 10:48	1

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17549/6**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 10:48	1
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 10:48	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 10:48	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 10:48	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 10:48	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 10:48	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 10:48	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 10:48	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 10:48	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 10:48	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 10:48	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 10:48	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 10:48	1
Toluene	ND		0.50	0.093	ug/L			09/06/19 10:48	1
Trichloroethene	ND		0.50	0.10	ug/L			09/06/19 10:48	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 10:48	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 10:48	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 10:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 128		09/06/19 10:48	1
4-Bromofluorobenzene (Surr)	95		68 - 120		09/06/19 10:48	1
Dibromofluoromethane	98		80 - 127		09/06/19 10:48	1
Toluene-d8 (Surr)	98		80 - 120		09/06/19 10:48	1

**Lab Sample ID: LCS 570-17549/3**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.37		ug/L		104	77 - 120
1,2-Dibromoethane	10.0	11.02		ug/L		110	80 - 120
1,2-Dichlorobenzene	10.0	10.98		ug/L		110	80 - 120
1,2-Dichloroethane	10.0	10.46		ug/L		105	80 - 122
Benzene	10.0	11.13		ug/L		111	80 - 120
Carbon tetrachloride	10.0	11.69		ug/L		117	80 - 129
Chlorobenzene	10.0	10.84		ug/L		108	80 - 120
Ethylbenzene	10.0	11.13		ug/L		111	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.28		ug/L		103	75 - 123
o-Xylene	10.0	11.40		ug/L		114	80 - 120
m,p-Xylene	20.0	22.60		ug/L		113	80 - 120
Toluene	10.0	10.93		ug/L		109	80 - 120
Trichloroethene	10.0	10.71		ug/L		107	80 - 120
Vinyl chloride	10.0	9.772		ug/L		98	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-17549/3**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
Dibromofluoromethane	99		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-17549/4**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,1-Dichloroethene	10.0	9.650		ug/L		97	77 - 120	7	26
1,2-Dibromoethane	10.0	10.93		ug/L		109	80 - 120	1	32
1,2-Dichlorobenzene	10.0	10.59		ug/L		106	80 - 120	4	30
1,2-Dichloroethane	10.0	10.41		ug/L		104	80 - 122	0	23
Benzene	10.0	10.54		ug/L		105	80 - 120	5	22
Carbon tetrachloride	10.0	10.68		ug/L		107	80 - 129	9	36
Chlorobenzene	10.0	10.40		ug/L		104	80 - 120	4	29
Ethylbenzene	10.0	10.60		ug/L		106	80 - 120	5	25
Methyl-t-Butyl Ether (MTBE)	10.0	10.60		ug/L		106	75 - 123	3	27
o-Xylene	10.0	10.91		ug/L		109	80 - 120	4	30
m,p-Xylene	20.0	21.75		ug/L		109	80 - 120	4	30
Toluene	10.0	10.28		ug/L		103	80 - 120	6	28
Trichloroethene	10.0	10.22		ug/L		102	80 - 120	5	25
Vinyl chloride	10.0	8.990		ug/L		90	63 - 135	8	30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	100		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: 570-6073-7 MS**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: S-32**  
**Prep Type: Total/NA**

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1-Dichloroethene	ND		10.0	10.23		ug/L		102	66 - 126
1,2-Dibromoethane	ND		10.0	10.04		ug/L		100	75 - 126
1,2-Dichlorobenzene	ND		10.0	10.51		ug/L		105	75 - 125
1,2-Dichloroethane	ND		10.0	10.00		ug/L		100	75 - 127
Benzene	ND		10.0	10.64		ug/L		106	75 - 125
Carbon tetrachloride	ND		10.0	11.78		ug/L		118	69 - 135
Chlorobenzene	ND		10.0	10.54		ug/L		105	75 - 125
Ethylbenzene	ND		10.0	11.01		ug/L		110	75 - 125
Methyl-t-Butyl Ether (MTBE)	ND		10.0	9.667		ug/L		97	71 - 131
o-Xylene	ND		10.0	11.00		ug/L		110	75 - 127
m,p-Xylene	ND		20.0	21.89		ug/L		109	75 - 125
Toluene	ND		10.0	10.52		ug/L		105	75 - 125
Trichloroethene	4.0		10.0	15.44		ug/L		114	75 - 125
Vinyl chloride	ND		10.0	10.83		ug/L		108	52 - 142

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-6073-7 MS**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: S-32**  
**Prep Type: Total/NA**

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	103		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: 570-6073-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 17549**

**Client Sample ID: S-32**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		10.0	9.755		ug/L		98	66 - 126	5	20
1,2-Dibromoethane	ND		10.0	9.840		ug/L		98	75 - 126	2	20
1,2-Dichlorobenzene	ND		10.0	10.31		ug/L		103	75 - 125	2	20
1,2-Dichloroethane	ND		10.0	9.783		ug/L		98	75 - 127	2	20
Benzene	ND		10.0	10.47		ug/L		105	75 - 125	2	20
Carbon tetrachloride	ND		10.0	11.50		ug/L		115	69 - 135	2	20
Chlorobenzene	ND		10.0	10.31		ug/L		103	75 - 125	2	20
Ethylbenzene	ND		10.0	10.66		ug/L		107	75 - 125	3	20
Methyl-t-Butyl Ether (MTBE)	ND		10.0	10.56		ug/L		106	71 - 131	9	20
o-Xylene	ND		10.0	10.75		ug/L		107	75 - 127	2	20
m,p-Xylene	ND		20.0	21.77		ug/L		109	75 - 125	1	20
Toluene	ND		10.0	10.42		ug/L		104	75 - 125	1	20
Trichloroethene	4.0		10.0	15.01		ug/L		110	75 - 125	3	20
Vinyl chloride	ND		10.0	9.398		ug/L		94	52 - 142	14	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	99		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: MB 570-17674/6**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/06/19 22:25	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/06/19 22:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/06/19 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/06/19 22:25	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/06/19 22:25	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/06/19 22:25	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/06/19 22:25	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/06/19 22:25	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/06/19 22:25	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/06/19 22:25	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/06/19 22:25	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/06/19 22:25	1

Eurofins Calscience LLC



# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17674/6**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/06/19 22:25	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/06/19 22:25	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/06/19 22:25	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/06/19 22:25	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/06/19 22:25	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/06/19 22:25	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/06/19 22:25	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/06/19 22:25	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/06/19 22:25	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/06/19 22:25	1
2-Butanone	ND		5.0	0.46	ug/L			09/06/19 22:25	1
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/06/19 22:25	1
2-Hexanone	ND		10	0.50	ug/L			09/06/19 22:25	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/06/19 22:25	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/06/19 22:25	1
Acetone	ND		10	4.0	ug/L			09/06/19 22:25	1
Benzene	ND		0.50	0.072	ug/L			09/06/19 22:25	1
Bromobenzene	ND		0.50	0.061	ug/L			09/06/19 22:25	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/06/19 22:25	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/06/19 22:25	1
Bromoform	ND		0.50	0.096	ug/L			09/06/19 22:25	1
Bromomethane	ND		2.0	0.99	ug/L			09/06/19 22:25	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/06/19 22:25	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/06/19 22:25	1
Carbon disulfide	ND		10	0.39	ug/L			09/06/19 22:25	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/06/19 22:25	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/06/19 22:25	1
Chloroethane	ND		0.50	0.12	ug/L			09/06/19 22:25	1
Chloroform	ND		0.50	0.062	ug/L			09/06/19 22:25	1
Chloromethane	ND		5.0	2.0	ug/L			09/06/19 22:25	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/06/19 22:25	1
Dibromomethane	ND		0.50	0.13	ug/L			09/06/19 22:25	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/06/19 22:25	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/06/19 22:25	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/06/19 22:25	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/06/19 22:25	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/06/19 22:25	1
Naphthalene	ND		1.0	0.097	ug/L			09/06/19 22:25	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/06/19 22:25	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/06/19 22:25	1
o-Xylene	ND		0.50	0.086	ug/L			09/06/19 22:25	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/06/19 22:25	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/06/19 22:25	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/06/19 22:25	1
Styrene	ND		0.50	0.059	ug/L			09/06/19 22:25	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/06/19 22:25	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/06/19 22:25	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/06/19 22:25	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/06/19 22:25	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17674/6**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.50	0.093	ug/L			09/06/19 22:25	1
Trichloroethene	ND		0.50	0.10	ug/L			09/06/19 22:25	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/06/19 22:25	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/06/19 22:25	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/06/19 22:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 128		09/06/19 22:25	1
4-Bromofluorobenzene (Surr)	92		68 - 120		09/06/19 22:25	1
Dibromofluoromethane	100		80 - 127		09/06/19 22:25	1
Toluene-d8 (Surr)	100		80 - 120		09/06/19 22:25	1

**Lab Sample ID: LCS 570-17674/3**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.950		ug/L		99	77 - 120
1,2-Dibromoethane	10.0	10.21		ug/L		102	80 - 120
1,2-Dichlorobenzene	10.0	10.61		ug/L		106	80 - 120
1,2-Dichloroethane	10.0	10.61		ug/L		106	80 - 122
Benzene	10.0	10.77		ug/L		108	80 - 120
Carbon tetrachloride	10.0	11.11		ug/L		111	80 - 129
Chlorobenzene	10.0	10.35		ug/L		103	80 - 120
Ethylbenzene	10.0	10.56		ug/L		106	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	9.736		ug/L		97	75 - 123
o-Xylene	10.0	10.79		ug/L		108	80 - 120
m,p-Xylene	20.0	21.53		ug/L		108	80 - 120
Toluene	10.0	10.67		ug/L		107	80 - 120
Trichloroethene	10.0	10.66		ug/L		107	80 - 120
Vinyl chloride	10.0	10.27		ug/L		103	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-17674/4**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	10.0	9.406		ug/L		94	77 - 120	6	26
1,2-Dibromoethane	10.0	10.09		ug/L		101	80 - 120	1	32
1,2-Dichlorobenzene	10.0	10.28		ug/L		103	80 - 120	3	30
1,2-Dichloroethane	10.0	10.13		ug/L		101	80 - 122	5	23
Benzene	10.0	10.19		ug/L		102	80 - 120	6	22

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# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-17674/4**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon tetrachloride	10.0	10.20		ug/L		102	80 - 129	9	36
Chlorobenzene	10.0	9.962		ug/L		100	80 - 120	4	29
Ethylbenzene	10.0	10.15		ug/L		102	80 - 120	4	25
Methyl-t-Butyl Ether (MTBE)	10.0	9.571		ug/L		96	75 - 123	2	27
o-Xylene	10.0	10.39		ug/L		104	80 - 120	4	30
m,p-Xylene	20.0	20.58		ug/L		103	80 - 120	5	30
Toluene	10.0	10.10		ug/L		101	80 - 120	6	28
Trichloroethene	10.0	10.13		ug/L		101	80 - 120	5	25
Vinyl chloride	10.0	9.809		ug/L		98	63 - 135	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120
Dibromofluoromethane	100		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: 570-6073-10 MS**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: SE-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		500	562.2		ug/L		112	66 - 126
1,2-Dibromoethane	ND		500	549.4		ug/L		110	75 - 126
1,2-Dichlorobenzene	ND		500	519.1		ug/L		104	75 - 125
1,2-Dichloroethane	ND		500	559.3		ug/L		112	75 - 127
Benzene	ND		500	579.8		ug/L		116	75 - 125
Carbon tetrachloride	ND		500	599.2		ug/L		120	69 - 135
Chlorobenzene	ND		500	542.3		ug/L		108	75 - 125
Ethylbenzene	ND		500	549.4		ug/L		110	75 - 125
Methyl-t-Butyl Ether (MTBE)	ND		500	531.8		ug/L		106	71 - 131
o-Xylene	ND		500	557.6		ug/L		112	75 - 127
m,p-Xylene	ND		1000	1121		ug/L		112	75 - 125
Toluene	ND		500	555.8		ug/L		111	75 - 125
Trichloroethene	5700	E	500	5725	E 4	ug/L		7	75 - 125
Vinyl chloride	ND		500	527.2		ug/L		105	52 - 142

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120
Dibromofluoromethane	99		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: 570-6073-10 MSD**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: SE-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		500	550.1		ug/L		110	66 - 126	2	20

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-6073-10 MSD**  
**Matrix: Water**  
**Analysis Batch: 17674**

**Client Sample ID: SE-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane	ND		500	542.2		ug/L		108	75 - 126	1	20
1,2-Dichlorobenzene	ND		500	524.4		ug/L		105	75 - 125	1	20
1,2-Dichloroethane	ND		500	541.0		ug/L		108	75 - 127	3	20
Benzene	ND		500	561.9		ug/L		112	75 - 125	3	20
Carbon tetrachloride	ND		500	585.7		ug/L		117	69 - 135	2	20
Chlorobenzene	ND		500	526.1		ug/L		105	75 - 125	3	20
Ethylbenzene	ND		500	530.7		ug/L		106	75 - 125	3	20
Methyl-t-Butyl Ether (MTBE)	ND		500	535.8		ug/L		107	71 - 131	1	20
o-Xylene	ND		500	544.7		ug/L		109	75 - 127	2	20
m,p-Xylene	ND		1000	1081		ug/L		108	75 - 125	4	20
Toluene	ND		500	541.9		ug/L		108	75 - 125	3	20
Trichloroethene	5700	E	500	5667	E 4	ug/L		-4	75 - 125	1	20
Vinyl chloride	ND		500	541.3		ug/L		108	52 - 142	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120
Dibromofluoromethane	100		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: MB 570-17895/6**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/09/19 11:50	1
1,1,1-Trichloroethane	ND		0.50	0.084	ug/L			09/09/19 11:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.087	ug/L			09/09/19 11:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.13	ug/L			09/09/19 11:50	1
1,1,2-Trichloroethane	ND		0.50	0.069	ug/L			09/09/19 11:50	1
1,1-Dichloroethane	ND		0.50	0.060	ug/L			09/09/19 11:50	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/09/19 11:50	1
1,1-Dichloropropene	ND		0.50	0.070	ug/L			09/09/19 11:50	1
1,2,3-Trichlorobenzene	ND		0.50	0.12	ug/L			09/09/19 11:50	1
1,2,3-Trichloropropane	ND		1.0	0.076	ug/L			09/09/19 11:50	1
1,2,4-Trichlorobenzene	ND		0.50	0.089	ug/L			09/09/19 11:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.068	ug/L			09/09/19 11:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.51	ug/L			09/09/19 11:50	1
1,2-Dibromoethane	ND		0.50	0.059	ug/L			09/09/19 11:50	1
1,2-Dichlorobenzene	ND		0.50	0.082	ug/L			09/09/19 11:50	1
1,2-Dichloroethane	ND		0.50	0.075	ug/L			09/09/19 11:50	1
1,2-Dichloropropane	ND		0.50	0.099	ug/L			09/09/19 11:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.079	ug/L			09/09/19 11:50	1
1,3-Dichlorobenzene	ND		0.50	0.098	ug/L			09/09/19 11:50	1
1,3-Dichloropropane	ND		1.0	0.082	ug/L			09/09/19 11:50	1
1,4-Dichlorobenzene	ND		0.50	0.073	ug/L			09/09/19 11:50	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			09/09/19 11:50	1
2-Butanone	ND		5.0	0.46	ug/L			09/09/19 11:50	1

