



January 2024
Columbia Helicopters, Inc.
Aurora, Oregon



Annual Report 2023

Prepared for the Oregon Department of Environmental Quality

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Prepared for
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CERTIFICATION STATEMENT

The material and data in this report were prepared under the supervision and direction of the undersigned.



Expires May 31, 2024

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January 10, 2024

Date

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ABBREVIATIONS

| | |
|--------------------|--|
| µg/L | micrograms per liter |
| 1,1-DCE | 1,1-dichloroethene |
| 1,1,1-TCA | 1,1,1 trichloroethane |
| 1,2-DCA | 1,2-dichloroethane |
| Apex | Apex Laboratories, LLC |
| CHI | Columbia Helicopters, Inc. |
| DEQ | Oregon Department of Environmental Quality |
| DMR | discharge monitoring report |
| NPDES | National Pollutant Discharge Elimination System |
| RBCL | risk-based concentration level |
| RBDM | risk-based decision making |
| RD/RA Workplan | <i>Remedial Design and Remedial Action Workplan</i> |
| Record of Decision | <i>DEQ Remedial Action Record of Decision for the Columbia Helicopters, Inc., Site</i> |
| TCE | trichloroethene |
| VOC | volatile organic compound |

1 Introduction

This Annual Report provides a comprehensive summary of the work completed in 2023 and findings resulting from the ongoing monitoring and reporting at the Columbia Helicopters, Inc. (CHI), site near Aurora, Oregon (Figure 1). Remedial Actions completed at CHI from April 2000 through August 2018 were done in accordance with the requirements of the *Remedial Design and Remedial Action Workplan* (RD/RA Workplan; IT Corporation 1999). On September 21, 2018, a Certificate of Completion was filed with the State of Oregon, documenting that CHI has satisfactorily completed remedial actions outlined in the RD/RA Workplan. The *Project Closure Report* (Anchor QEA 2018) states that long-term monitoring and reporting will continue until risk-based concentration levels (RBCLs) for a 26-year exposure limit are attained. The monitoring program is shown in Table 1. This report has been prepared to meet the requirements of the *Project Closure Report* and consists of the following sections:

- Section 1: Introduction
- Section 2: Completed Actions
- Section 3: Planned Actions
- Section 4: Monthly Records and Significant Events
- Section 5: 2023 Annual Groundwater Monitoring
- Section 6: Status of Shutdown of Extraction Wells
- Section 7: Water Well and Development Review
- Section 8: Institutional Controls Review
- Section 9: Recommendations
- Section 10: References

2 Completed Actions

The following actions were completed during 2023:

- The groundwater extraction and treatment system was operated and maintained.
- Water levels in on- and off-site wells were measured on October 2, 2023.
- Monitoring wells, domestic drinking water wells, and extraction wells were sampled on October 2, 3, 4, and 11, 2023.
- Institutional controls were reviewed.
- The annual water well and development review was completed.
- The annual contamination notices were prepared and sent out by CHI to affected property owners.

3 Planned Actions

The following actions are planned through December 2024:

- Operate and maintain the groundwater extraction and treatment system.
- Perform groundwater monitoring scheduled for October 2024.
- Review institutional controls.
- Prepare annual contamination notices.
- Conduct an annual water well and development review.

4 Monthly Records and Significant Events

The National Pollutant Discharge Elimination System (NPDES) discharge monitoring reports (DMRs) that document system monitoring for January through December 2023 are included as Appendix A. The NPDES DMRs document system flow rates, effluent parameters, and significant operational events. Routine maintenance was performed on the groundwater extraction and treatment systems. Records of routine maintenance are maintained by CHI.

5 2023 Annual Groundwater Monitoring

5.1 Procedures

5.1.1 Water Level Measurements

On October 2, 2023, the depth to water was measured in each well with an electric water level probe. The measurements, estimated to be accurate to ± 0.01 foot, were converted to mean sea level elevations using surveyed reference elevations for each well, as detailed in Table 2. Well locations with corresponding groundwater elevations are shown in Figure 2, and groundwater potentiometric surface contours are shown in Figure 3.

5.1.2 Groundwater Sampling and Analysis

On October 2, 3, 4, and 11, 2023, groundwater and surface water samples were collected from the 12 wells identified in the monitoring plan for annual sampling. Monitoring was consistent with the *Project Closure Report* (Anchor QEA 2018) approved by the Oregon Department of Environmental Quality (DEQ) and filed with the State of Oregon on September 21, 2018. The details of the monitoring plan are shown in Table 1. Before sampling, each well was purged of at least 3 casing volumes of water. Purging continued until the groundwater pH, temperature, and specific conductance stabilized to within $\pm 10\%$ (see field sampling data sheets in Appendix B).

Various methods were used to purge and sample the observation wells (OW), monitoring wells (MW), and extraction wells (EXT). Dedicated stainless-steel pumps equipped with Teflon bladders are in wells OW-4, MW-22, MW-23, and MW-26. These wells were purged and sampled with the dedicated pumps and attached dedicated tubing. Monitoring well MW-29 was purged using a dedicated submersible pump. Following purging, MW-29 was sampled with a single-use polyethylene bailer. Extraction wells EXT-2, EXT-3, and EXT-4 were sampled with single-use polyethylene bailers. Extraction well EXT-6 was sampled from a sampling tap at the wellhead.

The CHI water supply well was sampled from a valve at the wellhead. The well pump was operating at the time of sample collection. The valve was opened and flushed of approximately 1 gallon of water; the valve was then partially closed to create a gentle flow to fill the sample containers. The Anderson and Buehler domestic wells were sampled from spigots located as close to the wellheads as possible. A minimum of 50 gallons of water were purged from both the Anderson and Buehler wells before they were sampled.

Sampling of the two groundwater seeps was attempted, but both locations were dry at the time of sampling. All water samples were analyzed at Apex Laboratories, LLC (Apex), for halogenated volatile organic compounds (VOCs). The testing methods were consistent with those required by the *Project*

Closure Report (Anchor QEA 2018). Field sampling data sheets and a sampling memorandum are included as Appendix B. Laboratory reports and chain-of-custody documents are included as Appendix C. Sampling results for VOCs are in Table 3, and sampling results for natural attenuation parameters are in Table 4. Appendix D contains time-series concentration plots of VOCs at the wells and seeps.

5.1.3 *Quality Control*

Two duplicate samples (MW-26 and OW-4), a field blank sample, and a trip blank for VOCs were submitted to Apex for analysis. All samples were blind-labeled in the field. Samples were packed in iced coolers and shipped under chain-of-custody control to Apex in Tigard, Oregon. Laboratory data were subjected to a standard data validation review. The data were judged to be acceptable for their intended use as qualified. A data validation memorandum is included as Appendix E.

5.2 Results

5.2.1 *Groundwater Elevations*

Groundwater elevations in October 2023 were generally within a foot of those measured in October 2022. A water level measurement was attempted in monitoring well MW-21 in October 2023, but the water level probe was not responsive, and an accurate level could not be measured. Groundwater levels for October 2022 and October 2023 are in Table 2. The groundwater elevation map developed from the October 2023 data shows that groundwater generally flows east-northeast (Figure 3).

5.2.2 *Volatile Organic Compounds*

VOCs were detected above U.S. Environmental Protection Agency method reporting limits in samples from wells OW-4, MW-22, MW-26, MW-29, EXT-3, and EXT-6 (Table 3). VOCs were not detected above their respective method reporting limits in samples from monitoring well MW-23, extraction wells EXT-2 and EXT-4, the CHI production well, or the Anderson and Buehler domestic wells. While all VOC concentrations in observation well OW-4 were below their respective RBCLs in the October 2019 sampling event, concentrations of 1,1,1-trichloroethane (1,1,1-TCA) and 1,1-dichloroethene (1,1-DCE) were higher than they had been in recent years but have steadily declined through October 2022 with a slight increase in 2023 above the 2022 concentrations. Anchor QEA will continue to closely monitor concentrations in this well.

All concentrations were below applicable trigger levels in the respective wells.

5.2.3 *Natural Attenuation Parameters*

The results of laboratory and field analyses of groundwater natural attenuation parameters are presented in Table 4. Table 4 summarizes historical natural attenuation water quality data for both laboratory and field measurements, including the October 2023 results. Table 4 also includes the concentrations and the ratio of 1,1,1-TCA to 1,1-DCE. In general, the wells in the first column of the table represent the plume as follows: MW-25, background; OW-4, source; MW-12 and MW-22, center of plume; and MW-17, MW-20, MW-23, and MW-26, perimeter to downgradient of plume. Monitoring wells MW-12 and MW-17 were decommissioned in April 2005 and are no longer sampled. As part of the revised monitoring program approved by DEQ in an email dated September 26, 2012, monitoring wells MW-25 and MW-20 are no longer sampled as part of the monitoring program (Read 2012).

Natural attenuation of the VOCs in the groundwater has continued, as evidenced by the continued concentration declines of all compounds to below their respective RBCLs.

6 Status of Shutdown of Extraction Wells

In December 2017, new 1-year RBCLs were proposed to DEQ in the *Remedial Design and Remedial Action Work Plan Addendum* (Anchor QEA 2017). The new RBCLs were incorporated into the *Project Closure Report* (Anchor QEA 2018). The current RBCLs for the site are as follows:

| Contaminant of Concern | Maximum Contaminant Level (µg/L) | 2017 RBCLs (µg/L) | DEQ RBDM RBCLs (µg/L) |
|------------------------|----------------------------------|-------------------|-----------------------|
| | | 1-year | 26-year |
| 1,2-DCA | 5 | 4.57 | 0.17 |
| TCE | 5 | 3.23 | 0.49 |
| 1,1-DCE | 7 | 325 | 280 |
| 1,1,1-TCA | 200 | 8,800 | 8,000 |

The RBCLs for a 1-year exposure duration for all on-site monitoring wells and extraction wells have been achieved. Extraction well EXT-1 has been shut down since the second quarter of 2001. Extraction wells EXT-2, EXT-3, EXT-4, and EXT-5 were shut down on January 30, 2004. Extraction well EXT-6 was shut down in May 2007. Pumping from EXT-6 resumed in June 2008 and continued until October 19, 2012. Pumping from EXT-6 resumed in January 2014 and continued until February 5, 2016.

The overall plan is to keep the pumps off in extraction wells EXT-1 through EXT-6 as long as VOC concentrations are maintained below the 1-year exposure duration RBCLs. Even though VOC concentrations at observation well OW-4 remain below the 1-year exposure duration RBCLs, given the increased VOC concentrations referenced in Section 5.2.2, CHI began to operate the extraction system in January 2020 as a proactive measure. Concentrations in OW-4 decreased in 2020 and 2021; therefore, CHI discontinued operation of the system in January 2022. Extraction wells EXT-2, EXT-3, EXT-4, and EXT-6 will remain on the current monitoring schedule. Monitoring and institutional controls will continue until the lower of the maximum contaminant levels or the RBCLs for a 26-year exposure limit is attained.

7 Water Well and Development Review

This section updates the water well and development review conducted in December 2022. The review was conducted as specified in the *Project Closure Report* (Anchor QEA 2018). The annual review is necessary to determine whether off-site third parties have installed new water supply wells, determine if new off-site supply wells are proposed within the affected properties, and identify new or proposed development in the area. The area includes the affected properties, as defined in the *DEQ Remedial Action Record of Decision for the Columbia Helicopters, Inc., Site* (Record of Decision; DEQ 1997), and a buffer zone that extends approximately 1,000 feet beyond the downgradient edge of the groundwater contaminant plume. The last review (submitted December 2022) included data from December 4, 2021, through December 1, 2022, and this review provides updated information from December 2, 2022, to December 1, 2023.

Information was obtained from the following sources:

- Marion and Clackamas County Building Departments (new permit applications)
- Oregon Water Resources Department (water rights and well construction records)
- Visual observation (reports by CHI personnel of drilling or construction in the area)
- Marion and Clackamas County Land Use and Planning Departments

The December 1, 2023, memorandum included as Appendix F identifies the properties for which information was obtained, lists the information source, and documents the results of the records search.

7.1 Building Permits

Building permit information for the affected properties and for properties within 1,000 feet of the horizontal extent of the plume was obtained online and by telephone from the Clackamas and Marion County Building Departments.

7.1.1 Clackamas County

For the period of December 2, 2022, to December 1, 2023, no permits were obtained for any of the five affected properties.

7.1.2 Marion County

For the period of December 2, 2022, to December 1, 2023, no permits were obtained for any of the three affected properties.

7.2 Water Rights

No new water rights were issued within the search radius. Database search results are in Appendix F.

7.3 Water Supply Wells, Monitoring Wells, and Geotechnical Borings

No new water supply wells or monitoring wells were installed within the search radius. CHI did not observe any wells being installed on the affected properties.

8 Institutional Controls Review

The effectiveness of institutional controls is evaluated to assess whether the controls should be modified or terminated because of improvement in groundwater quality or changes in land or water use. No significant changes in land or water use were noted in 2023. No modifications are proposed to institutional controls for the site.

8.1 Annual Contamination Notice

An annual contamination notice is sent out by CHI to provide affected property owners with an updated summary of groundwater monitoring data. No modifications to the notice were made based on changes in land or water use. Notices for 2023 have been sent out to the current Anderson (now Winston), Staehely, and Buehler (now Brown and Arens) property owners. Copies of the annual contamination notices are included as Appendix G.

8.2 Annual Water Well and Development Review

No modifications are proposed based on changes in water quality and land or water use.

8.3 Access Agreements

Access agreements with other property owners currently allow sampling of monitoring wells. No other modifications with current property owners are necessary, nor are additional access agreements required based on significant changes in water quality.

9 Recommendations

9.1 Groundwater Seeps

As outlined in the RD/RA Workplan (IT Corporation 1999), historical VOC concentrations in the off-site groundwater plume upgradient of the ravine are substantially below the Oregon water quality criteria for protection of aquatic life. Therefore, significant adverse effects on surface water quality are not likely to result from current or future contaminant migration. The Record of Decision did not consider human exposure to surface water from the seeps in the ravine because it is unlikely to occur (DEQ 1997).

Two groundwater seeps are routinely sampled under the current monitoring program. Groundwater seeps S-4 and S-5 monitor seeps as they enter surface water at the downgradient edge of the off-site plume in the ravine. Groundwater seeps S-4 and S-5 have been monitored since 1999. RBCLs have never been exceeded at the seep locations, and concentrations have been declining.

It is therefore recommended that monitoring of the seeps be discontinued.

9.2 Reporting

Under the current reporting schedule, the annual monitoring report is due to DEQ on the last day of December to present the results of the October annual monitoring event, the water well and development review, and review of institutional controls. Due to a change in corporate structure within CHI, additional review time is necessary prior to submittal to DEQ. Anchor QEA is therefore requesting a permanent change in reporting schedule to the last day of January each year.

10 References

Anchor QEA (Anchor QEA, LLC), 2017. *Remedial Design and Remedial Action Work Plan Addendum*. Columbia Helicopters, Inc. Aurora, Oregon. Prepared for the Oregon Department of Environmental Quality. December 2017.

Anchor QEA, 2018. *Project Closure Report*. Columbia Helicopters, Inc. Aurora, Oregon. Prepared for Columbia Helicopters, Inc. May 2018.

DEQ (Oregon Department of Environmental Quality), 1997. *DEQ Remedial Action Record of Decision for the Columbia Helicopters, Inc., Site*. Marion County, Oregon. Oregon Department of Environmental Quality Waste Management and Cleanup Division. December 10, 1997.

IT Corporation, 1999. *Remedial Design and Remedial Action Workplan*. Columbia Helicopters, Inc. Aurora, Oregon. Prepared for Columbia Helicopters, Inc. October 1999.

Read, Norm, 2012. Regarding: CHI 2012 Monitoring Plan. Email to: John Renda and David Tripp (Anchor QEA, LLC). September 26, 2012.

Tables

Table 1
Monitoring Program

| Point | Volatile Organic Compounds¹ Annual² |
|------------------------------------|--|
| Observation Wells | |
| OW-4 | X |
| Monitoring Wells | |
| MW-22 | X |
| MW-23 | X |
| MW-26 | X |
| MW-29 | X |
| Extraction Wells | |
| EXT-2 | X |
| EXT-3 | X |
| EXT-4 | X |
| EXT-6 | X |
| Water Supply Wells | |
| CHI Supply | X |
| Anderson (Winston Property) | X |
| Buehler (Brown and Arens Property) | X |
| Surface Water | |
| S-4 | X |
| S-5 | X |

Notes:

1. Groundwater analyzed by U.S. Environmental Protection Agency Method 8260 (reporting only the 8021 analyte list).

2. Annual sampling performed in October.

CHI: Columbia Helicopters, Inc.

Table 2
Fall 2023 Water Level Data

| Well No. | Filter Pack Interval (feet) | Reference Elevation ^a (feet, mean sea level) | 10/4/2022 | 10/2/2023 | Change in Feet |
|----------------------|-----------------------------|---|-----------|-----------|----------------|
| OW-1 ^b | 14 to 24 | 191.19 | 180.05 | 179.90 | -0.15 |
| OW-3 | 16 to 24 | 191.89 | 178.93 | 178.52 | -0.41 |
| OW-4 | 15 to 24 | 194.16 | 179.06 | 179.01 | -0.05 |
| OW-10 ^c | 32 to 40 | 192.57 | 177.60 | 177.78 | 0.18 |
| OW-11 ^c | 30 to 43 | 194.85 | 178.85 | 178.76 | -0.09 |
| MW-13 ^c | 30 to 48 | 190.78 | 178.39 | 178.09 | -0.30 |
| MW-14 | 5 to 22.5 | 193.36 | 177.01 | 177.00 | -0.01 |
| MW-15 ^c | 20 to 44 | 193.69 | 176.66 | 176.69 | 0.03 |
| MW-16 | 50 to 60 | 193.05 | 176.39 | 176.37 | -0.02 |
| MW-19 ^c | 36.4 to 51 | 190.10 | 174.37 | 174.50 | 0.13 |
| MW-20 ^d | 77 to 93 | 191.14 | 173.02 | 172.86 | -0.16 |
| MW-22 ^c | 34 to 47 | 193.67 | 174.45 | 174.07 | -0.38 |
| MW-23 ^c | 31.4 to 44.4 | 191.87 | 175.50 | 175.13 | -0.37 |
| MW-25 ^c | 27 to 45 | 194.51 | 179.64 | 179.66 | 0.02 |
| MW-26 ^c | 32 to 45 | 187.55 | 158.54 | 158.50 | -0.04 |
| MW-27 ^c | 30.1 to 43.4 | 187.63 | 162.80 | 162.13 | -0.67 |
| MW-28 ^c | 32 to 45 | 189.31 | 171.98 | 171.66 | -0.32 |
| MW-29 ^c | 43.1 to 67.2 | 190.41 | 174.20 | 173.95 | -0.25 |
| PZ-1 | 16 to 28 | 191.90 | 176.46 | 176.51 | 0.05 |
| PZ-2 | 21 to 27.5 | 192.60 | 177.86 | 178.95 | 1.09 |
| PZ-3 | 17 to 29 | 192.35 | 179.65 | 179.11 | -0.54 |
| EXT-1 | 10 to 40 | 192.35 | 175.12 | 175.45 | 0.33 |
| EXT-2 | 10 to 42 | 192.79 | 171.07 | 175.42 | 4.35 |
| EXT-3 | 10 to 40.5 | 193.50 | 177.05 | 177.07 | 0.02 |
| EXT-4 | 10 to 40 | 193.51 | 176.25 | 178.50 | 2.25 |
| EXT-5 | 7 to 40 | 193.31 | 179.31 | 178.75 | -0.56 |
| EXT-6 ^c | 7 to 40 | 191.00 | 178.82 | 178.74 | -0.08 |
| MW-21 ^{d,e} | 107 to 128.5 | 191.39 | 104.27 | ND | ND |

Notes:

- a. Reference elevations resurveyed in March 1993
 - b. Top of well casing lowered; well resurveyed June 13, 1996
 - c. Intermediate-depth well used for groundwater contour in Figure 3
 - d. Raised during the Arndt Road/Airport Road widening project; resurveyed November 21, 2006
 - e. Screened in Troutdale Formation
- ND: none detected at or above MRL

Table 3
Fall 2023 Annual Surface and Groundwater Monitoring Results, Halogenated Volatile Organic Compounds

| Analyte | MRL | CHI | Anderson | Buehler | | | | | | | | | |
|---------------------------|-------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | Production Well | Domestic Well | Domestic Well | MW-22 | MW-23 | MW-26 | MW-26 (DUP) | MW-29 | OW-4 | OW-4 (DUP) | EXT-2 | EXT-3 |
| | | Blind Sample ID | | | | | | | | | | | |
| | | CHI-100423-11 | CHI-100223-03 | CHI-100223-04 | CHI-100323-06 | CHI-100323-05 | CHI-100223-01 | CHI-100223-02 | CHI-100323-07 | CHI-100323-08 | CHI-100323-09 | CHI-100423-12 | CHI-100423-13 |
| Bromodichloromethane | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 5.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon tetrachloride | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 5.00 | ND | ND | ND | ND | ND | ND | ND | ND | 15.0 | 15.8 | ND | ND |
| Chloroform | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 5.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 0.40 | ND | ND | ND | ND | ND | 0.660 | 0.720 | ND | 489 | 535 | ND | 22.5 |
| 1,2-Dichloroethane | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethene | 0.40 | ND | ND | ND | 1.74 | ND | 1.38 | 1.56 | 1.22 | 23.0 | 22.7 | ND | 1.38 |
| Cis-1,2-Dichloroethene | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | 6.93 | 6.77 | ND | ND |
| Trans-1,2-Dichloroethene | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Cis-1,3-Dichloropropene | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trans-1,3-Dichloropropene | 1.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene chloride | 10.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethene | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.430 |
| 1,1,1-Trichloroethane | 0.40 | ND | ND | ND | 0.96 | ND | ND | ND | 0.840 | 117 | 116 | ND | 6.79 |
| 1,1,2-Trichloroethane | 0.50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethene | 0.40 | ND | ND | ND | 1.09 | ND | ND | ND | 0.560 | ND | ND | ND | ND |
| Trichlorofluoromethane | 2.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichlorotrifluoroethane | 2.00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl chloride | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Table 3
Fall 2023 Annual Surface and Groundwater Monitoring Results, Halogenated Volatile Organic Compounds

| Analyte | MRL | EXT-4 | EXT-6 |
|---------------------------|-------|-----------------|---------------|
| | | Blind Sample ID | |
| | | CHI-100423-14 | CHI-101123-15 |
| Bromodichloromethane | 1.00 | ND | ND |
| Bromoform | 1.00 | ND | ND |
| Bromomethane | 5.00 | ND | ND |
| Carbon tetrachloride | 1.00 | ND | ND |
| Chlorobenzene | 0.50 | ND | ND |
| Chloroethane | 5.00 | ND | ND |
| Chloroform | 1.00 | ND | ND |
| Chloromethane | 5.00 | ND | ND |
| Dibromochloromethane | 1.00 | ND | ND |
| 1,2-Dichlorobenzene | 0.50 | ND | ND |
| 1,3-Dichlorobenzene | 0.50 | ND | ND |
| 1,4-Dichlorobenzene | 0.50 | ND | ND |
| Dichlorodifluoromethane | 1.00 | ND | ND |
| 1,1-Dichloroethane | 0.40 | ND | 43.2 |
| 1,2-Dichloroethane | 0.40 | ND | ND |
| 1,1-Dichloroethene | 0.40 | ND | 1.57 |
| Cis-1,2-Dichloroethene | 0.40 | ND | 0.600 |
| Trans-1,2-Dichloroethene | 0.40 | ND | ND |
| 1,2-Dichloropropane | 0.50 | ND | ND |
| Cis-1,3-Dichloropropene | 1.00 | ND | ND |
| Trans-1,3-Dichloropropene | 1.00 | ND | ND |
| Methylene chloride | 10.00 | ND | ND |
| 1,1,2,2-Tetrachloroethane | 0.50 | ND | ND |
| Tetrachloroethene | 0.40 | ND | ND |
| 1,1,1-Trichloroethane | 0.40 | ND | 6.74 |
| 1,1,2-Trichloroethane | 0.50 | ND | ND |
| Trichloroethene | 0.40 | ND | ND |
| Trichlorofluoromethane | 2.00 | ND | ND |
| Trichlorotrifluoroethane | 2.00 | ND | ND |
| Vinyl chloride | 0.40 | ND | ND |

Table 3

Fall 2023 Annual Surface and Groundwater Monitoring Results, Halogenated Volatile Organic Compounds

Notes:

All values expressed as µg/L (ppb).

Bold: detected at the concentration shown

µg/L: micrograms per liter

CHI: Columbia Helicopters, Inc.

DUP: duplicate

MRL: method reporting limit

ND: none detected at or above MRL

ppb: parts per billion

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|--------------------|----------------|-------------|
| OW-1 | 1/20/1998 | 266.1 | 11.73 | 0.611 | — | 3.28 | — | 2.58 | — | — | 107 | — | — | — |
| | 4/7/1998 | 154.7 | 1.62 | 1.37 | — | 3.31 | — | 3.96 | — | NA | 107 | 0.604 ^a | — | — |
| | 7/16/1998 | 91.3 | 2.73 | 0.522 | — | 3.28 | — | 2.67 | — | — | 102 | — | — | — |
| | 10/8/1998 | 210.0 | 5.72 | 0.584 | — | 3.68 | — | 2.53 | — | — | NA | — | — | — |
| OW-4 | 1/20/1998 | -15.0 | 12.13 | — | 1.9 | 4.11 | — | 5.05 | — | 0.055 | 140 | 26.6 | 142 | 0.2 |
| | 4/7/1998 | NA | 5.59 | — | 1.7 | 4.02 | — | 3.93 | — | NA | 118 | 162 | 23.7 | 6.8 |
| | 7/16/1998 | 61.7 | 0.37 | 3.32 | 0.1 | 5.7 | — | 4.95 | — | — | 69.1 | 9.25 | — | — |
| | 10/8/1998 | 173.0 | 0.31 | 3.00 | — | 5.96 | — | 3.82 | — | — | NA | — | — | — |
| | 4/30/1999 | 110.0 | 4.01 | 2.4 | — | 4.04 | — | 2.47 | — | — | 58 | — | — | — |
| | 10/27/1999 | 78.0 | 3.93 | 2.2 | — | 3.79 | — | 2.48 | 5.62 | — | 59 | 1.04 | — | — |
| | 3/2/2000 | 332.5 | 4.38 | 2.6 | — | 3.85 | — | 3.09 | — | — | 56 | — | — | — |
| | 10/26/2000 | 143.0 | 3.01 | 2.74 | — | 3.9 | — | 2.94 | 5.07 | — | 47.6 | — | — | — |
| | 3/1/2001 | 204.0 | 2.91 | 5.68 | — | 3.8 | 1.31 | 4.77 | NA | — | 48.0 | 5.90 | — | — |
| | 10/4/2001 | 143.0 | 4.35 | NA | NA | NA | NA | 18.9 | NA | NA | NA | 2.87 | — | — |
| | 3/14/2002 | 197.0 | 4.63 | NA | NA | NA | NA | 18.1 | NA | NA | NA | 1.35 | — | — |
| | 10/25/2002 | 201.4 | 2.22 | NA | NA | NA | NA | 7.06 | NA | NA | NA | 11.0 | 1.03 | 10.7 |
| | 3/6/2003 | 266.0 | 1.56 | NA | NA | NA | NA | 4.35 | NA | NA | NA | 2.38 | — | — |
| | 3/6/2003 | 266.0 | 1.56 | NA | NA | NA | NA | 4.33 | NA | NA | NA | 2.52 | — | — |
| | 11/5/2003 | 65.1 | 4.59 | NA | NA | NA | NA | 4.11 | NA | NA | NA | 1.45 | — | — |
| | 3/10/2004 | 151.0 | 2.11 | NA | NA | NA | NA | 4.01 | NA | NA | NA | — | — | — |
| | 10/26/2004 | 123.0 | 1.70 | NA | NA | NA | NA | 11.5 | NA | NA | NA | 6.47 | 0.63 | 10.3 |
| | 3/9/2005 | -63.4 | 2.78 | NA | NA | NA | NA | 11.6 | NA | NA | NA | 1.51 | — | — |
| | 10/11/2005 | -26.2 | 4.25 | NA | NA | NA | NA | 9.02 | NA | NA | NA | 4.25 | 1.07 | 4.0 |
| | 3/7/2006 | 16.5 | 2.70 | NA | NA | NA | NA | 7.55 | NA | NA | NA | — | — | — |
| | 10/18/2006 | 20.0 | 2.90 | NA | NA | NA | NA | 6.24 | NA | NA | NA | 6.12 | 3.24 | 1.9 |
| | 3/1/2007 | 11.0 | 2.90 | NA | NA | NA | NA | 6.48 | NA | NA | NA | — | — | — |
| | 10/30/2007 | 232.0 | 1.38 | NA | NA | NA | NA | 6.54 | NA | NA | NA | 7.60 | 3.29 | 2.3 |
| | 3/13/2008 | 118.9 | 3.57 | NA | NA | NA | NA | 5.95 | NA | NA | NA | 3.75 | 1.00 | 3.8 |
| | 10/21/2008 | 238.0 | 0.96 | NA | NA | NA | NA | 5.15 | NA | NA | NA | 23.00 | 6.68 | 3.4 |
| | 3/4/2009 | 182.6 | 1.85 | NA | NA | NA | NA | NA | NA | NA | NA | 0.86 | — | — |
| 10/6/2009 | 95.2 | 1.27 | NA | NA | NA | NA | NA | NA | NA | NA | 6.34 | 1.93 | 3.3 | |
| 3/11/2010 | 123.3 | 8.62 | NA | NA | NA | NA | NA | NA | NA | NA | 0.58 | — | — | |
| 10/26/2010 | 64.2 | 3.06 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| (duplicate) | 10/26/2010 | 64.2 | 3.06 | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 3/15/2011 | 196.5 | 3.96 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| (duplicate) | 3/15/2011 | 196.5 | 3.96 | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 10/25/2011 | 233.7 | 4.34 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| (duplicate) | 10/25/2011 | 233.7 | 4.34 | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 3/14/2012 | 184.1 | 1.71 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 10/2/2012 | 144.1 | 3.64 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 10/2/2013 | 211.0 | 2.36 | NA | NA | NA | NA | NA | NA | NA | NA | 5.98 | 1.88 | 3.18 | |
| 10/2/2014 | 183.0 | 2.87 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 10/7/2015 | 211.1 | 1.89 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | |
| 10/20/2016 | 289.9 | 2.40 | NA | NA | NA | NA | NA | NA | NA | NA | 8.98 | 4.76 | 1.89 | |
| 10/10/2017 | 71.9 | 1.29 | NA | NA | NA | NA | NA | NA | NA | NA | 14.10 | 13.90 | 1.01 | |
| (duplicate) | 10/10/2017 | 71.9 | 1.29 | NA | NA | NA | NA | NA | NA | NA | 14.50 | 11.00 | 1.32 | |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|--------------------|------------|----------------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| | 10/3/2018 | 109.7 | 2.35 | NA | NA | NA | NA | NA | NA | NA | NA | 19.60 | 11.50 | 1.70 |
| | 10/1/2019 | 63.1 | 1.82 | NA | NA | NA | NA | NA | NA | NA | NA | 1900 | 261.0 | 7.28 |
| (duplicate) | 10/1/2019 | 63.1 | 1.82 | NA | NA | NA | NA | NA | NA | NA | NA | 1930 | 280.0 | 6.89 |
| | 10/6/2020 | 115.2 | 3.37 | NA | NA | NA | NA | NA | NA | NA | NA | 895 | 128.0 | 6.99 |
| | 10/6/2021 | 135.5 | 1.85 | NA | NA | NA | NA | NA | NA | NA | NA | 180.00 | 38.6 | 4.7 |
| | 10/5/2022 | 126.4 | 0.89 | NA | NA | NA | NA | NA | NA | NA | NA | 84.40 | 10.3 | 8.2 |
| (duplicate) | 10/5/2022 | 126.4 | 0.89 | NA | NA | NA | NA | NA | NA | NA | NA | 75.50 | 10.0 | 7.6 |
| | 10/3/2023 | 223.2 | 1.28 | NA | NA | NA | NA | NA | NA | NA | NA | 117 | 23.0 | 5.1 |
| (duplicate) | 10/3/2023 | 223.2 | 1.28 | NA | NA | NA | NA | NA | NA | NA | NA | 116 | 22.7 | 5.1 |
| MW-12 | 1/20/1998 | 163.9 | 3.56 | 2.62 | — | 5.32 | — | 6.59 | — | — | 104 | 166 | 6.12 | 27.1 |
| | 4/17/1998 | NA | 2.82 | 2.93 | — | 5.66 | — | 7.19 | — | — | 96.8 | 207 | 164 | 1.3 |
| (duplicate) | 4/17/1998 | NA | 2.82 | 2.91 | — | 5.65 | — | 7.19 | — | — | 95.4 | 188 | 151 | 1.2 |
| | 7/16/1998 | 55.4 | 0.28 | 2.89 | — | 5.43 | — | 6.33 | — | — | 90 | 146 | 86 | 1.7 |
| (duplicate) | 7/16/1998 | 55.4 | 0.28 | 2.87 | — | 5.46 | — | 6.36 | — | — | 88.2 | 149 | 101 | 1.5 |
| | 10/8/1998 | 201.0 | 0.36 | 2.92 | — | 5.36 | — | 5.84 | — | — | NA | 122 | — | — |
| (duplicate) | 10/8/1998 | 201.0 | 0.36 | 2.95 | — | 5.39 | — | 6.32 | — | — | NA | 56.8 | 37.8 | 1.5 |
| | 4/30/1999 | 201.0 | 2.67 | 2.93 | — | 4.71 | — | 5.55 | — | — | 94 | 24.1 | 15.6 | 1.5 |
| | 10/27/1999 | -60.0 | 1.72 | 2.54 | — | 4.22 | — | 4.57 | — | — | 94 | 23.1 | 18.2 | 1.3 |
| | 3/2/2000 | 340.0 | 2.33 | 1.89 | — | 2.99 | — | 4.90 | — | — | 108 | 10.6 | 5.88 | 1.8 |
| | 10/26/2000 | 163.0 | 1.53 | 1.53 | — | 2.74 | — | 3.70 | 6.64 | — | 136 | 9.75 | 3.07 | 3.2 |
| | 3/1/2001 | 202.0 | 3.24 | 2.44 | — | 3.06 | — | 4.74 | NA | — | 114 | 4.79 | 3.40 | 1.4 |
| | 10/4/2001 | 137.0 | 2.50 | NA | NA | NA | NA | 5.17 | NA | NA | NA | 5.13 | 3.19 | 1.6 |
| | 3/13/2002 | 71.0 | 2.35 | NA | NA | NA | NA | 5.71 | NA | NA | NA | 2.60 | 2.13 | 1.2 |
| | 10/25/2002 | 99.9 | 1.37 | NA | NA | NA | NA | 5.83 | NA | NA | NA | 2.73 | 2.36 | 1.2 |
| | 3/5/2003 | 267.1 | 0.47 | NA | NA | NA | NA | 5.33 | NA | NA | NA | 3.08 | 4.11 | 0.7 |
| | 11/5/2003 | 84.7 | 0.43 | NA | NA | NA | NA | 5.20 | NA | NA | NA | 2.20 | 2.46 | 0.9 |
| (duplicate) | 11/5/2003 | 84.7 | 0.43 | NA | NA | NA | NA | 5.32 | NA | NA | NA | 2.19 | 2.74 | 0.8 |
| | 3/10/2004 | 186.0 | 2.80 | NA | NA | NA | NA | 5.04 | NA | NA | NA | 2.58 | 5.35 | 0.5 |
| | 10/27/2004 | 148.0 | 2.70 | NA | NA | NA | NA | 5.31 | NA | NA | NA | 3.70 | 4.13 | 0.9 |
| | 3/7/2005 | -52.6 | 2.16 | NA | NA | NA | NA | 4.81 | NA | NA | NA | 2.34 | 2.68 | 0.9 |
| | 4/25/2005 | Decommissioned | | | | | | | | | | | | |
| MW-17 ^M | 4/7/1998 | 170.8 | 1.56 | 2.27 | — | 4.76 | — | 3.91 | — | NA | 93.6 | 11.4 | 18.4 | 0.6 |
| MW-17 | 1/20/1998 | 136.6 | 1.70 | 1.09 | — | 3.06 | — | 4.10 | — | — | 129 | 11.8 | 20.9 | 0.6 |
| | 4/7/1998 | 153.9 | 2.01 | 0.536 | — | 3.09 | — | 3.02 | — | NA | 110 | 12.5 | 16.9 | 0.7 |
| | 7/16/1998 | 68.3 | 0.55 | 1.24 | — | 3.01 | — | 4.53 | — | — | 114 | 19.5 | 24.8 | 0.8 |
| | 10/15/1998 | 168.0 | 3.21 | 1.15 | — | 3.27 | — | 3.74 | — | — | NA | 15.5 | 16.2 | 1.0 |
| | 4/30/1999 | 208.0 | 8.57 | 1.94 | — | 4.84 | — | 3.41 | — | — | 92 | 1.9 | 6.97 | 0.3 |
| | 10/27/1999 | -112.0 | 7.30 | 1.54 | — | 4.34 | — | 3.18 | 11 | — | 113 | 7.4 | 7.19 | 1.0 |
| | 3/2/2000 | 167.3 | 3.37 | 1.54 | — | 3.69 | — | 3.97 | — | — | 109 | 7.18 | 6.54 | 1.1 |
| | 10/26/2000 | 155.0 | 6.00 | 1.14 | — | 4.02 | 2.23 | 3.41 | 5.9 | — | 121 | 11.4 | 8.86 | 1.3 |
| | 3/1/2001 | 197.0 | 7.62 | 0.924 | — | 2.64 | 1.58 | 3.80 | NA | — | 124 | 3.67 | 5.38 | 0.7 |
| | 10/4/2001 | 165.0 | 5.76 | NA | NA | NA | NA | 3.91 | NA | NA | NA | 4.92 | 6.99 | 0.7 |
| | 3/13/2002 | 32.0 | 7.89 | NA | NA | NA | NA | 3.86 | NA | NA | NA | 7.18 | 10.4 | 0.7 |
| (duplicate) | 3/13/2002 | 32.0 | 7.89 | NA | NA | NA | NA | 3.85 | NA | NA | NA | 7.31 | 10.1 | 0.7 |
| MW-17 | 10/24/2002 | 103.7 | 5.56 | NA | NA | NA | NA | 4.44 | NA | NA | NA | 2.73 | 2.36 | 1.2 |
| | 3/6/2003 | 177.4 | 6.82 | NA | NA | NA | NA | 3.92 | NA | NA | NA | 3.43 | 6.80 | 0.5 |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| | 11/5/2003 | 99.9 | 5.97 | NA | NA | NA | NA | 6.00 | NA | NA | NA | 2.86 | 4.83 | 0.6 |
| | 3/9/2004 | 169.0 | 6.79 | NA | NA | NA | NA | 3.08 | NA | NA | NA | 2.12 | 3.30 | 0.6 |
| | 10/26/2004 | -39.0 | 1.10 | NA | NA | NA | NA | 10.30 | NA | NA | NA | 1.02 | 1.57 | 0.6 |
| | 3/9/2005 | -55.4 | 2.86 | NA | NA | NA | NA | 3.39 | NA | NA | NA | 1.81 | 3.52 | 0.5 |
| | 4/25/2005 | Decommissioned | | | | | | | | | | | | |
| MW-20 | 1/21/1998 | -160.0 | 0.34 | — | 0.6 | — | 180 | 2.71 | 4.45 | — | 136 | — | — | — |
| | 4/17/1998 | NA | — | — | 1.1 | 3.08 | 420 | 3.02 | — | — | 148 | — | — | — |
| | 7/15/1998 | -77.6 | 0.11 | — | 0.8 | — | 410 | 3.00 | — | — | 144 | — | — | — |
| | 10/15/1998 | -131.0 | 0.72 | — | — | — | — | 2.72 | — | — | NA | — | — | — |
| | 4/30/1999 | -133.0 | 1.99 | — | 0.8 | — | 3700 | 2.73 | — | — | 148 | — | — | — |
| | 10/27/1999 | -142.0 | 1.56 | — | — | — | 84.7 | 2.27 | — | — | 154 | — | — | — |
| | 3/2/2000 | -130.8 | 0.24 | — | 0.6 | — | 120 | 3.22 | — | — | 149 | — | — | — |
| | 10/26/2000 | 157.0 | 0.75 | — | 0.8 | — | 187 | 2.63 | 1.86 | — | 162 | — | — | — |
| (duplicate) | 10/26/2000 | 157.0 | 0.75 | — | 0.8 | — | 194 | 2.65 | — | — | 162 | — | — | — |
| | 2/28/2001 | -291.0 | 0.70 | — | 0.9 | — | 561 | 3.02 | NA | — | 156 | — | — | — |
| (duplicate) | 2/28/2001 | -291.0 | 0.70 | — | 0.9 | — | 618 | 3.02 | NA | — | 155 | — | — | — |
| | 10/4/2001 | -183.0 | 0.42 | NA | NA | NA | NA | 3.14 | NA | NA | NA | — | — | — |
| | 3/13/2002 | -183.0 | 0.11 | NA | NA | NA | NA | 3.08 | NA | NA | NA | — | — | — |
| | 10/24/2002 | -169.8 | 0.12 | NA | NA | NA | NA | 3.28 | NA | NA | NA | — | — | — |
| (duplicate) | 10/24/2002 | -169.8 | 0.12 | NA | NA | NA | NA | 3.12 | NA | NA | NA | — | — | — |
| | 3/6/2003 | -146.0 | 0.25 | NA | NA | NA | NA | 3.06 | NA | NA | NA | — | — | — |
| | 11/5/2003 | -184.8 | 0.13 | NA | NA | NA | NA | 3.62 | NA | NA | NA | — | — | — |
| | 3/9/2004 | -123.0 | 0.71 | NA | NA | NA | NA | 3.13 | NA | NA | NA | — | — | — |
| | 10/26/2004 | 41.0 | 0.80 | NA | NA | NA | NA | 3.53 | NA | NA | NA | — | — | — |
| | 3/10/2005 | -82.1 | 0.32 | NA | NA | NA | NA | 3.43 | NA | NA | NA | — | — | — |
| (duplicate) | 3/10/2005 | -82.1 | 0.32 | NA | NA | NA | NA | 3.44 | NA | NA | NA | — | — | — |
| | 3/10/2006 | -30.4 | 1.88 | NA | NA | NA | NA | 2.86 | NA | NA | NA | — | — | — |
| | 10/18/2006 | -51.0 | 1.90 | NA | NA | NA | NA | 3.35 | NA | NA | NA | — | — | — |
| (duplicate) | 10/18/2006 | -51.0 | 1.90 | NA | NA | NA | NA | 3.34 | NA | NA | NA | — | — | — |
| | 2/28/2007 | -40.0 | 1.70 | NA | NA | NA | NA | 2.88 | NA | NA | NA | — | — | — |
| | 10/31/2007 | -118.7 | 1.93 | NA | NA | NA | NA | 3.43 | NA | NA | NA | — | — | — |
| (duplicate) | 10/31/2007 | -118.7 | 1.93 | NA | NA | NA | NA | 3.46 | NA | NA | NA | — | — | — |
| | 3/13/2008 | -22.2 | 5.07 | NA | NA | NA | NA | 2.91 | NA | NA | NA | — | — | — |
| | 10/21/2008 | -126.6 | 0.82 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/2/2009 | -119.0 | 1.03 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/6/2009 | 9.2 | 0.52 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/11/2010 | -116.5 | 5.35 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/26/2010 | -135.5 | 0.12 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/17/2011 | -44.5 | 0.37 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/25/2011 | -137.5 | 0.72 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/14/2012 | -165.9 | 0.48 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| MW-22 | 1/16/1998 | 167.6 | 0.46 | 4.63 | — | 4.58 | — | 4.51 | — | — | 116 | 355 | 242 | 1.5 |
| | 4/17/1998 | NA | 2.16 | 4.80 | — | 5.32 | — | 4.57 | — | — | 113 | 262 | 193 | 1.4 |
| | 7/15/1998 | 45.3 | 0.67 | 4.61 | — | 4.75 | — | 4.48 | — | — | 110 | 413 | 193 | 2.1 |
| | 10/9/1998 | 286.0 | 2.60 | 4.73 | — | 5.87 | — | 4.62 | — | — | NA | 636 | 285 | 2.2 |
| | 4/30/1999 | 198.0 | 3.10 | 6.05 | — | 5.4 | — | 4.04 | — | 0.06 | 106 | 218 | 109 | 2.0 |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| | 10/28/1999 | 191.0 | 3.08 | 5.40 | — | 5.39 | — | 3.32 | — | — | 106 | 245 | 141 | 1.7 |
| | 3/2/2000 | 203.6 | 1.86 | 5.69 | — | 5.54 | — | 4.45 | — | — | 103 | 246 | 102 | 2.4 |
| | 10/26/2000 | 170.0 | 3.43 | 7.22 | — | 7.09 | — | 3.51 | 2.31 | — | 97.6 | 160 | 63.4 | 2.5 |
| | 2/28/2001 | 160.0 | 6.30 | 8.32 | — | 8.46 | 1.33 | 3.71 | NA | — | 83.0 | 54.4 | 38.5 | 1.4 |
| | 10/4/2001 | 200.0 | 6.07 | NA | NA | NA | NA | 3.87 | NA | NA | NA | 50.1 | 37.6 | 1.3 |
| | 3/12/2002 | 187.0 | 5.87 | NA | NA | NA | NA | 3.65 | NA | NA | NA | 53.2 | 42.2 | 1.3 |
| | 10/25/2002 | 197.4 | 6.06 | NA | NA | NA | NA | 3.89 | NA | NA | NA | 41.7 | 34.8 | 1.2 |
| | 3/7/2003 | 253.2 | 5.53 | NA | NA | NA | NA | 3.98 | NA | NA | NA | 39.6 | 35.7 | 1.1 |
| | 11/5/2003 | 89.6 | 6.36 | NA | NA | NA | NA | 4.78 | NA | NA | NA | 27.3 | 24.3 | 1.1 |
| | 3/9/2004 | 239.0 | 5.50 | NA | NA | NA | NA | 4.70 | NA | NA | NA | 27.3 | 23.6 | 1.2 |
| | 10/27/2004 | 143.0 | 4.30 | NA | NA | NA | NA | 5.27 | NA | NA | NA | 31.6 | 31.1 | 1.0 |
| | 3/9/2005 | -26.4 | 3.47 | NA | NA | NA | NA | 5.12 | NA | NA | NA | 29.8 | 33.5 | 0.9 |
| | 10/12/2005 | -17.0 | 5.26 | NA | NA | NA | NA | 5.73 | NA | NA | NA | 29.0 | 33.5 | 0.9 |
| | 3/7/2006 | 13.1 | 4.04 | NA | NA | NA | NA | 4.89 | NA | NA | NA | 17.2 | 21.6 | 0.8 |
| | 10/18/2006 | 60.0 | 3.90 | NA | NA | NA | NA | 5.21 | NA | NA | NA | 17.2 | 23.3 | 0.7 |
| | 2/28/2007 | 19.0 | 4.20 | NA | NA | NA | NA | 4.31 | NA | NA | NA | 10.2 | 17.2 | 0.6 |
| | 10/29/2007 | 142.2 | 5.65 | NA | NA | NA | NA | 4.43 | NA | NA | NA | 7.18 | 13.4 | 0.5 |
| | 3/12/2008 | 140.6 | 5.99 | NA | NA | NA | NA | 4.48 | NA | NA | NA | 6.72 | 10.5 | 0.6 |
| | 10/21/2008 | 39.6 | 4.93 | NA | NA | NA | NA | 4.76 | NA | NA | NA | 6.22 | 7.38 | 0.8 |
| (duplicate) | 10/21/2008 | 39.6 | 4.93 | NA | NA | NA | NA | 4.72 | NA | NA | NA | 6.39 | 7.36 | 0.9 |
| | 3/3/2009 | 182.0 | 4.76 | NA | NA | NA | NA | NA | NA | NA | NA | 6.77 | 9.75 | 0.7 |
| (duplicate) | 3/3/2009 | 182.0 | 4.76 | NA | NA | NA | NA | NA | NA | NA | NA | 6.43 | 8.08 | 0.8 |
| | 10/7/2009 | 88.5 | 5.73 | NA | NA | NA | NA | NA | NA | NA | NA | 4.55 | 6.48 | 0.7 |
| (duplicate) | 10/7/2009 | 88.5 | 5.73 | NA | NA | NA | NA | NA | NA | NA | NA | 4.65 | 6.61 | 0.7 |
| | 3/11/2010 | 262.7 | 8.90 | NA | NA | NA | NA | NA | NA | NA | NA | 6.49 | 9.77 | 0.7 |
| | 10/27/2010 | 32.1 | 6.90 | NA | NA | NA | NA | NA | NA | NA | NA | 6.35 | 8.5 | 0.7 |
| | 3/17/2011 | 143.7 | 5.45 | NA | NA | NA | NA | NA | NA | NA | NA | 5.56 | 7.58 | 0.7 |
| | 10/26/2011 | 287.5 | 4.80 | NA | NA | NA | NA | NA | NA | NA | NA | 5.61 | 7.90 | 0.7 |
| (duplicate) | 10/26/2011 | 287.5 | 4.80 | NA | NA | NA | NA | NA | NA | NA | NA | 5.58 | 7.65 | 0.7 |
| | 3/16/2012 | 180.9 | 4.52 | NA | NA | NA | NA | NA | NA | NA | NA | 6.52 | 11 | 0.6 |
| | 10/3/2012 | 255.4 | 4.07 | NA | NA | NA | NA | NA | NA | NA | NA | 5.24 | 7.84 | 0.7 |
| | 10/2/2013 | 183.8 | 8.06 | NA | NA | NA | NA | NA | NA | NA | NA | 4.43 | 8.03 | 0.6 |
| | 10/2/2014 | 871.2 | 3.13 | NA | NA | NA | NA | NA | NA | NA | NA | 2.59 | 4.41 | 0.6 |
| | 10/7/2015 | 269.3 | 2.90 | NA | NA | NA | NA | NA | NA | NA | NA | 2.20 | 3.58 | 0.6 |
| | 10/20/2016 | 292.2 | 5.46 | NA | NA | NA | NA | NA | NA | NA | NA | 2.97 | 5.35 | 0.6 |
| | 10/11/2017 | 136.9 | 3.53 | NA | NA | NA | NA | NA | NA | NA | NA | 2.14 | 4.32 | 0.5 |
| | 10/3/2018 | 59.1 | 4.16 | NA | NA | NA | NA | NA | NA | NA | NA | 1.26 | 2.91 | 0.4 |
| (duplicate) | 10/3/2018 | 59.1 | 4.16 | NA | NA | NA | NA | NA | NA | NA | NA | 1.27 | 2.94 | 0.4 |
| | 10/1/2019 | 76.8 | 3.13 | NA | NA | NA | NA | NA | NA | NA | NA | 1.50 | 2.67 | 0.6 |
| | 10/6/2020 | 157.3 | 3.26 | NA | NA | NA | NA | NA | NA | NA | NA | 1.30 | 3.00 | 0.4 |
| | 10/6/2021 | 142.4 | 3.20 | NA | NA | NA | NA | NA | NA | NA | NA | 1.40 | 2.72 | 0.5 |
| (duplicate) | 10/6/2021 | 142.4 | 3.20 | NA | NA | NA | NA | NA | NA | NA | NA | 1.42 | 2.62 | 0.5 |
| | 10/5/2022 | 145.3 | 3.33 | NA | NA | NA | NA | NA | NA | NA | NA | 1.22 | 1.88 | 0.6 |
| | 10/3/2023 | 206.7 | 3.65 | NA | NA | NA | NA | NA | NA | NA | NA | 0.96 | 1.74 | 0.6 |
| MW-23 | 1/16/1998 | 173.6 | 2.99 | 6.43 | — | 6.63 | — | 5.31 | — | — | 116 | 7.45 | 2.52 | 3.0 |
| | 4/17/1998 | NA | 2.30 | 6.35 | — | 6.55 | — | 5.50 | — | — | 113 | 8.19 | 1.56 | 5.3 |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| | 7/15/1998 | 62.3 | 2.81 | 6.66 | — | 6.64 | — | 5.50 | — | — | 110 | 13.2 | 1.36 | 9.7 |
| | 10/9/1998 | 329.0 | 1.64 | 4.08 | — | 6.04 | — | 4.96 | — | — | NA | 40.2 | 5.69 | 7.1 |
| | 4/30/1999 | 222.0 | 6.38 | 6.05 | — | 6.63 | — | 5.06 | — | — | 110 | 13.1 | 0.76 | 17.2 |
| | 10/28/1999 | 233.0 | 4.47 | 5.08 | — | 5.49 | — | 3.89 | — | — | 120 | 27.2 | 5.9 | 4.6 |
| | 3/2/2000 | 253.9 | 1.83 | 7.65 | — | 7.05 | — | 5.71 | — | — | 105 | 13.0 | 2.19 | 5.9 |
| | 10/26/2000 | 181.0 | 3.88 | 6.96 | — | 6.25 | — | 4.61 | 6.52 | — | 119 | 36.9 | 6.61 | 5.6 |
| | 2/28/2001 | 156.0 | 3.48 | 7.56 | — | 6.82 | 1.36 | 5.01 | NA | — | 111 | 21.1 | 7.48 | 2.8 |
| | 10/4/2001 | 200.0 | 5.13 | NA | NA | NA | NA | 4.87 | NA | NA | NA | 13.2 | 4.48 | 2.9 |
| | 3/12/2002 | 196.0 | 2.99 | NA | NA | NA | NA | 4.55 | NA | NA | NA | 89.8 | 33.60 | 2.7 |
| | 10/25/2002 | 183.3 | 5.12 | NA | NA | NA | NA | 4.26 | NA | NA | NA | 26.6 | 9.75 | 2.7 |
| | 3/7/2003 | 241.1 | 3.61 | NA | NA | NA | NA | 4.31 | NA | NA | NA | 68.7 | 35.20 | 2.0 |
| | 11/5/2003 | 96.5 | 5.26 | NA | NA | NA | NA | 4.19 | NA | NA | NA | 30.0 | — | — |
| | 3/9/2004 | 225.0 | 3.20 | NA | NA | NA | NA | 4.36 | NA | NA | NA | 87.8 | 44.4 | 2.0 |
| | 10/27/2004 | 105.0 | 4.10 | NA | NA | NA | NA | 4.49 | NA | NA | NA | 71.2 | 43.0 | 1.7 |
| | 3/9/2005 | -43.2 | 2.36 | NA | NA | NA | NA | 4.31 | NA | NA | NA | 67.0 | 42.8 | 1.6 |
| | 10/12/2005 | -19.2 | 3.09 | NA | NA | NA | NA | 3.90 | NA | NA | NA | 38.4 | 27.8 | 1.4 |
| | 3/7/2006 | 15.2 | 1.74 | NA | NA | NA | NA | 4.38 | NA | NA | NA | 76.1 | 53.5 | 1.4 |
| | 10/18/2006 | 71.0 | 2.80 | NA | NA | NA | NA | 4.89 | NA | NA | NA | 29.1 | 24.3 | 1.2 |
| | 2/28/2007 | 31.0 | 2.00 | NA | NA | NA | NA | 4.29 | NA | NA | NA | 43.6 | 38.4 | 1.1 |
| | 10/29/2007 | 148.0 | 2.88 | NA | NA | NA | NA | 4.65 | NA | NA | NA | 27.3 | 28.4 | 1.0 |
| | 3/12/2008 | 34.0 | 3.21 | NA | NA | NA | NA | 4.43 | NA | NA | NA | 32.6 | 28.5 | 1.1 |
| | 10/21/2008 | 149.6 | 1.17 | NA | NA | NA | NA | 6.00 | NA | NA | NA | 18.6 | 18.1 | 1.0 |
| | 3/3/2009 | 186.1 | 2.33 | NA | NA | NA | NA | NA | NA | NA | NA | 26.6 | 25.2 | 1.1 |
| | 10/7/2009 | 88.3 | 0.86 | NA | NA | NA | NA | NA | NA | NA | NA | 12.1 | 13.8 | 0.9 |
| | 3/11/2010 | 244.3 | 5.14 | NA | NA | NA | NA | NA | NA | NA | NA | 16.1 | 18.4 | 0.9 |
| (duplicate) | 3/11/2010 | 244.3 | 5.14 | NA | NA | NA | NA | NA | NA | NA | NA | 17.3 | 20.0 | 0.9 |
| | 10/27/2010 | 62.9 | 2.10 | NA | NA | NA | NA | NA | NA | NA | NA | 14.0 | 16.3 | 0.9 |
| (duplicate) | 10/27/2010 | 62.9 | 2.10 | NA | NA | NA | NA | NA | NA | NA | NA | 14.8 | 16.9 | 0.9 |
| | 3/17/2011 | 142.2 | 2.39 | NA | NA | NA | NA | NA | NA | NA | NA | 10.3 | 13.4 | 0.8 |
| | 10/25/2011 | 116.8 | 1.51 | NA | NA | NA | NA | NA | NA | NA | NA | 10.9 | 13.8 | 0.8 |
| (duplicate) | 10/25/2011 | 116.8 | 1.51 | NA | NA | NA | NA | NA | NA | NA | NA | 11.5 | 14.7 | 0.8 |
| | 3/16/2012 | 180.1 | 2.24 | NA | NA | NA | NA | NA | NA | NA | NA | 8.97 | 14.1 | 0.6 |
| | 10/3/2012 | 177.4 | 1.48 | NA | NA | NA | NA | NA | NA | NA | NA | 9.47 | 13.6 | 0.7 |
| | 10/2/2013 | 138.9 | 5.45 | NA | NA | NA | NA | NA | NA | NA | NA | 5.92 | 9.9 | 0.6 |
| | 10/2/2014 | 408.9 | 1.17 | NA | NA | NA | NA | NA | NA | NA | NA | 4.25 | 7.2 | 0.6 |
| | 10/7/2015 | 267.1 | 1.08 | NA | NA | NA | NA | NA | NA | NA | NA | 2.61 | 4.5 | 0.6 |
| | 10/20/2016 | 287.4 | 4.69 | NA | NA | NA | NA | NA | NA | NA | NA | 2.75 | 5.4 | 0.5 |
| (duplicate) | 10/20/2016 | 287.4 | 4.69 | NA | NA | NA | NA | NA | NA | NA | NA | 2.45 | 5.0 | 0.5 |
| | 10/11/2017 | 143.6 | 1.91 | NA | NA | NA | NA | NA | NA | NA | NA | 2.05 | 4.6 | 0.4 |
| | 10/3/2018 | 78.3 | 1.70 | NA | NA | NA | NA | NA | NA | NA | NA | 1.12 | 3.1 | 0.4 |
| | 10/1/2019 | 74.9 | 1.81 | NA | NA | NA | NA | NA | NA | NA | NA | 0.77 | 1.7 | 0.5 |
| | 10/6/2020 | 161.1 | 2.24 | NA | NA | NA | NA | NA | NA | NA | NA | — | 1.0 | — |
| (duplicate) | 10/6/2020 | 161.1 | 2.24 | NA | NA | NA | NA | NA | NA | NA | NA | 0.40 | 1.0 | 0.4 |
| | 10/6/2021 | 141.1 | 3.54 | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.65 | — |
| | 10/5/2022 | 140.7 | 1.59 | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.52 | — |
| (duplicate) | 10/5/2022 | 140.7 | 1.59 | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.53 | — |
| | 10/3/2023 | 172.5 | 1.33 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| MW-25 | 4/30/1999 | 230.0 | 7.53 | 2.03 | — | 3.8 | — | 1.64 | — | — | 140 | — | — | — |
| | 10/27/1999 | -86.0 | 5.85 | 2.00 | — | 3.53 | — | 1.18 | — | — | 144 | — | — | — |
| | 3/2/2000 | 351.7 | 5.94 | 1.78 | — | 3.35 | — | 1.91 | — | — | 134 | — | — | — |
| | 10/26/2000 | 268.0 | 4.01 | 1.50 | — | 3.49 | — | 1.39 | 2.38 | — | 145 | — | — | — |
| | 2/28/2001 | 143.0 | 4.20 | 1.57 | — | 3.52 | 8.13 | 6.99 | NA | — | 142 | — | — | — |
| | 10/4/2001 | 144.0 | 2.83 | NA | NA | NA | NA | 1.75 | NA | NA | NA | — | — | — |
| | 3/13/2002 | 128.0 | 4.70 | NA | NA | NA | NA | 1.73 | NA | NA | NA | — | — | — |
| | 10/25/2002 | 241.9 | 2.79 | NA | NA | NA | NA | 1.78 | NA | NA | NA | — | — | — |
| (duplicate) | 10/25/2002 | 241.9 | 2.79 | NA | NA | NA | NA | 1.81 | NA | NA | NA | — | — | — |
| | 3/6/2003 | 238.5 | 2.95 | NA | NA | NA | NA | 1.85 | NA | NA | NA | — | — | — |
| | 11/5/2003 | 80.0 | 2.81 | NA | NA | NA | NA | 1.98 | NA | NA | NA | — | — | — |
| | 3/10/2004 | 143.0 | 2.88 | NA | NA | NA | NA | 1.89 | NA | NA | NA | — | — | — |
| | 10/27/2004 | 149.0 | 2.62 | NA | NA | NA | NA | 2.20 | NA | NA | NA | — | — | — |
| | 3/9/2005 | -34.2 | 2.13 | NA | NA | NA | NA | 2.29 | NA | NA | NA | — | — | — |
| (duplicate) | 3/9/2005 | -34.2 | 2.13 | NA | NA | NA | NA | 2.16 | NA | NA | NA | — | — | — |
| | 10/11/2005 | -1.7 | 2.71 | NA | NA | NA | NA | 2.49 | NA | NA | NA | — | — | — |
| (duplicate) | 10/11/2005 | -1.7 | 2.71 | NA | NA | NA | NA | 2.50 | NA | NA | NA | — | — | — |
| | 3/7/2006 | 10.5 | 1.97 | NA | NA | NA | NA | 2.09 | NA | NA | NA | — | — | — |
| (duplicate) | 3/7/2006 | 10.5 | 1.97 | NA | NA | NA | NA | 1.78 | NA | NA | NA | — | — | — |
| | 10/17/2006 | 154.0 | 2.10 | NA | NA | NA | NA | 2.43 | NA | NA | NA | — | — | — |
| | 2/27/2007 | 22.0 | 2.00 | NA | NA | NA | NA | 2.21 | NA | NA | NA | — | — | — |
| | 10/30/2007 | 125.0 | 2.37 | NA | NA | NA | NA | 2.83 | NA | NA | NA | — | — | — |
| | 3/13/2008 | 59.4 | 2.71 | NA | NA | NA | NA | 2.50 | NA | NA | NA | — | — | — |
| | 10/20/2008 | 301.5 | 2.34 | NA | NA | NA | NA | 2.63 | NA | NA | NA | — | — | — |
| | 3/4/2009 | 193.3 | 1.81 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/6/2009 | 107.9 | 1.39 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/11/2010 | 181.5 | 2.84 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/26/2010 | 35.2 | 0.85 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/15/2011 | 183.4 | 1.38 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 10/25/2011 | 193.7 | 0.94 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| | 3/14/2012 | 148.2 | 1.01 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — |
| MW-26 | 1/20/1998 | 133.9 | 5.21 | 2.99 | — | 9.14 | — | 5.14 | — | — | 112 | 0.91 | — | — |
| | 4/17/1998 | NA | 1.80 | 1.42 | — | 3.56 | — | 4.69 | — | — | 123 | 1.42 | — | — |
| | 7/15/1998 | 65.0 | 3.60 | 4.55 | — | 11.7 | — | 4.74 | — | — | 99 | 2.29 | — | — |
| | 10/8/1998 | 180.0 | 2.41 | 4.51 | — | 19.4 | — | 5.08 | — | — | NA | 2.08 | — | — |
| | 4/30/1999 | 138.0 | 3.05 | 3.51 | — | 8.19 | 180 | 3.48 | 3.14 | — | 104 | — | — | — |
| | 10/28/1999 | 193.0 | 2.35 | 4.86 | — | 12.2 | 2 | 3.89 | — | — | 103 | 1.74 | — | — |
| | 3/2/2000 | 335.0 | 1.79 | 3.38 | — | 6.99 | — | 4.84 | 7.03 | — | 102 | 3.57 | 0.599 | 6.0 |
| | 10/26/2000 | 153.0 | 1.81 | 5.43 | — | 11.9 | 2.86 | 4.50 | 5.72 | — | 99.7 | 3.18 | — | — |
| | 2/28/2001 | 165.8 | 2.75 | 3.45 | — | 6.62 | 4.10 | 4.57 | NA | — | 104 | 3.18 | 0.808 | 3.9 |
| | 10/4/2001 | 171.0 | 5.24 | NA | NA | NA | NA | 5.50 | NA | NA | NA | 5.45 | 0.96 | 5.7 |
| | 3/12/2002 | 120.0 | 3.09 | NA | NA | NA | NA | 6.30 | NA | NA | NA | 2.60 | 0.54 | 4.8 |
| | 10/24/2002 | 219.2 | 6.22 | NA | NA | NA | NA | 5.68 | NA | NA | NA | 2.10 | — | — |
| | 3/5/2003 | 230.1 | 3.25 | NA | NA | NA | NA | 4.91 | NA | NA | NA | 4.14 | 0.77 | 5.4 |
| | 11/5/2003 | 60.1 | 4.29 | NA | NA | NA | NA | 6.38 | NA | NA | NA | 1.52 | — | — |
| | 3/9/2004 | 181.0 | 3.43 | NA | NA | NA | NA | 5.26 | NA | NA | NA | 4.47 | 1.16 | 3.9 |