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17895/6**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50	0.058	ug/L			09/09/19 11:50	1
2-Hexanone	ND		10	0.50	ug/L			09/09/19 11:50	1
4-Chlorotoluene	ND		0.50	0.091	ug/L			09/09/19 11:50	1
4-Methyl-2-pentanone	ND		5.0	0.42	ug/L			09/09/19 11:50	1
Acetone	ND		10	4.0	ug/L			09/09/19 11:50	1
Benzene	ND		0.50	0.072	ug/L			09/09/19 11:50	1
Bromobenzene	ND		0.50	0.061	ug/L			09/09/19 11:50	1
Bromochloromethane	ND		1.0	0.082	ug/L			09/09/19 11:50	1
Bromodichloromethane	ND		0.50	0.053	ug/L			09/09/19 11:50	1
Bromoform	ND		0.50	0.096	ug/L			09/09/19 11:50	1
Bromomethane	ND		2.0	0.99	ug/L			09/09/19 11:50	1
cis-1,2-Dichloroethene	ND		0.50	0.11	ug/L			09/09/19 11:50	1
cis-1,3-Dichloropropene	ND		0.50	0.096	ug/L			09/09/19 11:50	1
Carbon disulfide	ND		10	0.39	ug/L			09/09/19 11:50	1
Carbon tetrachloride	ND		0.50	0.057	ug/L			09/09/19 11:50	1
Chlorobenzene	ND		0.50	0.088	ug/L			09/09/19 11:50	1
Chloroethane	ND		0.50	0.12	ug/L			09/09/19 11:50	1
Chloroform	ND		0.50	0.062	ug/L			09/09/19 11:50	1
Chloromethane	ND		5.0	2.0	ug/L			09/09/19 11:50	1
Dibromochloromethane	ND		0.50	0.064	ug/L			09/09/19 11:50	1
Dibromomethane	ND		0.50	0.13	ug/L			09/09/19 11:50	1
Dichlorodifluoromethane	ND		1.0	0.099	ug/L			09/09/19 11:50	1
Ethylbenzene	ND		0.50	0.087	ug/L			09/09/19 11:50	1
Isopropylbenzene	ND		0.50	0.077	ug/L			09/09/19 11:50	1
Methylene Chloride	ND		1.0	0.043	ug/L			09/09/19 11:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.067	ug/L			09/09/19 11:50	1
Naphthalene	ND		1.0	0.097	ug/L			09/09/19 11:50	1
n-Butylbenzene	ND		0.50	0.11	ug/L			09/09/19 11:50	1
N-Propylbenzene	ND		0.50	0.076	ug/L			09/09/19 11:50	1
o-Xylene	ND		0.50	0.086	ug/L			09/09/19 11:50	1
m,p-Xylene	ND		1.0	0.15	ug/L			09/09/19 11:50	1
p-Isopropyltoluene	ND		0.50	0.074	ug/L			09/09/19 11:50	1
sec-Butylbenzene	ND		0.50	0.095	ug/L			09/09/19 11:50	1
Styrene	ND		0.50	0.059	ug/L			09/09/19 11:50	1
trans-1,2-Dichloroethene	ND		0.50	0.082	ug/L			09/09/19 11:50	1
trans-1,3-Dichloropropene	ND		0.50	0.053	ug/L			09/09/19 11:50	1
tert-Butylbenzene	ND		0.50	0.082	ug/L			09/09/19 11:50	1
Tetrachloroethene	ND		0.50	0.24	ug/L			09/09/19 11:50	1
Toluene	ND		0.50	0.093	ug/L			09/09/19 11:50	1
Trichloroethene	ND		0.50	0.10	ug/L			09/09/19 11:50	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/09/19 11:50	1
Vinyl acetate	ND		5.0	0.70	ug/L			09/09/19 11:50	1
Vinyl chloride	ND		0.50	0.078	ug/L			09/09/19 11:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 128		09/09/19 11:50	1
4-Bromofluorobenzene (Surr)	93		68 - 120		09/09/19 11:50	1
Dibromofluoromethane	101		80 - 127		09/09/19 11:50	1

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-17895/6**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		80 - 120		09/09/19 11:50	1

**Lab Sample ID: LCS 570-17895/3**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.629		ug/L		96	77 - 120
1,2-Dibromoethane	10.0	10.48		ug/L		105	80 - 120
1,2-Dichlorobenzene	10.0	10.52		ug/L		105	80 - 120
1,2-Dichloroethane	10.0	10.55		ug/L		105	80 - 122
Benzene	10.0	10.86		ug/L		109	80 - 120
Carbon tetrachloride	10.0	10.69		ug/L		107	80 - 129
Chlorobenzene	10.0	10.55		ug/L		105	80 - 120
Ethylbenzene	10.0	10.68		ug/L		107	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.88		ug/L		109	75 - 123
o-Xylene	10.0	10.94		ug/L		109	80 - 120
m,p-Xylene	20.0	21.94		ug/L		110	80 - 120
Toluene	10.0	10.67		ug/L		107	80 - 120
Trichloroethene	10.0	10.56		ug/L		106	80 - 120
Vinyl chloride	10.0	10.11		ug/L		101	63 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	95		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	99		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: LCSD 570-17895/4**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	10.0	9.355		ug/L		94	77 - 120	3	26
1,2-Dibromoethane	10.0	10.46		ug/L		105	80 - 120	0	32
1,2-Dichlorobenzene	10.0	10.46		ug/L		105	80 - 120	1	30
1,2-Dichloroethane	10.0	10.72		ug/L		107	80 - 122	2	23
Benzene	10.0	10.72		ug/L		107	80 - 120	1	22
Carbon tetrachloride	10.0	10.26		ug/L		103	80 - 129	4	36
Chlorobenzene	10.0	10.32		ug/L		103	80 - 120	2	29
Ethylbenzene	10.0	10.35		ug/L		103	80 - 120	3	25
Methyl-t-Butyl Ether (MTBE)	10.0	10.86		ug/L		109	75 - 123	0	27
o-Xylene	10.0	10.79		ug/L		108	80 - 120	1	30
m,p-Xylene	20.0	21.05		ug/L		105	80 - 120	4	30
Toluene	10.0	10.37		ug/L		104	80 - 120	3	28
Trichloroethene	10.0	10.47		ug/L		105	80 - 120	1	25
Vinyl chloride	10.0	9.655		ug/L		97	63 - 135	5	30

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-17895/4**  
**Matrix: Water**  
**Analysis Batch: 17895**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	100		80 - 120

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 570-16379/1-A**  
**Matrix: Water**  
**Analysis Batch: 16723**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 16379**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.18	ug/L		08/30/19 19:07	09/03/19 16:29	1
Isotope Dilution	MB MB		Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	40		15 - 150				08/30/19 19:07	09/03/19 16:29	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	103		56 - 123				08/30/19 19:07	09/03/19 16:29	1

**Lab Sample ID: LCS 570-16379/2-A**  
**Matrix: Water**  
**Analysis Batch: 16723**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 16379**

Analyte	LCS LCS		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			20.0	14.16		ug/L		71	50 - 130
Isotope Dilution	LCS LCS		Limits						
1,4-Dioxane-d8	37		15 - 150						
Surrogate	LCS LCS		Limits						
Nitrobenzene-d5	98		56 - 123						

**Lab Sample ID: 570-6105-H-3-F MS**  
**Matrix: Water**  
**Analysis Batch: 16723**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 16379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.73		20.0	15.07		ug/L		72	50 - 130
Isotope Dilution	MS MS		Limits						
1,4-Dioxane-d8	35		15 - 150						
Surrogate	MS MS		Limits						
Nitrobenzene-d5	100		56 - 123						

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

**Lab Sample ID: 570-6105-H-3-G MSD**  
**Matrix: Water**  
**Analysis Batch: 16723**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 16379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.73		20.0	13.45		ug/L		64	50 - 130	11	20
	<i>MSD</i>	<i>MSD</i>									
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>								
1,4-Dioxane-d8	42		15 - 150								
	<i>MSD</i>	<i>MSD</i>									
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>								
Nitrobenzene-d5	101		56 - 123								

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# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## GC/MS VOA

### Analysis Batch: 17549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-6073-1	TB-082919	Total/NA	Water	8260B	
570-6073-2	UA-04D	Total/NA	Water	8260B	
570-6073-3	UA-0400	Total/NA	Water	8260B	
570-6073-4	S-04	Total/NA	Water	8260B	
570-6073-6	UAX-01	Total/NA	Water	8260B	
570-6073-7	S-32	Total/NA	Water	8260B	
570-6073-8	S-08	Total/NA	Water	8260B	
570-6073-9	S-0800	Total/NA	Water	8260B	
570-6073-11	HEW-03	Total/NA	Water	8260B	
MB 570-17549/6	Method Blank	Total/NA	Water	8260B	
LCS 570-17549/3	Lab Control Sample	Total/NA	Water	8260B	
LCS 570-17549/4	Lab Control Sample Dup	Total/NA	Water	8260B	
570-6073-7 MS	S-32	Total/NA	Water	8260B	
570-6073-7 MSD	S-32	Total/NA	Water	8260B	

### Analysis Batch: 17674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-6073-10	SE-01	Total/NA	Water	8260B	
MB 570-17674/6	Method Blank	Total/NA	Water	8260B	
LCS 570-17674/3	Lab Control Sample	Total/NA	Water	8260B	
LCS 570-17674/4	Lab Control Sample Dup	Total/NA	Water	8260B	
570-6073-10 MS	SE-01	Total/NA	Water	8260B	
570-6073-10 MSD	SE-01	Total/NA	Water	8260B	

### Analysis Batch: 17895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-6073-5	RB-082919	Total/NA	Water	8260B	
570-6073-8 - DL	S-08	Total/NA	Water	8260B	
570-6073-9 - DL	S-0800	Total/NA	Water	8260B	
570-6073-10 - DL	SE-01	Total/NA	Water	8260B	
570-6073-11 - DL	HEW-03	Total/NA	Water	8260B	
MB 570-17895/6	Method Blank	Total/NA	Water	8260B	
LCS 570-17895/3	Lab Control Sample	Total/NA	Water	8260B	
LCS 570-17895/4	Lab Control Sample Dup	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 16379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-6073-6	UAX-01	Total/NA	Water	3510C	
570-6073-11	HEW-03	Total/NA	Water	3510C	
MB 570-16379/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-16379/2-A	Lab Control Sample	Total/NA	Water	3510C	
570-6105-H-3-F MS	Matrix Spike	Total/NA	Water	3510C	
570-6105-H-3-G MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 16723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-6073-6	UAX-01	Total/NA	Water	8270C SIM ID	16379
570-6073-11	HEW-03	Total/NA	Water	8270C SIM ID	16379
MB 570-16379/1-A	Method Blank	Total/NA	Water	8270C SIM ID	16379

Eurofins Calscience LLC

# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 16723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-16379/2-A	Lab Control Sample	Total/NA	Water	8270C SIM ID	16379
570-6105-H-3-F MS	Matrix Spike	Total/NA	Water	8270C SIM ID	16379
570-6105-H-3-G MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM ID	16379

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# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Client Sample ID: TB-082919

Date Collected: 08/29/19 07:30

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 15:30	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: UA-04D

Date Collected: 08/29/19 07:55

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 16:00	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: UA-0400

Date Collected: 08/29/19 08:00

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 16:30	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: S-04

Date Collected: 08/29/19 08:06

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 16:59	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: RB-082919

Date Collected: 08/29/19 08:10

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17895	09/09/19 12:50	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: UAX-01

Date Collected: 08/29/19 08:18

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 17:59	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Prep	3510C			100 mL	10 mL	16379	08/30/19 19:07	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16723	09/03/19 18:04	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

Eurofins Calscience LLC

# Lab Chronicle

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Client Sample ID: S-32

Date Collected: 08/29/19 08:31

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 13:02	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: S-08

Date Collected: 08/29/19 08:44

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	17549	09/06/19 18:28	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Analysis	8260B	DL	80	20 mL	20 mL	17895	09/09/19 13:19	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: S-0800

Date Collected: 08/29/19 08:46

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	17549	09/06/19 18:58	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Analysis	8260B	DL	80	20 mL	20 mL	17895	09/09/19 13:49	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: SE-01

Date Collected: 08/29/19 08:53

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	20 mL	20 mL	17674	09/06/19 22:54	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Analysis	8260B	DL	400	20 mL	20 mL	17895	09/09/19 14:18	UJHB	ECL 2
Instrument ID: GCMSL										

## Client Sample ID: HEW-03

Date Collected: 08/29/19 09:05

Date Received: 08/29/19 11:50

## Lab Sample ID: 570-6073-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	17549	09/06/19 19:27	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Analysis	8260B	DL	4	20 mL	20 mL	17895	09/09/19 14:48	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Prep	3510C			100 mL	10 mL	16379	08/30/19 19:07	XF3X	ECL 1
Total/NA	Analysis	8270C SIM ID		1			16723	09/03/19 18:20	AJ2Q	ECL 1
Instrument ID: GCMSDDD										

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19

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# Method Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8270C SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 -Raytheon / 764.10

Job ID: 570-6073-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-6073-1	TB-082919	Water	08/29/19 07:30	08/29/19 11:50	
570-6073-2	UA-04D	Water	08/29/19 07:55	08/29/19 11:50	
570-6073-3	UA-0400	Water	08/29/19 08:00	08/29/19 11:50	
570-6073-4	S-04	Water	08/29/19 08:06	08/29/19 11:50	
570-6073-5	RB-082919	Water	08/29/19 08:10	08/29/19 11:50	
570-6073-6	UAX-01	Water	08/29/19 08:18	08/29/19 11:50	
570-6073-7	S-32	Water	08/29/19 08:31	08/29/19 11:50	
570-6073-8	S-08	Water	08/29/19 08:44	08/29/19 11:50	
570-6073-9	S-0800	Water	08/29/19 08:46	08/29/19 11:50	
570-6073-10	SE-01	Water	08/29/19 08:53	08/29/19 11:50	
570-6073-11	HEW-03	Water	08/29/19 09:05	08/29/19 11:50	





570-6073 Chain of Custody

Date: 8/29/19  
Page 1 of 1

HARGIS ASSOCIATES, INC.  
HYDROGEOLOGY - ENVIRONMENTAL

PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION				SPECIAL HANDLING	REMARKS
		Date	Time					0-10	10-100	100-1,000	>1,000		
1	TB-062919	08/29/19	0730	Groundwater	Lab prepared water	500 mL Amber	1,4-Dioxane by 8270 MOD	X	X	X	X	Standard TAT	
2	UA-04D		0755	X	X	40-ml VOA	VOCs by EPA 8260B	X	X	X	X		
3	UA-0400D		0800	X	X			X	X	X	X		
4	S-04		0800	X	X			X	X	X	X		
5	RB-082919		0810	X	X			X	X	X	X		
6	UA-01		0816	X	X			X	X	X	X		
7	S-32		0831	X	X			X	X	X	X		
8	S-08		0844	X	X			X	X	X	X		
9	S-0800		0846	X	X			X	X	X	X		
10	SF-01		0853	X	X			X	X	X	X		
11	HEW-03		0905	X	X			X	X	X	X		
↓	↓		↓	X	X			X	X	X	X		

Total number of containers per analysis:  
Relinquished By: / Company: RE HHA Date / Time: 8/29/19 1158 Received By: / Company: Summell ec Date / Time: 8/29/19 1158  
Relinquished By: / Company: \_\_\_\_\_ Date / Time: \_\_\_\_\_ Received By: / Company: \_\_\_\_\_ Date / Time: \_\_\_\_\_

No. of containers correct  
Received in good condition  
Custody seals secure  
Conforms to COC document

Send Results to:  
**Ken Puentes**  
9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com

Temperature on receipt \_\_\_\_\_

2.7/29 SCC



## Login Sample Receipt Checklist

Client: Hargis + Associates, Inc.

Job Number: 570-6073-1

**Login Number: 6073**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-13062-1  
Client Project/Site: Building 684 - Raytheon

For:  
Hargis + Associates, Inc.  
La Jolla Gateway  
9171 Towne Centre Drive  
Suite 375  
San Diego, California 92122

Attn: Julie Kelly

*Virendra R Patel*

---

Authorized for release by:  
12/4/2019 5:04:54 PM

Virendra Patel, Project Manager I  
(714)895-5494  
[virendrapatel@eurofinsus.com](mailto:virendrapatel@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time

### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

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## Job ID: 570-13062-1

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### Laboratory: Eurofins Calscience LLC

#### Narrative

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#### Job Narrative 570-13062-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/15/2019 3:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

#### GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-35699.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 570-35808 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-36354.

Method 8260B: The following sample was analyzed outside of analytical holding time due to system outages. HEW-01 (570-13062-10)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method 8270C SIM ID: Surrogate recovery for the following samples were outside the upper control limit: UAX-03 (570-13062-7), HEW-02 (570-13062-12) and HEW-05 (570-13062-15). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM ID: Surrogate recovery for the following sample was outside the upper control limit: UAX-01 (570-13062-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM ID: Surrogate recovery for the following sample was outside the upper control limit: RB-111519 (570-13062-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Client Sample ID: TB-111419

Lab Sample ID: 570-13062-1

No Detections.