Table 4
Natural Attenuation Evaluation

| Parameter | Date | ORP (mV) | DO (mg/L) | NO ₃ (mg/L) | Fe ²⁺ (mg/L) | SO ₄ (mg/L) | CH ₄ (µg/L) | Cl (mg/L) | DOC (mg/L) | HS (mg/L) | HCO ₃ (mg/L) | TCA (µg/L) | 1,1-DCE (µg/L) | TCA/1,1-DCE |
|-------------|------------|----------|-----------|------------------------|-------------------------|------------------------|------------------------|-----------|------------|-----------|-------------------------|------------|----------------|-------------|
| | 10/26/2004 | 143.0 | 3.90 | NA | NA | NA | NA | 6.23 | NA | NA | NA | 3.92 | 1.21 | 3.2 |
| | 3/10/2005 | 29.4 | 3.69 | NA | NA | NA | NA | 5.45 | NA | NA | NA | 5.98 | 2.51 | 2.4 |
| | 10/13/2005 | -4.5 | 6.61 | NA | NA | NA | NA | 6.17 | NA | NA | NA | 5.43 | 2.04 | 2.7 |
| | 3/10/2006 | -98.8 | 2.87 | NA | NA | NA | NA | 4.71 | NA | NA | NA | 2.72 | 1.05 | 2.6 |
| | 10/18/2006 | 56.0 | 4.90 | NA | NA | NA | NA | 5.42 | NA | NA | NA | 2.92 | 1.48 | 2.0 |
| | 2/27/2007 | -113.0 | 2.40 | NA | NA | NA | NA | 4.66 | NA | NA | NA | 3.08 | 1.81 | 1.7 |
| | 10/29/2007 | 144.6 | 4.14 | NA | NA | NA | NA | 4.77 | NA | NA | NA | 2.35 | 1.88 | 1.3 |
| | 3/13/2008 | 82.0 | 3.30 | NA | NA | NA | NA | 4.31 | NA | NA | NA | 3.71 | 2.47 | 1.5 |
| (duplicate) | 3/13/2008 | 82.0 | 3.30 | NA | NA | NA | NA | 4.31 | NA | NA | NA | 3.83 | 2.42 | 1.6 |
| | 10/22/2008 | 227.6 | 3.90 | NA | NA | NA | NA | 3.72 | NA | NA | NA | 2.81 | 2.26 | 1.2 |
| | 3/4/2009 | 184.5 | 2.61 | NA | NA | NA | NA | NA | NA | NA | NA | 4.33 | 3.27 | 1.3 |
| | 10/7/2009 | 94.2 | 5.69 | NA | NA | NA | NA | NA | NA | NA | NA | 3.22 | 3.01 | 1.1 |
| | 3/11/2010 | 245.1 | 6.84 | NA | NA | NA | NA | NA | NA | NA | NA | 2.87 | 2.56 | 1.1 |
| | 10/27/2010 | 28.7 | 3.44 | NA | NA | NA | NA | NA | NA | NA | NA | 1.96 | 1.85 | 1.1 |
| | 3/17/2011 | 150.1 | 3.02 | NA | NA | NA | NA | NA | NA | NA | NA | 1.26 | 1.33 | 0.9 |
| (duplicate) | 3/17/2011 | 150.1 | 3.02 | NA | NA | NA | NA | NA | NA | NA | NA | 1.40 | 1.27 | 1.1 |
| | 10/26/2011 | 215.0 | 3.22 | NA | NA | NA | NA | NA | NA | NA | NA | 1.74 | 1.95 | 0.9 |
| | 3/15/2012 | 147.5 | 2.41 | NA | NA | NA | NA | NA | NA | NA | NA | 2.49 | 3.66 | 0.7 |
| | 10/3/2012 | 196.7 | 4.20 | NA | NA | NA | NA | NA | NA | NA | NA | 1.81 | 2.81 | 0.6 |
| (duplicate) | 10/3/2012 | 196.7 | 4.20 | NA | NA | NA | NA | NA | NA | NA | NA | 1.84 | 3.01 | 0.6 |
| | 10/2/2013 | 149.6 | 6.58 | NA | NA | NA | NA | NA | NA | NA | NA | 1.44 | 2.24 | 0.6 |
| | 10/2/2014 | 126.7 | 1.86 | NA | NA | NA | NA | NA | NA | NA | NA | 1.59 | 2.68 | 0.6 |
| | 10/6/2015 | 193.1 | 6.23 | NA | NA | NA | NA | NA | NA | NA | NA | 1.27 | 1.9 | 0.7 |
| | 10/20/2016 | 294.3 | 3.10 | NA | NA | NA | NA | NA | NA | NA | NA | 1.25 | 2.44 | 0.5 |
| | 10/11/2017 | 148.6 | 2.96 | NA | NA | NA | NA | NA | NA | NA | NA | 0.634 | 1.71 | 0.4 |
| | 10/4/2018 | 141.8 | 5.32 | NA | NA | NA | NA | NA | NA | NA | NA | 0.778 | 2.19 | 0.4 |
| | 10/2/2019 | 233.1 | 5.16 | NA | NA | NA | NA | NA | NA | NA | NA | 0.651 | 1.73 | 0.4 |
| (duplicate) | 10/2/2019 | 233.1 | 5.16 | NA | NA | NA | NA | NA | NA | NA | NA | 0.634 | 1.92 | 0.3 |
| | 10/6/2020 | 155.9 | 5.76 | NA | NA | NA | NA | NA | NA | NA | NA | 0.54 | 0.79 | 0.7 |
| | 10/7/2021 | 124.3 | 6.17 | NA | NA | NA | NA | NA | NA | NA | NA | 0.40 | 0.63 | 0.6 |
| | 10/6/2022 | 172.1 | 5.98 | NA | NA | NA | NA | NA | NA | NA | NA | — | 1.44 | — |
| | 10/2/2023 | 275.1 | 5.78 | NA | NA | NA | NA | NA | NA | NA | NA | — | 1.38 | — |
| (duplicate) | 10/2/2023 | 172.1 | 5.98 | NA | NA | NA | NA | NA | NA | NA | NA | — | 1.56 | — |

Table 4
Natural Attenuation Evaluation

Notes:

a. Well was resampled on May 26, 1998; VOCs were not detected.

— : not detected at method reporting limit

µg/L: micrograms per liter

1,1-DCE: 1,1-dichloroethene

CH₄: methane

Cl: chlorine

DO: dissolved oxygen

DOC: dissolved organic carbon

Fe²⁺: iron

HCO₃: bicarbonate

HS: hydrogen sulfide

M: micropurge

mg/L: milligram per milliliter

mV: millivolt

NA: not analyzed

NO₃: nitrate

ORP: oxidation reduction potential

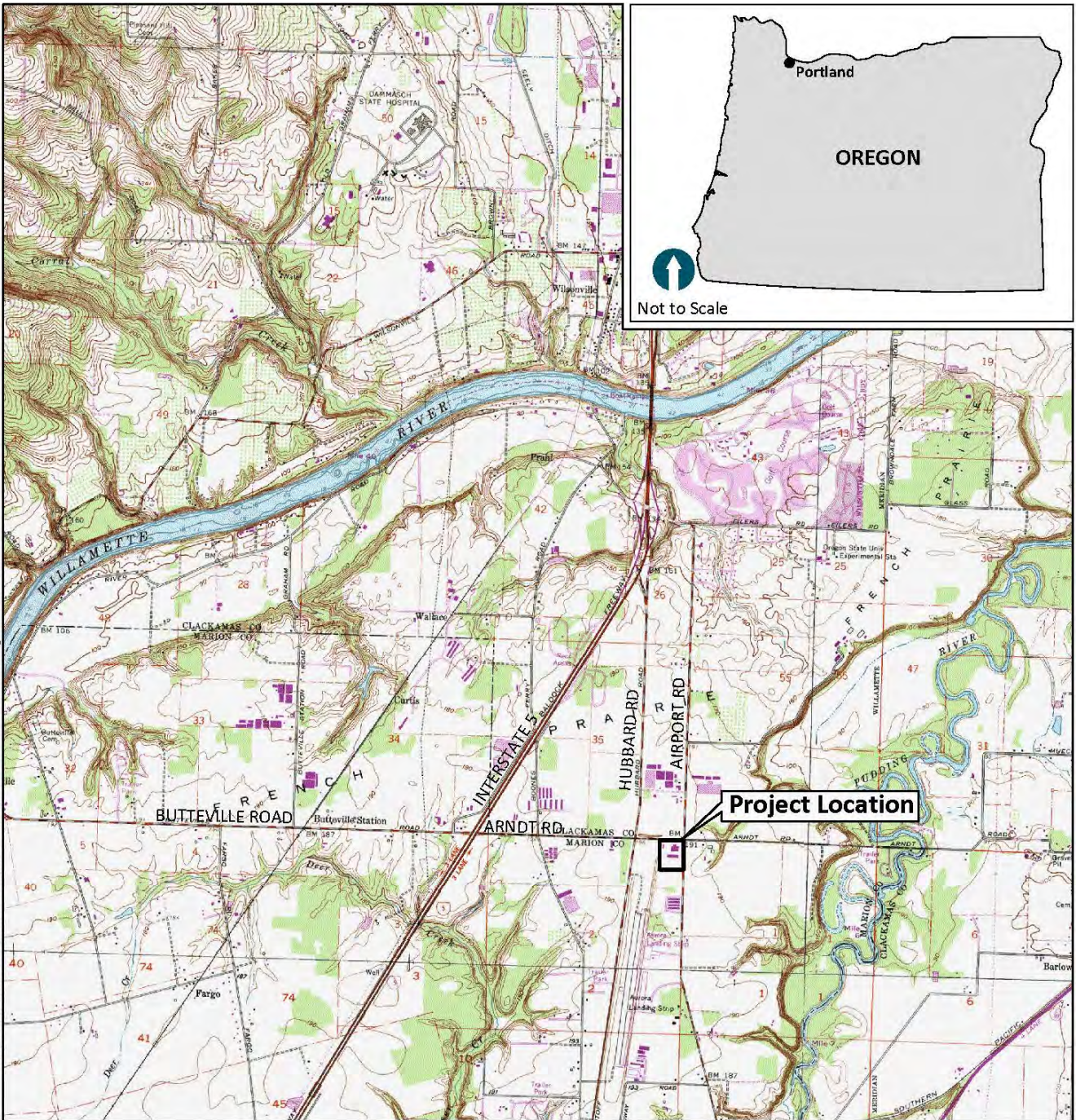
SO₄: sulfate

TCA: 1,1,1-trichloroethane

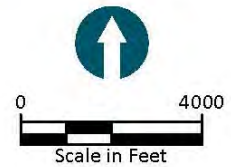
VOC: volatile organic carbon

Figures

K:\Jobs\090171-Columbia Helicopters\09017101\09017101-RP-V10-006.dwg MARCH 2010 FIG 1
Apr 05, 2010 11:24am c davidson



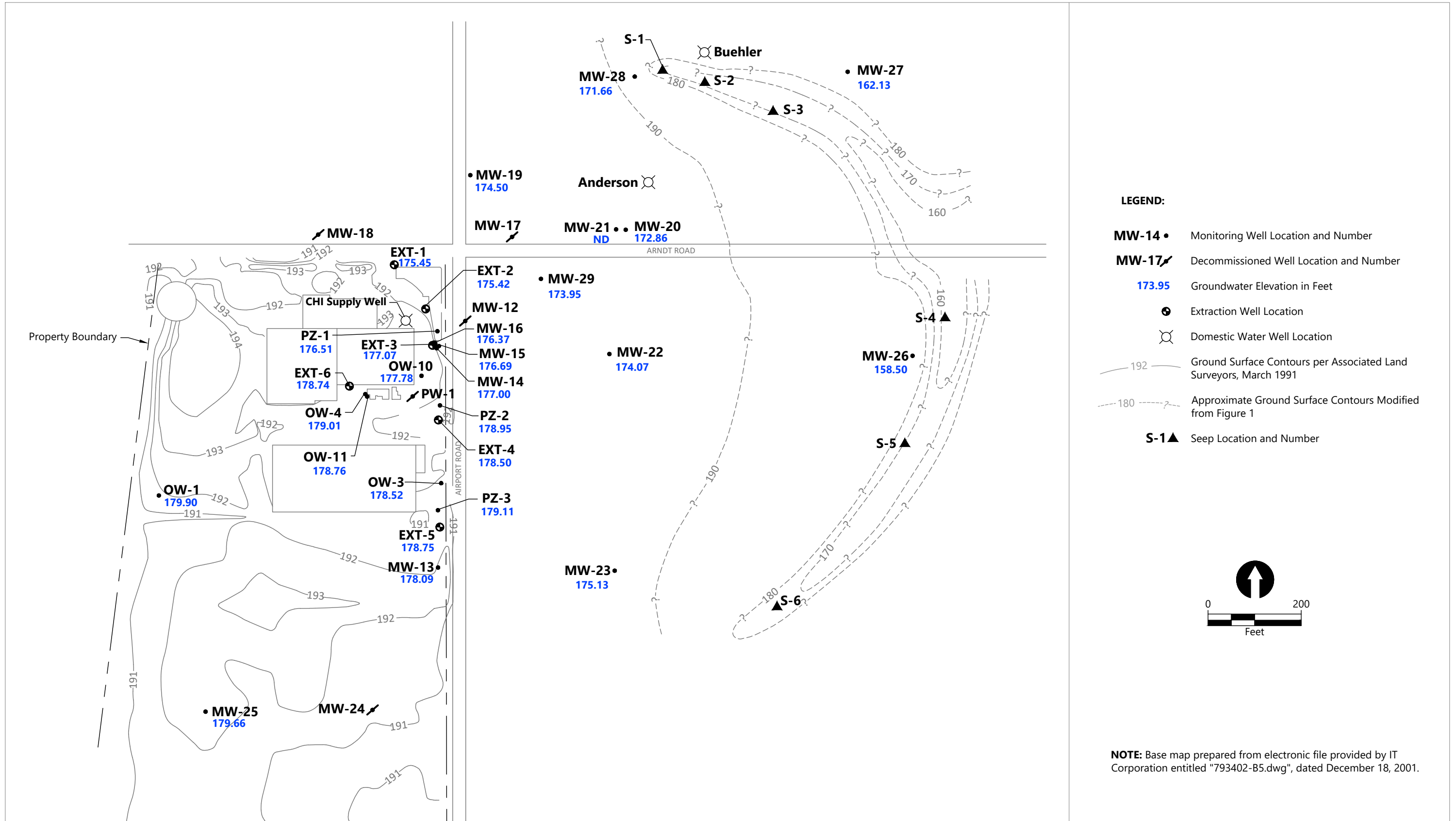
NOTE: Base map prepared from Terrain Navigator Pro USGS 7.5 minute quadrangle map(s) of Canby, Sherwood, Woodburn, and Yoder, Oregon.



Filepath: P:\Projects\Columbia_Helicopters_Inc\CHI\Monitoring reports\4Q2022-Annual 2022\02 Figures\Figure 1.docx



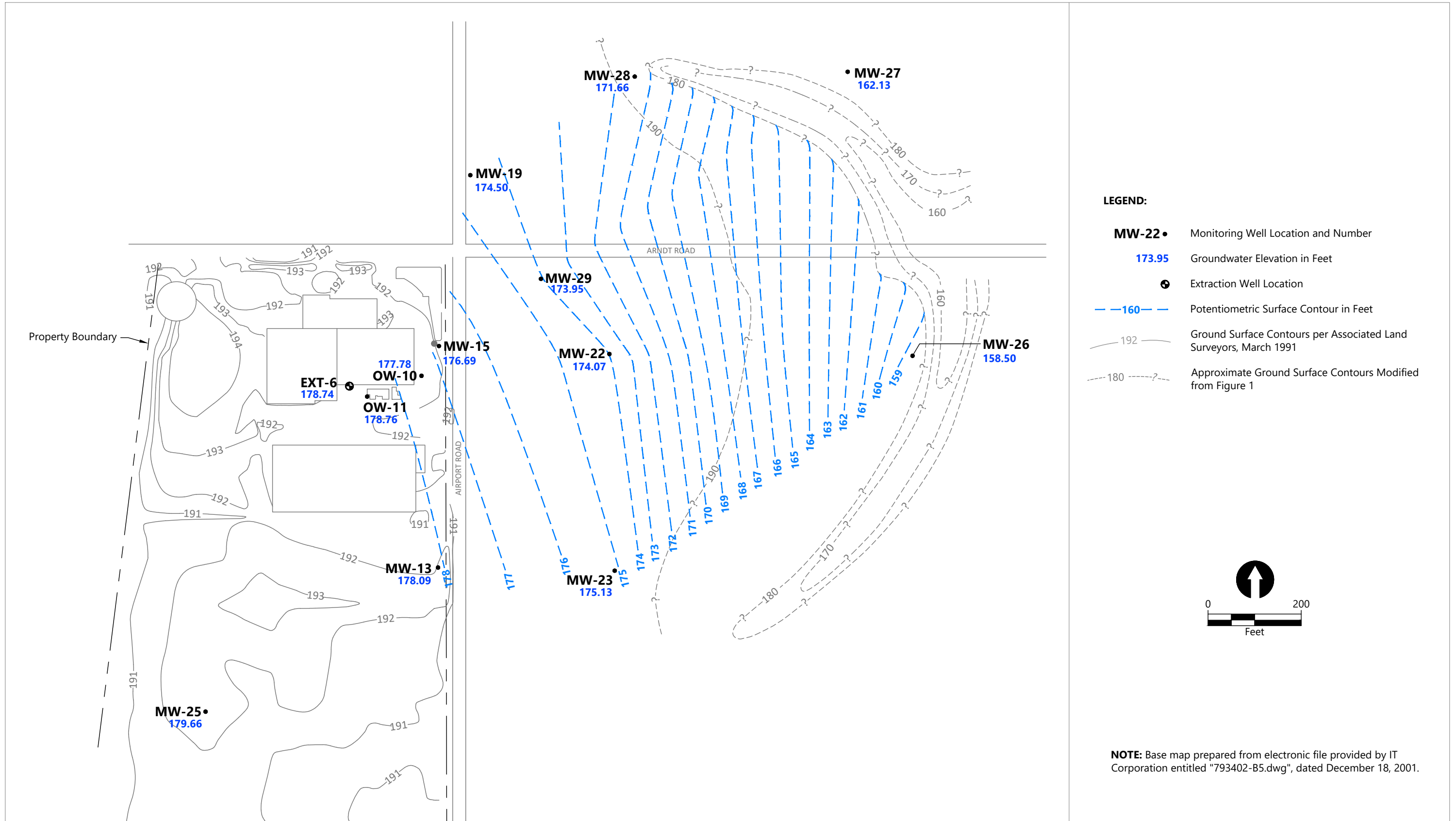
Figure 1
Vicinity Map
Annual Report 2023
Columbia Helicopters, Inc., Aurora, Oregon



Publish Date: 2023/12/13 7:50 AM | User: hmerrick
 Filepath: K:\Projects\0171-Columbia Helicopters\Aurora Facility\0171-RP-025.dwg 2



Figure 2
Monitoring Well Locations and Groundwater Elevation Map: October 2, 2023



Publish Date: 2023/12/13 7:50 AM | User: hmerrick
 Filepath: K:\Projects\0171-Columbia Helicopters\Aurora Facility\0171-RP-026.dwg 3



Figure 3
Potentiometric Surface Map: October 2, 2023

Appendix A
National Pollutant Discharge Elimination
System Reports

DMR Copy of Record

| | | | | |
|---|--|--|---|---------------------------------------|
| Permit | | Permit #: OR0033391 | Permittee: COLUMBIA HELICOPTERS, INC. | Facility: COLUMBIA HELICOPTERS |
| Major: No | | Permittee Address: PO Box 3500 Portland, OR 97208-3500 | Facility Location: 14452 ARNDT RD NE AURORA, OR 97002 | |
| Permitted Feature: 001 External Outfall | | Discharge: 001-Q Treated Groundwater | | |

| | | | | |
|----------------------------------|--|---|-------------------------------|---------------------------------|
| Report Dates & Status | | Monitoring Period: From 01/01/23 to 03/31/23 | DMR Due Date: 04/15/23 | Status: NetDMR Validated |
|----------------------------------|--|---|-------------------------------|---------------------------------|