## Client Sample ID: LAX-01

Lab Sample ID: 570-13062-2

No Detections.

## Client Sample ID: LAX-02

Lab Sample ID: 570-13062-3

No Detections.

## Client Sample ID: LAX-03

Lab Sample ID: 570-13062-4

No Detections.

## Client Sample ID: UAX-01

Lab Sample ID: 570-13062-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.0		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	2.8		0.50	ug/L	1		8260B	Total/NA

## Client Sample ID: UAX-02

Lab Sample ID: 570-13062-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.5		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	4.3		0.50	ug/L	1		8260B	Total/NA
1,4-Dioxane	1.2		0.50	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: UAX-03

Lab Sample ID: 570-13062-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.54		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	9.6		0.50	ug/L	1		8260B	Total/NA

## Client Sample ID: RB-111519

Lab Sample ID: 570-13062-8

No Detections.

## Client Sample ID: TB-111519

Lab Sample ID: 570-13062-9

No Detections.

## Client Sample ID: HEW-01

Lab Sample ID: 570-13062-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	660	H	10	ug/L	20		8260B	Total/NA
1,4-Dioxane	1.9		0.50	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: HEW-0100

Lab Sample ID: 570-13062-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	10		10	ug/L	20		8260B	Total/NA
Trichloroethene	610		10	ug/L	20		8260B	Total/NA
1,4-Dioxane	1.7		0.50	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: HEW-02

Lab Sample ID: 570-13062-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	120		2.0	ug/L	4		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Client Sample ID: HEW-03

## Lab Sample ID: 570-13062-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.0		2.0	ug/L	4		8260B	Total/NA
Trichloroethene	100		2.0	ug/L	4		8260B	Total/NA
1,4-Dioxane	0.59		0.50	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: HEW-04

## Lab Sample ID: 570-13062-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	130		2.0	ug/L	4		8260B	Total/NA
1,4-Dioxane	6.6		0.50	ug/L	1		8270C SIM ID	Total/NA

## Client Sample ID: HEW-05

## Lab Sample ID: 570-13062-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.1		2.0	ug/L	4		8260B	Total/NA
Trichloroethene	120		2.0	ug/L	4		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: TB-111419**  
**Date Collected: 11/14/19 08:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 03:02	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 03:02	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 03:02	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 03:02	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 03:02	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 03:02	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 03:02	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 03:02	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 03:02	1
2-Butanone	ND		5.0	ug/L			11/27/19 03:02	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 03:02	1
2-Hexanone	ND		10	ug/L			11/27/19 03:02	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 03:02	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 03:02	1
Acetone	ND		10	ug/L			11/27/19 03:02	1
Benzene	ND		0.50	ug/L			11/27/19 03:02	1
Bromobenzene	ND		0.50	ug/L			11/27/19 03:02	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 03:02	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 03:02	1
Bromoform	ND		0.50	ug/L			11/27/19 03:02	1
Bromomethane	ND		2.0	ug/L			11/27/19 03:02	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 03:02	1
cis-1,3-Dichloropropane	ND		0.50	ug/L			11/27/19 03:02	1
Carbon disulfide	ND		10	ug/L			11/27/19 03:02	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 03:02	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 03:02	1
Chloroethane	ND		0.50	ug/L			11/27/19 03:02	1
Chloroform	ND		0.50	ug/L			11/27/19 03:02	1
Chloromethane	ND		5.0	ug/L			11/27/19 03:02	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 03:02	1
Dibromomethane	ND		0.50	ug/L			11/27/19 03:02	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 03:02	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 03:02	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 03:02	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB-111419**  
**Date Collected: 11/14/19 08:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			11/27/19 03:02	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
o-Xylene	ND		0.50	ug/L			11/27/19 03:02	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 03:02	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 03:02	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
Styrene	ND		0.50	ug/L			11/27/19 03:02	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 03:02	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 03:02	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 03:02	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 03:02	1
Toluene	ND		0.50	ug/L			11/27/19 03:02	1
Trichloroethene	ND		0.50	ug/L			11/27/19 03:02	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 03:02	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 03:02	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 03:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		80 - 128		11/27/19 03:02	1
<i>4-Bromofluorobenzene (Surr)</i>	96		68 - 120		11/27/19 03:02	1
<i>Dibromofluoromethane</i>	104		80 - 127		11/27/19 03:02	1
<i>Toluene-d8 (Surr)</i>	103		80 - 120		11/27/19 03:02	1

**Client Sample ID: LAX-01**  
**Date Collected: 11/14/19 13:08**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 03:29	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 03:29	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 03:29	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 03:29	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 03:29	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 03:29	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 03:29	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 03:29	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 03:29	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-01**  
**Date Collected: 11/14/19 13:08**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	ug/L			11/27/19 03:29	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 03:29	1
2-Hexanone	ND		10	ug/L			11/27/19 03:29	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 03:29	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 03:29	1
Acetone	ND		10	ug/L			11/27/19 03:29	1
Benzene	ND		0.50	ug/L			11/27/19 03:29	1
Bromobenzene	ND		0.50	ug/L			11/27/19 03:29	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 03:29	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 03:29	1
Bromoform	ND		0.50	ug/L			11/27/19 03:29	1
Bromomethane	ND		2.0	ug/L			11/27/19 03:29	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 03:29	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 03:29	1
Carbon disulfide	ND		10	ug/L			11/27/19 03:29	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 03:29	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 03:29	1
Chloroethane	ND		0.50	ug/L			11/27/19 03:29	1
Chloroform	ND		0.50	ug/L			11/27/19 03:29	1
Chloromethane	ND		5.0	ug/L			11/27/19 03:29	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 03:29	1
Dibromomethane	ND		0.50	ug/L			11/27/19 03:29	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 03:29	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 03:29	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 03:29	1
Naphthalene	ND		1.0	ug/L			11/27/19 03:29	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
o-Xylene	ND		0.50	ug/L			11/27/19 03:29	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 03:29	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 03:29	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
Styrene	ND		0.50	ug/L			11/27/19 03:29	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 03:29	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 03:29	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 03:29	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 03:29	1
Toluene	ND		0.50	ug/L			11/27/19 03:29	1
Trichloroethene	ND		0.50	ug/L			11/27/19 03:29	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 03:29	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 03:29	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		80 - 128		11/27/19 03:29	1
<i>4-Bromofluorobenzene (Surr)</i>	97		68 - 120		11/27/19 03:29	1
<i>Dibromofluoromethane</i>	104		80 - 127		11/27/19 03:29	1
<i>Toluene-d8 (Surr)</i>	102		80 - 120		11/27/19 03:29	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: LAX-02**  
**Date Collected: 11/15/19 13:25**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 21:05	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 21:05	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 21:05	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 21:05	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 21:05	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 21:05	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 21:05	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 21:05	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 21:05	1
2-Butanone	ND		5.0	ug/L			11/27/19 21:05	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 21:05	1
2-Hexanone	ND		10	ug/L			11/27/19 21:05	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 21:05	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 21:05	1
Acetone	ND		10	ug/L			11/27/19 21:05	1
Benzene	ND		0.50	ug/L			11/27/19 21:05	1
Bromobenzene	ND		0.50	ug/L			11/27/19 21:05	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 21:05	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 21:05	1
Bromoform	ND		0.50	ug/L			11/27/19 21:05	1
Bromomethane	ND		2.0	ug/L			11/27/19 21:05	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 21:05	1
cis-1,3-Dichloropropane	ND		0.50	ug/L			11/27/19 21:05	1
Carbon disulfide	ND		10	ug/L			11/27/19 21:05	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 21:05	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 21:05	1
Chloroethane	ND		0.50	ug/L			11/27/19 21:05	1
Chloroform	ND		0.50	ug/L			11/27/19 21:05	1
Chloromethane	ND		5.0	ug/L			11/27/19 21:05	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 21:05	1
Dibromomethane	ND		0.50	ug/L			11/27/19 21:05	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 21:05	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 21:05	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 21:05	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-02**  
**Date Collected: 11/15/19 13:25**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			11/27/19 21:05	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
o-Xylene	ND		0.50	ug/L			11/27/19 21:05	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 21:05	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 21:05	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
Styrene	ND		0.50	ug/L			11/27/19 21:05	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 21:05	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 21:05	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 21:05	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 21:05	1
Toluene	ND		0.50	ug/L			11/27/19 21:05	1
Trichloroethene	ND		0.50	ug/L			11/27/19 21:05	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 21:05	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 21:05	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 128		11/27/19 21:05	1
4-Bromofluorobenzene (Surr)	111		68 - 120		11/27/19 21:05	1
Dibromofluoromethane	92		80 - 127		11/27/19 21:05	1
Toluene-d8 (Surr)	99		80 - 120		11/27/19 21:05	1

**Client Sample ID: LAX-03**  
**Date Collected: 11/15/19 09:52**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 21:33	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 21:33	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 21:33	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 21:33	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 21:33	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 21:33	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 21:33	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 21:33	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 21:33	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: LAX-03**  
**Date Collected: 11/15/19 09:52**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	ug/L			11/27/19 21:33	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 21:33	1
2-Hexanone	ND		10	ug/L			11/27/19 21:33	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 21:33	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 21:33	1
Acetone	ND		10	ug/L			11/27/19 21:33	1
Benzene	ND		0.50	ug/L			11/27/19 21:33	1
Bromobenzene	ND		0.50	ug/L			11/27/19 21:33	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 21:33	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 21:33	1
Bromoform	ND		0.50	ug/L			11/27/19 21:33	1
Bromomethane	ND		2.0	ug/L			11/27/19 21:33	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 21:33	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 21:33	1
Carbon disulfide	ND		10	ug/L			11/27/19 21:33	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 21:33	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 21:33	1
Chloroethane	ND		0.50	ug/L			11/27/19 21:33	1
Chloroform	ND		0.50	ug/L			11/27/19 21:33	1
Chloromethane	ND		5.0	ug/L			11/27/19 21:33	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 21:33	1
Dibromomethane	ND		0.50	ug/L			11/27/19 21:33	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 21:33	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 21:33	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 21:33	1
Naphthalene	ND		1.0	ug/L			11/27/19 21:33	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
o-Xylene	ND		0.50	ug/L			11/27/19 21:33	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 21:33	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 21:33	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
Styrene	ND		0.50	ug/L			11/27/19 21:33	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 21:33	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 21:33	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 21:33	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 21:33	1
Toluene	ND		0.50	ug/L			11/27/19 21:33	1
Trichloroethene	ND		0.50	ug/L			11/27/19 21:33	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 21:33	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 21:33	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		11/27/19 21:33	1
<i>4-Bromofluorobenzene (Surr)</i>	92		68 - 120		11/27/19 21:33	1
<i>Dibromofluoromethane</i>	100		80 - 127		11/27/19 21:33	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		11/27/19 21:33	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UAX-01**  
**Date Collected: 11/15/19 14:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 22:00	1
<b>1,1-Dichloroethene</b>	<b>2.0</b>		0.50	ug/L			11/27/19 22:00	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 22:00	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 22:00	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 22:00	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 22:00	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 22:00	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 22:00	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 22:00	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 22:00	1
2-Butanone	ND		5.0	ug/L			11/27/19 22:00	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 22:00	1
2-Hexanone	ND		10	ug/L			11/27/19 22:00	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 22:00	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 22:00	1
Acetone	ND		10	ug/L			11/27/19 22:00	1
Benzene	ND		0.50	ug/L			11/27/19 22:00	1
Bromobenzene	ND		0.50	ug/L			11/27/19 22:00	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 22:00	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 22:00	1
Bromoform	ND		0.50	ug/L			11/27/19 22:00	1
Bromomethane	ND		2.0	ug/L			11/27/19 22:00	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:00	1
cis-1,3-Dichloropropane	ND		0.50	ug/L			11/27/19 22:00	1
Carbon disulfide	ND		10	ug/L			11/27/19 22:00	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 22:00	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 22:00	1
Chloroethane	ND		0.50	ug/L			11/27/19 22:00	1
Chloroform	ND		0.50	ug/L			11/27/19 22:00	1
Chloromethane	ND		5.0	ug/L			11/27/19 22:00	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 22:00	1
Dibromomethane	ND		0.50	ug/L			11/27/19 22:00	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 22:00	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 22:00	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 22:00	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-01**  
**Date Collected: 11/15/19 14:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			11/27/19 22:00	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
o-Xylene	ND		0.50	ug/L			11/27/19 22:00	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 22:00	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 22:00	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
Styrene	ND		0.50	ug/L			11/27/19 22:00	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:00	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 22:00	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 22:00	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 22:00	1
Toluene	ND		0.50	ug/L			11/27/19 22:00	1
<b>Trichloroethene</b>	<b>2.8</b>		0.50	ug/L			11/27/19 22:00	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 22:00	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 22:00	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 22:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		11/27/19 22:00	1
<i>4-Bromofluorobenzene (Surr)</i>	91		68 - 120		11/27/19 22:00	1
<i>Dibromofluoromethane</i>	95		80 - 127		11/27/19 22:00	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		11/27/19 22:00	1

**Client Sample ID: UAX-02**  
**Date Collected: 11/15/19 10:15**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 22:28	1
<b>1,1-Dichloroethene</b>	<b>3.5</b>		0.50	ug/L			11/27/19 22:28	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 22:28	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 22:28	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 22:28	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 22:28	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 22:28	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 22:28	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 22:28	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 22:28	1

Eurofins Calscience LLC



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-02**  
**Date Collected: 11/15/19 10:15**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	ug/L			11/27/19 22:28	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 22:28	1
2-Hexanone	ND		10	ug/L			11/27/19 22:28	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 22:28	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 22:28	1
Acetone	ND		10	ug/L			11/27/19 22:28	1
Benzene	ND		0.50	ug/L			11/27/19 22:28	1
Bromobenzene	ND		0.50	ug/L			11/27/19 22:28	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 22:28	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 22:28	1
Bromoform	ND		0.50	ug/L			11/27/19 22:28	1
Bromomethane	ND		2.0	ug/L			11/27/19 22:28	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:28	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 22:28	1
Carbon disulfide	ND		10	ug/L			11/27/19 22:28	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 22:28	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 22:28	1
Chloroethane	ND		0.50	ug/L			11/27/19 22:28	1
Chloroform	ND		0.50	ug/L			11/27/19 22:28	1
Chloromethane	ND		5.0	ug/L			11/27/19 22:28	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 22:28	1
Dibromomethane	ND		0.50	ug/L			11/27/19 22:28	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 22:28	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 22:28	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 22:28	1
Naphthalene	ND		1.0	ug/L			11/27/19 22:28	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
o-Xylene	ND		0.50	ug/L			11/27/19 22:28	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 22:28	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 22:28	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
Styrene	ND		0.50	ug/L			11/27/19 22:28	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:28	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 22:28	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 22:28	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 22:28	1
Toluene	ND		0.50	ug/L			11/27/19 22:28	1
<b>Trichloroethene</b>	<b>4.3</b>		0.50	ug/L			11/27/19 22:28	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 22:28	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 22:28	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	111		80 - 128		11/27/19 22:28	1
<i>4-Bromofluorobenzene (Surr)</i>	91		68 - 120		11/27/19 22:28	1
<i>Dibromofluoromethane</i>	95		80 - 127		11/27/19 22:28	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		11/27/19 22:28	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: UAX-03**  
**Date Collected: 11/15/19 12:05**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:55	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 22:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 22:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 22:55	1
1,1,2-Trichloroethane	ND	F2 F1	0.50	ug/L			11/27/19 22:55	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 22:55	1
<b>1,1-Dichloroethene</b>	<b>0.54</b>		0.50	ug/L			11/27/19 22:55	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 22:55	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
1,2,3-Trichloropropane	ND	F1	1.0	ug/L			11/27/19 22:55	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
1,2-Dibromo-3-Chloropropane	ND	F2 F1	5.0	ug/L			11/27/19 22:55	1
1,2-Dibromoethane	ND	F2	0.50	ug/L			11/27/19 22:55	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 22:55	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 22:55	1
1,3,5-Trimethylbenzene	ND	F2	0.50	ug/L			11/27/19 22:55	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
1,3-Dichloropropane	ND	F2 F1	1.0	ug/L			11/27/19 22:55	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 22:55	1
2-Butanone	ND		5.0	ug/L			11/27/19 22:55	1
2-Chlorotoluene	ND	F2 F1	0.50	ug/L			11/27/19 22:55	1
2-Hexanone	ND	F2 F1	10	ug/L			11/27/19 22:55	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 22:55	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 22:55	1
Acetone	ND		10	ug/L			11/27/19 22:55	1
Benzene	ND		0.50	ug/L			11/27/19 22:55	1
Bromobenzene	ND	F2	0.50	ug/L			11/27/19 22:55	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 22:55	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 22:55	1
Bromoform	ND		0.50	ug/L			11/27/19 22:55	1
Bromomethane	ND		2.0	ug/L			11/27/19 22:55	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:55	1
cis-1,3-Dichloropropane	ND		0.50	ug/L			11/27/19 22:55	1
Carbon disulfide	ND		10	ug/L			11/27/19 22:55	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 22:55	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 22:55	1
Chloroethane	ND		0.50	ug/L			11/27/19 22:55	1
Chloroform	ND		0.50	ug/L			11/27/19 22:55	1
Chloromethane	ND	F2	5.0	ug/L			11/27/19 22:55	1
Dibromochloromethane	ND	F2 F1	0.50	ug/L			11/27/19 22:55	1
Dibromomethane	ND		0.50	ug/L			11/27/19 22:55	1
Dichlorodifluoromethane	ND	F2	1.0	ug/L			11/27/19 22:55	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 22:55	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 22:55	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: UAX-03**  
**Date Collected: 11/15/19 12:05**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			11/27/19 22:55	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
N-Propylbenzene	ND	F2	0.50	ug/L			11/27/19 22:55	1
o-Xylene	ND		0.50	ug/L			11/27/19 22:55	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 22:55	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 22:55	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
Styrene	ND		0.50	ug/L			11/27/19 22:55	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 22:55	1
trans-1,3-Dichloropropene	ND	F2 F1	0.50	ug/L			11/27/19 22:55	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 22:55	1
Tetrachloroethene	ND	F2	0.50	ug/L			11/27/19 22:55	1
Toluene	ND		0.50	ug/L			11/27/19 22:55	1
<b>Trichloroethene</b>	<b>9.6</b>		0.50	ug/L			11/27/19 22:55	1
Trichlorofluoromethane	ND	F2	0.50	ug/L			11/27/19 22:55	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 22:55	1
Vinyl chloride	ND	F2	0.50	ug/L			11/27/19 22:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		80 - 128		11/27/19 22:55	1
<i>4-Bromofluorobenzene (Surr)</i>	91		68 - 120		11/27/19 22:55	1
<i>Dibromofluoromethane</i>	99		80 - 127		11/27/19 22:55	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120		11/27/19 22:55	1

**Client Sample ID: RB-111519**  
**Date Collected: 11/15/19 09:58**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 23:23	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 23:23	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 23:23	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 23:23	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 23:23	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 23:23	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 23:23	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 23:23	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 23:23	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RB-111519**  
**Date Collected: 11/15/19 09:58**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	ug/L			11/27/19 23:23	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 23:23	1
2-Hexanone	ND		10	ug/L			11/27/19 23:23	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 23:23	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 23:23	1
Acetone	ND		10	ug/L			11/27/19 23:23	1
Benzene	ND		0.50	ug/L			11/27/19 23:23	1
Bromobenzene	ND		0.50	ug/L			11/27/19 23:23	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 23:23	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 23:23	1
Bromoform	ND		0.50	ug/L			11/27/19 23:23	1
Bromomethane	ND		2.0	ug/L			11/27/19 23:23	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 23:23	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 23:23	1
Carbon disulfide	ND		10	ug/L			11/27/19 23:23	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 23:23	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 23:23	1
Chloroethane	ND		0.50	ug/L			11/27/19 23:23	1
Chloroform	ND		0.50	ug/L			11/27/19 23:23	1
Chloromethane	ND		5.0	ug/L			11/27/19 23:23	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 23:23	1
Dibromomethane	ND		0.50	ug/L			11/27/19 23:23	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 23:23	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 23:23	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 23:23	1
Naphthalene	ND		1.0	ug/L			11/27/19 23:23	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
o-Xylene	ND		0.50	ug/L			11/27/19 23:23	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 23:23	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 23:23	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
Styrene	ND		0.50	ug/L			11/27/19 23:23	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 23:23	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 23:23	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 23:23	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 23:23	1
Toluene	ND		0.50	ug/L			11/27/19 23:23	1
Trichloroethene	ND		0.50	ug/L			11/27/19 23:23	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 23:23	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 23:23	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		80 - 128		11/27/19 23:23	1
<i>4-Bromofluorobenzene (Surr)</i>	89		68 - 120		11/27/19 23:23	1
<i>Dibromofluoromethane</i>	100		80 - 127		11/27/19 23:23	1
<i>Toluene-d8 (Surr)</i>	98		80 - 120		11/27/19 23:23	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: TB-111519**  
**Date Collected: 11/15/19 08:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 20:10	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 20:10	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 20:10	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 20:10	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 20:10	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 20:10	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 20:10	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 20:10	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 20:10	1
2-Butanone	ND		5.0	ug/L			11/27/19 20:10	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 20:10	1
2-Hexanone	ND		10	ug/L			11/27/19 20:10	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 20:10	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 20:10	1
Acetone	ND		10	ug/L			11/27/19 20:10	1
Benzene	ND		0.50	ug/L			11/27/19 20:10	1
Bromobenzene	ND		0.50	ug/L			11/27/19 20:10	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 20:10	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 20:10	1
Bromoform	ND		0.50	ug/L			11/27/19 20:10	1
Bromomethane	ND		2.0	ug/L			11/27/19 20:10	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 20:10	1
cis-1,3-Dichloropropane	ND		0.50	ug/L			11/27/19 20:10	1
Carbon disulfide	ND		10	ug/L			11/27/19 20:10	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 20:10	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 20:10	1
Chloroethane	ND		0.50	ug/L			11/27/19 20:10	1
Chloroform	ND		0.50	ug/L			11/27/19 20:10	1
Chloromethane	ND		5.0	ug/L			11/27/19 20:10	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 20:10	1
Dibromomethane	ND		0.50	ug/L			11/27/19 20:10	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 20:10	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 20:10	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 20:10	1

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB-111519**  
**Date Collected: 11/15/19 08:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			11/27/19 20:10	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
o-Xylene	ND		0.50	ug/L			11/27/19 20:10	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 20:10	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 20:10	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
Styrene	ND		0.50	ug/L			11/27/19 20:10	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 20:10	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 20:10	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 20:10	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 20:10	1
Toluene	ND		0.50	ug/L			11/27/19 20:10	1
Trichloroethene	ND		0.50	ug/L			11/27/19 20:10	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 20:10	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 20:10	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		80 - 128		11/27/19 20:10	1
<i>4-Bromofluorobenzene (Surr)</i>	79		68 - 120		11/27/19 20:10	1
<i>Dibromofluoromethane</i>	103		80 - 127		11/27/19 20:10	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120		11/27/19 20:10	1

**Client Sample ID: HEW-01**  
**Date Collected: 11/15/19 13:40**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1,1-Trichloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1,2,2-Tetrachloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1,2-Trichloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1-Dichloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,1-Dichloroethene	ND	H	10	ug/L			12/03/19 15:03	20
1,1-Dichloropropene	ND	H	10	ug/L			12/03/19 15:03	20
1,2,3-Trichlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,2,3-Trichloropropane	ND	H	20	ug/L			12/03/19 15:03	20
1,2,4-Trichlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,2,4-Trimethylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,2-Dibromo-3-Chloropropane	ND	H	100	ug/L			12/03/19 15:03	20
1,2-Dibromoethane	ND	H	10	ug/L			12/03/19 15:03	20
1,2-Dichlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,2-Dichloroethane	ND	H	10	ug/L			12/03/19 15:03	20
1,2-Dichloropropane	ND	H	10	ug/L			12/03/19 15:03	20
1,3,5-Trimethylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,3-Dichlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
1,3-Dichloropropane	ND	H	20	ug/L			12/03/19 15:03	20
1,4-Dichlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
2,2-Dichloropropane	ND	H	20	ug/L			12/03/19 15:03	20

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-01**  
**Date Collected: 11/15/19 13:40**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND	H	100	ug/L			12/03/19 15:03	20
2-Chlorotoluene	ND	H	10	ug/L			12/03/19 15:03	20
2-Hexanone	ND	H	200	ug/L			12/03/19 15:03	20
4-Chlorotoluene	ND	H	10	ug/L			12/03/19 15:03	20
4-Methyl-2-pentanone	ND	H	100	ug/L			12/03/19 15:03	20
Acetone	ND	H	200	ug/L			12/03/19 15:03	20
Benzene	ND	H	10	ug/L			12/03/19 15:03	20
Bromobenzene	ND	H	10	ug/L			12/03/19 15:03	20
Bromochloromethane	ND	H	20	ug/L			12/03/19 15:03	20
Bromodichloromethane	ND	H	10	ug/L			12/03/19 15:03	20
Bromoform	ND	H	10	ug/L			12/03/19 15:03	20
Bromomethane	ND	H	40	ug/L			12/03/19 15:03	20
cis-1,2-Dichloroethene	ND	H	10	ug/L			12/03/19 15:03	20
cis-1,3-Dichloropropene	ND	H	10	ug/L			12/03/19 15:03	20
Carbon disulfide	ND	H	200	ug/L			12/03/19 15:03	20
Carbon tetrachloride	ND	H	10	ug/L			12/03/19 15:03	20
Chlorobenzene	ND	H	10	ug/L			12/03/19 15:03	20
Chloroethane	ND	H	10	ug/L			12/03/19 15:03	20
Chloroform	ND	H	10	ug/L			12/03/19 15:03	20
Chloromethane	ND	H	100	ug/L			12/03/19 15:03	20
Dibromochloromethane	ND	H	10	ug/L			12/03/19 15:03	20
Dibromomethane	ND	H	10	ug/L			12/03/19 15:03	20
Dichlorodifluoromethane	ND	H	20	ug/L			12/03/19 15:03	20
Ethylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
Isopropylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
Methylene Chloride	ND	H	20	ug/L			12/03/19 15:03	20
Methyl-t-Butyl Ether (MTBE)	ND	H	10	ug/L			12/03/19 15:03	20
Naphthalene	ND	H	20	ug/L			12/03/19 15:03	20
n-Butylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
N-Propylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
o-Xylene	ND	H	10	ug/L			12/03/19 15:03	20
m,p-Xylene	ND	H	20	ug/L			12/03/19 15:03	20
p-Isopropyltoluene	ND	H	10	ug/L			12/03/19 15:03	20
sec-Butylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
Styrene	ND	H	10	ug/L			12/03/19 15:03	20
trans-1,2-Dichloroethene	ND	H	10	ug/L			12/03/19 15:03	20
trans-1,3-Dichloropropene	ND	H	10	ug/L			12/03/19 15:03	20
tert-Butylbenzene	ND	H	10	ug/L			12/03/19 15:03	20
Tetrachloroethene	ND	H	10	ug/L			12/03/19 15:03	20
Toluene	ND	H	10	ug/L			12/03/19 15:03	20
<b>Trichloroethene</b>	<b>660</b>	<b>H</b>	10	ug/L			12/03/19 15:03	20
Trichlorofluoromethane	ND	H	10	ug/L			12/03/19 15:03	20
Vinyl acetate	ND	H	100	ug/L			12/03/19 15:03	20
Vinyl chloride	ND	H	10	ug/L			12/03/19 15:03	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 128		12/03/19 15:03	20
4-Bromofluorobenzene (Surr)	97		68 - 120		12/03/19 15:03	20
Dibromofluoromethane	100		80 - 127		12/03/19 15:03	20
Toluene-d8 (Surr)	102		80 - 120		12/03/19 15:03	20

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# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-0100**  
**Date Collected: 11/15/19 13:50**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	ug/L			11/28/19 01:13	20
1,1,1-Trichloroethane	ND		10	ug/L			11/28/19 01:13	20
1,1,2,2-Tetrachloroethane	ND		10	ug/L			11/28/19 01:13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	ug/L			11/28/19 01:13	20
1,1,2-Trichloroethane	ND		10	ug/L			11/28/19 01:13	20
1,1-Dichloroethane	ND		10	ug/L			11/28/19 01:13	20
1,1-Dichloroethene	ND		10	ug/L			11/28/19 01:13	20
1,1-Dichloropropene	ND		10	ug/L			11/28/19 01:13	20
1,2,3-Trichlorobenzene	ND		10	ug/L			11/28/19 01:13	20
1,2,3-Trichloropropane	ND		20	ug/L			11/28/19 01:13	20
1,2,4-Trichlorobenzene	ND		10	ug/L			11/28/19 01:13	20
1,2,4-Trimethylbenzene	ND		10	ug/L			11/28/19 01:13	20
1,2-Dibromo-3-Chloropropane	ND		100	ug/L			11/28/19 01:13	20
1,2-Dibromoethane	ND		10	ug/L			11/28/19 01:13	20
1,2-Dichlorobenzene	ND		10	ug/L			11/28/19 01:13	20
1,2-Dichloroethane	ND		10	ug/L			11/28/19 01:13	20
1,2-Dichloropropane	ND		10	ug/L			11/28/19 01:13	20
1,3,5-Trimethylbenzene	ND		10	ug/L			11/28/19 01:13	20
1,3-Dichlorobenzene	ND		10	ug/L			11/28/19 01:13	20
1,3-Dichloropropane	ND		20	ug/L			11/28/19 01:13	20
1,4-Dichlorobenzene	ND		10	ug/L			11/28/19 01:13	20
2,2-Dichloropropane	ND		20	ug/L			11/28/19 01:13	20
2-Butanone	ND		100	ug/L			11/28/19 01:13	20
2-Chlorotoluene	ND		10	ug/L			11/28/19 01:13	20
2-Hexanone	ND		200	ug/L			11/28/19 01:13	20
4-Chlorotoluene	ND		10	ug/L			11/28/19 01:13	20
4-Methyl-2-pentanone	ND		100	ug/L			11/28/19 01:13	20
Acetone	ND		200	ug/L			11/28/19 01:13	20
Benzene	ND		10	ug/L			11/28/19 01:13	20
Bromobenzene	ND		10	ug/L			11/28/19 01:13	20
Bromochloromethane	ND		20	ug/L			11/28/19 01:13	20
Bromodichloromethane	ND		10	ug/L			11/28/19 01:13	20
Bromoform	ND		10	ug/L			11/28/19 01:13	20
Bromomethane	ND		40	ug/L			11/28/19 01:13	20
cis-1,2-Dichloroethene	ND		10	ug/L			11/28/19 01:13	20
cis-1,3-Dichloropropane	ND		10	ug/L			11/28/19 01:13	20
Carbon disulfide	ND		200	ug/L			11/28/19 01:13	20
Carbon tetrachloride	ND		10	ug/L			11/28/19 01:13	20
Chlorobenzene	ND		10	ug/L			11/28/19 01:13	20
Chloroethane	ND		10	ug/L			11/28/19 01:13	20
Chloroform	ND		10	ug/L			11/28/19 01:13	20
Chloromethane	ND		100	ug/L			11/28/19 01:13	20
Dibromochloromethane	ND		10	ug/L			11/28/19 01:13	20
Dibromomethane	ND		10	ug/L			11/28/19 01:13	20
Dichlorodifluoromethane	ND		20	ug/L			11/28/19 01:13	20
Ethylbenzene	ND		10	ug/L			11/28/19 01:13	20
Isopropylbenzene	ND		10	ug/L			11/28/19 01:13	20
Methylene Chloride	ND		20	ug/L			11/28/19 01:13	20
Methyl-t-Butyl Ether (MTBE)	ND		10	ug/L			11/28/19 01:13	20