Considerations for Form Completion
Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter.

| | | | | |
|------------------------------------|--|--------------------------|---------------------------|--------------------------------|
| Principal Executive Officer | | First Name: Brett | Title: HSE Manager | Telephone: 503-678-1222 |
| Last Name: Baird | | | | |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | | Quality or Concentration | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|-------|-----------------------|---------------------|----------|-------------|-------------|---------------------|---------|-------------|---------|--------------------------|-------------|--------------|-------------|----------|-----------------------|-------------|--|--------------|
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | | | | Value 2 | Qualifier 3 |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 6.97 | | = | 7.02 | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | >= | 6.2 DAILY MN | | <= | 9.0 DAILY MX | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00556 | Oil & Grease | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | <= | 10.0 VALUE | 19 - mg/L | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | B - Below Detection Limit/No Detection | |
| 84066 | Oil and grease visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 01/07 - Weekly | VI - VISUAL |
| | | | | | Permit Req. | | | | | | | | | | | | Req Mon VALUE | 9P - N=0;Y=1 |
| | | | | | Value NODI | | | | | | | | | | | | B - Below Detection Limit/No Detection | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments

| Attachments | | |
|--|------|----------|
| Name | Type | Size |
| Outfall_1_Q1_Weekly_Check_January_March_2023.pdf | pdf | 108544.0 |

Report Last Saved By
COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-04-03 13:32 (Time Zone: -07:00)

Report Last Signed By
User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-04-03 15:12 (Time Zone: -07:00)

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-QS Stormwater runoff | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 01/01/23 to 03/31/23 | DMR Due Date: | 04/15/23 | Status: | NetDMR Validated |

Considerations for Form Completion
 Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter.

| | | | | | |
|------------------------------------|-------|--------|-------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)
 Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | Quality or Concentration | | | # of Ex. | Frequency of Analysis | Sample Type | |
|-------|---|---------------------|----------|-------------|-------------|---------------------|---------|-------------|--------------------------|-------|-------------|-------------|--|----------------------------------|-------------|
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | | | | Value 1 |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 2.0 | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | | <= | 130.0 VALUE | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01042 | Copper, total [as Cu] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 0.0052 | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | | <= | 0.1 VALUE | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01051 | Lead, total [as Pb] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 0.00096 | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | | <= | 0.4 VALUE | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01092 | Zinc, total [as Zn] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 0.0304 | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | | <= | 0.6 VALUE | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | |
| 45613 | Floating solids, waste or visible foam-visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | MM/WD - Monthly When Discharging | VI - VISUAL |
| | | | | | Permit Req. | | | | | | <= | 0.0 VALUE | 9P - N=0;Y=1 | | |
| | | | | | Value NODI | | | | | | | | B - Below Detection Limit/No Detection | | |

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments

Attachments

| Name | Type | Size |
|---|------|----------|
| 23_00680_3_General_Chemistry_Multi_Report.pdf | pdf | 174259.0 |

Report Last Saved By
COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
 Name: Brett Baird
 E-Mail: brett.baird@colheli.com
 Date/Time: 2023-04-03 15:08 (Time Zone: -07:00)

Report Last Signed By

User: BRETTBAIRD
 Name: Brett Baird
 E-Mail: brett.baird@colheli.com
 Date/Time: 2023-04-03 15:08 (Time Zone: -07:00)

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 002 Internal Outfall | Discharge: | 002-Q Air Stripper Effluent | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 01/01/23 to 03/31/23 | DMR Due Date: | 04/15/23 | Status: | NetDMR Validated |

Considerations for Form Completion

| | | | | | |
|------------------------------------|-------|--------|-------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|---------|-------|--------------------------|------------------|-------------|-------------|-------------|----------|-----------------------|-------------------|----------------|------------------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | Req Mon DAILY MN | | | | | Req Mon DAILY MX | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | | C - No Discharge | | | |
| 32103 | 1,2-Dichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 34475 | Tetrachloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 34501 | 1,1-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 28 - ug/L | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 7.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 34506 | 1,1,1-Trichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 200.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 34546 | trans-1,2-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 100.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 39175 | Vinyl chloride | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 2.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 39180 | Trichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |
| 50050 | Flow, in conduit or thru treatment plant | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 03 - MGD | 01/01 - Daily | MS - MEASRD | |
| | | | | | Permit Req. | | | | | | Req Mon MO AVG | | | | | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | | | | | |
| 81686 | cis-1,2-Dichloroethene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 70.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | C - No Discharge |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
Outfall 002 (air Stripper) did not operate during the 1st quarter 2023

Attachments
No attachments.

Report Last Saved By

COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-04-03 13:30 (Time Zone: -07:00)

Report Last Signed By

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-04-03 14:52 (Time Zone: -07:00)

DMR Copy of Record

| Permit | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|-------------------------|---------------------|--------------------------------------|--------------------|---------------------|--|---------------|---------|-------|--------------------------|--|-------------|---------------------------------------|-------------|--------------|-----------------------|----------------|------------------|----------------|-------------|--|--------------|--|--|--|
| Permit #: | | OR0033391 | | | Permittee: | | COLUMBIA HELICOPTERS, INC. | | | | | Facility: | | COLUMBIA HELICOPTERS | | | | | | | | | | | | |
| Major: | | No | | | Permittee Address: | | PO Box 3500 Portland, OR 97208-3500 | | | | | Facility Location: | | 14452 ARNDT RD NE AURORA, OR 97002 | | | | | | | | | | | | |
| Permitted Feature: | | 001 External Outfall | | | Discharge: | | 001-Q Treated Groundwater | | | | | | | | | | | | | | | | | | | |
| Report Dates & Status | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitoring Period: | | | | From 04/01/23 to 06/30/23 | | | | DMR Due Date: | | | | 07/15/23 | | | | Status: | | | NetDMR Validated | | | | | | | |
| Considerations for Form Completion | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Principal Executive Officer | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Name: | | | | Brett | | | | Title: | | | | HSE Manager | | | | | Telephone: | | | | | | 503-678-1222 | | | |
| Last Name: | | | | Baird | | | | | | | | | | | | | | | | | | | | | | |
| No Data Indicator (NODI) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Form NODI: -- | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Table Headers | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Parameter | | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | | | | | | | |
| | Name | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units | | | | | | |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | = | 6.99 | | | = | 7.03 | 12 - SU | 01/07 - Weekly | GR - GRAB | | | | | | |
| | | | | | Permit Req. | | | | | | >= | 6.2 DAILY MN | | | <= | 9.0 DAILY MX | 12 - SU | 01/07 - Weekly | GR - GRAB | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | |
| 00556 | Oil & Grease | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | <= | 10.0 VALUE | 19 - mg/L | 01/07 - Weekly | GR - GRAB | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | |
| 84066 | Oil and grease visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | 01/07 - Weekly | VI - VISUAL | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | |
| Req Mon VALUE 9P - N=0;Y=1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B - Below Detection Limit/No Detection | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Submission Note | | | | | | | | | | | | | | | | | | | | | | | | | | |
| If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Edit Check Errors | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No errors. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Comments | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attachments | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Name | Type | Size | | | | | | | | | | | | |
| | | | | | | | | | | | | Outfall_1_Q2_Weekly_Check_April_June_2023.docx | docx | 19848.0 | | | | | | | | | | | | |
| Report Last Saved By | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COLUMBIA HELICOPTERS, INC. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| User: | | | | JDELACRUZ75 | | | | | | | | | | | | | | | | | | | | | | |
| Name: | | | | Jose Delacruz | | | | | | | | | | | | | | | | | | | | | | |
| E-Mail: | | | | jdelacruz@colheli.com | | | | | | | | | | | | | | | | | | | | | | |
| Date/Time: | | | | 2023-07-12 12:54 (Time Zone: -07:00) | | | | | | | | | | | | | | | | | | | | | | |
| Report Last Signed By | | | | | | | | | | | | | | | | | | | | | | | | | | |
| User: | | | | BRETTBAIRD | | | | | | | | | | | | | | | | | | | | | | |
| Name: | | | | Brett Baird | | | | | | | | | | | | | | | | | | | | | | |
| E-Mail: | | | | brett.baird@colheli.com | | | | | | | | | | | | | | | | | | | | | | |
| Date/Time: | | | | 2023-07-13 13:35 (Time Zone: -07:00) | | | | | | | | | | | | | | | | | | | | | | |

DMR Copy of Record

| | |
|--|--|
| Permit | |
| Permit #: OR0033391 | Permittee: COLUMBIA HELICOPTERS, INC. |
| Major: No | Permittee Address: PO Box 3500 Portland, OR 97208-3500 |
| Permitted Feature: 001 External Outfall | Discharge: 001-QS Stormwater runoff |
| | Facility: COLUMBIA HELICOPTERS Facility Location: 14452 ARNDT RD NE AURORA, OR 97002 |

| | |
|---|---------------------------------|
| Report Dates & Status | |
| Monitoring Period: From 04/01/23 to 06/30/23 | DMR Due Date: 07/15/23 |
| | Status: NetDMR Validated |

Considerations for Form Completion
Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter.

| | |
|------------------------------------|-------------------------|
| Principal Executive Officer | |
| First Name: Brett | Title: HSE Manager |
| Last Name: Baird | Telephone: 503-678-1222 |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | Quality or Concentration | | | # of Ex. | Frequency of Analysis | Sample Type | | | | |
|-------|---|---------------------|----------|-------------|-------------|---------------------|---------|-------------|--------------------------|-------|-------------|----------|-----------------------|-------------|---|------------------------|----------------------------------|-------------|
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | | | | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | <= | 130.0 VALUE | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | |
| 01042 | Copper, total [as Cu] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | <= | 0.1 VALUE | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | |
| 01051 | Lead, total [as Pb] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | <= | 0.4 VALUE | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | |
| 01092 | Zinc, total [as Zn] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | <= | 0.6 VALUE | 19 - mg/L | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | |
| 45613 | Floating solids, waste or visible foam-visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | <= | 0.0 VALUE | 9P - N=0;Y=1 | MM/WD - Monthly When Discharging | VI - VISUAL |
| | | | | | Value NODI | | | | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
No quarterly monitoring performed required by permit. Permit required Bi-Annual sampling per schedule B.

Attachments
No attachments.

Report Last Saved By
COLUMBIA HELICOPTERS, INC.

User: JDELACRUZ75
Name: Jose Delacruz
E-Mail: jdelacruz@colheli.com
Date/Time: 2023-07-12 12:42 (Time Zone: -07:00)

Report Last Signed By
User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-07-13 13:36 (Time Zone: -07:00)

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 002 Internal Outfall | Discharge: | 002-Q Air Stripper Effluent | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 04/01/23 to 06/30/23 | DMR Due Date: | 07/15/23 | Status: | NetDMR Validated |

Considerations for Form Completion

| | | | | | |
|------------------------------------|-------|--------|-------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|---------|-------|--------------------------|------------------|-------------|---------|-------------|------------------|-----------------------|-------------------|----------------|-----------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | Req Mon DAILY MN | | | | Req Mon DAILY MX | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | C - No Discharge | | | | |
| 32103 | 1,2-Dichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34475 | Tetrachloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34501 | 1,1-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 28 - ug/L | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 7.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34506 | 1,1,1-Trichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 200.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34546 | trans-1,2-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 100.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39175 | Vinyl chloride | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 2.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39180 | Trichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 50050 | Flow, in conduit or thru treatment plant | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 03 - MGD | 01/01 - Daily | MS - MEASRD | |
| | | | | | Permit Req. | | | | | | Req Mon MO AVG | | | | | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | | | | | |
| 81686 | cis-1,2-Dichloroethene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 70.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
Outfall 002 (Air stripper) did not operate during the 2nd quarter 2023

Attachments
No attachments.

Report Last Saved By

COLUMBIA HELICOPTERS, INC.

User: JDELACRUZ75
Name: Jose Delacruz
E-Mail: jdelacruz@colheli.com
Date/Time: 2023-07-12 12:38 (Time Zone: -07:00)

Report Last Signed By

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-07-13 13:37 (Time Zone: -07:00)

DMR Copy of Record

| Permit | | | | | | | | | | | | | | | | | | |
|--|-----------------------|--------------------------------------|----------|-------------|--------------------|---------------------|--|-------------|---------|--|--------------|---|---------|---------------------------------------|--------------|--|-----------------------|-------------|
| Permit #: | | OR0033391 | | | Permittee: | | COLUMBIA HELICOPTERS, INC. | | | | | Facility: | | COLUMBIA HELICOPTERS | | | | |
| Major: | | No | | | Permittee Address: | | PO Box 3500 Portland, OR 97208-3500 | | | | | Facility Location: | | 14452 ARNDT RD NE AURORA, OR 97002 | | | | |
| Permitted Feature: | | 001 External Outfall | | | Discharge: | | 001-Q Treated Groundwater | | | | | | | | | | | |
| Report Dates & Status | | | | | | | | | | | | | | | | | | |
| Monitoring Period: | | From 07/01/23 to 09/30/23 | | | DMR Due Date: | | 10/15/23 | | | | | Status: | | NetDMR Validated | | | | |
| Considerations for Form Completion | | | | | | | | | | | | | | | | | | |
| Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter. | | | | | | | | | | | | | | | | | | |
| Principal Executive Officer | | | | | | | | | | | | | | | | | | |
| First Name: | | Brett | | | Title: | | HSE Manager | | | | | Telephone: | | 503-678-1222 | | | | |
| Last Name: | | Baird | | | | | | | | | | | | | | | | |
| No Data Indicator (NODI) | | | | | | | | | | | | | | | | | | |
| Form NODI: | | -- | | | | | | | | | | | | | | | | |
| Table Headers | | | | | | | | | | | | | | | | | | |
| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | | Quality or Concentration | | | | | | # of Ex. | Frequency of Analysis | Sample Type |
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | Value 3 | | | |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 7.03 | | | = | 7.06 | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | >= | 6.2 DAILY MN | | | <= | 9.0 DAILY MX | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00556 | Oil & Grease | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | | | | | <= | 10.0 VALUE | 19 - mg/L | |
| | | | | | Value NODI | | | | | | | | | | | B - Below Detection Limit/No Detection | | |
| 84066 | Oil and grease visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 01/07 - Weekly | VI - VISUAL |
| | | | | | Permit Req. | | | | | Req Mon VALUE | 9P - N=0;Y=1 | | | | | | | |
| | | | | | Value NODI | | | | | B - Below Detection Limit/No Detection | | | | | | | | |
| Submission Note | | | | | | | | | | | | | | | | | | |
| If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. | | | | | | | | | | | | | | | | | | |
| Edit Check Errors | | | | | | | | | | | | | | | | | | |
| No errors. | | | | | | | | | | | | | | | | | | |
| Comments | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Attachments | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Name | Type | Size | | | | |
| | | | | | | | | | | | | Outfall_1_Q3_Weekly_Check_July_September_2023.pdf | pdf | 112175.0 | | | | |
| Report Last Saved By | | | | | | | | | | | | | | | | | | |
| COLUMBIA HELICOPTERS, INC. | | | | | | | | | | | | | | | | | | |
| User: | | BRETTBAIRD | | | | | | | | | | | | | | | | |
| Name: | | Brett Baird | | | | | | | | | | | | | | | | |
| E-Mail: | | brett.baird@colheli.com | | | | | | | | | | | | | | | | |
| Date/Time: | | 2023-10-17 07:32 (Time Zone: -07:00) | | | | | | | | | | | | | | | | |
| Report Last Signed By | | | | | | | | | | | | | | | | | | |
| User: | | BRETTBAIRD | | | | | | | | | | | | | | | | |
| Name: | | Brett Baird | | | | | | | | | | | | | | | | |
| E-Mail: | | brett.baird@colheli.com | | | | | | | | | | | | | | | | |
| Date/Time: | | 2023-10-17 07:32 (Time Zone: -07:00) | | | | | | | | | | | | | | | | |

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-QS Stormwater runoff | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 07/01/23 to 09/30/23 | DMR Due Date: | 10/15/23 | Status: | NetDMR Validated |

Considerations for Form Completion
 Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter.

| | | | | | |
|------------------------------------|-------|--------|-------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)
 Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | Quality or Concentration | | | # of Ex. | Frequency of Analysis | Sample Type | |
|-------|---|---------------------|----------|-------------|-------------|---------------------|---------|-------------|--------------------------|-------|--|--------------|-----------------------|----------------------------------|-------------|
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | | | | Value 1 |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 20.5 | 19 - mg/L | | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | <= | 130.0 VALUE | 19 - mg/L | | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01042 | Copper, total [as Cu] | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 0.0238 | 19 - mg/L | | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | <= | 0.1 VALUE | 19 - mg/L | | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01051 | Lead, total [as Pb] | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 0.0035 | 19 - mg/L | | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | <= | 0.4 VALUE | 19 - mg/L | | | |
| | | | | | Value NODI | | | | | | | | | | |
| 01092 | Zinc, total [as Zn] | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 0.278 | 19 - mg/L | | 02/YR - Twice Per Year | GR - GRAB |
| | | | | | Permit Req. | | | | | <= | 0.6 VALUE | 19 - mg/L | | | |
| | | | | | Value NODI | | | | | | | | | | |
| 45613 | Floating solids, waste or visible foam-visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | MM/WD - Monthly When Discharging | VI - VISUAL |
| | | | | | Permit Req. | | | | | <= | 0.0 VALUE | 9P - N=0;Y=1 | | | |
| | | | | | Value NODI | | | | | | B - Below Detection Limit/No Detection | | | | |

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments

Attachments

| Name | Type | Size |
|--|------|----------|
| 23_26442_3_General_Chemistry_Multi_Report_Q3.pdf | pdf | 174347.0 |

Report Last Saved By
COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
 Name: Brett Baird
 E-Mail: brett.baird@colheli.com
 Date/Time: 2023-10-17 07:28 (Time Zone: -07:00)

Report Last Signed By

User: BRETTBAIRD
 Name: Brett Baird
 E-Mail: brett.baird@colheli.com
 Date/Time: 2023-10-17 07:28 (Time Zone: -07:00)

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 002 Internal Outfall | Discharge: | 002-Q Air Stripper Effluent | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 07/01/23 to 09/30/23 | DMR Due Date: | 10/15/23 | Status: | NetDMR Validated |

Considerations for Form Completion

| | | | | | |
|------------------------------------|-------|--------|-------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)

Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|---------|-------|--------------------------|------------------|-------------|-------------|-------------|------------------|-----------------------|-------------------|----------------|-----------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | Req Mon DAILY MN | | | | Req Mon DAILY MX | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | C - No Discharge | | | | |
| 32103 | 1,2-Dichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34475 | Tetrachloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34501 | 1,1-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 28 - ug/L | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 7.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34506 | 1,1,1-Trichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 200.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34546 | trans-1,2-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 100.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39175 | Vinyl chloride | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 2.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39180 | Trichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 5.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 50050 | Flow, in conduit or thru treatment plant | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 03 - MGD | 01/01 - Daily | MS - MEASRD | |
| | | | | | Permit Req. | | | | | | Req Mon MO AVG | | | | | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | | | | | |
| 81686 | cis-1,2-Dichloroethene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | <= | 70.0 VALUE | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
Outfall 002 (Air stripper) did not operate during the 3rd quarter 2023

Attachments
No attachments.

Report Last Saved By

COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-10-17 07:19 (Time Zone: -07:00)

Report Last Signed By

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2023-10-17 07:19 (Time Zone: -07:00)

DMR Copy of Record

| Permit | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|--------------------------------------|----------|-------------|--------------------|---------------------|--|-------------|---------|--|--------------|---|---------|---------------------------------------|--------------|------------|-----------------------|----------------|--|
| Permit #: | | OR0033391 | | | Permittee: | | COLUMBIA HELICOPTERS, INC. | | | | | Facility: | | COLUMBIA HELICOPTERS | | | | | |
| Major: | | No | | | Permittee Address: | | PO Box 3500 Portland, OR 97208-3500 | | | | | Facility Location: | | 14452 ARNDT RD NE AURORA, OR 97002 | | | | | |
| Permitted Feature: | | 001 External Outfall | | | Discharge: | | 001-Q Treated Groundwater | | | | | | | | | | | | |
| Report Dates & Status | | | | | | | | | | | | | | | | | | | |
| Monitoring Period: | | From 10/01/23 to 12/31/23 | | | DMR Due Date: | | 01/15/24 | | | | | Status: | | NetDMR Validated | | | | | |
| Considerations for Form Completion | | | | | | | | | | | | | | | | | | | |
| Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter. | | | | | | | | | | | | | | | | | | | |
| Principal Executive Officer | | | | | | | | | | | | | | | | | | | |
| First Name: | | Brett | | | Title: | | HSE Manager | | | | | Telephone: | | 503-678-1222 | | | | | |
| Last Name: | | Baird | | | | | | | | | | | | | | | | | |
| No Data Indicator (NODI) | | | | | | | | | | | | | | | | | | | |
| Form NODI: | | -- | | | | | | | | | | | | | | | | | |
| Table Headers | | | | | | | | | | | | | | | | | | | |
| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | | Quantity or Loading | | | | Quality or Concentration | | | | | | # of Ex. | Frequency of Analysis | Sample Type | |
| | | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | Value 3 | | | | Units |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 6.89 | | | = | 6.98 | 12 - SU | 01/07 - Weekly | GR - GRAB | |
| | | | | | Permit Req. | | | | | >= | 6.2 DAILY MN | | | <= | 9.0 DAILY MX | 12 - SU | 01/07 - Weekly | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00556 | Oil & Grease | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | <= | 10.0 VALUE | 19 - mg/L | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | B - Below Detection Limit/No Detection |
| 84066 | Oil and grease visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | Req Mon VALUE | 9P - N=0;Y=1 | | | | | | | | |
| | | | | | Value NODI | | | | | B - Below Detection Limit/No Detection | | | | | | | | | |
| Submission Note | | | | | | | | | | | | | | | | | | | |
| If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. | | | | | | | | | | | | | | | | | | | |
| Edit Check Errors | | | | | | | | | | | | | | | | | | | |
| No errors. | | | | | | | | | | | | | | | | | | | |
| Comments | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Attachments | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Name | Type | Size | | | | | |
| | | | | | | | | | | | | Outfall_1_Q4_Weekly_Check_October_December_2023.pdf | pdf | 111218.0 | | | | | |
| Report Last Saved By | | | | | | | | | | | | | | | | | | | |
| COLUMBIA HELICOPTERS, INC. | | | | | | | | | | | | | | | | | | | |
| User: | | BRETTBAIRD | | | | | | | | | | | | | | | | | |
| Name: | | Brett Baird | | | | | | | | | | | | | | | | | |
| E-Mail: | | brett.baird@colheli.com | | | | | | | | | | | | | | | | | |
| Date/Time: | | 2024-01-02 10:18 (Time Zone: -08:00) | | | | | | | | | | | | | | | | | |
| Report Last Signed By | | | | | | | | | | | | | | | | | | | |
| User: | | BRETTBAIRD | | | | | | | | | | | | | | | | | |
| Name: | | Brett Baird | | | | | | | | | | | | | | | | | |
| E-Mail: | | brett.baird@colheli.com | | | | | | | | | | | | | | | | | |
| Date/Time: | | 2024-01-02 10:18 (Time Zone: -08:00) | | | | | | | | | | | | | | | | | |

DMR Copy of Record

| | | | | | |
|---------------------------|-------------------------|---------------------------|--|---------------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-QS Stormwater runoff | | |

| | | | | | |
|----------------------------------|----------------------------------|----------------------|-----------------|----------------|-------------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 10/01/23 to 12/31/23 | DMR Due Date: | 01/15/24 | Status: | NetDMR Validated |

Considerations for Form Completion
Report Quarterly by the 15th of the month following the end of the quarter. Use NODI '9' if parameter or DMR not required in Quarter.

| | | | | | |
|------------------------------------|-------|---------------|-------------|-------------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | Brett | Title: | HSE Manager | Telephone: | 503-678-1222 |
| Last Name: | Baird | | | | |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | Quality or Concentration | | | # of Ex. | Frequency of Analysis | Sample Type | | | | | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|--------------------------|-------|-------------|----------|-----------------------|-------------|---------|-------------|---------|-------------|---------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | | | | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | Value 3 |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 01042 | Copper, total [as Cu] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 01051 | Lead, total [as Pb] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 01092 | Zinc, total [as Zn] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 45613 | Floating solids, waste or visible foam-visual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
No quarterly monitoring performed required by permit. Permit required bi-annual sampling per schedule "B"

Attachments
No attachments.

Report Last Saved By
COLUMBIA HELICOPTERS, INC.

| | |
|-------------------|--------------------------------------|
| User: | BRETTBAIRD |
| Name: | Brett Baird |
| E-Mail: | brett.baird@colheli.com |
| Date/Time: | 2024-01-02 10:24 (Time Zone: -08:00) |

| | |
|------------------------------|--------------------------------------|
| Report Last Signed By | |
| User: | BRETTBAIRD |
| Name: | Brett Baird |
| E-Mail: | brett.baird@colheli.com |
| Date/Time: | 2024-01-02 10:24 (Time Zone: -08:00) |

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---------------------------------------|
| Permit | | | | | |
| Permit #: | OR0033391 | Permittee: | COLUMBIA HELICOPTERS, INC. | Facility: | COLUMBIA HELICOPTERS |
| Major: | No | Permittee Address: | PO Box 3500 Portland, OR 97208-3500 | Facility Location: | 14452 ARNDT RD NE AURORA, OR 97002 |
| Permitted Feature: | 002 Internal Outfall | Discharge: | 002-Q Air Stripper Effluent | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 10/01/23 to 12/31/23 | DMR Due Date: | 01/15/24 | Status: | NetDMR Validated |

Considerations for Form Completion

| | | | | | |
|------------------------------------|--|--------|--|------------|--|
| Principal Executive Officer | | | | | |
| First Name: | | Title: | | Telephone: | |
| Last Name: | | | | | |

No Data Indicator (NODI)
Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|---------|-------|--------------------------|------------------|-------------|---------|-------------|------------------|-----------------------|-------------------|----------------|-----------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 12 - SU | 01/07 - Weekly | GR - GRAB |
| | | | | | Permit Req. | | | | | | Req Mon DAILY MN | | | | Req Mon DAILY MX | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | C - No Discharge | | | | |
| 32103 | 1,2-Dichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34475 | Tetrachloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34501 | 1,1-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 28 - ug/L | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 7.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34506 | 1,1,1-Trichloroethane | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 200.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 34546 | trans-1,2-Dichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 100.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39175 | Vinyl chloride | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 2.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 39180 | Trichloroethylene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 5.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |
| 50050 | Flow, in conduit or thru treatment plant | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 03 - MGD | 01/01 - Daily | MS - MEASRD | |
| | | | | | Permit Req. | | | | | | Req Mon MO AVG | | | | | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | | | | | | | |
| 81686 | cis-1,2-Dichloroethene | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | 21 - ppb | 01/90 - Quarterly | GR - GRAB | |
| | | | | | Permit Req. | | | | | | <= | 70.0 VALUE | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | C - No Discharge | | | | |

Submission Note
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
Outfall 002 (Air stripper) did not operate during the 2nd quarter 2023

Attachments
No attachments.

Report Last Saved By

COLUMBIA HELICOPTERS, INC.

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2024-01-02 10:25 (Time Zone: -08:00)

Report Last Signed By

User: BRETTBAIRD
Name: Brett Baird
E-Mail: brett.baird@colheli.com
Date/Time: 2024-01-02 10:25 (Time Zone: -08:00)

Appendix B
Sampling Memorandum and Field
Sampling Data Sheets

Memorandum

December 1, 2023

To: File 230171-01.01

From: James Melton, Anchor QEA, LLC

Re: October 2023 Groundwater Monitoring at Columbia Helicopters, Inc., Aurora, OR

Overview

On October 2, 2023, Anchor QEA, LLC (Anchor QEA), measured groundwater elevations in 28 groundwater wells associated with the Columbia Helicopters, Inc. (CHI), facility in Aurora, Oregon. On October 2, 3, 4, and 11, 2023, Anchor QEA sampled four groundwater monitoring wells, one observation well, four extraction wells, two domestic wells, and one supply well at CHI. Fourteen groundwater samples were collected and submitted for analysis of halogenated volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method 8021. Four samples (OW 4, MW 22, MW-23, and MW-26) were additionally analyzed for natural attenuation products. The natural attenuation monitoring included field measurement of dissolved oxygen and oxidation reduction potential.

Purging and Sampling

Before sampling, wells were purged of at least three casing volumes of water until field parameters (temperature, pH, and specific conductivity) stabilized or until the wells purged dry. Temperature, pH, and specific conductivity values were recorded after each casing volume was removed. Table 1 summarizes the field parameter measurements for this event.