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-0100**  
**Date Collected: 11/15/19 13:50**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		20	ug/L			11/28/19 01:13	20
n-Butylbenzene	ND		10	ug/L			11/28/19 01:13	20
N-Propylbenzene	ND		10	ug/L			11/28/19 01:13	20
o-Xylene	ND		10	ug/L			11/28/19 01:13	20
m,p-Xylene	ND		20	ug/L			11/28/19 01:13	20
p-Isopropyltoluene	ND		10	ug/L			11/28/19 01:13	20
sec-Butylbenzene	ND		10	ug/L			11/28/19 01:13	20
Styrene	ND		10	ug/L			11/28/19 01:13	20
trans-1,2-Dichloroethene	ND		10	ug/L			11/28/19 01:13	20
trans-1,3-Dichloropropene	ND		10	ug/L			11/28/19 01:13	20
tert-Butylbenzene	ND		10	ug/L			11/28/19 01:13	20
<b>Tetrachloroethene</b>	<b>10</b>		10	ug/L			11/28/19 01:13	20
Toluene	ND		10	ug/L			11/28/19 01:13	20
<b>Trichloroethene</b>	<b>610</b>		10	ug/L			11/28/19 01:13	20
Trichlorofluoromethane	ND		10	ug/L			11/28/19 01:13	20
Vinyl acetate	ND		100	ug/L			11/28/19 01:13	20
Vinyl chloride	ND		10	ug/L			11/28/19 01:13	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	114		80 - 128		11/28/19 01:13	20
<i>4-Bromofluorobenzene (Surr)</i>	91		68 - 120		11/28/19 01:13	20
<i>Dibromofluoromethane</i>	106		80 - 127		11/28/19 01:13	20
<i>Toluene-d8 (Surr)</i>	104		80 - 120		11/28/19 01:13	20

**Client Sample ID: HEW-02**  
**Date Collected: 11/15/19 10:39**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-12**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1,1-Trichloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1,2-Trichloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1-Dichloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,1-Dichloroethene	ND		2.0	ug/L			11/28/19 01:41	4
1,1-Dichloropropene	ND		2.0	ug/L			11/28/19 01:41	4
1,2,3-Trichlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,2,3-Trichloropropane	ND		4.0	ug/L			11/28/19 01:41	4
1,2,4-Trichlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,2,4-Trimethylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			11/28/19 01:41	4
1,2-Dibromoethane	ND		2.0	ug/L			11/28/19 01:41	4
1,2-Dichlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,2-Dichloroethane	ND		2.0	ug/L			11/28/19 01:41	4
1,2-Dichloropropane	ND		2.0	ug/L			11/28/19 01:41	4
1,3,5-Trimethylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,3-Dichlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
1,3-Dichloropropane	ND		4.0	ug/L			11/28/19 01:41	4
1,4-Dichlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
2,2-Dichloropropane	ND		4.0	ug/L			11/28/19 01:41	4

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-02**  
**Date Collected: 11/15/19 10:39**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-12**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	ug/L			11/28/19 01:41	4
2-Chlorotoluene	ND		2.0	ug/L			11/28/19 01:41	4
2-Hexanone	ND		40	ug/L			11/28/19 01:41	4
4-Chlorotoluene	ND		2.0	ug/L			11/28/19 01:41	4
4-Methyl-2-pentanone	ND		20	ug/L			11/28/19 01:41	4
Acetone	ND		40	ug/L			11/28/19 01:41	4
Benzene	ND		2.0	ug/L			11/28/19 01:41	4
Bromobenzene	ND		2.0	ug/L			11/28/19 01:41	4
Bromochloromethane	ND		4.0	ug/L			11/28/19 01:41	4
Bromodichloromethane	ND		2.0	ug/L			11/28/19 01:41	4
Bromoform	ND		2.0	ug/L			11/28/19 01:41	4
Bromomethane	ND		8.0	ug/L			11/28/19 01:41	4
cis-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 01:41	4
cis-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 01:41	4
Carbon disulfide	ND		40	ug/L			11/28/19 01:41	4
Carbon tetrachloride	ND		2.0	ug/L			11/28/19 01:41	4
Chlorobenzene	ND		2.0	ug/L			11/28/19 01:41	4
Chloroethane	ND		2.0	ug/L			11/28/19 01:41	4
Chloroform	ND		2.0	ug/L			11/28/19 01:41	4
Chloromethane	ND		20	ug/L			11/28/19 01:41	4
Dibromochloromethane	ND		2.0	ug/L			11/28/19 01:41	4
Dibromomethane	ND		2.0	ug/L			11/28/19 01:41	4
Dichlorodifluoromethane	ND		4.0	ug/L			11/28/19 01:41	4
Ethylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
Isopropylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
Methylene Chloride	ND		4.0	ug/L			11/28/19 01:41	4
Methyl-t-Butyl Ether (MTBE)	ND		2.0	ug/L			11/28/19 01:41	4
Naphthalene	ND		4.0	ug/L			11/28/19 01:41	4
n-Butylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
N-Propylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
o-Xylene	ND		2.0	ug/L			11/28/19 01:41	4
m,p-Xylene	ND		4.0	ug/L			11/28/19 01:41	4
p-Isopropyltoluene	ND		2.0	ug/L			11/28/19 01:41	4
sec-Butylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
Styrene	ND		2.0	ug/L			11/28/19 01:41	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 01:41	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 01:41	4
tert-Butylbenzene	ND		2.0	ug/L			11/28/19 01:41	4
Tetrachloroethene	ND		2.0	ug/L			11/28/19 01:41	4
Toluene	ND		2.0	ug/L			11/28/19 01:41	4
<b>Trichloroethene</b>	<b>120</b>		2.0	ug/L			11/28/19 01:41	4
Trichlorofluoromethane	ND		2.0	ug/L			11/28/19 01:41	4
Vinyl acetate	ND		20	ug/L			11/28/19 01:41	4
Vinyl chloride	ND		2.0	ug/L			11/28/19 01:41	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		80 - 128		11/28/19 01:41	4
<i>4-Bromofluorobenzene (Surr)</i>	109		68 - 120		11/28/19 01:41	4
<i>Dibromofluoromethane</i>	97		80 - 127		11/28/19 01:41	4
<i>Toluene-d8 (Surr)</i>	95		80 - 120		11/28/19 01:41	4

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-03**  
**Date Collected: 11/15/19 10:53**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-13**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1,1-Trichloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1,2-Trichloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1-Dichloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,1-Dichloroethene	ND		2.0	ug/L			11/28/19 02:08	4
1,1-Dichloropropene	ND		2.0	ug/L			11/28/19 02:08	4
1,2,3-Trichlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,2,3-Trichloropropane	ND		4.0	ug/L			11/28/19 02:08	4
1,2,4-Trichlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,2,4-Trimethylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			11/28/19 02:08	4
1,2-Dibromoethane	ND		2.0	ug/L			11/28/19 02:08	4
1,2-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,2-Dichloroethane	ND		2.0	ug/L			11/28/19 02:08	4
1,2-Dichloropropane	ND		2.0	ug/L			11/28/19 02:08	4
1,3,5-Trimethylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,3-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
1,3-Dichloropropane	ND		4.0	ug/L			11/28/19 02:08	4
1,4-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
2,2-Dichloropropane	ND		4.0	ug/L			11/28/19 02:08	4
2-Butanone	ND		20	ug/L			11/28/19 02:08	4
2-Chlorotoluene	ND		2.0	ug/L			11/28/19 02:08	4
2-Hexanone	ND		40	ug/L			11/28/19 02:08	4
4-Chlorotoluene	ND		2.0	ug/L			11/28/19 02:08	4
4-Methyl-2-pentanone	ND		20	ug/L			11/28/19 02:08	4
Acetone	ND		40	ug/L			11/28/19 02:08	4
Benzene	ND		2.0	ug/L			11/28/19 02:08	4
Bromobenzene	ND		2.0	ug/L			11/28/19 02:08	4
Bromochloromethane	ND		4.0	ug/L			11/28/19 02:08	4
Bromodichloromethane	ND		2.0	ug/L			11/28/19 02:08	4
Bromoform	ND		2.0	ug/L			11/28/19 02:08	4
Bromomethane	ND		8.0	ug/L			11/28/19 02:08	4
cis-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 02:08	4
cis-1,3-Dichloropropane	ND		2.0	ug/L			11/28/19 02:08	4
Carbon disulfide	ND		40	ug/L			11/28/19 02:08	4
Carbon tetrachloride	ND		2.0	ug/L			11/28/19 02:08	4
Chlorobenzene	ND		2.0	ug/L			11/28/19 02:08	4
Chloroethane	ND		2.0	ug/L			11/28/19 02:08	4
Chloroform	ND		2.0	ug/L			11/28/19 02:08	4
Chloromethane	ND		20	ug/L			11/28/19 02:08	4
Dibromochloromethane	ND		2.0	ug/L			11/28/19 02:08	4
Dibromomethane	ND		2.0	ug/L			11/28/19 02:08	4
Dichlorodifluoromethane	ND		4.0	ug/L			11/28/19 02:08	4
Ethylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
Isopropylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
Methylene Chloride	ND		4.0	ug/L			11/28/19 02:08	4
Methyl-t-Butyl Ether (MTBE)	ND		2.0	ug/L			11/28/19 02:08	4

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-03**  
**Date Collected: 11/15/19 10:53**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-13**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		4.0	ug/L			11/28/19 02:08	4
n-Butylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
N-Propylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
o-Xylene	ND		2.0	ug/L			11/28/19 02:08	4
m,p-Xylene	ND		4.0	ug/L			11/28/19 02:08	4
p-Isopropyltoluene	ND		2.0	ug/L			11/28/19 02:08	4
sec-Butylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
Styrene	ND		2.0	ug/L			11/28/19 02:08	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 02:08	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 02:08	4
tert-Butylbenzene	ND		2.0	ug/L			11/28/19 02:08	4
<b>Tetrachloroethene</b>	<b>2.0</b>		2.0	ug/L			11/28/19 02:08	4
Toluene	ND		2.0	ug/L			11/28/19 02:08	4
<b>Trichloroethene</b>	<b>100</b>		2.0	ug/L			11/28/19 02:08	4
Trichlorofluoromethane	ND		2.0	ug/L			11/28/19 02:08	4
Vinyl acetate	ND		20	ug/L			11/28/19 02:08	4
Vinyl chloride	ND		2.0	ug/L			11/28/19 02:08	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		80 - 128		11/28/19 02:08	4
<i>4-Bromofluorobenzene (Surr)</i>	91		68 - 120		11/28/19 02:08	4
<i>Dibromofluoromethane</i>	104		80 - 127		11/28/19 02:08	4
<i>Toluene-d8 (Surr)</i>	102		80 - 120		11/28/19 02:08	4

**Client Sample ID: HEW-04**  
**Date Collected: 11/15/19 11:45**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1,1-Trichloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1,2-Trichloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1-Dichloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,1-Dichloroethene	ND		2.0	ug/L			11/28/19 02:36	4
1,1-Dichloropropene	ND		2.0	ug/L			11/28/19 02:36	4
1,2,3-Trichlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,2,3-Trichloropropane	ND		4.0	ug/L			11/28/19 02:36	4
1,2,4-Trichlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,2,4-Trimethylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			11/28/19 02:36	4
1,2-Dibromoethane	ND		2.0	ug/L			11/28/19 02:36	4
1,2-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,2-Dichloroethane	ND		2.0	ug/L			11/28/19 02:36	4
1,2-Dichloropropane	ND		2.0	ug/L			11/28/19 02:36	4
1,3,5-Trimethylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,3-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
1,3-Dichloropropane	ND		4.0	ug/L			11/28/19 02:36	4
1,4-Dichlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
2,2-Dichloropropane	ND		4.0	ug/L			11/28/19 02:36	4

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-04**  
**Date Collected: 11/15/19 11:45**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	ug/L			11/28/19 02:36	4
2-Chlorotoluene	ND		2.0	ug/L			11/28/19 02:36	4
2-Hexanone	ND		40	ug/L			11/28/19 02:36	4
4-Chlorotoluene	ND		2.0	ug/L			11/28/19 02:36	4
4-Methyl-2-pentanone	ND		20	ug/L			11/28/19 02:36	4
Acetone	ND		40	ug/L			11/28/19 02:36	4
Benzene	ND		2.0	ug/L			11/28/19 02:36	4
Bromobenzene	ND		2.0	ug/L			11/28/19 02:36	4
Bromochloromethane	ND		4.0	ug/L			11/28/19 02:36	4
Bromodichloromethane	ND		2.0	ug/L			11/28/19 02:36	4
Bromoform	ND		2.0	ug/L			11/28/19 02:36	4
Bromomethane	ND		8.0	ug/L			11/28/19 02:36	4
cis-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 02:36	4
cis-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 02:36	4
Carbon disulfide	ND		40	ug/L			11/28/19 02:36	4
Carbon tetrachloride	ND		2.0	ug/L			11/28/19 02:36	4
Chlorobenzene	ND		2.0	ug/L			11/28/19 02:36	4
Chloroethane	ND		2.0	ug/L			11/28/19 02:36	4
Chloroform	ND		2.0	ug/L			11/28/19 02:36	4
Chloromethane	ND		20	ug/L			11/28/19 02:36	4
Dibromochloromethane	ND		2.0	ug/L			11/28/19 02:36	4
Dibromomethane	ND		2.0	ug/L			11/28/19 02:36	4
Dichlorodifluoromethane	ND		4.0	ug/L			11/28/19 02:36	4
Ethylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
Isopropylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
Methylene Chloride	ND		4.0	ug/L			11/28/19 02:36	4
Methyl-t-Butyl Ether (MTBE)	ND		2.0	ug/L			11/28/19 02:36	4
Naphthalene	ND		4.0	ug/L			11/28/19 02:36	4
n-Butylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
N-Propylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
o-Xylene	ND		2.0	ug/L			11/28/19 02:36	4
m,p-Xylene	ND		4.0	ug/L			11/28/19 02:36	4
p-Isopropyltoluene	ND		2.0	ug/L			11/28/19 02:36	4
sec-Butylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
Styrene	ND		2.0	ug/L			11/28/19 02:36	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 02:36	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 02:36	4
tert-Butylbenzene	ND		2.0	ug/L			11/28/19 02:36	4
Tetrachloroethene	ND		2.0	ug/L			11/28/19 02:36	4
Toluene	ND		2.0	ug/L			11/28/19 02:36	4
<b>Trichloroethene</b>	<b>130</b>		2.0	ug/L			11/28/19 02:36	4
Trichlorofluoromethane	ND		2.0	ug/L			11/28/19 02:36	4
Vinyl acetate	ND		20	ug/L			11/28/19 02:36	4
Vinyl chloride	ND		2.0	ug/L			11/28/19 02:36	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		80 - 128		11/28/19 02:36	4
<i>4-Bromofluorobenzene (Surr)</i>	97		68 - 120		11/28/19 02:36	4
<i>Dibromofluoromethane</i>	90		80 - 127		11/28/19 02:36	4
<i>Toluene-d8 (Surr)</i>	102		80 - 120		11/28/19 02:36	4

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: HEW-05**  
**Date Collected: 11/15/19 11:16**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1,1-Trichloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1,2-Trichloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1-Dichloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,1-Dichloroethene	ND		2.0	ug/L			11/28/19 03:03	4
1,1-Dichloropropene	ND		2.0	ug/L			11/28/19 03:03	4
1,2,3-Trichlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,2,3-Trichloropropane	ND		4.0	ug/L			11/28/19 03:03	4
1,2,4-Trichlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,2,4-Trimethylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			11/28/19 03:03	4
1,2-Dibromoethane	ND		2.0	ug/L			11/28/19 03:03	4
1,2-Dichlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,2-Dichloroethane	ND		2.0	ug/L			11/28/19 03:03	4
1,2-Dichloropropane	ND		2.0	ug/L			11/28/19 03:03	4
1,3,5-Trimethylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,3-Dichlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
1,3-Dichloropropane	ND		4.0	ug/L			11/28/19 03:03	4
1,4-Dichlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
2,2-Dichloropropane	ND		4.0	ug/L			11/28/19 03:03	4
2-Butanone	ND		20	ug/L			11/28/19 03:03	4
2-Chlorotoluene	ND		2.0	ug/L			11/28/19 03:03	4
2-Hexanone	ND		40	ug/L			11/28/19 03:03	4
4-Chlorotoluene	ND		2.0	ug/L			11/28/19 03:03	4
4-Methyl-2-pentanone	ND		20	ug/L			11/28/19 03:03	4
Acetone	ND		40	ug/L			11/28/19 03:03	4
Benzene	ND		2.0	ug/L			11/28/19 03:03	4
Bromobenzene	ND		2.0	ug/L			11/28/19 03:03	4
Bromochloromethane	ND		4.0	ug/L			11/28/19 03:03	4
Bromodichloromethane	ND		2.0	ug/L			11/28/19 03:03	4
Bromoform	ND		2.0	ug/L			11/28/19 03:03	4
Bromomethane	ND		8.0	ug/L			11/28/19 03:03	4
<b>cis-1,2-Dichloroethene</b>	<b>4.1</b>		2.0	ug/L			11/28/19 03:03	4
cis-1,3-Dichloropropane	ND		2.0	ug/L			11/28/19 03:03	4
Carbon disulfide	ND		40	ug/L			11/28/19 03:03	4
Carbon tetrachloride	ND		2.0	ug/L			11/28/19 03:03	4
Chlorobenzene	ND		2.0	ug/L			11/28/19 03:03	4
Chloroethane	ND		2.0	ug/L			11/28/19 03:03	4
Chloroform	ND		2.0	ug/L			11/28/19 03:03	4
Chloromethane	ND		20	ug/L			11/28/19 03:03	4
Dibromochloromethane	ND		2.0	ug/L			11/28/19 03:03	4
Dibromomethane	ND		2.0	ug/L			11/28/19 03:03	4
Dichlorodifluoromethane	ND		4.0	ug/L			11/28/19 03:03	4
Ethylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
Isopropylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
Methylene Chloride	ND		4.0	ug/L			11/28/19 03:03	4
Methyl-t-Butyl Ether (MTBE)	ND		2.0	ug/L			11/28/19 03:03	4

Eurofins Calscience LLC

# Client Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: HEW-05**  
**Date Collected: 11/15/19 11:16**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		4.0	ug/L			11/28/19 03:03	4
n-Butylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
N-Propylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
o-Xylene	ND		2.0	ug/L			11/28/19 03:03	4
m,p-Xylene	ND		4.0	ug/L			11/28/19 03:03	4
p-Isopropyltoluene	ND		2.0	ug/L			11/28/19 03:03	4
sec-Butylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
Styrene	ND		2.0	ug/L			11/28/19 03:03	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			11/28/19 03:03	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			11/28/19 03:03	4
tert-Butylbenzene	ND		2.0	ug/L			11/28/19 03:03	4
Tetrachloroethene	ND		2.0	ug/L			11/28/19 03:03	4
Toluene	ND		2.0	ug/L			11/28/19 03:03	4
<b>Trichloroethene</b>	<b>120</b>		2.0	ug/L			11/28/19 03:03	4
Trichlorofluoromethane	ND		2.0	ug/L			11/28/19 03:03	4
Vinyl acetate	ND		20	ug/L			11/28/19 03:03	4
Vinyl chloride	ND		2.0	ug/L			11/28/19 03:03	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		80 - 128		11/28/19 03:03	4
<i>4-Bromofluorobenzene (Surr)</i>	106		68 - 120		11/28/19 03:03	4
<i>Dibromofluoromethane</i>	95		80 - 127		11/28/19 03:03	4
<i>Toluene-d8 (Surr)</i>	99		80 - 120		11/28/19 03:03	4



# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8270C SIM ID - Semivolatle Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: LAX-01**  
**Date Collected: 11/14/19 13:08**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 16:43	1
Isotope Dilution	%Recovery	Qualifier	Limits					
1,4-Dioxane-d8	51		15 - 150					
Surrogate	%Recovery	Qualifier	Limits					
Nitrobenzene-d5	127		46 - 128					

**Client Sample ID: LAX-02**  
**Date Collected: 11/15/19 13:25**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 16:58	1
Isotope Dilution	%Recovery	Qualifier	Limits					
1,4-Dioxane-d8	48		15 - 150					
Surrogate	%Recovery	Qualifier	Limits					
Nitrobenzene-d5	123		46 - 128					

**Client Sample ID: LAX-03**  
**Date Collected: 11/15/19 09:52**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 17:14	1
Isotope Dilution	%Recovery	Qualifier	Limits					
1,4-Dioxane-d8	45		15 - 150					
Surrogate	%Recovery	Qualifier	Limits					
Nitrobenzene-d5	125		46 - 128					

**Client Sample ID: UAX-01**  
**Date Collected: 11/15/19 14:00**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 17:29	1
Isotope Dilution	%Recovery	Qualifier	Limits					
1,4-Dioxane-d8	53		15 - 150					
Surrogate	%Recovery	Qualifier	Limits					
Nitrobenzene-d5	148	X	46 - 128					

**Client Sample ID: UAX-02**  
**Date Collected: 11/15/19 10:15**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2		0.50	ug/L		11/18/19 21:07	11/21/19 17:44	1
Isotope Dilution	%Recovery	Qualifier	Limits					
1,4-Dioxane-d8	54		15 - 150					
Surrogate	%Recovery	Qualifier	Limits					
Nitrobenzene-d5	127		46 - 128					

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8270C SIM ID - Semivolatle Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: UAX-03**  
**Date Collected: 11/15/19 12:05**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-7**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 18:00	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	53		15 - 150			11/18/19 21:07	11/21/19 18:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	135	X	46 - 128			11/18/19 21:07	11/21/19 18:00	1

**Client Sample ID: RB-111519**  
**Date Collected: 11/15/19 09:58**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-8**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:07	11/21/19 18:15	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	54		15 - 150			11/18/19 21:07	11/21/19 18:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	138	X	46 - 128			11/18/19 21:07	11/21/19 18:15	1

**Client Sample ID: HEW-01**  
**Date Collected: 11/15/19 13:40**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-10**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.9		0.50	ug/L		11/18/19 21:07	11/21/19 18:31	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	53		15 - 150			11/18/19 21:07	11/21/19 18:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	126		46 - 128			11/18/19 21:07	11/21/19 18:31	1

**Client Sample ID: HEW-0100**  
**Date Collected: 11/15/19 13:50**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-11**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.7		0.50	ug/L		11/18/19 21:07	11/21/19 18:46	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	56		15 - 150			11/18/19 21:07	11/21/19 18:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	121		46 - 128			11/18/19 21:07	11/21/19 18:46	1

**Client Sample ID: HEW-02**  
**Date Collected: 11/15/19 10:39**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-12**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:08	11/21/19 19:02	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	49		15 - 150			11/18/19 21:08	11/21/19 19:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	140	X	46 - 128			11/18/19 21:08	11/21/19 19:02	1

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# Client Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8270C SIM ID - Semivolatle Organic Compounds (GC/MS SIM / Isotope Dilution)

**Client Sample ID: HEW-03**  
**Date Collected: 11/15/19 10:53**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-13**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.59		0.50	ug/L		11/19/19 19:49	11/21/19 19:17	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	53		15 - 150			11/19/19 19:49	11/21/19 19:17	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrobenzene-d5	125		46 - 128			11/19/19 19:49	11/21/19 19:17	1

**Client Sample ID: HEW-04**  
**Date Collected: 11/15/19 11:45**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-14**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.6		0.50	ug/L		11/19/19 19:49	11/21/19 19:32	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	50		15 - 150			11/19/19 19:49	11/21/19 19:32	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrobenzene-d5	124		46 - 128			11/19/19 19:49	11/21/19 19:32	1

**Client Sample ID: HEW-05**  
**Date Collected: 11/15/19 11:16**  
**Date Received: 11/15/19 15:52**

**Lab Sample ID: 570-13062-15**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/19/19 19:49	11/21/19 19:48	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	48		15 - 150			11/19/19 19:49	11/21/19 19:48	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrobenzene-d5	136	X	46 - 128			11/19/19 19:49	11/21/19 19:48	1

# Surrogate Summary

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-128)	BFB (68-120)	DBFM (80-127)	TOL (80-120)
570-13062-1	TB-111419	110	96	104	103
570-13062-2	LAX-01	112	97	104	102
570-13062-3	LAX-02	96	111	92	99
570-13062-4	LAX-03	113	92	100	101
570-13062-5	UAX-01	113	91	95	100
570-13062-6	UAX-02	111	91	95	101
570-13062-7	UAX-03	116	91	99	101
570-13062-7 MS	UAX-03	95	100	94	100
570-13062-7 MSD	UAX-03	95	92	95	99
570-13062-8	RB-111519	109	89	100	98
570-13062-9	TB-111519	113	79	103	100
570-13062-10	HEW-01	107	97	100	102
570-13062-11	HEW-0100	114	91	106	104
570-13062-12	HEW-02	101	109	97	95
570-13062-13	HEW-03	116	91	104	102
570-13062-14	HEW-04	98	97	90	102
570-13062-15	HEW-05	98	106	95	99
LCS 570-35699/3	Lab Control Sample	106	103	105	101
LCS 570-35808/9	Lab Control Sample	108	101	103	102
LCS 570-36354/4	Lab Control Sample	101	105	102	101
LCSD 570-35699/4	Lab Control Sample Dup	105	102	101	103
LCSD 570-35808/10	Lab Control Sample Dup	108	101	104	99
LCSD 570-36354/5	Lab Control Sample Dup	102	103	101	101
MB 570-35699/6	Method Blank	108	98	102	103
MB 570-35808/12	Method Blank	109	93	100	99
MB 570-36354/8	Method Blank	106	97	101	103

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane  
 TOL = Toluene-d8 (Surr)

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		NBZ (46-128)
570-13062-2	LAX-01	127
570-13062-3	LAX-02	123
570-13062-4	LAX-03	125
570-13062-5	UAX-01	148 X
570-13062-6	UAX-02	127
570-13062-7	UAX-03	135 X
570-13062-7 MS	UAX-03	128
570-13062-7 MSD	UAX-03	125
570-13062-8	RB-111519	138 X
570-13062-10	HEW-01	126
570-13062-11	HEW-0100	121

# Surrogate Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

**Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)**

**(Continued)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NBZ (46-128)
570-13062-12	HEW-02	140 X
570-13062-13	HEW-03	125
570-13062-14	HEW-04	124
570-13062-15	HEW-05	136 X
LCS 570-33691/2-A	Lab Control Sample	124
LCSD 570-33691/3-A	Lab Control Sample Dup	124
MB 570-33691/1-A	Method Blank	115

### Surrogate Legend

NBZ = Nitrobenzene-d5

# Isotope Dilution Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

**Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (15-150)
570-13062-2	LAX-01	51
570-13062-3	LAX-02	48
570-13062-4	LAX-03	45
570-13062-5	UAX-01	53
570-13062-6	UAX-02	54
570-13062-7	UAX-03	53
570-13062-7 MS	UAX-03	53
570-13062-7 MSD	UAX-03	57
570-13062-8	RB-111519	54
570-13062-10	HEW-01	53
570-13062-11	HEW-0100	56
570-13062-12	HEW-02	49
570-13062-13	HEW-03	53
570-13062-14	HEW-04	50
570-13062-15	HEW-05	48
LCS 570-33691/2-A	Lab Control Sample	54
LCSD 570-33691/3-A	Lab Control Sample Dup	54
MB 570-33691/1-A	Method Blank	49

### Surrogate Legend

DXE = 1,4-Dioxane-d8

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-35699/6**  
**Matrix: Water**  
**Analysis Batch: 35699**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 01:14	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 01:14	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 01:14	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 01:14	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 01:14	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 01:14	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 01:14	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 01:14	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 01:14	1
2-Butanone	ND		5.0	ug/L			11/27/19 01:14	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 01:14	1
2-Hexanone	ND		10	ug/L			11/27/19 01:14	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 01:14	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 01:14	1
Acetone	ND		10	ug/L			11/27/19 01:14	1
Benzene	ND		0.50	ug/L			11/27/19 01:14	1
Bromobenzene	ND		0.50	ug/L			11/27/19 01:14	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 01:14	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 01:14	1
Bromoform	ND		0.50	ug/L			11/27/19 01:14	1
Bromomethane	ND		2.0	ug/L			11/27/19 01:14	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 01:14	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 01:14	1
Carbon disulfide	ND		10	ug/L			11/27/19 01:14	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 01:14	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 01:14	1
Chloroethane	ND		0.50	ug/L			11/27/19 01:14	1
Chloroform	ND		0.50	ug/L			11/27/19 01:14	1
Chloromethane	ND		5.0	ug/L			11/27/19 01:14	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 01:14	1
Dibromomethane	ND		0.50	ug/L			11/27/19 01:14	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 01:14	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 01:14	1

# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-35699/6**  
**Matrix: Water**  
**Analysis Batch: 35699**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 01:14	1
Naphthalene	ND		1.0	ug/L			11/27/19 01:14	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
o-Xylene	ND		0.50	ug/L			11/27/19 01:14	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 01:14	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 01:14	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
Styrene	ND		0.50	ug/L			11/27/19 01:14	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 01:14	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 01:14	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 01:14	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 01:14	1
Toluene	ND		0.50	ug/L			11/27/19 01:14	1
Trichloroethene	ND		0.50	ug/L			11/27/19 01:14	1
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 01:14	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 01:14	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 01:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 128		11/27/19 01:14	1
4-Bromofluorobenzene (Surr)	98		68 - 120		11/27/19 01:14	1
Dibromofluoromethane	102		80 - 127		11/27/19 01:14	1
Toluene-d8 (Surr)	103		80 - 120		11/27/19 01:14	1

**Lab Sample ID: LCS 570-35699/3**  
**Matrix: Water**  
**Analysis Batch: 35699**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.42		ug/L		104	77 - 120
1,2-Dibromoethane	10.0	10.13		ug/L		101	80 - 120
1,2-Dichlorobenzene	10.0	10.12		ug/L		101	80 - 120
1,2-Dichloroethane	10.0	10.20		ug/L		102	80 - 122
Benzene	10.0	9.947		ug/L		99	80 - 120
Carbon tetrachloride	10.0	9.363		ug/L		94	80 - 129
Chlorobenzene	10.0	9.940		ug/L		99	80 - 120
Ethylbenzene	10.0	10.17		ug/L		102	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	10.19		ug/L		102	75 - 123
o-Xylene	10.0	10.40		ug/L		104	80 - 120
m,p-Xylene	20.0	20.89		ug/L		104	80 - 120
Toluene	10.0	9.989		ug/L		100	80 - 120
Trichloroethene	10.0	9.877		ug/L		99	80 - 120
Vinyl chloride	10.0	10.56		ug/L		106	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 128
4-Bromofluorobenzene (Surr)	103		68 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-35699/3**  
**Matrix: Water**  
**Analysis Batch: 35699**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane	105		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-35699/4**  
**Matrix: Water**  
**Analysis Batch: 35699**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
1,1-Dichloroethene	10.0	9.813		ug/L		98	77 - 120	6	26	
1,2-Dibromoethane	10.0	9.765		ug/L		98	80 - 120	4	32	
1,2-Dichlorobenzene	10.0	10.00		ug/L		100	80 - 120	1	30	
1,2-Dichloroethane	10.0	9.736		ug/L		97	80 - 122	5	23	
Benzene	10.0	9.691		ug/L		97	80 - 120	3	22	
Carbon tetrachloride	10.0	8.994		ug/L		90	80 - 129	4	36	
Chlorobenzene	10.0	9.598		ug/L		96	80 - 120	3	29	
Ethylbenzene	10.0	9.705		ug/L		97	80 - 120	5	25	
Methyl-t-Butyl Ether (MTBE)	10.0	9.769		ug/L		98	75 - 123	4	27	
o-Xylene	10.0	9.969		ug/L		100	80 - 120	4	30	
m,p-Xylene	20.0	19.83		ug/L		99	80 - 120	5	30	
Toluene	10.0	9.655		ug/L		97	80 - 120	3	28	
Trichloroethene	10.0	9.760		ug/L		98	80 - 120	1	25	
Vinyl chloride	10.0	9.891		ug/L		99	63 - 135	7	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		80 - 128
4-Bromofluorobenzene (Surr)	102		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	103		80 - 120