Monitoring wells and observation wells requiring natural attenuation parameters were purged and sampled using dedicated bladder pumps. The CHI supply well, the domestic wells, and well EXT-6 were sampled from the closest spigots to the well heads prior to treatment. Extraction wells EXT-2 through EXT-4 and EXT-6 were collected with disposable polyethylene bailers and, to reduce volatilization of samples, a disposable bottom-emptying device was used to transfer groundwater samples from the bailer to the laboratory-supplied sample containers.

Quality control consisted of analyzing a laboratory-provided trip blank and a field blank for halogenated volatile organic compounds by EPA Method 8021 and analyzing a duplicate sample from monitoring wells MW-26 and OW-4. The transfer blank sample was collected by pouring laboratory-supplied deionized water into the sample bottles from a height of 1 foot. Samples were given unique blind sample identifications (blind codes), which are summarized in Table 1. Field forms (including water level survey data and field sampling data sheets) are included in Attachment A.

Sample Handling and Shipping

Samples were packed in iced shipping containers for preservation and transported under chain-of-custody procedures to Apex Laboratories, LLC, in Tigard, Oregon. Chain-of-custody forms are included in Attachment B.

Table

Table 1
Sampling Field Parameters

| Well | Blind Code | Date Sampled | Depth to Water (feet) | Casing Volumes Purged | Gallons Removed | pH | Specific Conductance (µS/cm) | Temperature (°C) | Redox Potential (ORP) (mV) | Dissolved Oxygen (mg/L) |
|--|---------------|--------------|-----------------------|-----------------------|-----------------|------|------------------------------|------------------|----------------------------|-------------------------|
| Observation Wells | | | | | | | | | | |
| OW-4 | CHI-100323-08 | 10/3/2023 | 14.99 | 3 | 5.25 | 6.54 | 182.1 | 16.9 | 223.2 | 1.28 |
| Monitoring Wells | | | | | | | | | | |
| MW-22 | CHI-100323-06 | 10/3/2023 | 19.62 | 3 | 15.75 | 6.79 | 230.5 | 12.9 | 206.7 | 3.65 |
| MW-23 | CHI-100323-05 | 10/3/2023 | 16.79 | 3 | 15.0 | 6.67 | 252.9 | 12.5 | 172.5 | 1.33 |
| MW-26 | CHI-100223-01 | 10/2/2023 | 29.05 | 3 | 7.50 | 6.64 | 256.8 | 12.2 | 275.1 | 5.78 |
| MW-29 | CHI-100323-07 | 10/3/2023 | 16.49 | 3 | 225.0 | 7.06 | 261.2 | 14.3 | 213.7 | 0.55 |
| Surface Water | | | | | | | | | | |
| S-4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| S-5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Extraction Wells | | | | | | | | | | |
| EXT-2 | CHI-100423-12 | 10/4/2023 | 17.46 | NA | NA | 6.31 | 196.0 | 17.2 | 157.1 | 3.84 |
| EXT-3 | CHI-100423-13 | 10/4/2023 | 16.48 | NA | NA | 6.44 | 225.5 | 18.6 | 173.1 | 4.27 |
| EXT-4 | CHI-100423-14 | 10/4/2023 | 15.05 | NA | NA | 6.67 | 218.6 | 17.7 | 185.0 | 5.50 |
| EXT-6 | CHI-101123-15 | 10/11/2023 | 19.20 | NA | 5.0 | 6.76 | 166.1 | 16.7 | 182.3 | 3.28 |
| Supply Wells | | | | | | | | | | |
| CHI | CHI-100423-11 | 10/4/2023 | NA | NA | 5.0 | 7.46 | 274.7 | 13.9 | 134.3 | 1.63 |
| Anderson | CHI-100223-03 | 10/2/2023 | NA | NA | 90.0 | 7.82 | 302.4 | 13.0 | -92.0 | 0.20 |
| Buehler | CHI-100223-04 | 10/2/2023 | NA | NA | 90.0 | 7.91 | 248.6 | 13.5 | -132.9 | 0.12 |
| Quality Assurance/Quality Control | | | | | | | | | | |
| MW-26 (DUP) | CHI-100223-02 | 10/2/2023 | 29.05 | 3 | 7.50 | 6.64 | 256.8 | 12.2 | 275.1 | 5.78 |
| OW-4 (DUP) | CHI-100323-09 | 10/3/2023 | 14.99 | 3 | 5.25 | 6.29 | 191.1 | 17.1 | 126.4 | 0.89 |
| Transfer Blank | CHI-100323-10 | 10/3/2023 | NA | NA | NA | 7.71 | 9.5 | 18.6 | 92.4 | 6.70 |

Notes:

µS/cm: microsiemens per centimeter

mg/L: milligrams per liter

mV: millivolt

NA: not applicable

ORP: oxidation reduction potential

Attachment A
Field Forms

**Columbia Helicopters Inc.
Task Sheet
Annual Event (October 2023)**

| Site | DTB | Natural Attenuation ² | Sample Blind Code | Sample Date | Sample Time | Sampling Method |
|---|-------|----------------------------------|-------------------|-------------|-------------|-----------------|
| MONITORING WELLS | | | | | | |
| OW-4 | 23.91 | X | CHI-100323-08 | 10/3/23 | 13:25 | BP |
| MW-22 | 49.14 | X | CHI-100323-06 | 10/3/23 | 11:30 | BP |
| MW-23 | 44.05 | X | CHI-100323-05 | 10/3/23 | 10:20 | BP |
| MW-26 | 44.17 | X | CHI-100223-01 | 10/2/23 | 15:30 | BP |
| MW-29 | 65.80 | — | CHI-100323-07 | 10/3/23 | 12:25 | E & DB |
| EXTRACTION WELLS | | | | | | |
| EXT-2 | NA | — | CHI-100423-12 | 10/4/23 | 09:55 | DB |
| EXT-3 | NA | — | CHI-100423-13 | 10/4/23 | 10:30 | DB |
| EXT-4 | NA | — | CHI-100423-14 | 10/4/23 | 10:55 | DB |
| EXT-6 | NA | — | CHI-101123-15 | 10/11/23 | 09:05 | GRAB |
| SUPPLY WELLS | | | | | | |
| CHI | NA | — | CHI-100423-11 | 10/4/23 | 09:35 | GRAB |
| ANDERSON | NA | — | CHI-100223-03 | 10/2/23 | 16:20 | GRAB |
| BUEHLER | NA | — | CHI-100223-04 | 10/2/23 | 16:55 | GRAB |
| SURFACE WATER | | | | | | |
| S-4 | NA | — | CHI- DRY | — | — | GRAB |
| S-5 | NA | — | CHI- DRY | — | — | GRAB |
| QA/QC | | | | | | |
| DUP | | | CHI-100223-02 | 10/2/23 | 15:35 | MW-26 |
| DUP | | | CHI-100323-09 | 10/3/23 | 13:30 | OW-4 |
| Transfer Blank | | | CHI-100323-10 | 10/3/23 | 14:25 | POUR |
| Notes: TRIP BLANK: TB-100423 @1120 | | | | | | |
| ² Natural Attenuation parameters: DO and ORP DB = Disposable Bailer MB = Micro Bailer (or 1' bailer) BP = Bladder Pump E = Electric (4-prong, 6K generator, 120/240V) SP = Submersible Pump GRAB - faucet or seep POUR = poured distilled water from a height of 1 foot | | | | | | |

**Columbia Helicopters
Water Levels**

| Site | Time | DTW | Well Integrity |
|--|----------------------------------|--------------------------------|----------------------|
| MONITORING WELLS | | | |
| OW-1 | 11 : 45 | 11.29 | |
| OW-3 | 11 : 55 | 13.37 | |
| OW-4 | 11 : 37 | 15.15 | |
| OW-10 | 11 : 11 | 14.79 | |
| OW-11 | 11 : 36 | 16.09 | |
| MW-13 | 12 : 01 | 12.69 | |
| MW-14 | 11 : 17 | 16.36 | |
| MW-15 | 11 : 21 | 17.00 | |
| MW-16 | 11 : 19 ^{cm} | 16.43 ^{cm} | Time: 1133 DTW 16.68 |
| MW-19 | 12 : 27 | 15.60 | |
| MW-20 | 13 : 16 | 18.28 | |
| MW-21 | 13 : 07 | ND | |
| MW-22 | 13 : 36 | 19.60 | |
| MW-23 | 13 : 46 | 16.74 | |
| MW-25 | 12 : 13 | 14.85 | |
| MW-26 | 15 : 05 | 29.05 | |
| MW-27 | 12 : 37 | 25.50 | |
| MW-28 | 12 : 56 | 17.65 | |
| MW-29 | 13 : 30 | 16.46 | |
| EXTRACTION WELLS | | | |
| EXT-1 | 11 : 27 | 16.90 | |
| EXT-2 | 11 : 29 | 17.37 | Pump ON / OFF |
| EXT-3 | 11 : 19 | 16.43 | Pump ON / OFF |
| EXT-4 | 11 : 04 | 15.01 | Pump ON / OFF |
| EXT-5 | 10 : 56 | 14.56 | Pump ON / OFF |
| EXT-6 | 11 : 40 | 12.26 | Pump ON / OFF |
| PIEZOMETERS | | | |
| PZ-1 | 11 : 23 | 15.39 | |
| PZ-2 | 11 : 50 | 13.65 | |
| PZ-3 | 11 : 59 | 13.24 | |
| SUPPLY WELLS | | | |
| CHI | NA | NA | |
| ANDERSON | NA | NA | |
| BUEHLER | NA | NA | |
| <p>Date: <u>10/2/23</u></p> <p>Personnel: <u>Melton / Montgomery</u></p> <p>Waterlevel Probe #: _____</p> <p>Weather: <u>cloudy, 56° F</u></p> <p>Notes: _____</p> <p>NA = Not Applicable</p> <p>= On-site Flush-mount well - open well cap and let equilibrate before measuring depth to water.</p> | | | |

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01 **WELL ID:** S-4

SITE ADDRESS: Aurora, Oregon **BLIND ID:** CHI- —

DUP ID: —

| | | | | | | | | | | | |
|-------------------|-------|----|--------|----|------|----|------------|----|---------|--------|-------------------------------|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: _____ ° F |

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | X 1 | Volume (gal) |
|------|-------|-----------|------------|----------|---------|---------|-----|--------------|
| NA | 10:45 | NA | --- | NA | --- | NA | | X 1 |
| NA | 11:00 | NA | --- | NA | --- | NA | X 3 | --- |

Gal/ft = (dia./2)² x 0.163 1" = 0.041 2" = 0.174 3" = 0.367 4" = 0.653 6" = 1.469 8" = 2.611 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA [√ if used]

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|------|------|--------|--------------------|--|-----|--------|----|---|
| VOA Glass | / / | : | | 3 40 ml | HCl | YES | NO | | |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | | |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | | |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | | |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | | |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | | |
| | / / | : | | 250, 500, 1L | | YES | | | |

Total Bottles (include duplicate count):

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTPH-G) (8260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

WATER QUALITY DATA Purge Start Time: _____ : ORP

| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
|-------|----------|--------------|----|-------------|---------|----|----------------------------|---------------|
| 5 | | | . | | . | | . | |
| 4 | | | | | | | . | |
| 3 | | | | | | | . | |
| 2 | | | | | | | . | |
| 1 | | | | | | | . | |

[Select A-G] [Cumulative Totals]

[Clarity, Color]

Comments: Dug a hole at the base of the seep and waited till water ran clear, then collected sample from hole.

SAMPLER: James Melton / Casey Montgomery
 (PRINTED NAME)

[Signature]
 (SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125
Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: S-5

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-

DUP ID:

| | | | | | | | | | | | |
|-------------------|-------|----|--------|----|------|----|------------|----|---------|--------|---|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: <u> </u> ° F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|---|-----------------|-----------|------------|----------|---------|---------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| NA | <u> </u> | NA | --- | NA | --- | NA | | | X 1 SEEP |
| NA | <u> </u> | NA | --- | NA | --- | NA | | | X 3 --- |
| Gal/ft = (dia./2) ² x 0.163 1" = 0.041 2" = 0.174 3" = 0.367 4" = 0.653 6" = 1.469 8" = 2.611 12" = 5.875 | | | | | | | | | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

| GROUNDWATER SAMPLING DATA | | | | | | | | | | [√ if used] |
|---------------------------|----------------|--------------|--------|--------------------|--|-----|--------|----|---|-------------|
| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ | |
| VOA Glass | / / | : | | 3 40 ml | HCl | YES | NO | | | |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | | | |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | | |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | | | |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | | | |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | | | |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | | | |
| | / / | : | | 250, 500, 1L | | YES | | | | |

Total Bottles (include duplicate count):

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTPH-G) (8260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: : | | | ORP | | | |
|--------------------|------------------------|--------------|------------------------|-------------|---------|-----|----------------------------|---------------|--|
| Meas. | Method ^s | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality | |
| 5 | | . | . | | . | | . | | |
| 4 | <i>No Sample - Dry</i> | | | | | | | . | |
| 3 | <i>No Sample - Dry</i> | | | | | | | . | |
| 2 | | . | . | | . | | . | | |
| 1 | | . | . | | . | | . | | |

[Select A-G] [Cumulative Totals]

[Clarity, Color]

Comments: Dug a hole at the base of the seep and waited till water ran clear, then collected sample from hole.

SAMPLER: James Melton
(PRINTED NAME)

Casey Martz

James Melton
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125 Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01 **WELL ID:** MW-26
SITE ADDRESS: Aurora, Oregon **BLIND ID:** CHI-101223-01
DUP ID: CHI-100223-02 @ 1535

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN PRTLY CLDY No Wind **TEMPERATURE:** 57°F

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|-------|------------|------------|------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | Volume (gal) | |
| 10/2/23 | 15:05 | 44.17 | --- | 29.05 | --- | 15.12 | X 1 | 2.46 |
| --- | --- | --- | --- | --- | --- | --- | X 3 | 7.38 |
| Gal/ft = (dia./2) ² x 0.163 | | 1" = 0.041 | 2" = 0.174 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 8" = 2.611 | 12" = 5.875 |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailor (D) Bladder Pump (E) Dedicated Bailor (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | ✓ |
|----------------|---------|-------|--------|--------------------|--|-----|--------|-----|-----|
| VOA Glass | 10/2/23 | 15:30 | D | 3 40 ml | (HCl) | YES | NO | - | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | --- | --- |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | --- |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | --- | --- |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | --- | --- |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | --- | --- |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | --- | --- |
| | / / | : | | 250, 500, 1L | | YES | --- | --- | --- |

Total Bottles (include duplicate count): 3 x 2 = 6 Dup

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (#21) (BTEX) (NWTPH-G) (#260) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 15:10 | | | ORP | | Water Quality |
|--------------------|----------|--------------|-------------------------|-------------|---------|-------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | |
| 5 | D | 2.5 | 6.65 | 255.5 | 12.3 | 270 | 5.89 | clear, colorless |
| 4 | D | 5.0 | 6.65 | 256.4 | 12.3 | 283.5 | 5.88 | clear, colorless |
| 3 | D | 7.5 | 6.64 | 256.8 | 12.2 | 275.1 | 5.78 | clear, colorless |
| 2 | | . | . | | . | | . | |
| 1 | | . | . | | . | | . | |

[Select A-G] [Cumulative Totals]

[Clarity, Color]

Comments:

SAMPLER: James Melton
 (PRINTED NAME)

Casey Martinez

(SIGNATURE)

James Melton

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: Anderson

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100223-03

DUP ID: ~

| | | | | | | | | | | | |
|------------|-------|----|--------|----|------|----|------------|----|---------|--------|--------------------|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: 58 °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|------|------------|------------|------------|------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| NA | NA | NA | NA | NA | NA | NA | | | X 1 DOMESTIC |
| NA | NA | NA | NA | NA | NA | NA | | | X 3 WELL |
| Gal/ft = (dia./2) ² x 0.163 | | 1" = 0.041 | 2" = 0.174 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 8" = 2.611 | 12" = 5.875 | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method § | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | ✓ |
|----------------|---------|-------|----------|--------------------|--|-------|--------|-----|-----|
| VOA Glass | 10/2/23 | 16:20 | G | 3 (40 ml) | (HCl) | (YES) | (NO) | - | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | --- | --- |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | --- |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | --- | --- |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | --- | --- |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | --- | --- |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | --- | --- |
| | / / | : | | 250, 500, 1L | | YES | | --- | --- |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTFH-G) (8260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTFH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 16:08 | | | ORP | | Water Quality |
|--------------------|----------|--------------|-------------------------|-------------|---------|------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | |
| 5 | G | 30.0 | 7.78 | 302.4 | 13.0 | 7.3 | 0.42 | clear, colorless |
| 4 | G | 60.0 | 7.81 | 302.4 | 13.0 | -510 | 0.27 | clear, colorless |
| 3 | G | 90.0 | 7.82 | 302.4 | 13.0 | -920 | 0.20 | clear, colorless |
| 2 | | . | . | . | . | . | . | |
| 1 | | . | . | . | . | . | . | |

[Select A-G] [Cumulative Totals]

[Clarity, Color]

Comments: Opened spigot in pump house and let 90.0 gallons purge before collecting sample from spigot.
 Flow Rate = 5 gallons / 0.5 minutes = 10.0 GPM
 gpm x minutes = gallons
 Continuously pumping well - no purging required before sampling.

SAMPLER: James Melton
 (PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125
Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01
SITE ADDRESS: Aurora, Oregon

WELL ID: Buehler
BLIND ID: CHI-100223-04

DUP ID: _____

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN PRTLY CLDY No Wind **TEMPERATURE:** 57° F

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|------|------------|------------|------------|------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| NA | NA | NA | NA | NA | NA | NA | | | X 1 DOMESTIC |
| NA | NA | NA | NA | NA | NA | NA | | | X 3 WELL |
| Gal/ft = (dia./2) ² x 0.163 | | 1" = 0.041 | 2" = 0.174 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 8" = 2.611 | 12" = 5.875 | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Grab (✓ if used)

| GROUNDWATER SAMPLING DATA | | | | | | | | | | |
|--|---------|-------|----------|--------------------|-----------------------|--|--------|-----|----|---|
| Bottle Type | Date | Time | Method § | Amount & Volume mL | Preservative (circle) | Ice | Filter | pH | ✓ | |
| VOA Glass | 10/2/23 | 16:55 | G | 3 | 40 ml | HCl | YES | NO | — | ✓ |
| Amber Glass | / / | : | | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | — | — |
| White Poly | / / | : | | | 250, 500, 1L | None | YES | NO | NA | — |
| Yellow Poly | / / | : | | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | — | — |
| Green Poly | / / | : | | | 250, 500, 1L | NaOH | YES | NO | — | — |
| Red Total Poly | / / | : | | | 250, 500, 1L | HNO ₃ | YES | NO | — | — |
| Red Diss. Poly | / / | : | | | 250, 500, 1L | HNO ₃ | YES | YES | — | — |
| | / / | : | | | 250, 500, 1L | | YES | — | — | — |
| Total Bottles (include duplicate count): | | | | 3 | | | | | | |

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (802) (BTEX) (NWTPH-G) (2605) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 16:35 | | | ORP | | |
|--------------------|----------|--------------|-------------------------|-------------|---------|--------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | G | 30.0 | 7.87 | 250.4 | 13.4 | -68.0 | 0.18 | clear, colorless |
| 4 | G | 60.0 | 7.90 | 249.8 | 13.6 | -121.3 | 0.13 | clear, colorless |
| 3 | G | 90.0 | 7.91 | 248.6 | 13.5 | -132.9 | 0.12 | clear, colorless |
| 2 | | . | . | . | . | . | . | |
| 1 | | . | . | . | . | . | . | |

[Select A-G] [Cumulative Totals] [Clarity, Color]

Comments: Opened spigot in garden and let 90.0 gallons purge before collecting sample from spigot.
Flow Rate = 5 gallons/0.75 minutes = 6.67 GPM
GPM x minutes = gallons
Continuously pumping well - no purging required before sampling.

SAMPLER: James Melton / Casey Montgomery (PRINTED NAME) [Signature] (SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125 Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: MW-23

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100323-05

DUP ID: -

| | | | | | | | | | | | |
|------------|-------|----|--------|----|------|----|------------|----|---------|--------|--------------------|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: 58 °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|-------|------------|------------|------------|------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| 10/13/23 | 09:15 | 44.05 | --- | 16.79 | --- | 27.26 | | | X 1 4.75 |
| + | : | . | --- | --- | --- | --- | | | X 3 14.25 |
| Gal/ft = (dia./2) ² x 0.163 | | 1" = 0.041 | 2" = 0.17 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 8" = 2.611 | 12" = 5.875 | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method § | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|----------|-------|----------|--------------------|--|-----|--------|----|---|
| VOA Glass | 10/17/23 | 10:20 | D | 3 (40 ml) | HCl | YES | NO | - | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | - | - |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | - |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | - | - |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | - | - |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | - | - |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | - | - |
| | / / | : | | 250, 500, 1L | | YES | - | - | - |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTPH-C) (8260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 09:16 | | | ORP | | Water Quality |
|--------------------|----------|--------------|-------------------------|-------------|---------|-------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | |
| 5 | G | 5.0 | 6.67 | 250.5 | 12.5 | 213.2 | 1.11 | clear, colorless |
| 4 | G | 10.0 | 6.67 | 251.1 | 12.5 | 199.3 | 1.24 | clear, colorless |
| 3 | G | 15.0 | 6.67 | 252.9 | 12.5 | 172.5 | 1.33 | clear, colorless |
| 2 | | . | . | . | . | . | . | |
| 1 | | . | . | . | . | . | . | |

[Select A-G]

[Cumulative Totals]

[Clarity, Color]

Comments:

SAMPLER: James Melton / Casey Montgomery
 (PRINTED NAME)

[Signature]
 (SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125 Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01 **WELL ID:** MW-22

SITE ADDRESS: Aurora, Oregon **BLIND ID:** CHI-100323-06

DUP ID: 2

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN PRTLY CLDY No Wind **TEMPERATURE:** 62 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | Volume (gal) |
|---------|-------|-----------|------------|----------|---------|---------|--------------|
| 10/3/23 | 10:47 | 49.14 | --- | 19.62 | --- | 29.52 | X 1 5.14 |
| --- | --- | --- | --- | --- | --- | --- | X 3 15.42 |

Gal/ft = (dia./2)² x 0.163 1" = 0.041 2" = 0.174 3" = 0.367 4" = 0.653 6" = 1.469 8" = 2.611 12" = 5.875

§ **METHODS:** (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA [√ if used]

| Bottle Type | Date | Time | Method § | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|---------|-------|----------|--------------------|--|-----|--------|-----|-----|
| VOA Glass | 10/3/23 | 11:30 | D | 3 (40 ml) | HCl | YES | NO | --- | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | --- | --- |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | --- |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | --- | --- |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | --- | --- |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | --- | --- |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | --- | --- |
| | / / | : | | 250, 500, 1L | | YES | --- | --- | --- |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (#021) (BTEX) (NWTPH-G) (#260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

WATER QUALITY DATA Purge Start Time: 10:52 ORP

| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
|-------|----------|--------------|------|-------------|---------|-------|----------------------------|-------------------|
| 5 | D | 5.25 | 6.79 | 230.2 | 12.9 | 216.7 | 3.71 | clear, colorless |
| 4 | D | 10.50 | 6.77 | 230.8 | 12.9 | 208.0 | 3.62 | clear, colorless. |
| 3 | D | 15.75 | 6.79 | 230.5 | 12.9 | 206.7 | 3.65 | clear, colorless. |
| 2 | | . | . | . | . | . | . | |
| 1 | | . | . | . | . | . | . | |

[Select A-C]

[Cumulative Totals]

[Clarity, Color]

Comments:

SAMPLER: James Melton / Casey Montgomery
 (PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125 Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: MW-2A

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100323-07

DUP ID: -

| | | | | | | | | | | | |
|------------|-------|----|--------|----|------|-----------|------------|----|---------|--------|--------------------|
| WIND FROM: | N | NE | E | SE | S | <u>SW</u> | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: 63 °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|-------|-----------|------------|----------|---------|---------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| 10/3/23 | 12:02 | 65.80 | --- | 16.49 | --- | 49.31 | | | X1 72.43 |
| 10/3/23 | 12:02 | 65.80 | --- | 16.49 | --- | 49.31 | | | X3 217.31 |

Gal/ft = (dia./2)² x 0.163 1" = 0.041 2" = 0.174 3" = 0.367 4" = 0.653 6" = 1.109 8" = 2.611 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|---------|-------|--------|--------------------|--|-----|--------|-----|-----|
| VOA Glass | 10/3/23 | 12:25 | F | 3 40 ml | HCl | YES | NO | --- | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | --- | --- |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | --- |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | --- | --- |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | --- | --- |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | --- | --- |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | --- | --- |
| | / / | : | | 250, 500, 1L | | YES | --- | --- | --- |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTPH-G) (8210B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 12:10 | ORP | | | | |
|--------------------|----------|--------------|-------------------------|-------------|---------|-------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | | 75.0 | 7.07 | 266.3 | 14.4 | 222.8 | 5.27 | clear, colorless |
| 4 | | 150.0 | 7.05 | 261.9 | 14.4 | 221.0 | 0.40 | clear, colorless |
| 3 | | 225.0 | 7.06 | 261.2 | 14.3 | 213.7 | 0.55 | clear, colorless |
| 2 | | . | . | . | . | . | . | . |
| 1 | | . | . | . | . | . | . | . |

[Select A-G] [Cumulative Totals]

[Clarity, Color]

Comments:

SAMPLER: James Melton / Casey Montgomery
(PRINTED NAME)

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125 Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01 **WELL ID:** OW-4
SITE ADDRESS: Aurora, Oregon **BLIND ID:** CHI-100323-08
DUP ID: CHI-100323-09 @1330

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN PRTLY CLDY No Wind **TEMPERATURE:** 62 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | Volume (gal) |
|---------|-------|-----------|------------|----------|---------|---------|--------------|
| 10/3/23 | 12:52 | 23.91 | --- | 14.99 | --- | 8.92 | X 1 1.55 |
| / / | / / | - | --- | - | --- | - | X 3 4.65 |

Gal/ft = (dia./2)² x 0.163 1" = 0.041 2" = 0.172 3" = 0.367 4" = 0.653 6" = 1.469 8" = 2.611 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA [√ if used]

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|----------|-------|--------|--------------------|--|-----|--------|-----|-----|
| VOA Glass | 10/03/23 | 13:25 | D | 3 40 mL | HCl | YES | NO | - | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | --- | --- |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | --- |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | --- | --- |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | --- | --- |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | --- | --- |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | --- | --- |
| | / / | : | | 250, 500, 1L | | YES | --- | --- | --- |

Total Bottles (include duplicate count): 3 x 2 = 6 Dup

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (802) (BTEX) (NWTPH-G) (260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

WATER QUALITY DATA Purge Start Time: 12:57 ORP

| Meas. | Method | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
|-------|--------|--------------|------|-------------|---------|-------|----------------------------|-------------------|
| 5 | D | 1.75 | 6.92 | 199.2 | 17.1 | 234.0 | 3.50 | clear, colorless. |
| 4 | D | 3.5 | 6.61 | 196.4 | 16.9 | 237.0 | 0.89 | clear, colorless. |
| 3 | D | 5.25 | 6.54 | 182.1 | 16.9 | 223.2 | 1.28 | clear colorless. |
| 2 | . | . | . | . | . | . | . | . |
| 1 | . | . | . | . | . | . | . | . |

[Select A-G] [Cumulative Totals] [Clarity, Color]

Comments:

SAMPLER: James Melton / Casey Montgomery (PRINTED NAME) *[Signature]* (SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125
Portland, OR 97219

Office: (503) 670-1108

PROJECT NAME: Columbia Helicopters, Inc 210171-01 WELL ID: Field Blank

SITE ADDRESS: Aurora, Oregon BLIND ID: CHI-100323-10

DUP ID: -

WIND FROM: N NE E SE S SW W NW LIGHT MEDIUM HEAVY
WEATHER: SUNNY CLOUDY RAIN PRITLY CLDY No Wind TEMPERATURE: 63 °F

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | Volume (gal) |
|------|------|-----------|------------|----------|---------|---------|--------------|
| NA | NA | NA | NA | NA | NA | NA | X 1 FIELD |
| NA | NA | NA | NA | NA | NA | NA | X 3 BLANK |

Gal/ft = (dia./2)² x 0.163 1" = 0.041 2" = 0.174 3" = 0.367 4" = 0.653 6" = 1.469 8" = 2.611 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other = Four

GROUNDWATER SAMPLING DATA [√ if used]

| Bottle Type | Date | Time | Method § | Amount & Volume ml | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|---------|-------|----------|--------------------|--|-----|--------|----|---|
| VOA Glass | 10/3/23 | 14:05 | G | 3 (40 ml) | HCl | YES | NO | - | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | - | - |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | - |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | - | - |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | - | - |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | - | - |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | - | - |
| | / / | : | | 250, 500, 1L | | YES | - | - | - |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (6021) (BTEX) (NWTPH-G) (8260) |
| | AMBER - Glass | (PAH) (IPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

WATER QUALITY DATA Purge Start Time: NA ORP

| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
|-------|----------|--------------|------|-------------|---------|-------|----------------------------|------------------|
| 5 | G | NA | 7.58 | 14.5 | 15.4 | 163.6 | 7.44 | clear, colorless |
| 4 | . | . | . | . | . | . | . | |
| 3 | . | . | . | . | . | . | . | |
| 2 | . | . | . | . | . | . | . | |
| 1 | . | . | . | . | . | . | . | |

[Select A-G] [Cumulative Totals] [Clarity, Color]

Comments: Sample collected by pouring laboratory-provided VOC-free deionized water into sample containers from a height of one foot. Sample collected at location OW-4.

SAMPLER: James Melton / Casey Montgomery
(PRINTED NAME)

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125
Portland, OR 97219

Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Columbia Helicopters, Inc 210171-01 **WELL ID:** CHI

SITE ADDRESS: Aurora, Oregon **BLIND ID:** CHI-100423-11

DUP ID:

| | | | | | | | | | | | |
|-------------------|-------|----|--------------|-----------|------|----|------------|----|---------|--------|----------------------------------|
| WIND FROM: | N | NE | E | <u>SE</u> | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | <u>COUDY</u> | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: <u>96</u> °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] | | | | | |
|--|------|-----------|------------|----------|---------|---------|---------------------|----------------|-------------------------|-------|------|-------|-------|-------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) | | | | | |
| / / | : | NA | --- | NA | --- | NA | | | X 1 SUPPLY | | | | | |
| / / | : | NA | --- | NA | --- | NA | | | X 3 WELL | | | | | |
| Gal/ft = (dia./2) ² x 0.163 | 1" = | 0.041 | 2" = | 0.174 | 3" = | 0.367 | 4" = | 0.653 | 6" = | 1.469 | 8" = | 2.611 | 12" = | 5.875 |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA [√ if used]

| Bottle Type | Date | Time | Method [§] | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|----------------|--------------|---------------------|-----------------------|--|------------|-----------|-----------------|-----------------|
| VOA Glass | <u>10/4/23</u> | <u>09:35</u> | <u>6</u> | <u>3</u> <u>40 ml</u> | <u>HCl</u> | <u>YES</u> | <u>NO</u> | <u> </u> | <u> </u> |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | | |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | | |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | | |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | | |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | | |
| | / / | : | | 250, 500, 1L | | YES | | | |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | <u>(021)</u> (BTEX) (NWTPH-G) <u>(260E)</u> |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

WATER QUALITY DATA Purge Start Time: 09:26 ORP

| Meas. | Method [§] | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
|-------|---------------------|--------------|-------------|------------------------|-------------|--------------|----------------------------|-------------------------|
| 5 | <u>6</u> | <u>5.0</u> | <u>7.46</u> | <u>134.3</u> <u>cm</u> | <u>17.9</u> | <u>134.3</u> | <u>1.63</u> | <u>clear, colorless</u> |
| 4 | | . | . | <u>274.7</u> | . | | . | |
| 3 | | . | . | | . | | . | |
| 2 | | . | . | | . | | . | |
| 1 | | . | . | | . | | . | |

[Select A-G] [Cumulative Totals] [Clarity, Color]

Comments: Opened valve and let ~ 5 gallons purge before sampling. Collected sample from cam-lock connector by adjusting flow until it emits a steady smooth stream
Continuously pumping well - no purging required before sampling.

SAMPLER: James Melton / Casey Montgomery (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: EXT - 2

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100423-12

DUP ID: —

| | | | | | | | | | | | |
|------------|-------|----|---------------|-----------|------|----|------------|----|---------|--------|---------------------------|
| WIND FROM: | N | NE | E | <u>SE</u> | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | <u>CLOUDY</u> | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: <u>57</u> °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] | | | | | |
|--|------|-----------|------------|----------|---------|---------|---------------------|----------------|-------------------------|-------|------|-------|-------|-------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) | | | | | |
| 10/4/23 | : | NA | --- | 17.46 | --- | NA | | | X 1 EXTRACTION | | | | | |
| / / | : | . | --- | . | --- | . | | | X 3 WELL | | | | | |
| Gal/ft = (dia./2) ² × 0.163 | 1" = | 0.041 | 2" = | 0.174 | 3" = | 0.367 | 4" = | 0.653 | 5" = | 1.469 | 8" = | 2.611 | 12" = | 5.875 |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

| GROUNDWATER SAMPLING DATA | | | | | | | | | | [v if used] |
|---------------------------|--------|-------|--------|--------------------|--|-----|--------|----|---|-------------|
| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | | √ |
| VOA Glass | 9/4/23 | 09:55 | C | 3 (40 ml) | HCl | YES | NO | — | — | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | — | — | — |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | — | — |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | — | — | — |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | — | — | — |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | — | — | — |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | — | — | — |
| | / / | : | | 250, 500, 1L | | YES | | — | — | — |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (VOC) (BTEX) (NWTPH-G) (260) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: >24 hours prior | ORP | | | | |
|--------------------|----------|--------------|-----------------------------------|-------------|---------|------|----------------------------|------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | C | NA | 6.31 | 196.0 | 17.2 | 57.1 | 3.84 | clear, colorless |
| 4 | . | . | . | . | . | . | . | |
| 3 | . | . | . | . | . | . | . | |
| 2 | . | . | . | . | . | . | . | |
| 1 | . | . | . | . | . | . | . | |

[Select A-G]

[Cumulative Totals]

[Clarity, Color]

Comments: Pump turned on and allowed to run for more than 24 hours before sample collected.

SAMPLER: James Melton
(PRINTED NAME)

Casey Montgomery

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108

Fax: (503) 670-1128

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: EXT - 3

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100423-13

DUP ID: -

| | | | | | | | | | | | |
|------------|-------|----|--------|-----------|------|----|------------|----|--------------|--------|---------------------------|
| WIND FROM: | N | NE | E | <u>SE</u> | S | SW | W | NW | <u>LIGHT</u> | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: <u>57</u> °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|--------------|------------|------------|--------------|-------------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| <u>10/4/23</u> | <u>10:19</u> | <u>NA</u> | <u>---</u> | <u>16.48</u> | <u>---</u> | <u>---</u> | | | X 1 |
| <u>1-1</u> | <u>---</u> | <u>---</u> | <u>---</u> | <u>---</u> | <u>---</u> | <u>---</u> | | | X 3 |
| Gal/ft = (dia./2) ² x 0.163 | 1" = 0.041 | 2" = 0.174 | 3" = 0.367 | 4" = 0.653 | 6" = <u>1.469</u> | 8" = 2.611 | 12" = 5.875 | | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailor (D) Bladder Pump (E) Dedicated Bailor (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|----------------|--------------|----------|--------------------|--|------------|------------|------------|------------|
| VOA Glass | <u>10/4/23</u> | <u>10:30</u> | <u>C</u> | 3 <u>40 ml</u> | <u>HCl</u> | <u>YES</u> | <u>NO</u> | <u>---</u> | <u>✓</u> |
| Amber Glass | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | <u>---</u> | <u>---</u> |
| White Poly | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | None | YES | NO | NA | <u>---</u> |
| Yellow Poly | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | <u>---</u> | <u>---</u> |
| Green Poly | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | NaOH | YES | NO | <u>---</u> | <u>---</u> |
| Red Total Poly | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | HNO ₃ | YES | NO | <u>---</u> | <u>---</u> |
| Red Diss. Poly | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | HNO ₃ | YES | YES | <u>---</u> | <u>---</u> |
| | <u>/ /</u> | <u>:</u> | | 250, 500, 1L | | YES | <u>---</u> | <u>---</u> | <u>---</u> |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | <u>6021</u> (BTEX) (NWTPH-G) <u>6260B</u> |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: >24 hours prior | ORP | | | | |
|--------------------|----------|--------------|-----------------------------------|--------------|-------------|--------------|----------------------------|-------------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | <u>C</u> | <u>NA</u> | <u>6.44</u> | <u>225.5</u> | <u>18.6</u> | <u>173.1</u> | <u>4.27</u> | <u>clear, colorless</u> |
| 4 | | | . | | . | | . | |
| 3 | | | . | | . | | . | |
| 2 | | | . | | . | | . | |
| 1 | | | . | | . | | . | |

[Select A-G]

[Cumulative Totals]

[Clarity, Color]

Comments: Pump turned on and allowed to run for more than 24 hours before sample collected.

SAMPLER: James Melton / Casey Montgomery
(PRINTED NAME)

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: EXT - 4

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-100423-14

DUP ID: —

| | | | | | | | | | | | |
|------------|-------|----|--------|----|------|----|------------|----|---------|--------|---------------------|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: 57 ° F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|-------|-----------|------------|----------|---------|---------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | | | Volume (gal) |
| 10/4/23 | 10:44 | NA | --- | 15.05 | --- | NA | | | X 1 |
| —/—/— | —:— | — | --- | — | --- | — | | | X 3 |
| Gal/ft = (dia./2) ² x 0.163 | | | | | | | | | |
| 1" = | 0.041 | 2" = | 0.174 | 3" = | 0.367 | 4" = | 0.653 | 6" = | 1.419 |
| 8" = | 2.611 | 12" = | 5.875 | | | | | | |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA

| Bottle Type | Date | Time | Method | Amount & Volume mL | Preservative [circle] | Ice | Filter | pH | √ |
|----------------|---------|-------|--------|--------------------|--|-----|--------|----|---|
| VOA Glass | 10/4/23 | 10:55 | C | 3 (40 ml) | HCl | YES | NO | — | ✓ |
| Amber Glass | / / | : | | 250, 500, 1L | (None) (HCl) (H ₂ SO ₄) | YES | NO | — | — |
| White Poly | / / | : | | 250, 500, 1L | None | YES | NO | NA | — |
| Yellow Poly | / / | : | | 250, 500, 1L | H ₂ SO ₄ | YES | NO | — | — |
| Green Poly | / / | : | | 250, 500, 1L | NaOH | YES | NO | — | — |
| Red Total Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | NO | — | — |
| Red Diss. Poly | / / | : | | 250, 500, 1L | HNO ₃ | YES | YES | — | — |
| | / / | : | | 250, 500, 1L | | YES | — | — | — |

Total Bottles (include duplicate count): 3

| Analysis Allowed per Bottle Type | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|----------------------------------|----------------------|---|
| | VOA - Glass | (802) (BTEX) (NWTPH-G) (260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₃ /NO ₂) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: >24 hours prior | ORP | | | | |
|--------------------|----------|--------------|-----------------------------------|-------------|---------|-------|----------------------------|-------------------|
| Meas. | Method § | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | C | NA | 6.67 | 218.6 | 17.7 | 185.0 | 5.50 | Clear, colorless. |
| 4 | | . | . | | . | | . | |
| 3 | | . | . | | . | | . | |
| 2 | | . | . | | . | | . | |
| 1 | | . | . | | . | | . | |

[Select A-G]

[Cumulative Totals]

[Clarity, Color]

Comments: Pump turned on and allowed to run for more than 24 hours before sample collected.

SAMPLER: James Melton / Casey Montgomery
(PRINTED NAME)

[Signature]
(SIGNATURE)

FIELD SAMPLING DATA SHEET



6720 S Macadam Ave, Suite 125

Portland, OR 97219

Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Columbia Helicopters, Inc 210171-01

WELL ID: EXT-6

SITE ADDRESS: Aurora, Oregon

BLIND ID: CHI-101123-15

DUP ID:

| | | | | | | | | | | | |
|-------------------|-------|----|--------|----|------|----|------------|----|---------|--------|---------------------------|
| WIND FROM: | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| WEATHER: | SUNNY | | CLOUDY | | RAIN | | PRTLY CLDY | | No Wind | | TEMPERATURE: 54 °F |

| HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) | | | | | | [Product Thickness] | [Water Column] | [Water Column x Gal/ft] |
|--|---------|------------|------------|------------|------------|---------------------|----------------|-------------------------|
| Date | Time | DT-Bottom | DT-Product | DT-Water | DTP-DTW | DTB-DTW | Volume (gal) | |
| 10 / 11 / 23 | 08 : 49 | N.A | --- | 19 . 20 | --- | . | X 1 | EXTRACTION |
| / / | : | . | --- | . | --- | . | X 3 | WELL |
| Gal/ft = (dia./2) ² x 0.163 | | 1" = 0.041 | 2" = 0.174 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 8" = 2.611 | 12" = 5.875 |

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) Bladder Pump (E) Dedicated Bailer (F) Dedicated Pump (G) Other Grab

| GROUNDWATER SAMPLING DATA | | | | | | | | | | [v if used] |
|---------------------------|--------------|---------|---------------------|--------------------|--|-----|--------|----|--|-------------|
| Bottle Type | Date | Time | Method ^s | Amount & Volume mL | Preservative (circle) | Ice | Filter | pH | | ✓ |
| VOA Glass | 10 / 11 / 23 | 09 : 05 | G | 3 | 40 ml | HC | YES | NO | | ✓ |
| Amber Glass | / / | : | | | (None) (HCl) (H ₂ SO ₄) | YES | NO | | | |
| White Poly | / / | : | | | None | YES | NO | NA | | |
| Yellow Poly | / / | : | | | H ₂ SO ₄ | YES | NO | | | |
| Green Poly | / / | : | | | NaOH | YES | NO | | | |
| Red Total Poly | / / | : | | | HNO ₃ | YES | NO | | | |
| Red Diss. Poly | / / | : | | | HNO ₃ | YES | YES | | | |
| | / / | : | | | | YES | | | | |

Total Bottles (include duplicate count): 3

| Analysis Allowed | BOTTLE TYPE | TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) |
|------------------|----------------------|---|
| | VOA - Glass | (8021) (BTEX) (NWTPH-G) (8260B) |
| | AMBER - Glass | (PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) |
| | WHITE - Poly | (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO ₃ /CO ₃) (Cl) (SO ₄) (NO ₃) (NO ₂) (F) |
| | YELLOW - Poly | (COD) (TOC) (Total PO ₄) (Total Keldahl Nitrogen) (NH ₃) (NO ₂ /NO ₃) |
| | GREEN - Poly | (Cyanide) |
| | RED TOTAL - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) |
| | RED DISSOLVED - Poly | (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) |

| WATER QUALITY DATA | | | Purge Start Time: 09 : 57 | | | ORP | | |
|--------------------|---------------------|--------------|---------------------------|-------------|---------|-------|----------------------------|-----------------|
| Meas. | Method ^s | Purged (gal) | pH | E Cond (µS) | Temp °C | mV | Diss O ₂ (mg/l) | Water Quality |
| 5 | G | 5.0 | 6.76 | 166.1 | 16.7 | 182.3 | 3.28 | Clear colorless |
| 4 | | . | . | | . | | . | |
| 3 | | . | . | | . | | . | |
| 2 | | . | . | | . | | . | |
| 1 | | . | . | | . | | . | |

[Select A-G]

[Cumulative Totals]

[Clarity, Color]

Comments: Opened sample tap and let ~ 5 gallons purge before sampling. Collected sample from sample tap. Continuously pumping well - no purging required before sampling.

SAMPLER: James Melton *James Melton*
(PRINTED NAME)

James Melton
(SIGNATURE)

Attachment B

Chain-of-Custody Forms

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------------------|--------|-----------------|------------|----------|----------|-----------|----------------|----------------|-----------------------|---|--------------------------|-----------|-----------------|-----------------|----------------------|---|-----------------|-------------|----------------|--|--|--|
| Company: <u>Anchor OEA</u> Address: <u>6720 S Macadam Ave, Portland, OR 97219</u> Project Mgr: <u>John Renda</u> Project Name: <u>2023 Columbia Helicopters INC</u> Email: <u>renda@anchorgeo.com</u> Project #: <u>220171-01.01</u> PO #: _____ | Phone: <u>503-670-1108</u> Project Name: <u>2023 Columbia Helicopters INC</u> Email: <u>renda@anchorgeo.com</u> Project #: <u>220171-01.01</u> PO #: _____ | ANALYSIS REQUEST | | | | | | | | | | | | | | | | | | | | | | |
| Sampled by: <u>James Melton / Casey Montgomery</u> | | | | | | | | | | | | | | | | | | | | | | | | |
| Site Location: _____ State: <u>OR</u> County: _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| SAMPLE ID | DATE | TIME | MATRIX | # OF CONTAINERS | NWTPH-HCID | NWTPH-Dx | NWTPH-Gx | 8260 BTEX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full List * | 8270 SIM PAHs | 8270 Semi-Vols Full List | 8082 PCBs | 8081 Pesticides | RCRA Metals (8) | Priority Metals (13) | Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn, TCLP DISS, TCLP | TCLP Metals (8) | Hold Sample | Frozen Archive | | | |
| CHI-100223-01 | 10/2/23 | 1530 | W6 | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100223-02 | | 1535 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100223-03 | | 1626 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100223-04 | | 1655 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-05 | 10/3/23 | 1026 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-06 | | 1130 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-07 | | 1225 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-08 | | 1325 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-09 | | 1330 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| CHI-100323-10 | | 1405 | | 3 | | | | | | | X | | | | | | | | | | | | | |
| Standard Turn Around Time (TAT) = 10 Business Days | | | | | | | | | | | | | | | | | | | | | | | | |
| TAT Requested (circle) 1 Day 2 Day 3 Day 5 Day Standard Other: <u>10 or MA</u> | | | | | | | | | | | | | | | | | | | | | | | | |
| SPECIAL INSTRUCTIONS: * = Short 8021 | | | | | | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: Signature: _____ Date: <u>10/4/23</u> | | | | | | | | | | | | RECEIVED BY: Signature: _____ Date: <u>10/4/23</u> | | | | | | | | | | | | |
| Printed Name: <u>Casey Montgomery</u> Time: <u>1223</u> | | | | | | | | | | | | Printed Name: <u>RICHARD B. HATT</u> Time: _____ | | | | | | | | | | | | |
| Company: <u>Anchor OEA</u> | | | | | | | | | | | | Company: <u>Anchor OEA</u> | | | | | | | | | | | | |

| Company: Anchor GFA | | Project Mgr: John Renda | | Project Name: 2023 Columbia Helicopters INC | | Project #: 220171-01.01 | | | | | | | | | | | | | | | | | |
|--|---------|-------------------------|--------|---|------------|-------------------------|----------|---------------------|----------------|---------------------|---------------|--------------------------|-----------|----------------------|-----------------|----------------------|--|-----------------|-------------|----------------|--|--|--|
| Address: 6720 S Macadam Ave Portland, OR 97219 | | Phone: 503-670-1108 | | Email: J.Renda@anchor2ea.com | | PO # _____ | | | | | | | | | | | | | | | | | |
| Sampled by: James Meton / Casey Montgomery | | | | | | | | | | | | | | | | | | | | | | | |
| Site Location: _____ | | | | | | | | | | | | | | | | | | | | | | | |
| State: <u>OR</u> | | _____ | | | | | | | | | | | | | | | | | | | | | |
| County: _____ | | _____ | | | | | | | | | | | | | | | | | | | | | |
| SAMPLE ID | DATE | TIME | MATRIX | # OF CONTAINERS | NWTFH-HCID | NWTFH-DX | NWTFH-GX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full List | 8270 SIM PAHs | 8270 Semi-Vols Full List | 8082 PCBs | 8081 Pesticides | RCRA Metals (8) | Priority Metals (13) | AL, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn, TOTAL DISS. TCLP | TCLP Metals (8) | Hold Sample | Frozen Archive | | | |
| CHI-100423-11 | 10/4/23 | 0935 | WG | 3 | | | | | | | X | | | | | | | | | | | | |
| CHI-100423-12 | | 0955 | WG | 3 | | | | | | | X | | | | | | | | | | | | |
| CHI-100423-13 | | 1030 | ↓ | 3 | | | | | | | X | | | | | | | | | | | | |
| CHI-100423-14 | | 1055 | ↓ | 3 | | | | | | | X | | | | | | | | | | | | |
| TB-100423 | | 1120 | W | 1 | | | | | | | X | | | | | | | | | | | | |
| Standard Turn Around Time (TAT) = 10 Business Days | | | | | | | | 1 Day | | | | 2 Day | | 3 Day | | | | | | | | | |
| TAT Requested (circle) | | | | | | | | | | | | Standard | | Other: <u>Normal</u> | | | | | | | | | |
| RECEIVED BY: _____ | | | | | | | | RECEIVED BY: _____ | | | | | | | | RECEIVED BY: _____ | | | | | | | |
| Signature: _____ | | | | | | | | Signature: _____ | | | | | | | | Signature: _____ | | | | | | | |
| Date: 10/4/23 | | | | | | | | Date: 10/4/23 | | | | | | | | Date: _____ | | | | | | | |
| Printed Name: _____ | | | | | | | | Printed Name: _____ | | | | | | | | Printed Name: _____ | | | | | | | |
| Time: 1223 | | | | | | | | Time: _____ | | | | | | | | Time: _____ | | | | | | | |
| Company: Anchor GFA | | | | | | | | Company: _____ | | | | | | | | Company: _____ | | | | | | | |

SPECIAL INSTRUCTIONS:
* Short 8021

CHAIN OF CUSTODY

Company: Anchor GEA **Project Mgr:** John Renda **Project Name:** 23 Columbia Hillscapes Trc. **Project #:** 220171-01.01
Address: 6700 SW Sandburg Ave Portland, OR 97229 **Phone:** 503-670-1028 **Email:** jrenda@anchorgea.com **PO #** _____
Sampled by: Casey Montgomery **ANALYSIS REQUEST**

| SAMPLE ID | DATE | TIME | MATRIX | # OF CONTAINERS | NWTPH-HCID | NWTPH-Dx | NWTPH-Gx | 8260 BTEX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full List * | 8270 SIM PAHs | 8270 Semi-Vols Full List | 8082 PCBs | 8081 Pesticides | RCRA Metals (8) | Priority Metals (13) Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn | TOTAL DISS. TCLP | TCLP Metals (8) | Hold Sample | Frozen Archive | |
|---------------|----------|------|--------|-----------------|------------|----------|----------|-----------|----------------|----------------|-----------------------|---------------|--------------------------|-----------|-----------------|-----------------|--|------------------|-----------------|-------------|----------------|-----------------------|
| | | | | | | | | | | | | | | | | | | | | | | SPECIAL INSTRUCTIONS: |
| CHI-101123-15 | 10/11/23 | 0905 | WC | 3 | | | | | | | X | | | | | | | | | | | |
| TR-101123 | ↓ | 0930 | W | 1 | | | | | | | X | | | | | | | | | | | |

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle)
 1 Day 2 Day 3 Day
 5 Day Standard Other: Normal

SAMPLES ARE HELD FOR 30 DAYS
RELINQUISHED BY: _____ **RECEIVED BY:** _____
Signature: _____ **Signature:** _____
Date: _____ **Date:** _____

Printed Name: _____ **Printed Name:** _____
Time: _____ **Time:** _____
Company: _____ **Company:** _____

RELINQUISHED BY: _____ **RECEIVED BY:** _____
Signature: _____ **Signature:** _____
Date: _____ **Date:** _____
Printed Name: _____ **Printed Name:** _____
Time: _____ **Time:** _____
Company: _____ **Company:** _____

Appendix C
Laboratory Results



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Tuesday, November 14, 2023

John Renda
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A3J0956 - Columbia Helicopters - 220171-01.01

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3J0956, which was received by the laboratory on 10/4/2023 at 12:23:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

| Cooler Receipt Information | |
|--|-----------------|
| <p><u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u></p> <p>(See Cooler Receipt Form for details)</p> | |
| <p>Default Cooler</p> | <p>1.7 degC</p> |

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|--|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|--|

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

| Client Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received | |
|------------------|----------------|------------|--------------|----------------|----------------|
| CHI-100223-01 | MW-26 | A3J0956-01 | WG | 10/02/23 15:30 | 10/04/23 12:23 |
| CHI-100223-02 | MW-26 (Dup) | A3J0956-02 | WG | 10/02/23 15:35 | 10/04/23 12:23 |
| CHI-100223-03 | Anderson | A3J0956-03 | WG | 10/02/23 16:20 | 10/04/23 12:23 |
| CHI-100223-04 | Buehler | A3J0956-04 | WG | 10/02/23 16:55 | 10/04/23 12:23 |
| CHI-100323-05 | MW-23 | A3J0956-05 | WG | 10/03/23 10:20 | 10/04/23 12:23 |
| CHI-100323-06 | MW-22 | A3J0956-06 | WG | 10/03/23 11:30 | 10/04/23 12:23 |
| CHI-100323-07 | MW-29 | A3J0956-07 | WG | 10/03/23 12:25 | 10/04/23 12:23 |
| CHI-100323-08 | OW-4 | A3J0956-08 | WG | 10/03/23 13:25 | 10/04/23 12:23 |
| CHI-100323-09 | OW-4 (Dup) | A3J0956-09 | WG | 10/03/23 13:30 | 10/04/23 12:23 |
| CHI-100323-10 | Transfer Blank | A3J0956-10 | WG | 10/03/23 14:05 | 10/04/23 12:23 |
| CHI-100423-11 | CHI | A3J0956-11 | WG | 10/04/23 09:35 | 10/04/23 12:23 |
| CHI-100423-12 | EXT-2 | A3J0956-12 | WG | 10/04/23 09:55 | 10/04/23 12:23 |
| CHI-100423-13 | EXT-3 | A3J0956-13 | WG | 10/04/23 10:30 | 10/04/23 12:23 |
| CHI-100423-14 | EXT-4 | A3J0956-14 | WG | 10/04/23 10:55 | 10/04/23 12:23 |
| TB-100423 | | A3J0956-15 | W | 10/04/23 11:20 | 10/04/23 12:23 |

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100223-01 (A3J0956-01) | | MW-26 | | Matrix: WG | | Batch: 23J0216 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1-Dichloroethane | 0.660 | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1-Dichloroethene | 1.38 | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/06/23 18:28 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 103 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/06/23 18:28</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/06/23 18:28</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>98 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/06/23 18:28</i> | <i>EPA 8260D</i> |

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|-----------------------|-----------------------|------------------|-------|
| CHI-100223-02 (A3J0956-02) MW-26 (Dup) | | Matrix: WG | | | Batch: 23J0216 | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1-Dichloroethane | 0.720 | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1-Dichloroethene | 1.56 | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/06/23 18:56 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 103 %</i> | | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/06/23 18:56</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | <i>99 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/06/23 18:56</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>98 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/06/23 18:56</i> | <i>EPA 8260D</i> | |

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|-------------------|-----------------------|------------------|-------|
| CHI-100223-03 (A3J0956-03RE1) Anderson | | | | | Matrix: WG | Batch: 23J0269 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 14:10 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 105 %</i> | | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/09/23 14:10</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 14:10</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 14:10</i> | <i>EPA 8260D</i> | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|-----------------|------------------------|-------------------------|----------|-----------------------|------------------|-------|
| CHI-100223-04 (A3J0956-04RE1) | | Buehler | | Matrix: WG | | Batch: 23J0269 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 14:39 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | | <i>Recovery: 106 %</i> | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/09/23 14:39</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | | <i>103 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 14:39</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | | <i>95 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 14:39</i> | <i>EPA 8260D</i> | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100323-05 (A3J0956-05) | | | | Matrix: WG | | Batch: 23J0273 | | |
| | | | | | | | | MW-23 |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | Q-42 |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 16:19 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 110 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 16:19</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 16:19</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>102 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 16:19</i> | <i>EPA 8260D</i> |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100323-06 (A3J0956-06) | | MW-22 | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1-Dichloroethene | 1.74 | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1,1-Trichloroethane | 0.960 | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Trichloroethene (TCE) | 1.09 | --- | 0.400 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 12:56 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 110 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 12:56</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 12:56</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 12:56</i> | <i>EPA 8260D</i> |

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---------------|------------------------|-----------------|-------------------------|-----------------------|----------------|-----------------------|------------------|
| CHI-100323-07 (A3J0956-07) MW-29 | | Matrix: WG | | | Batch: 23J0273 | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1-Dichloroethene | 1.22 | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1,1-Trichloroethane | 0.840 | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Trichloroethene (TCE) | 0.560 | --- | 0.400 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1) | ND | --- | 2.00 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 13:19 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 109 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 13:19</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 13:19</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>102 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 13:19</i> | <i>EPA 8260D</i> |