**Lab Sample ID: MB 570-35808/12**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1-Dichloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,1-Dichloroethene	ND		0.50	ug/L			11/27/19 19:42	1
1,1-Dichloropropene	ND		0.50	ug/L			11/27/19 19:42	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,2,3-Trichloropropane	ND		1.0	ug/L			11/27/19 19:42	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/27/19 19:42	1
1,2-Dibromoethane	ND		0.50	ug/L			11/27/19 19:42	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-35808/12**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,2-Dichloroethane	ND		0.50	ug/L			11/27/19 19:42	1
1,2-Dichloropropane	ND		0.50	ug/L			11/27/19 19:42	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
1,3-Dichloropropane	ND		1.0	ug/L			11/27/19 19:42	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
2,2-Dichloropropane	ND		1.0	ug/L			11/27/19 19:42	1
2-Butanone	ND		5.0	ug/L			11/27/19 19:42	1
2-Chlorotoluene	ND		0.50	ug/L			11/27/19 19:42	1
2-Hexanone	ND		10	ug/L			11/27/19 19:42	1
4-Chlorotoluene	ND		0.50	ug/L			11/27/19 19:42	1
4-Methyl-2-pentanone	ND		5.0	ug/L			11/27/19 19:42	1
Acetone	ND		10	ug/L			11/27/19 19:42	1
Benzene	ND		0.50	ug/L			11/27/19 19:42	1
Bromobenzene	ND		0.50	ug/L			11/27/19 19:42	1
Bromochloromethane	ND		1.0	ug/L			11/27/19 19:42	1
Bromodichloromethane	ND		0.50	ug/L			11/27/19 19:42	1
Bromoform	ND		0.50	ug/L			11/27/19 19:42	1
Bromomethane	ND		2.0	ug/L			11/27/19 19:42	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 19:42	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 19:42	1
Carbon disulfide	ND		10	ug/L			11/27/19 19:42	1
Carbon tetrachloride	ND		0.50	ug/L			11/27/19 19:42	1
Chlorobenzene	ND		0.50	ug/L			11/27/19 19:42	1
Chloroethane	ND		0.50	ug/L			11/27/19 19:42	1
Chloroform	ND		0.50	ug/L			11/27/19 19:42	1
Chloromethane	ND		5.0	ug/L			11/27/19 19:42	1
Dibromochloromethane	ND		0.50	ug/L			11/27/19 19:42	1
Dibromomethane	ND		0.50	ug/L			11/27/19 19:42	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/27/19 19:42	1
Ethylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
Isopropylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
Methylene Chloride	ND		1.0	ug/L			11/27/19 19:42	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			11/27/19 19:42	1
Naphthalene	ND		1.0	ug/L			11/27/19 19:42	1
n-Butylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
N-Propylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
o-Xylene	ND		0.50	ug/L			11/27/19 19:42	1
m,p-Xylene	ND		1.0	ug/L			11/27/19 19:42	1
p-Isopropyltoluene	ND		0.50	ug/L			11/27/19 19:42	1
sec-Butylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
Styrene	ND		0.50	ug/L			11/27/19 19:42	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			11/27/19 19:42	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			11/27/19 19:42	1
tert-Butylbenzene	ND		0.50	ug/L			11/27/19 19:42	1
Tetrachloroethene	ND		0.50	ug/L			11/27/19 19:42	1
Toluene	ND		0.50	ug/L			11/27/19 19:42	1
Trichloroethene	ND		0.50	ug/L			11/27/19 19:42	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-35808/12**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Trichlorofluoromethane	ND		0.50	ug/L			11/27/19 19:42	1
Vinyl acetate	ND		5.0	ug/L			11/27/19 19:42	1
Vinyl chloride	ND		0.50	ug/L			11/27/19 19:42	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	109		80 - 128		11/27/19 19:42	1
4-Bromofluorobenzene (Surr)	93		68 - 120		11/27/19 19:42	1
Dibromofluoromethane	100		80 - 127		11/27/19 19:42	1
Toluene-d8 (Surr)	99		80 - 120		11/27/19 19:42	1

**Lab Sample ID: LCS 570-35808/9**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1-Dichloroethene	10.0	10.59		ug/L		106	77 - 120
1,2-Dibromoethane	10.0	10.40		ug/L		104	80 - 120
1,2-Dichlorobenzene	10.0	10.00		ug/L		100	80 - 120
1,2-Dichloroethane	10.0	11.40		ug/L		114	80 - 122
Benzene	10.0	9.838		ug/L		98	80 - 120
Carbon tetrachloride	10.0	10.95		ug/L		109	80 - 129
Chlorobenzene	10.0	10.28		ug/L		103	80 - 120
Ethylbenzene	10.0	10.17		ug/L		102	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	8.196		ug/L		82	75 - 123
o-Xylene	10.0	10.44		ug/L		104	80 - 120
m,p-Xylene	20.0	21.50		ug/L		108	80 - 120
Toluene	10.0	10.20		ug/L		102	80 - 120
Trichloroethene	10.0	10.46		ug/L		105	80 - 120
Vinyl chloride	10.0	9.660		ug/L		97	63 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	103		80 - 127
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: LCSD 570-35808/10**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
1,1-Dichloroethene	10.0	9.790		ug/L		98	77 - 120	8	26
1,2-Dibromoethane	10.0	10.41		ug/L		104	80 - 120	0	32
1,2-Dichlorobenzene	10.0	9.463		ug/L		95	80 - 120	6	30
1,2-Dichloroethane	10.0	11.08		ug/L		111	80 - 122	3	23
Benzene	10.0	9.365		ug/L		94	80 - 120	5	22
Carbon tetrachloride	10.0	10.01		ug/L		100	80 - 129	9	36
Chlorobenzene	10.0	9.804		ug/L		98	80 - 120	5	29

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-35808/10**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	9.560		ug/L		96	80 - 120	6	25
Methyl-t-Butyl Ether (MTBE)	10.0	8.102		ug/L		81	75 - 123	1	27
o-Xylene	10.0	10.02		ug/L		100	80 - 120	4	30
m,p-Xylene	20.0	20.47		ug/L		102	80 - 120	5	30
Toluene	10.0	9.479		ug/L		95	80 - 120	7	28
Trichloroethene	10.0	9.750		ug/L		97	80 - 120	7	25
Vinyl chloride	10.0	9.016		ug/L		90	63 - 135	7	30

Surrogate	%Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		80 - 128
4-Bromofluorobenzene (Surr)	101		68 - 120
Dibromofluoromethane	104		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: 570-13062-7 MS**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: UAX-03**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.54		10.0	12.23		ug/L		117	66 - 126
1,2-Dibromoethane	ND	F2	10.0	9.636		ug/L		96	75 - 126
1,2-Dichlorobenzene	ND		10.0	9.148		ug/L		91	75 - 125
1,2-Dichloroethane	ND		10.0	9.497		ug/L		95	75 - 127
Benzene	ND		10.0	9.326		ug/L		93	75 - 125
Carbon tetrachloride	ND		10.0	9.004		ug/L		90	69 - 135
Chlorobenzene	ND		10.0	9.405		ug/L		94	75 - 125
Ethylbenzene	ND		10.0	9.319		ug/L		93	75 - 125
Methyl-t-Butyl Ether (MTBE)	ND		10.0	8.921		ug/L		89	71 - 131
o-Xylene	ND		10.0	9.572		ug/L		96	75 - 127
m,p-Xylene	ND		20.0	19.98		ug/L		100	75 - 125
Toluene	ND		10.0	9.348		ug/L		93	75 - 125
Trichloroethene	9.6		10.0	18.95		ug/L		94	75 - 125
Vinyl chloride	ND	F2	10.0	7.874		ug/L		79	52 - 142

Surrogate	%Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 128
4-Bromofluorobenzene (Surr)	100		68 - 120
Dibromofluoromethane	94		80 - 127
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: 570-13062-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: UAX-03**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.54		10.0	11.38		ug/L		108	66 - 126	7	20
1,2-Dibromoethane	ND	F2	10.0	7.834	F2	ug/L		78	75 - 126	21	20
1,2-Dichlorobenzene	ND		10.0	8.115		ug/L		81	75 - 125	12	20

Eurofins Calscience LLC

# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-13062-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 35808**

**Client Sample ID: UAX-03**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	ND		10.0	8.402		ug/L		84	75 - 127	12	20
Benzene	ND		10.0	8.500		ug/L		85	75 - 125	9	20
Carbon tetrachloride	ND		10.0	8.278		ug/L		83	69 - 135	8	20
Chlorobenzene	ND		10.0	8.715		ug/L		87	75 - 125	8	20
Ethylbenzene	ND		10.0	8.718		ug/L		87	75 - 125	7	20
Methyl-t-Butyl Ether (MTBE)	ND		10.0	8.251		ug/L		83	71 - 131	8	20
o-Xylene	ND		10.0	8.597		ug/L		86	75 - 127	11	20
m,p-Xylene	ND		20.0	18.24		ug/L		91	75 - 125	9	20
Toluene	ND		10.0	8.518		ug/L		85	75 - 125	9	20
Trichloroethene	9.6		10.0	17.40		ug/L		78	75 - 125	8	20
Vinyl chloride	ND	F2	10.0	11.01	F2	ug/L		110	52 - 142	33	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 128
4-Bromofluorobenzene (Surr)	92		68 - 120
Dibromofluoromethane	95		80 - 127
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: MB 570-36354/8**  
**Matrix: Water**  
**Analysis Batch: 36354**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1,1-Trichloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1,2-Trichloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1-Dichloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,1-Dichloroethene	ND		0.50	ug/L			12/03/19 11:52	1
1,1-Dichloropropene	ND		0.50	ug/L			12/03/19 11:52	1
1,2,3-Trichlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,2,3-Trichloropropane	ND		1.0	ug/L			12/03/19 11:52	1
1,2,4-Trichlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			12/03/19 11:52	1
1,2-Dibromoethane	ND		0.50	ug/L			12/03/19 11:52	1
1,2-Dichlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,2-Dichloroethane	ND		0.50	ug/L			12/03/19 11:52	1
1,2-Dichloropropane	ND		0.50	ug/L			12/03/19 11:52	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,3-Dichlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
1,3-Dichloropropane	ND		1.0	ug/L			12/03/19 11:52	1
1,4-Dichlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
2,2-Dichloropropane	ND		1.0	ug/L			12/03/19 11:52	1
2-Butanone	ND		5.0	ug/L			12/03/19 11:52	1
2-Chlorotoluene	ND		0.50	ug/L			12/03/19 11:52	1
2-Hexanone	ND		10	ug/L			12/03/19 11:52	1

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# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-36354/8**

**Matrix: Water**

**Analysis Batch: 36354**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.50	ug/L			12/03/19 11:52	1
4-Methyl-2-pentanone	ND		5.0	ug/L			12/03/19 11:52	1
Acetone	ND		10	ug/L			12/03/19 11:52	1
Benzene	ND		0.50	ug/L			12/03/19 11:52	1
Bromobenzene	ND		0.50	ug/L			12/03/19 11:52	1
Bromochloromethane	ND		1.0	ug/L			12/03/19 11:52	1
Bromodichloromethane	ND		0.50	ug/L			12/03/19 11:52	1
Bromoform	ND		0.50	ug/L			12/03/19 11:52	1
Bromomethane	ND		2.0	ug/L			12/03/19 11:52	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			12/03/19 11:52	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			12/03/19 11:52	1
Carbon disulfide	ND		10	ug/L			12/03/19 11:52	1
Carbon tetrachloride	ND		0.50	ug/L			12/03/19 11:52	1
Chlorobenzene	ND		0.50	ug/L			12/03/19 11:52	1
Chloroethane	ND		0.50	ug/L			12/03/19 11:52	1
Chloroform	ND		0.50	ug/L			12/03/19 11:52	1
Chloromethane	ND		5.0	ug/L			12/03/19 11:52	1
Dibromochloromethane	ND		0.50	ug/L			12/03/19 11:52	1
Dibromomethane	ND		0.50	ug/L			12/03/19 11:52	1
Dichlorodifluoromethane	ND		1.0	ug/L			12/03/19 11:52	1
Ethylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
Isopropylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
Methylene Chloride	ND		1.0	ug/L			12/03/19 11:52	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	ug/L			12/03/19 11:52	1
Naphthalene	ND		1.0	ug/L			12/03/19 11:52	1
n-Butylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
N-Propylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
o-Xylene	ND		0.50	ug/L			12/03/19 11:52	1
m,p-Xylene	ND		1.0	ug/L			12/03/19 11:52	1
p-Isopropyltoluene	ND		0.50	ug/L			12/03/19 11:52	1
sec-Butylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
Styrene	ND		0.50	ug/L			12/03/19 11:52	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			12/03/19 11:52	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			12/03/19 11:52	1
tert-Butylbenzene	ND		0.50	ug/L			12/03/19 11:52	1
Tetrachloroethene	ND		0.50	ug/L			12/03/19 11:52	1
Toluene	ND		0.50	ug/L			12/03/19 11:52	1
Trichloroethene	ND		0.50	ug/L			12/03/19 11:52	1
Trichlorofluoromethane	ND		0.50	ug/L			12/03/19 11:52	1
Vinyl acetate	ND		5.0	ug/L			12/03/19 11:52	1
Vinyl chloride	ND		0.50	ug/L			12/03/19 11:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 128				12/03/19 11:52	1
4-Bromofluorobenzene (Surr)	97		68 - 120				12/03/19 11:52	1
Dibromofluoromethane	101		80 - 127				12/03/19 11:52	1
Toluene-d8 (Surr)	103		80 - 120				12/03/19 11:52	1

# QC Sample Results

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-36354/4**  
**Matrix: Water**  
**Analysis Batch: 36354**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.694		ug/L		97	77 - 120
1,2-Dibromoethane	10.0	10.12		ug/L		101	80 - 120
1,2-Dichlorobenzene	10.0	10.20		ug/L		102	80 - 120
1,2-Dichloroethane	10.0	9.953		ug/L		100	80 - 122
Benzene	10.0	9.800		ug/L		98	80 - 120
Carbon tetrachloride	10.0	9.249		ug/L		92	80 - 129
Chlorobenzene	10.0	9.962		ug/L		100	80 - 120
Ethylbenzene	10.0	10.23		ug/L		102	80 - 120
Methyl-t-Butyl Ether (MTBE)	10.0	8.558		ug/L		86	75 - 123
o-Xylene	10.0	10.52		ug/L		105	80 - 120
m,p-Xylene	20.0	21.02		ug/L		105	80 - 120
Toluene	10.0	9.753		ug/L		98	80 - 120
Trichloroethene	10.0	9.784		ug/L		98	80 - 120
Vinyl chloride	10.0	8.579		ug/L		86	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 128
4-Bromofluorobenzene (Surr)	105		68 - 120
Dibromofluoromethane	102		80 - 127
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: LCSD 570-36354/5**  
**Matrix: Water**  
**Analysis Batch: 36354**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	10.0	9.297		ug/L		93	77 - 120	4	26
1,2-Dibromoethane	10.0	9.685		ug/L		97	80 - 120	4	32
1,2-Dichlorobenzene	10.0	9.965		ug/L		100	80 - 120	2	30
1,2-Dichloroethane	10.0	9.714		ug/L		97	80 - 122	2	23
Benzene	10.0	9.525		ug/L		95	80 - 120	3	22
Carbon tetrachloride	10.0	9.164		ug/L		92	80 - 129	1	36
Chlorobenzene	10.0	9.718		ug/L		97	80 - 120	2	29
Ethylbenzene	10.0	9.889		ug/L		99	80 - 120	3	25
Methyl-t-Butyl Ether (MTBE)	10.0	8.110		ug/L		81	75 - 123	5	27
o-Xylene	10.0	10.17		ug/L		102	80 - 120	3	30
m,p-Xylene	20.0	20.26		ug/L		101	80 - 120	4	30
Toluene	10.0	9.570		ug/L		96	80 - 120	2	28
Trichloroethene	10.0	9.779		ug/L		98	80 - 120	0	25
Vinyl chloride	10.0	8.376		ug/L		84	63 - 135	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 128
4-Bromofluorobenzene (Surr)	103		68 - 120
Dibromofluoromethane	101		80 - 127
Toluene-d8 (Surr)	101		80 - 120