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| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-------------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100323-08 (A3J0956-08) | | OW-4 | Matrix: WG | | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Chloroethane | 15.0 | --- | 5.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,1-Dichloroethene | 23.0 | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| cis-1,2-Dichloroethene | 6.93 | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,1,1-Trichloroethane | 117 | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 13:41 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 105 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 13:41</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 13:41</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>102 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 13:41</i> | <i>EPA 8260D</i> |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100323-08 (A3J0956-08RE1) OW-4 | | | | | | | | |
| | | | | Matrix: WG | | Batch: 23J0330 | | |
| 1,1-Dichloroethane | 489 | --- | 8.00 | ug/L | 20 | 10/10/23 19:30 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 106 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/10/23 19:30</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>102 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/10/23 19:30</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/10/23 19:30</i> | <i>EPA 8260D</i> |
| CHI-100323-09 (A3J0956-09) OW-4 (Dup) | | | | | | | | |
| | | | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Chloroethane | 15.8 | --- | 5.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,1-Dichloroethene | 22.7 | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| cis-1,2-Dichloroethene | 6.77 | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,1,1,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,1,1-Trichloroethane | 116 | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-------------|---------------------------------|
| CHI-100323-09 (A3J0956-09) | | OW-4 (Dup) | | Matrix: WG | | Batch: 23J0273 | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 14:04 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 105 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | | <i>10/09/23 14:04 EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | <i>1</i> | | <i>10/09/23 14:04 EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | | <i>1</i> | | <i>10/09/23 14:04 EPA 8260D</i> |
| CHI-100323-09 (A3J0956-09RE1) | | OW-4 (Dup) | | Matrix: WG | | Batch: 23J0330 | | |
| 1,1-Dichloroethane | 535 | --- | 8.00 | ug/L | 20 | 10/10/23 20:01 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 104 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | | <i>10/10/23 20:01 EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>102 %</i> | | <i>80-120 %</i> | | <i>1</i> | | <i>10/10/23 20:01 EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | | <i>1</i> | | <i>10/10/23 20:01 EPA 8260D</i> |
| CHI-100323-10 (A3J0956-10) | | Transfer Blank | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100323-10 (A3J0956-10) | | Transfer Blank | | Matrix: WG | | Batch: 23J0273 | | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 14:26 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 109 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 14:26</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 14:26</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 14:26</i> | <i>EPA 8260D</i> |
| CHI-100423-11 (A3J0956-11) | | CHI | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100423-11 (A3J0956-11) | | CHI | | Matrix: WG | | Batch: 23J0273 | | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 14:49 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 110 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 14:49</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 14:49</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 14:49</i> | <i>EPA 8260D</i> |

| | | | | | | | | |
|-----------------------------------|----|--------------|-------|-------------------|---|-----------------------|-----------|--|
| CHI-100423-12 (A3J0956-12) | | EXT-2 | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100423-12 (A3J0956-12) | | EXT-2 | | Matrix: WG | | Batch: 23J0273 | | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 15:12 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 112 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 15:12</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 15:12</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 15:12</i> | <i>EPA 8260D</i> |

| | | | | | | | | |
|-----------------------------------|-------------|--------------|-------|-------------------|---|-----------------------|-----------|--|
| CHI-100423-13 (A3J0956-13) | | EXT-3 | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,1-Dichloroethane | 22.5 | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|-----------------------|------------------|
| CHI-100423-13 (A3J0956-13) | | EXT-3 | | Matrix: WG | | Batch: 23J0273 | | |
| 1,1-Dichloroethene | 1.38 | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Tetrachloroethene (PCE) | 0.430 | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,1,1-Trichloroethane | 6.79 | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 15:34 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 110 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/09/23 15:34</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 15:34</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/09/23 15:34</i> | <i>EPA 8260D</i> |

| | | | | | | | | |
|-----------------------------------|----|--------------|-------|-------------------|---|-----------------------|-----------|--|
| CHI-100423-14 (A3J0956-14) | | EXT-4 | | Matrix: WG | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|----------|-----------------------|------------------|-------|
| CHI-100423-14 (A3J0956-14) | | EXT-4 | | Matrix: WG | | Batch: 23J0273 | | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 15:57 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 111 %</i> | | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/09/23 15:57</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 15:57</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 15:57</i> | <i>EPA 8260D</i> | |

| | | | | | | | | |
|-------------------------------|----|-----|-------|------------------|---|-----------------------|-----------|--|
| TB-100423 (A3J0956-15) | | | | Matrix: W | | Batch: 23J0273 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---------------|-----------------|------------------------|-------------------------|----------|-----------------------|------------------|-------|
| TB-100423 (A3J0956-15) | | | Matrix: W | | | Batch: 23J0273 | | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1,1,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1) | ND | --- | 2.00 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/09/23 12:34 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | | <i>Recovery: 107 %</i> | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/09/23 12:34</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | | <i>105 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 12:34</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | | <i>106 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/09/23 12:34</i> | <i>EPA 8260D</i> | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0216 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0216-BLK1) | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 12:26 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |

Surr: 1,4-Difluorobenzene (Surr) Recovery: 103 % Limits: 80-120 % Dilution: 1x

Apex Laboratories

Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

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ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|--------------------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0216 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0216-BLK1) | | | Prepared: 10/06/23 10:22 | | | Analyzed: 10/06/23 12:26 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 101 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | " | | | | | | |
| LCS (23J0216-BS1) | | | | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 11:19 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 22.1 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |
| Bromoform | 19.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 99 | 80-120% | --- | --- | |
| Bromomethane | 21.2 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| Carbon tetrachloride | 22.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| Chlorobenzene | 19.5 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 98 | 80-120% | --- | --- | |
| Chloroethane | 23.7 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 118 | 80-120% | --- | --- | |
| Chloroform | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Chloromethane | 18.6 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 93 | 80-120% | --- | --- | |
| Dibromochloromethane | 19.6 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 98 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 20.0 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 21.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.7 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 94 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 20.3 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| 1,1-Dichloroethane | 20.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,1-Dichloroethene | 21.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethene | 19.8 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 99 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethene | 19.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 19.0 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 19.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 20.6 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Methylene chloride | 21.3 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 20.1 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 20.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 22.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 111 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 20.5 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 18.5 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 92 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 24.2 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 121 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 21.2 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |

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| | | |
|--|---|--|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|--|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0216 - EPA 5030C | | | | | | Water | | | | | | |
| LCS (23J0216-BS1) | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 11:19 | | | | | | | | | |
| Vinyl chloride | 18.7 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 94 | 80-120% | --- | --- | |
| m,p-Xylene | 40.3 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 101 | 80-120% | --- | --- | |
| o-Xylene | 18.8 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 94 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 97 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>98 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|----|-----|------|------|----|---|----|-----|-----|-----|-----|--|
| Duplicate (23J0216-DUP1) | | | | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 21:15 | | | | | | |
| QC Source Sample: Non-SDG (A3J0802-05) | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 100 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 100 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 100 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| cis-1,2-Dichloroethene | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 200 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0216 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0216-DUP1) | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 21:15 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J0802-05) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 8.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | --- | 40.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 40.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 4.00 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | ND | --- | 20.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| o-Xylene | ND | --- | 10.0 | ug/L | 20 | --- | ND | --- | --- | --- | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 103 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|------|-----|---|------|---|------|----|-----|---------|-----|-----|--|
| Matrix Spike (23J0216-MS1) | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 15:13 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J0815-01) | | | | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 18.9 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 95 | 79-125% | --- | --- | |
| Bromoform | 16.6 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 83 | 66-130% | --- | --- | |
| Bromomethane | 17.3 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 86 | 53-141% | --- | --- | |
| Carbon tetrachloride | 21.6 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 108 | 72-136% | --- | --- | |
| Chlorobenzene | 17.2 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 86 | 80-120% | --- | --- | |
| Chloroethane | 21.0 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 105 | 60-138% | --- | --- | |
| Chloroform | 17.9 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 90 | 79-124% | --- | --- | |
| Chloromethane | 19.3 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 96 | 50-139% | --- | --- | |
| Dibromochloromethane | 16.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 84 | 74-126% | --- | --- | |
| 1,2-Dichlorobenzene | 17.5 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 87 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 18.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 93 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 16.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 81 | 79-120% | --- | --- | |
| Dichlorodifluoromethane | 20.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 100 | 32-152% | --- | --- | |
| 1,1-Dichloroethane | 18.0 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 90 | 77-125% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 18.0 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 90 | 73-128% | --- | --- | |
| 1,1-Dichloroethene | 20.2 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 101 | 71-131% | --- | --- | |
| cis-1,2-Dichloroethene | 17.5 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 87 | 78-123% | --- | --- | |
| trans-1,2-Dichloroethene | 17.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 88 | 75-124% | --- | --- | |
| 1,2-Dichloropropane | 16.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 83 | 78-122% | --- | --- | |

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ANALYTICAL REPORT

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|-----------------|-------------------------|----------|---|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0216 - EPA 5030C | | | | | | Water | | | | | | |
| Matrix Spike (23J0216-MS1) | | | | | | Prepared: 10/06/23 10:22 Analyzed: 10/06/23 15:13 | | | | | | |
| QC Source Sample: Non-SDG (A3J0815-01) | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 14.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 74 | 75-124% | --- | --- | Q-01 |
| trans-1,3-Dichloropropene | 17.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 86 | 73-127% | --- | --- | |
| Methylene chloride | 17.4 | --- | 10.0 | ug/L | 1 | 20.0 | ND | 87 | 74-124% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 17.7 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 89 | 71-121% | --- | --- | |
| Tetrachloroethene (PCE) | 21.2 | --- | 0.400 | ug/L | 1 | 20.0 | 2.78 | 92 | 74-129% | --- | --- | |
| 1,1,1-Trichloroethane | 20.8 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 104 | 74-131% | --- | --- | |
| 1,1,2-Trichloroethane | 17.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 89 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 17.3 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 87 | 79-123% | --- | --- | |
| Trichlorofluoromethane | 24.7 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 123 | 65-141% | --- | --- | Q-54 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 11.7 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 108 | 70-136% | --- | --- | |
| Vinyl chloride | 18.5 | --- | 0.200 | ug/L | 1 | 20.0 | ND | 93 | 58-137% | --- | --- | |
| m,p-Xylene | 35.6 | --- | 1.00 | ug/L | 1 | 40.0 | ND | 89 | 80-121% | --- | --- | |
| o-Xylene | 16.2 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 81 | 78-122% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 98 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>96 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0269 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0269-BLK1) | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 12:13 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |

Surr: 1,4-Difluorobenzene (Surr)

Recovery: 104 % Limits: 80-120 %

Dilution: 1x

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ANALYTICAL REPORT

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ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|-----------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0269 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0269-BLK1) | | | | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 12:13 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 104 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>96 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| LCS (23J0269-BS1) | | | | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 11:12 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 24.0 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 120 | 80-120% | --- | --- | |
| Bromoform | 20.1 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| Bromomethane | 24.8 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 124 | 80-120% | --- | --- | Q-56 |
| Carbon tetrachloride | 24.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 124 | 80-120% | --- | --- | Q-56 |
| Chlorobenzene | 20.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Chloroethane | 28.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 140 | 80-120% | --- | --- | Q-56 |
| Chloroform | 21.7 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 109 | 80-120% | --- | --- | |
| Chloromethane | 20.1 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| Dibromochloromethane | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 20.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 21.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.8 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 94 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 20.1 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| 1,1-Dichloroethane | 22.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.7 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 109 | 80-120% | --- | --- | |
| 1,1-Dichloroethane | 23.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 116 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethane | 20.5 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethane | 20.3 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 20.7 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 21.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 22.7 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| Methylene chloride | 21.3 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 21.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 20.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 23.8 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 119 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 21.0 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 19.4 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 26.5 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 133 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 22.3 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 111 | 80-120% | --- | --- | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0269 - EPA 5030C | | | | | | Water | | | | | | |
| LCS (23J0269-BS1) | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 11:12 | | | | | | | | | |
| Vinyl chloride | 20.9 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |
| m,p-Xylene | 42.9 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 107 | 80-120% | --- | --- | |
| o-Xylene | 19.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 99 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>92 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

Duplicate (23J0269-DUP1) Prepared: 10/09/23 09:15 Analyzed: 10/09/23 23:42 **T-02**

QC Source Sample: Non-SDG (A3J0949-10)

| | | | | | | | | | | | | |
|---------------------------|----|-----|------|------|----|-----|----|-----|-----|-----|-----|--|
| Bromodichloromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| cis-1,2-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 100 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0269 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0269-DUP1) | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 23:42 | | | | | | T-02 | | | |
| QC Source Sample: Non-SDG (A3J0949-10) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | --- | 20.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 20.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 2.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | ND | --- | 10.0 | ug/L | 10 | --- | 5.60 | --- | --- | *** | 30% | |
| o-Xylene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 99 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>98 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|------|-----|-------|------|---|------|----|------------|----------------|-----|-----|-------|
| Matrix Spike (23J0269-MS1) | | | | | | | | | | | | |
| Prepared: 10/09/23 09:15 Analyzed: 10/09/23 16:07 | | | | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1043-11) | | | | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 23.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 119 | 79-125% | --- | --- | |
| Bromoform | 19.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 99 | 66-130% | --- | --- | |
| Bromomethane | 22.6 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 113 | 53-141% | --- | --- | Q-54e |
| Carbon tetrachloride | 26.6 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 133 | 72-136% | --- | --- | Q-54e |
| Chlorobenzene | 20.2 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 101 | 80-120% | --- | --- | |
| Chloroethane | 29.9 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 150 | 60-138% | --- | --- | Q-54c |
| Chloroform | 22.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 110 | 79-124% | --- | --- | |
| Chloromethane | 24.3 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 122 | 50-139% | --- | --- | |
| Dibromochloromethane | 20.1 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 101 | 74-126% | --- | --- | |
| 1,2-Dichlorobenzene | 19.7 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 99 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 20.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 103 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.4 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 92 | 79-120% | --- | --- | |
| Dichlorodifluoromethane | 23.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 116 | 32-152% | --- | --- | |
| 1,1-Dichloroethane | 22.2 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 111 | 77-125% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 108 | 73-128% | --- | --- | |
| 1,1-Dichloroethene | 24.2 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 121 | 71-131% | --- | --- | |
| cis-1,2-Dichloroethene | 20.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 103 | 78-123% | --- | --- | |
| trans-1,2-Dichloroethene | 20.5 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 102 | 75-124% | --- | --- | |
| 1,2-Dichloropropane | 20.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 104 | 78-122% | --- | --- | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|----------------------|---|------------------------|----------|---------------------|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0269 - EPA 5030C | | | | | | Water | | | | | | |
| Matrix Spike (23J0269-MS1) | | | Prepared: 10/09/23 09:15 Analyzed: 10/09/23 16:07 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1043-11) | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 17.7 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 89 | 75-124% | --- | --- | |
| trans-1,3-Dichloropropene | 21.5 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 108 | 73-127% | --- | --- | |
| Methylene chloride | 21.0 | --- | 10.0 | ug/L | 1 | 20.0 | ND | 105 | 74-124% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 21.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 106 | 71-121% | --- | --- | |
| Tetrachloroethene (PCE) | 20.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 103 | 74-129% | --- | --- | |
| 1,1,1-Trichloroethane | 25.0 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 125 | 74-131% | --- | --- | |
| 1,1,2-Trichloroethane | 20.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 104 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 20.0 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 100 | 79-123% | --- | --- | |
| Trichlorofluoromethane | 29.3 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 147 | 65-141% | --- | --- | Q-54a |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.5 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 128 | 70-136% | --- | --- | |
| Vinyl chloride | 23.2 | --- | 0.200 | ug/L | 1 | 20.0 | ND | 116 | 58-137% | --- | --- | |
| m,p-Xylene | 42.0 | --- | 1.00 | ug/L | 1 | 40.0 | ND | 105 | 80-121% | --- | --- | |
| o-Xylene | 19.1 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 95 | 78-122% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 99%</i> | | <i>Limits: 80-120%</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>98%</i> | | <i>80-120%</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>91%</i> | | <i>80-120%</i> | | <i>"</i> | | | | | | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0273 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0273-BLK1) | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 12:11 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |

Surr: 1,4-Difluorobenzene (Surr) Recovery: 106 % Limits: 80-120 % Dilution: 1x

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ANALYTICAL REPORT

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ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|-----------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0273 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0273-BLK1) | | | | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 12:11 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 104 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>104 %</i> | | <i>80-120 %</i> | | " | | | | | | |
| LCS (23J0273-BS1) | | | | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 11:17 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 21.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| Bromoform | 21.5 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 108 | 80-120% | --- | --- | |
| Bromomethane | 19.5 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| Carbon tetrachloride | 23.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 116 | 80-120% | --- | --- | |
| Chlorobenzene | 20.5 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Chloroethane | 22.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |
| Chloroform | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Chloromethane | 20.4 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Dibromochloromethane | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 21.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 22.9 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 19.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 26.7 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 134 | 80-120% | --- | --- | Q-56 |
| 1,1-Dichloroethane | 20.8 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,1-Dichloroethene | 23.6 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 118 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethene | 20.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethene | 21.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 21.0 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 19.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 24.7 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 123 | 80-120% | --- | --- | Q-56 |
| Methylene chloride | 24.9 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 124 | 80-120% | --- | --- | Q-56 |
| 1,1,2,2-Tetrachloroethane | 19.9 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 22.3 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 111 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 22.6 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 113 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 20.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 19.4 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 26.7 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 134 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 26.8 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 134 | 80-120% | --- | --- | Q-56 |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|-----------------|-------------------------|----------|--------------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0273 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| LCS (23J0273-BS1) | | | | | | | | | | | | |
| Prepared: 10/09/23 09:48 | | | | | | Analyzed: 10/09/23 11:17 | | | | | | |
| Vinyl chloride | 22.8 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| m,p-Xylene | 44.4 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 111 | 80-120% | --- | --- | |
| o-Xylene | 19.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 100 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>99 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>92 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|----|-----|------|------|-----|--------------------------|----|-----|-----|-----|-----|--|
| Duplicate (23J0273-DUP1) | | | | | | | | | | | | |
| Prepared: 10/09/23 09:48 | | | | | | Analyzed: 10/09/23 20:29 | | | | | | |
| QC Source Sample: Non-SDG (A3J1011-01) | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 1000 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 1000 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 1000 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| cis-1,2-Dichloroethene | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | --- | 200 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 2000 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|------------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0273 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0273-DUP1) | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 20:29 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1011-01) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 100 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 80.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | --- | 400 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 400 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 40.0 | ug/L | 200 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | 566 | --- | 200 | ug/L | 200 | --- | 554 | --- | --- | 2 | 30% | |
| o-Xylene | 310 | --- | 100 | ug/L | 200 | --- | 292 | --- | --- | 6 | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 98 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>101 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>106 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|------|-----|---|------|---|------|-------|-----|---------|-----|-----|-------|
| Matrix Spike (23J0273-MS1) | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 16:42 | | | | | | | | | |
| QC Source Sample: CHI-100323-05 (A3J0956-05) | | | | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 21.9 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 110 | 79-125% | --- | --- | |
| Bromoform | 21.4 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 107 | 66-130% | --- | --- | |
| Bromomethane | 23.8 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 119 | 53-141% | --- | --- | |
| Carbon tetrachloride | 25.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 125 | 72-136% | --- | --- | |
| Chlorobenzene | 20.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 104 | 80-120% | --- | --- | |
| Chloroethane | 24.8 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 124 | 60-138% | --- | --- | |
| Chloroform | 21.1 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 106 | 79-124% | --- | --- | |
| Chloromethane | 22.3 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 111 | 50-139% | --- | --- | |
| Dibromochloromethane | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 102 | 74-126% | --- | --- | |
| 1,2-Dichlorobenzene | 21.2 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 106 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 23.0 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 115 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 19.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 98 | 79-120% | --- | --- | |
| Dichlorodifluoromethane | 30.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 150 | 32-152% | --- | --- | Q-54b |
| 1,1-Dichloroethane | 21.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 108 | 77-125% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 22.0 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 110 | 73-128% | --- | --- | |
| 1,1-Dichloroethene | 25.8 | --- | 0.400 | ug/L | 1 | 20.0 | 0.380 | 127 | 71-131% | --- | --- | |
| cis-1,2-Dichloroethene | 20.9 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 105 | 78-123% | --- | --- | |
| trans-1,2-Dichloroethene | 22.1 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 111 | 75-124% | --- | --- | |
| 1,2-Dichloropropane | 21.7 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 108 | 78-122% | --- | --- | |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|-----------------|-------------------------|----------|---|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0273 - EPA 5030C | | | | | | Water | | | | | | |
| Matrix Spike (23J0273-MS1) | | | | | | Prepared: 10/09/23 09:48 Analyzed: 10/09/23 16:42 | | | | | | |
| QC Source Sample: CHI-100323-05 (A3J0956-05) | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 14.9 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 74 | 75-124% | --- | --- | Q-01 |
| trans-1,3-Dichloropropene | 24.6 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 123 | 73-127% | --- | --- | Q-54d |
| Methylene chloride | 24.6 | --- | 10.0 | ug/L | 1 | 20.0 | ND | 123 | 74-124% | --- | --- | Q-54e |
| 1,1,2,2-Tetrachloroethane | 20.0 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 100 | 71-121% | --- | --- | |
| Tetrachloroethene (PCE) | 22.9 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 114 | 74-129% | --- | --- | |
| 1,1,1-Trichloroethane | 24.1 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 120 | 74-131% | --- | --- | |
| 1,1,2-Trichloroethane | 20.9 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 105 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 20.1 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 101 | 79-123% | --- | --- | |
| Trichlorofluoromethane | 30.1 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 151 | 65-141% | --- | --- | Q-54b |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 30.1 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 150 | 70-136% | --- | --- | Q-54b |
| Vinyl chloride | 25.0 | --- | 0.200 | ug/L | 1 | 20.0 | ND | 125 | 58-137% | --- | --- | |
| m,p-Xylene | 45.4 | --- | 1.00 | ug/L | 1 | 40.0 | ND | 114 | 80-121% | --- | --- | |
| o-Xylene | 19.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 96 | 78-122% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 101 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>90 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0330 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0330-BLK1) | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 14:44 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |

Surr: 1,4-Difluorobenzene (Surr)

Recovery: 107 % Limits: 80-120 %

Dilution: 1x

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ANALYTICAL REPORT

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| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|-----------------|-------------------------|----------|--|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0330 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0330-BLK1) | | | | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 14:44 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 103 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>93 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| LCS (23J0330-BS1) | | | | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 13:27 Q-50 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 22.9 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| Bromoform | 19.0 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| Bromomethane | 23.2 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 116 | 80-120% | --- | --- | |
| Carbon tetrachloride | 23.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 119 | 80-120% | --- | --- | |
| Chlorobenzene | 19.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| Chloroethane | 26.7 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 134 | 80-120% | --- | --- | Q-56 |
| Chloroform | 20.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |
| Chloromethane | 20.5 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Dibromochloromethane | 19.5 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 19.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 20.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 101 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 91 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 19.3 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| 1,1-Dichloroethane | 21.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 20.9 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| 1,1-Dichloroethene | 21.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethene | 19.5 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethene | 19.4 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 19.6 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 98 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 19.6 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 98 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 21.3 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| Methylene chloride | 20.4 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 20.6 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 19.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 22.7 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 20.6 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 18.6 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 93 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 26.0 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 130 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.8 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |

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| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|-----------------|-------------------------|----------|---|---------------|-------|--------------|-----|-----------|-------------|
| Batch 23J0330 - EPA 5030C | | | | | | Water | | | | | | |
| LCS (23J0330-BS1) | | | | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 13:27 | | | | | | Q-50 |
| Vinyl chloride | 20.4 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| m,p-Xylene | 39.9 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 100 | 80-120% | --- | --- | |
| o-Xylene | 18.1 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 90 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 98 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>99 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>92 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|--------------|-----|-------|------|---|---|-------|-----|-----|-----|-----|--|
| Duplicate (23J0330-DUP1) | | | | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 21:06 | | | | | | |
| QC Source Sample: Non-SDG (A3J1032-05) | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | 0.780 | --- | 0.400 | ug/L | 1 | --- | 0.700 | --- | --- | 11 | 30% | |
| cis-1,2-Dichloroethene | 9.73 | --- | 0.400 | ug/L | 1 | --- | 9.14 | --- | --- | 6 | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|-------------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0330 - EPA 5030C | | | | | | Water | | | | | | |
| Duplicate (23J0330-DUP1) | | | Prepared: 10/10/23 11:28 Analyzed: 10/10/23 21:06 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1032-05) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | 5.25 | --- | 0.400 | ug/L | 1 | --- | 5.16 | --- | --- | 2 | 30% | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | 2.11 | --- | 0.200 | ug/L | 1 | --- | 1.91 | --- | --- | 10 | 30% | |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | ND | --- | --- | --- | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 106 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>101 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

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SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|-----------------------|--------|-----------|----------------|----------------|----------------------|-----------------------|----------------|
| <u>Batch: 23J0216</u> | | | | | | | |
| A3J0956-01 | WG | EPA 8260D | 10/02/23 15:30 | 10/06/23 10:22 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-02 | WG | EPA 8260D | 10/02/23 15:35 | 10/06/23 10:22 | 5mL/5mL | 5mL/5mL | 1.00 |
| <u>Batch: 23J0269</u> | | | | | | | |
| A3J0956-03RE1 | WG | EPA 8260D | 10/02/23 16:20 | 10/09/23 09:15 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-04RE1 | WG | EPA 8260D | 10/02/23 16:55 | 10/09/23 09:15 | 5mL/5mL | 5mL/5mL | 1.00 |
| <u>Batch: 23J0273</u> | | | | | | | |
| A3J0956-05 | WG | EPA 8260D | 10/03/23 10:20 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-06 | WG | EPA 8260D | 10/03/23 11:30 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-07 | WG | EPA 8260D | 10/03/23 12:25 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-08 | WG | EPA 8260D | 10/03/23 13:25 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-09 | WG | EPA 8260D | 10/03/23 13:30 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-10 | WG | EPA 8260D | 10/03/23 14:05 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-11 | WG | EPA 8260D | 10/04/23 09:35 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-12 | WG | EPA 8260D | 10/04/23 09:55 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-13 | WG | EPA 8260D | 10/04/23 10:30 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-14 | WG | EPA 8260D | 10/04/23 10:55 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-15 | W | EPA 8260D | 10/04/23 11:20 | 10/09/23 09:48 | 5mL/5mL | 5mL/5mL | 1.00 |
| <u>Batch: 23J0330</u> | | | | | | | |
| A3J0956-08RE1 | WG | EPA 8260D | 10/03/23 13:25 | 10/10/23 11:28 | 5mL/5mL | 5mL/5mL | 1.00 |
| A3J0956-09RE1 | WG | EPA 8260D | 10/03/23 13:30 | 10/10/23 11:28 | 5mL/5mL | 5mL/5mL | 1.00 |

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|--|---|---|

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

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- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- Q-50** Due to instrument malfunction, not all Batch QC samples were analyzed. The batch is accepted based on the recoveries of the Blank Spike (BS).
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +13%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +14%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +20%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +3%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- T-02** This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.

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Darwin Thomas, Business Development Director



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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

- For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

- Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Table with 3 columns: Client (Anchor QEA, LLC), Project (Columbia Helicopters), and Report ID (A3J0956 - 11 14 23 0543).