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 570-33691/1-A**  
**Matrix: Water**  
**Analysis Batch: 34421**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 33691**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		11/18/19 21:06	11/21/19 14:24	1
Isotope Dilution	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	49		15 - 150			11/18/19 21:06	11/21/19 14:24	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	115		46 - 128			11/18/19 21:06	11/21/19 14:24	1

**Lab Sample ID: LCS 570-33691/2-A**  
**Matrix: Water**  
**Analysis Batch: 34421**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 33691**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	20.0	22.00		ug/L		110	57 - 136
Isotope Dilution	%Recovery	LCS Qualifier	Limits				
1,4-Dioxane-d8	54		15 - 150				
Surrogate	%Recovery	LCS Qualifier	Limits				
Nitrobenzene-d5	124		46 - 128				

**Lab Sample ID: LCSD 570-33691/3-A**  
**Matrix: Water**  
**Analysis Batch: 34421**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 33691**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	20.0	20.78		ug/L		104	57 - 136	6	20
Isotope Dilution	%Recovery	LCSD Qualifier	Limits						
1,4-Dioxane-d8	54		15 - 150						
Surrogate	%Recovery	LCSD Qualifier	Limits						
Nitrobenzene-d5	124		46 - 128						

**Lab Sample ID: 570-13062-7 MS**  
**Matrix: Water**  
**Analysis Batch: 34421**

**Client Sample ID: UAX-03**  
**Prep Type: Total/NA**  
**Prep Batch: 33691**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		20.0	23.61		ug/L		118	45 - 139
Isotope Dilution	%Recovery	MS Qualifier	Limits						
1,4-Dioxane-d8	53		15 - 150						
Surrogate	%Recovery	MS Qualifier	Limits						
Nitrobenzene-d5	128		46 - 128						

# QC Sample Results

Client: Hargis + Associates, Inc.  
 Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

**Lab Sample ID: 570-13062-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 34421**

**Client Sample ID: UAX-03**  
**Prep Type: Total/NA**  
**Prep Batch: 33691**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		20.0	22.60		ug/L		113	45 - 139	4	17
		<i>MSD</i>	<i>MSD</i>								
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>								
1,4-Dioxane-d8	57		15 - 150								
		<i>MSD</i>	<i>MSD</i>								
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>								
Nitrobenzene-d5	125		46 - 128								

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## GC/MS VOA

### Analysis Batch: 35699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-13062-1	TB-111419	Total/NA	Water	8260B	
570-13062-2	LAX-01	Total/NA	Water	8260B	
MB 570-35699/6	Method Blank	Total/NA	Water	8260B	
LCS 570-35699/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-35699/4	Lab Control Sample Dup	Total/NA	Water	8260B	

### Analysis Batch: 35808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-13062-3	LAX-02	Total/NA	Water	8260B	
570-13062-4	LAX-03	Total/NA	Water	8260B	
570-13062-5	UAX-01	Total/NA	Water	8260B	
570-13062-6	UAX-02	Total/NA	Water	8260B	
570-13062-7	UAX-03	Total/NA	Water	8260B	
570-13062-8	RB-111519	Total/NA	Water	8260B	
570-13062-9	TB-111519	Total/NA	Water	8260B	
570-13062-11	HEW-0100	Total/NA	Water	8260B	
570-13062-12	HEW-02	Total/NA	Water	8260B	
570-13062-13	HEW-03	Total/NA	Water	8260B	
570-13062-14	HEW-04	Total/NA	Water	8260B	
570-13062-15	HEW-05	Total/NA	Water	8260B	
MB 570-35808/12	Method Blank	Total/NA	Water	8260B	
LCS 570-35808/9	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-35808/10	Lab Control Sample Dup	Total/NA	Water	8260B	
570-13062-7 MS	UAX-03	Total/NA	Water	8260B	
570-13062-7 MSD	UAX-03	Total/NA	Water	8260B	

### Analysis Batch: 36354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-13062-10	HEW-01	Total/NA	Water	8260B	
MB 570-36354/8	Method Blank	Total/NA	Water	8260B	
LCS 570-36354/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-36354/5	Lab Control Sample Dup	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 33691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-13062-2	LAX-01	Total/NA	Water	3510C	
570-13062-3	LAX-02	Total/NA	Water	3510C	
570-13062-4	LAX-03	Total/NA	Water	3510C	
570-13062-5	UAX-01	Total/NA	Water	3510C	
570-13062-6	UAX-02	Total/NA	Water	3510C	
570-13062-7	UAX-03	Total/NA	Water	3510C	
570-13062-8	RB-111519	Total/NA	Water	3510C	
570-13062-10	HEW-01	Total/NA	Water	3510C	
570-13062-11	HEW-0100	Total/NA	Water	3510C	
570-13062-12	HEW-02	Total/NA	Water	3510C	
570-13062-13	HEW-03	Total/NA	Water	3510C	
570-13062-14	HEW-04	Total/NA	Water	3510C	
570-13062-15	HEW-05	Total/NA	Water	3510C	
MB 570-33691/1-A	Method Blank	Total/NA	Water	3510C	

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# QC Association Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 33691 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-33691/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-33691/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
570-13062-7 MS	UAX-03	Total/NA	Water	3510C	
570-13062-7 MSD	UAX-03	Total/NA	Water	3510C	

### Analysis Batch: 34421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-13062-2	LAX-01	Total/NA	Water	8270C SIM ID	33691
570-13062-3	LAX-02	Total/NA	Water	8270C SIM ID	33691
570-13062-4	LAX-03	Total/NA	Water	8270C SIM ID	33691
570-13062-5	UAX-01	Total/NA	Water	8270C SIM ID	33691
570-13062-6	UAX-02	Total/NA	Water	8270C SIM ID	33691
570-13062-7	UAX-03	Total/NA	Water	8270C SIM ID	33691
570-13062-8	RB-111519	Total/NA	Water	8270C SIM ID	33691
570-13062-10	HEW-01	Total/NA	Water	8270C SIM ID	33691
570-13062-11	HEW-0100	Total/NA	Water	8270C SIM ID	33691
570-13062-12	HEW-02	Total/NA	Water	8270C SIM ID	33691
570-13062-13	HEW-03	Total/NA	Water	8270C SIM ID	33691
570-13062-14	HEW-04	Total/NA	Water	8270C SIM ID	33691
570-13062-15	HEW-05	Total/NA	Water	8270C SIM ID	33691
MB 570-33691/1-A	Method Blank	Total/NA	Water	8270C SIM ID	33691
LCS 570-33691/2-A	Lab Control Sample	Total/NA	Water	8270C SIM ID	33691
LCSD 570-33691/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM ID	33691
570-13062-7 MS	UAX-03	Total/NA	Water	8270C SIM ID	33691
570-13062-7 MSD	UAX-03	Total/NA	Water	8270C SIM ID	33691

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

**Client Sample ID: TB-111419**

**Lab Sample ID: 570-13062-1**

**Date Collected: 11/14/19 08:00**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35699	11/27/19 03:02	UJHB	ECL 2
Instrument ID: GCMSL										

**Client Sample ID: LAX-01**

**Lab Sample ID: 570-13062-2**

**Date Collected: 11/14/19 13:08**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35699	11/27/19 03:29	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 16:43	XF3X	ECL 1
Instrument ID: GCMSDDD										

**Client Sample ID: LAX-02**

**Lab Sample ID: 570-13062-3**

**Date Collected: 11/15/19 13:25**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 21:05	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 16:58	XF3X	ECL 1
Instrument ID: GCMSDDD										

**Client Sample ID: LAX-03**

**Lab Sample ID: 570-13062-4**

**Date Collected: 11/15/19 09:52**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 21:33	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 17:14	XF3X	ECL 1
Instrument ID: GCMSDDD										

**Client Sample ID: UAX-01**

**Lab Sample ID: 570-13062-5**

**Date Collected: 11/15/19 14:00**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 22:00	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 17:29	XF3X	ECL 1
Instrument ID: GCMSDDD										

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# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Client Sample ID: UAX-02

Lab Sample ID: 570-13062-6

Date Collected: 11/15/19 10:15

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 22:28	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 17:44	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: UAX-03

Lab Sample ID: 570-13062-7

Date Collected: 11/15/19 12:05

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 22:55	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 18:00	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: RB-111519

Lab Sample ID: 570-13062-8

Date Collected: 11/15/19 09:58

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 23:23	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 18:15	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: TB-111519

Lab Sample ID: 570-13062-9

Date Collected: 11/15/19 08:00

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	35808	11/27/19 20:10	UJHB	ECL 2
Instrument ID: GCMSUU										

## Client Sample ID: HEW-01

Lab Sample ID: 570-13062-10

Date Collected: 11/15/19 13:40

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	36354	12/03/19 15:03	UJHB	ECL 2
Instrument ID: GCMSL										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 18:31	XF3X	ECL 1
Instrument ID: GCMSDDD										

Eurofins Calscience LLC

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Client Sample ID: HEW-0100

## Lab Sample ID: 570-13062-11

Date Collected: 11/15/19 13:50

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	35808	11/28/19 01:13	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:07	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 18:46	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-02

## Lab Sample ID: 570-13062-12

Date Collected: 11/15/19 10:39

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	20 mL	20 mL	35808	11/28/19 01:41	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/18/19 21:08	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 19:02	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-03

## Lab Sample ID: 570-13062-13

Date Collected: 11/15/19 10:53

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	20 mL	20 mL	35808	11/28/19 02:08	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/19/19 19:49	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 19:17	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-04

## Lab Sample ID: 570-13062-14

Date Collected: 11/15/19 11:45

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	20 mL	20 mL	35808	11/28/19 02:36	UJHB	ECL 2
Instrument ID: GCMSUU										
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/19/19 19:49	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 19:32	XF3X	ECL 1
Instrument ID: GCMSDDD										

## Client Sample ID: HEW-05

## Lab Sample ID: 570-13062-15

Date Collected: 11/15/19 11:16

Matrix: Water

Date Received: 11/15/19 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	20 mL	20 mL	35808	11/28/19 03:03	UJHB	ECL 2
Instrument ID: GCMSUU										

Eurofins Calscience LLC

# Lab Chronicle

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

**Client Sample ID: HEW-05**

**Lab Sample ID: 570-13062-15**

**Date Collected: 11/15/19 11:16**

**Matrix: Water**

**Date Received: 11/15/19 15:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			100 mL	10 mL	33691	11/19/19 19:49	USUL	ECL 1
Total/NA	Analysis	8270C SIM ID		1			34421	11/21/19 19:48	XF3X	ECL 1

Instrument ID: GCMSDDD

## Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lompson, 7445 Lompson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

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# Method Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8270C SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494





# Sample Summary

Client: Hargis + Associates, Inc.  
Project/Site: Building 684 - Raytheon

Job ID: 570-13062-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-13062-1	TB-111419	Water	11/14/19 08:00	11/15/19 15:52	
570-13062-2	LAX-01	Water	11/14/19 13:08	11/15/19 15:52	
570-13062-3	LAX-02	Water	11/15/19 13:25	11/15/19 15:52	
570-13062-4	LAX-03	Water	11/15/19 09:52	11/15/19 15:52	
570-13062-5	UAX-01	Water	11/15/19 14:00	11/15/19 15:52	
570-13062-6	UAX-02	Water	11/15/19 10:15	11/15/19 15:52	
570-13062-7	UAX-03	Water	11/15/19 12:05	11/15/19 15:52	
570-13062-8	RB-111519	Water	11/15/19 09:58	11/15/19 15:52	
570-13062-9	TB-111519	Water	11/15/19 08:00	11/15/19 15:52	
570-13062-10	HEW-01	Water	11/15/19 13:40	11/15/19 15:52	
570-13062-11	HEW-0100	Water	11/15/19 13:50	11/15/19 15:52	
570-13062-12	HEW-02	Water	11/15/19 10:39	11/15/19 15:52	
570-13062-13	HEW-03	Water	11/15/19 10:53	11/15/19 15:52	
570-13062-14	HEW-04	Water	11/15/19 11:45	11/15/19 15:52	
570-13062-15	HEW-05	Water	11/15/19 11:16	11/15/19 15:52	

13062

Date: 11/14/19  
Page 1 of 2



570-13062 Chain of Custody

HARGIS & ASSOCIATES, INC.  
HYDROGEOLOGY • ENGINEERING

PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	LAB ID	SAMPLE ID	SAMPLE COLLECTION	
			Date	Time
BCI Fullerton 764.10	1	TB-111419	11/14/19	0800
	2	LAX-01	↓	1308
	3	LAX-02	11/15/19	1325
	4	LAX-03	↓	1325
	5	UAX-01	11/15/19	0952
	6	UAX-02	↓	0952
	7	UAX-03	11/15/19	1400
	8	TB-111519	11/15/19	0958
	9	TB-111519	11/15/19	0800

Total number of containers per analysis:	Date / Time		Received By: / Company
	Relinquished By: / Company:	Received By: / Company	
23	11-15-19	11/15/19	Ken Puentes / H&A
	11-15-19	1518	Ken Puentes / H&A
	11/15/19	1552	Ken Puentes / H&A

4.0/4.5 SCO

MATRIX PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION	SPECIAL HANDLING	REMARKS
Lab prepared water	8	VOCs by EPA 8260B	0-10		
Hydrochloric Acid (HCl)	40-ml VOA	1,4-Dioxane by 8270C MOD	100-1,000	Standard TAT	
500 ml Amber			>1,000		
					M/MS/SD Requested

Total No. of Containers: 22

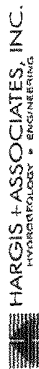
No. of containers correct  
Received in good condition  
Custody seals secure  
Conforms to COC document

Temperature on receipt

Send Results to:  
Ken Puentes  
9171 Towne Centre Drive  
Suite 375  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com



Date: 11/15/19  
Page 2 of 2



PROJECT: Building 684 - Raytheon  
TASK NO.: 764.10

Project Manager Ken Puentes  
QA Manager Tyler Evans  
Phone 858-455-6500

Project	LAB ID	Sampled By:	SAMPLE COLLECTION		MATRIX	PRESERVATION	CONTAINERS	ANALYSIS REQUESTED	ESTIMATED CONCENTRATION	SPECIAL HANDLING	REMARKS	
			Date	Time								
BCI Fullerton 764.10		D. Sealice A. Janson			Groundwater							
	10	HEW-01	11/15/19	1340	X	40-ml VOA	VOCs by EPA 8260B	>1,000	Standard TAT			
		↓		1340	X	Ice	1-4-Dioxane by 8270C MOD	100-1,000				
	11	HEW-0100		1350	X			0-10				
		↓		1360	X							
	12	HEW-02		1039	X							
		↓		1039	X							
	13	HEW-03		1063	X							
		↓		1063	X							
	14	HEW-04		1145	X							
		↓		1145	X							
	15	HEW-05		1116	X							
		↓		1116	X							
Total number of containers per analysis:					18	6					Total No. of Containers: 24	
Relinquished By: / Company:					Date / Time	Received By: / Company	Date / Time					
Sealice / H + A					11-15 / 1518	M. Puentes	11/15/19					
Relinquished By: / Company:					Date / Time	Received By: / Company	Date / Time					
M. Puentes					11/15/19 1552	Ken Puentes	11/15/19 1552					

<input type="checkbox"/>	No. of containers correct
<input type="checkbox"/>	Received in good condition
<input type="checkbox"/>	Custody seals secure
<input type="checkbox"/>	Conforms to COC document

Send Results to:  
Ken Puentes  
Suite 375  
9171 Towne Centre Drive  
San Diego, CA 92122  
Ph: 858-455-6500  
kpuentes@hargis.com

Temperature on receipt



## Login Sample Receipt Checklist

Client: Hargis + Associates, Inc.

Job Number: 570-13062-1

**Login Number: 13062**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	