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Table with 6 columns: Matrix, Analysis, TNI_ID, Analyte, TNI_ID, Accreditation. Content: All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Handwritten signature of Darwin Thomas

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|--------------------------------------|---|
| Anchor QEA, LLC | Project: Columbia Helicopters | Report ID: A3J0956 - 11 14 23 0543 |
| 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project Number: 220171-01.01 | |
| | Project Manager: John Renda | |

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # 131056 COC 1 of 2

Project Name: **2023 Columbia Helicopters INC** Project #: **220171-01.01**

Address: **6720 S Macadam Ave., Portland, OR 97219** Phone: **503-670-1108** Email: **renda@anchorqea.com**

Sampled by: **James Melton / Casey Montgomery**

Site Location: _____

State OR County _____

| SAMPLE ID | DATE | TIME | MATRIX | # OF CONTAINERS | TAT Requested (circle) | | | | SPECIAL INSTRUCTIONS: |
|---------------|----------|------|--------|-----------------|------------------------|-------|-------|-------|-----------------------|
| | | | | | 1 Day | 2 Day | 3 Day | 5 Day | |
| CHI-100223-01 | 10/14/23 | 1530 | W6 | 3 | | | | | * = Short 8021 |
| CHI-100223-02 | | 1535 | | 3 | X | | | | |
| CHI-100223-03 | | 1626 | | 3 | X | | | | |
| CHI-100223-04 | | 1655 | | 3 | X | | | | |
| CHI-100323-05 | 10/18/23 | 1026 | | 3 | X | | | | |
| CHI-100323-06 | | 1130 | | 3 | X | | | | |
| CHI-100323-07 | | 1225 | | 3 | X | | | | |
| CHI-100323-08 | | 1325 | | 3 | X | | | | |
| CHI-100323-09 | | 1330 | | 3 | X | | | | |
| CHI-100323-10 | | 1405 | | 3 | X | | | | |

Standard Turn Around Time (TAT) = 10 Business Days

RELINQUISHED BY: Signature: [Signature] Date: 10/14/23

RECEIVED BY: Signature: [Signature] Date: 10/14/23

Printed Name: Casey Montgomery Printed Name: Bernard Pratt

Company: Anchor QEA Company: Apex

Apex Laboratories

[Signature]

Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|--|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|--|

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 PH: 503-718-2323

CHAIN OF CUSTODY

Company: Anchor QEA
Address: 6720 S Macadam Ave., Portland, OR 97219
Phone: 503-670-1108
Email: renda@anchorsqa.com

Project Mgr: John Renda
Project Name: 2023 Columbia Helicopters INC
Project #: 220171-01.01

Sampled by: James Melton / Casey Montgomery
Site Location: _____
State: OR
County: _____

Lab # AP11956 COC 1 of 2

PO # _____

ANALYSIS REQUEST

| DATE | TIME | MATRIX | # OF CONTAINERS | NWTPH-ICD | NWTPH-GX | NWTPH-RTX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full Lst * | 8270 SIM PAHs | 8270 Semi-Vols Full Lst | 8082 PCBs | 8081 Pesticides | RCRA Metals (8) | Priority Metals (13) Al, Sb, As, Ba, Be, Bi, Cd, Cr, Cu, Co, Ni, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn, TCDF, TCDF, TCDF | TCDF Metals (8) | Fold Sample | Frozen Archive |
|---------|------|--------|-----------------|-----------|----------|-----------|----------------|----------------|----------------------|---------------|-------------------------|-----------|-----------------|-----------------|--|-----------------|-------------|----------------|
| 10/2/3 | 1530 | 106 | 3 | | | | | X | X | | | | | | | | | |
| | 1535 | | 3 | | | | | X | X | | | | | | | | | |
| | 1620 | | 3 | | | | | X | X | | | | | | | | | |
| | 1655 | | 3 | | | | | X | X | | | | | | | | | |
| 10/8/23 | 1020 | | 3 | | | | | X | X | | | | | | | | | |
| | 1130 | | 3 | | | | | X | X | | | | | | | | | |
| | 1205 | | 3 | | | | | X | X | | | | | | | | | |
| | 1325 | | 3 | | | | | X | X | | | | | | | | | |
| | 1330 | | 3 | | | | | X | X | | | | | | | | | |
| | 1405 | | 3 | | | | | X | X | | | | | | | | | |

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle)
 1 Day 2 Day 3 Day 5 Day Standard Other: Net Mtl

SPECIAL INSTRUCTIONS:
* = Short 8021

RECEIVED BY:
Signature: [Signature] Date: 10/4/23
Printed Name: DAVID PIATT Time: _____
Company: Anchor QEA

RECEIVED BY:
Signature: _____ Date: _____
Printed Name: _____ Time: _____
Company: _____

Form Y-002 R-00

Apex Laboratories

David Thomas

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

Anchor QEA, LLC Project: Columbia Helicopters
6720 SW Macadam Ave. Suite 125 Project Number: 220171-01.01
Portland, OR 97219 Project Manager: John Renda Report ID: A3J0956 - 11 14 23 0543

CHAIN OF CUSTODY
APEX LABS
Company: Anchor QEA
Project Mgr: John Renda
Address: 6720 S Macadam Ave Portland, OR 97219
Phone: 503-670-1108
Email: jrenda@anchorqea.com
Project Name: 2023 Columbia Helicopters INC
Project #: 220171-01.01
PO #
Sampled by: James Melton / Casey Montgomery
Site Location:
State OR
County
SAMPLE ID
DATE
TIME
MATRIX
OF CONTAINERS
NWTPH-HCID
NWTPH-GX
NWTPH-EX
8260 RBDM VOCs
8260 Halo VOCs
8260 VOCs Full List
8270 SIM PAHs
8270 Semi-Vols Full List
8082 PCBs
8081 Pesticides
RCRA Metals (8)
Priority Metals (13)
AL, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn
TOTAL DISS.
TCMP Metals (8)
Hold Sample
Frozen Archive
RECEIVED BY:
RELINQUISHED BY:
SPECIAL INSTRUCTIONS:
TAT Requested (circle)
SAMPLES ARE HELD FOR 30 DAYS

Apex Laboratories
Darwin Thomas

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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| | | |
|--|---|--|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|--|

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Company: Anchor QEA Project Mgr: John Renda
Address: 6720 S Macadam Ave. Portland, OR 97219 Phone: 503-670-1108
Sampled by: James Melton / Casey Montgomery
Site Location: _____
State: OR
County: _____

Project Name: 2023 Columbia Helicopters INC Project #: 220171-01.01
Email: J.Renda@anchorqea.com PO # _____

ANALYSE REQUEST

| DATE | TIME | MATRIX | # OF CONTAINERS | NWTPH-HCD | NWTPH-GX | 8260 BTEX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full List * | 8270 SIM PAHs | 8270 Semi-Volat Full List | 8082 PCBs | 8081 Pesticides | RCRA Metals (9) | Priority Metals (13) | AL, Sb, Ar, Ba, Be, Bi, Cd, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Ni, Pb, Se, Ag, Na, Ti, V, Zn | TCLP Metals (9) | TOTAL DISS. SOL. Na, TL, V, Zn, TCLP | Hold Sample | Frozen Archive |
|----------------|-------------|------------|-----------------|-----------|----------|-----------|----------------|-------------------------------------|-------------------------------------|---------------|---------------------------|-----------|-----------------|-----------------|----------------------|--|-----------------|--------------------------------------|-------------|----------------|
| <u>10/4/23</u> | <u>0955</u> | <u>106</u> | <u>3</u> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| <u>10/4/23</u> | <u>1030</u> | <u>106</u> | <u>3</u> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| <u>10/4/23</u> | <u>1055</u> | <u>106</u> | <u>3</u> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| <u>11/20</u> | <u>1120</u> | <u>106</u> | <u>1</u> | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | | |

SPECIAL INSTRUCTIONS:
\$ Start 8021

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle):
 1 Day 2 Day 3 Day 5 Day Standard
 Other: Net/Mel

SAMPLES ARE HELD FOR 30 DAYS

| RELINQUISHED BY: | RECEIVED BY: |
|---|--|
| Signature: <u>James Melton</u> Printed Name: <u>James Melton</u> Company: <u>Anchor QEA</u> | Signature: <u>[Signature]</u> Printed Name: <u>[Name]</u> Company: <u>Apex</u> |
| Date: <u>10/14/23</u> Time: <u>12:23</u> | Date: <u>10/14/23</u> Time: <u>[Time]</u> |

Apex Laboratories

[Signature]

Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J0956 - 11 14 23 0543 |
|--|---|---|

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3J0956

Project/Project #: 2023 Columbia Helicopters Inc./220171-01.01

Delivery Info:
 Date/time received: 10/4/23 @ 1223 By: RHP
 Delivered by: Apex Client FedEx UPS Radio Morgan SDS Evergreen Other

Cooler Inspection Date/time inspected: 10/4/23 @ 1224 By: RHP

Chain of Custody included? Yes No
 Signed/dated by client? Yes No

| | Cooler #1 | Cooler #2 | Cooler #3 | Cooler #4 | Cooler #5 | Cooler #6 | Cooler #7 |
|----------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Temperature (°C) | <u>1.7</u> | | | | | | |
| Custody seals? (Y/N) | <u>N</u> | | | | | | |
| Received on ice? (Y/N) | <u>Y</u> | | | | | | |
| Temp. blanks? (Y/N) | <u>Y</u> | | | | | | |
| Ice type: (Gel/Real/Other) | <u>REAL</u> | | | | | | |
| Condition (In/Out): | <u>IN</u> | | | | | | |

Cooler out of temp? (Y/N) Possible reason why: _____
 Green dots applied to out of temperature samples? Yes No
 Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 10/4/23 @ 1243 By: W

All samples intact? Yes No Comments: _____

Bottle labels/COCs agree? Yes No Comments: _____

COC/container discrepancies form initiated? Yes No

Containers/volumes received appropriate for analysis? Yes No Comments: _____

Do VOA vials have visible headspace? Yes No NA

Comments: had 3/3 vials for CHI-07

Water samples: pH checked: Yes No NA pH appropriate? Yes No NA pH ID: _____

Comments: _____

Additional information: TB# 3400.

Labeled by: W Witness: DJS Cooler Inspected by: DJS

Form Y-003 R-01

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Tuesday, November 14, 2023

John Renda
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A3J1203 - Columbia Helicopters - 220171-01.01

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3J1203, which was received by the laboratory on 10/11/2023 at 10:07:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

| Cooler Receipt Information | |
|--|-----------------|
| <p><u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u></p> <p>(See Cooler Receipt Form for details)</p> | |
| <p>Default Cooler</p> <hr style="width: 80%; margin-left: 0;"/> | <p>5.6 degC</p> |

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

| Client Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---------------|--------|----------------|----------------|
| CHI-101123-15 EXT-6 | A3J1203-01 | WG | 10/11/23 09:05 | 10/11/23 10:07 |
| TB-101123 | A3J1203-02 | W | 10/11/23 09:30 | 10/11/23 10:07 |

Apex Laboratories

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|------------------------|-----------------|-------------------------|-----------------------|----------------|-----------------------|------------------|
| CHI-101123-15 (A3J1203-01RE1) EXT-6 | | Matrix: WG | | | Batch: 23J0752 | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1-Dichloroethane | 43.2 | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1-Dichloroethene | 1.57 | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| cis-1,2-Dichloroethene | 0.600 | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1,1-Trichloroethane | 6.74 | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/19/23 16:11 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 105 %</i> | | <i>Limits: 80-120 %</i> | | <i>1</i> | <i>10/19/23 16:11</i> | <i>EPA 8260D</i> |
| <i>Toluene-d8 (Surr)</i> | | <i>101 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/19/23 16:11</i> | <i>EPA 8260D</i> |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | <i>1</i> | <i>10/19/23 16:11</i> | <i>EPA 8260D</i> |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|--|---------------|-----------------|------------------------|-------------------------|----------|-----------------------|------------------|-------|
| TB-101123 (A3J1203-02) | | | Matrix: W | | | Batch: 23J0680 | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-1 | ND | --- | 2.00 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | 10/18/23 13:16 | EPA 8260D | |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> | | | <i>Recovery: 116 %</i> | <i>Limits: 80-120 %</i> | <i>1</i> | <i>10/18/23 13:16</i> | <i>EPA 8260D</i> | |
| <i>Toluene-d8 (Surr)</i> | | | <i>108 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/18/23 13:16</i> | <i>EPA 8260D</i> | |
| <i>4-Bromofluorobenzene (Surr)</i> | | | <i>103 %</i> | <i>80-120 %</i> | <i>1</i> | <i>10/18/23 13:16</i> | <i>EPA 8260D</i> | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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 503-718-2323
 ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0680-BLK1) | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 12:54 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | --- |

Surr: 1,4-Difluorobenzene (Surr) Recovery: 107 % Limits: 80-120 % Dilution: 1x

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|-----------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0680-BLK1) | | | | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 12:54 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 106 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>103 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| LCS (23J0680-BS1) | | | | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 11:36 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 20.6 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| Bromoform | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Bromomethane | 18.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 90 | 80-120% | --- | --- | |
| Carbon tetrachloride | 23.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 116 | 80-120% | --- | --- | |
| Chlorobenzene | 19.0 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| Chloroethane | 22.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |
| Chloroform | 19.8 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 99 | 80-120% | --- | --- | |
| Chloromethane | 22.4 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 112 | 80-120% | --- | --- | |
| Dibromochloromethane | 19.1 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 19.7 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 98 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 21.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 91 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 27.9 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 140 | 80-120% | --- | --- | Q-56 |
| 1,1-Dichloroethane | 21.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 105 | 80-120% | --- | --- | |
| 1,1-Dichloroethene | 23.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 115 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethene | 19.9 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethene | 20.7 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 20.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 18.5 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 93 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 23.5 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 118 | 80-120% | --- | --- | |
| Methylene chloride | 25.2 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 126 | 80-120% | --- | --- | Q-56 |
| 1,1,2,2-Tetrachloroethane | 20.7 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 20.6 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 103 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 22.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 111 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 19.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 17.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 86 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 26.8 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 134 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 26.4 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 132 | 80-120% | --- | --- | Q-56 |

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| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | Water | | | | | | |
| LCS (23J0680-BS1) | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 11:36 | | | | | | | | | |
| Vinyl chloride | 23.9 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 120 | 80-120% | --- | --- | |
| m,p-Xylene | 40.7 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 102 | 80-120% | --- | --- | |
| o-Xylene | 16.7 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 83 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 101 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>91 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|----|-----|------|------|----|---|----|-----|-----|-----|-----|--|
| Duplicate (23J0680-DUP1) | | | | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 14:46 | | | | | | |
| QC Source Sample: Non-SDG (A3J1254-01) | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 50.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| cis-1,2-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | --- | 10.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 100 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 4.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |

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|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|-------------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0680-DUP1) | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 14:46 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1254-01) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 5.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 4.00 | ug/L | 10 | --- | 2.10 | --- | --- | *** | 30% | |
| Trichlorofluoromethane | ND | --- | 20.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 20.0 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 2.00 | ug/L | 10 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | 12.6 | --- | 10.0 | ug/L | 10 | --- | 12.9 | --- | --- | 2 | 30% | |
| o-Xylene | 5.30 | --- | 5.00 | ug/L | 10 | --- | 5.10 | --- | --- | 4 | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 102 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>107 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>105 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|----|-----|---|------|---|-----|----|-----|-----|-----|-----|--|
| Duplicate (23J0680-DUP2) | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 20:02 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1277-01) | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Chloroform | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Dichlorodifluoromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| cis-1,2-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |

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ANALYTICAL REPORT

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ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|--|--------|-----------------|-----------------|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0680-DUP2) | | | | | | | | | | | | |
| Prepared: 10/18/23 09:34 Analyzed: 10/18/23 20:02 | | | | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1277-01) | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Methylene chloride | ND | --- | 50.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1,1-Trichloroethane | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloroethane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | --- | 10.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 10.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 1.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| o-Xylene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Surr: 1,4-Difluorobenzene (Surr) Recovery: 109 % Limits: 80-120 % Dilution: 1x | | | | | | | | | | | | |
| Toluene-d8 (Surr) 108 % 80-120 % " | | | | | | | | | | | | |
| 4-Bromofluorobenzene (Surr) 103 % 80-120 % " | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|------|-----|-------|------|---|------|----|------------|----------------|-----|-----|-------|
| Matrix Spike (23J0680-MS1) | | | | | | | | | | | | |
| Prepared: 10/18/23 09:34 Analyzed: 10/18/23 21:32 | | | | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1379-06) | | | | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 24.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 121 | 79-125% | --- | --- | |
| Bromoform | 23.5 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 118 | 66-130% | --- | --- | |
| Bromomethane | 23.4 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 117 | 53-141% | --- | --- | |
| Carbon tetrachloride | 28.1 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 140 | 72-136% | --- | --- | Q-01 |
| Chlorobenzene | 22.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 112 | 80-120% | --- | --- | |
| Chloroethane | 28.2 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 141 | 60-138% | --- | --- | Q-01 |
| Chloroform | 23.5 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 118 | 79-124% | --- | --- | |
| Chloromethane | 26.8 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 134 | 50-139% | --- | --- | |
| Dibromochloromethane | 22.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 110 | 74-126% | --- | --- | |
| 1,2-Dichlorobenzene | 22.5 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 112 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 24.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 123 | 80-120% | --- | --- | Q-01 |
| 1,4-Dichlorobenzene | 20.9 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 104 | 79-120% | --- | --- | |
| Dichlorodifluoromethane | 34.5 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 173 | 32-152% | --- | --- | Q-54c |
| 1,1-Dichloroethane | 24.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 123 | 77-125% | --- | --- | |

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|-----------------|-------------------------|----------|---|---------------|----------------|--------------|-----|-----------|-------|
| Batch 23J0680 - EPA 5030C | | | | | | Water | | | | | | |
| Matrix Spike (23J0680-MS1) | | | | | | Prepared: 10/18/23 09:34 Analyzed: 10/18/23 21:32 | | | | | | |
| QC Source Sample: Non-SDG (A3J1379-06) | | | | | | | | | | | | |
| 1,2-Dichloroethane (EDC) | 24.7 | --- | 0.400 | ug/L | 1 | 20.0 | ND 123 | 73-128% | --- | --- | | |
| 1,1-Dichloroethene | 28.6 | --- | 0.400 | ug/L | 1 | 20.0 | ND 143 | 71-131% | --- | --- | | Q-01 |
| cis-1,2-Dichloroethene | 22.5 | --- | 0.400 | ug/L | 1 | 20.0 | ND 113 | 78-123% | --- | --- | | |
| trans-1,2-Dichloroethene | 24.9 | --- | 0.400 | ug/L | 1 | 20.0 | ND 124 | 75-124% | --- | --- | | |
| 1,2-Dichloropropane | 24.6 | --- | 0.500 | ug/L | 1 | 20.0 | ND 123 | 78-122% | --- | --- | | Q-01 |
| cis-1,3-Dichloropropene | 15.6 | --- | 1.00 | ug/L | 1 | 20.0 | ND 78 | 75-124% | --- | --- | | |
| trans-1,3-Dichloropropene | 26.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND 134 | 73-127% | --- | --- | | Q-01 |
| Methylene chloride | 28.4 | --- | 10.0 | ug/L | 1 | 20.0 | ND 142 | 74-124% | --- | --- | | Q-54e |
| 1,1,2,2-Tetrachloroethane | 24.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND 122 | 71-121% | --- | --- | | Q-01 |
| Tetrachloroethene (PCE) | 25.1 | --- | 0.400 | ug/L | 1 | 20.0 | ND 126 | 74-129% | --- | --- | | |
| 1,1,1-Trichloroethane | 26.5 | --- | 0.400 | ug/L | 1 | 20.0 | ND 132 | 74-131% | --- | --- | | Q-01 |
| 1,1,2-Trichloroethane | 22.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND 114 | 80-120% | --- | --- | | |
| Trichloroethene (TCE) | 20.5 | --- | 0.400 | ug/L | 1 | 20.0 | ND 103 | 79-123% | --- | --- | | |
| Trichlorofluoromethane | 34.0 | --- | 2.00 | ug/L | 1 | 20.0 | ND 170 | 65-141% | --- | --- | | Q-54a |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 33.8 | --- | 2.00 | ug/L | 1 | 20.0 | ND 169 | 70-136% | --- | --- | | Q-54 |
| Vinyl chloride | 28.0 | --- | 0.200 | ug/L | 1 | 20.0 | ND 140 | 58-137% | --- | --- | | Q-01 |
| m,p-Xylene | 47.6 | --- | 1.00 | ug/L | 1 | 40.0 | ND 119 | 80-121% | --- | --- | | |
| o-Xylene | 19.1 | --- | 0.500 | ug/L | 1 | 20.0 | ND 95 | 78-122% | --- | --- | | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 102 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>97 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>88 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

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ANALYTICAL REPORT

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0752 - EPA 5030C | | | | | | Water | | | | | | |
| Blank (23J0752-BLK1) | | | Prepared: 10/19/23 10:37 Analyzed: 10/19/23 13:27 | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromoform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromomethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Carbon tetrachloride | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloroethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloroform | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloromethane | ND | --- | 5.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dibromochloromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,3-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,4-Dichlorobenzene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dichlorodifluoromethane | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloroethane (EDC) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| cis-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,2-Dichloroethene | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloropropane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| cis-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,3-Dichloropropene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Methylene chloride | ND | --- | 10.0 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2,2-Tetrachloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Tetrachloroethene (PCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,1-Trichloroethane | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2-Trichloroethane | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichloroethene (TCE) | ND | --- | 0.400 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichlorofluoromethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 2.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| Vinyl chloride | ND | --- | 0.200 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| m,p-Xylene | ND | --- | 1.00 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |
| o-Xylene | ND | --- | 0.500 | ug/L | 1 | --- | --- | --- | --- | --- | --- | |

Surr: 1,4-Difluorobenzene (Surr) Recovery: 107 % Limits: 80-120 % Dilution: 1x

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ANALYTICAL REPORT

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---------------------------------------|--------|------------------------|-----------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0752 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Blank (23J0752-BLK1) | | | | | | | | | | | | |
| | | | | | | Prepared: 10/19/23 10:37 Analyzed: 10/19/23 13:27 | | | | | | |
| <i>Surr: Toluene-d8 (Surr)</i> | | <i>Recovery: 101 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>96 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| LCS (23J0752-BS1) | | | | | | | | | | | | |
| | | | | | | Prepared: 10/19/23 10:37 Analyzed: 10/19/23 12:24 | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 23.9 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 119 | 80-120% | --- | --- | |
| Bromoform | 20.4 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Bromomethane | 16.7 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 83 | 80-120% | --- | --- | |
| Carbon tetrachloride | 25.0 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 125 | 80-120% | --- | --- | Q-56 |
| Chlorobenzene | 19.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 96 | 80-120% | --- | --- | |
| Chloroethane | 27.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 135 | 80-120% | --- | --- | Q-56 |
| Chloroform | 21.3 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 107 | 80-120% | --- | --- | |
| Chloromethane | 22.0 | --- | 5.00 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |
| Dibromochloromethane | 19.5 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| 1,2-Dichlorobenzene | 19.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 97 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 20.5 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 18.2 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 91 | 80-120% | --- | --- | |
| Dichlorodifluoromethane | 23.3 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 117 | 80-120% | --- | --- | |
| 1,1-Dichloroethane | 21.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.1 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| 1,1-Dichloroethene | 20.5 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| cis-1,2-Dichloroethene | 19.9 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 99 | 80-120% | --- | --- | |
| trans-1,2-Dichloroethene | 19.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| 1,2-Dichloropropane | 19.8 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 99 | 80-120% | --- | --- | |
| cis-1,3-Dichloropropene | 20.0 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 100 | 80-120% | --- | --- | |
| trans-1,3-Dichloropropene | 21.2 | --- | 1.00 | ug/L | 1 | 20.0 | --- | 106 | 80-120% | --- | --- | |
| Methylene chloride | 22.8 | --- | 10.0 | ug/L | 1 | 20.0 | --- | 114 | 80-120% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 20.9 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 104 | 80-120% | --- | --- | |
| Tetrachloroethene (PCE) | 19.0 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 95 | 80-120% | --- | --- | |
| 1,1,1-Trichloroethane | 22.6 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 113 | 80-120% | --- | --- | |
| 1,1,2-Trichloroethane | 20.4 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 102 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 18.2 | --- | 0.400 | ug/L | 1 | 20.0 | --- | 91 | 80-120% | --- | --- | |
| Trichlorofluoromethane | 28.1 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 140 | 80-120% | --- | --- | Q-56 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 22.0 | --- | 2.00 | ug/L | 1 | 20.0 | --- | 110 | 80-120% | --- | --- | |

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ANALYTICAL REPORT

Apex Laboratories, LLC

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| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0752 - EPA 5030C | | | | | | Water | | | | | | |
| LCS (23J0752-BS1) | | | Prepared: 10/19/23 10:37 Analyzed: 10/19/23 12:24 | | | | | | | | | |
| Vinyl chloride | 22.3 | --- | 0.200 | ug/L | 1 | 20.0 | --- | 112 | 80-120% | --- | --- | |
| m,p-Xylene | 40.8 | --- | 1.00 | ug/L | 1 | 40.0 | --- | 102 | 80-120% | --- | --- | |
| o-Xylene | 18.3 | --- | 0.500 | ug/L | 1 | 20.0 | --- | 91 | 80-120% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 100 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>99 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>94 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

Duplicate (23J0752-DUP1) Prepared: 10/19/23 13:47 Analyzed: 10/20/23 00:21 **V-01, V-13**

QC Source Sample: Non-SDG (A3J1262-39)

| | | | | | | | | | | | |
|---------------------------|----|-----|------|------|---|-----|----|-----|-----|-----|-----|
| Bromodichloromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Bromoform | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Bromomethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Carbon tetrachloride | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Chlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Chloroethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Chloroform | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Chloromethane | ND | --- | 25.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Dibromochloromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,2-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,3-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,4-Dichlorobenzene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Dichlorodifluoromethane | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,1-Dichloroethane | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,2-Dichloroethane (EDC) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,1-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| cis-1,2-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| trans-1,2-Dichloroethene | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,2-Dichloropropane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| cis-1,3-Dichloropropene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| trans-1,3-Dichloropropene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Methylene chloride | ND | --- | 50.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,1,2,2-Tetrachloroethane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| Tetrachloroethene (PCE) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |
| 1,1,1-Trichloroethane | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% |

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|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| Batch 23J0752 - EPA 5030C | | | | | | | | | | | | |
| Water | | | | | | | | | | | | |
| Duplicate (23J0752-DUP1) | | | Prepared: 10/19/23 13:47 Analyzed: 10/20/23 00:21 | | | | | | V-01, V-13 | | | |
| QC Source Sample: Non-SDG (A3J1262-39) | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | --- | 2.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | --- | 10.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | --- | 10.0 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | --- | 1.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| m,p-Xylene | ND | --- | 5.00 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| o-Xylene | ND | --- | 2.50 | ug/L | 5 | --- | ND | --- | --- | --- | 30% | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 96 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>100 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>98 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

| | | | | | | | | | | | | |
|---|------|-----|---|------|---|------|-------|------------|----------------|-----|-----|-------|
| Matrix Spike (23J0752-MS1) | | | Prepared: 10/19/23 13:47 Analyzed: 10/19/23 20:16 | | | | | | | | | |
| QC Source Sample: Non-SDG (A3J1262-41) | | | | | | | | | | | | |
| EPA 8260D | | | | | | | | | | | | |
| Bromodichloromethane | 24.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 121 | 79-125% | --- | --- | |
| Bromoform | 21.1 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 105 | 66-130% | --- | --- | |
| Bromomethane | 15.4 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 77 | 53-141% | --- | --- | |
| Carbon tetrachloride | 27.2 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 136 | 72-136% | --- | --- | Q-54d |
| Chlorobenzene | 20.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 101 | 80-120% | --- | --- | |
| Chloroethane | 30.9 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 154 | 60-138% | --- | --- | Q-54b |
| Chloroform | 22.0 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 110 | 79-124% | --- | --- | |
| Chloromethane | 19.2 | --- | 5.00 | ug/L | 1 | 20.0 | ND | 96 | 50-139% | --- | --- | |
| Dibromochloromethane | 19.9 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 99 | 74-126% | --- | --- | |
| 1,2-Dichlorobenzene | 19.7 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 98 | 80-120% | --- | --- | |
| 1,3-Dichlorobenzene | 21.3 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 107 | 80-120% | --- | --- | |
| 1,4-Dichlorobenzene | 19.1 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 96 | 79-120% | --- | --- | |
| Dichlorodifluoromethane | 26.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 132 | 32-152% | --- | --- | |
| 1,1-Dichloroethane | 21.8 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 109 | 77-125% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 21.9 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 109 | 73-128% | --- | --- | |
| 1,1-Dichloroethene | 23.8 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 119 | 71-131% | --- | --- | |
| cis-1,2-Dichloroethene | 21.7 | --- | 0.400 | ug/L | 1 | 20.0 | 0.880 | 104 | 78-123% | --- | --- | |
| trans-1,2-Dichloroethene | 19.9 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 100 | 75-124% | --- | --- | |
| 1,2-Dichloropropane | 19.8 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 99 | 78-122% | --- | --- | |

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| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|-----------------|-------------------------|----------|---|---------------|------------|----------------|-----|-----------|-------|
| Batch 23J0752 - EPA 5030C | | | | | | Water | | | | | | |
| Matrix Spike (23J0752-MS1) | | | | | | Prepared: 10/19/23 13:47 Analyzed: 10/19/23 20:16 | | | | | | |
| QC Source Sample: Non-SDG (A3J1262-41) | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | 16.3 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 81 | 75-124% | --- | --- | |
| trans-1,3-Dichloropropene | 21.8 | --- | 1.00 | ug/L | 1 | 20.0 | ND | 109 | 73-127% | --- | --- | |
| Methylene chloride | 21.3 | --- | 10.0 | ug/L | 1 | 20.0 | ND | 106 | 74-124% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 20.9 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 105 | 71-121% | --- | --- | |
| Tetrachloroethene (PCE) | 20.8 | --- | 0.400 | ug/L | 1 | 20.0 | 0.410 | 102 | 74-129% | --- | --- | |
| 1,1,1-Trichloroethane | 24.4 | --- | 0.400 | ug/L | 1 | 20.0 | ND | 122 | 74-131% | --- | --- | |
| 1,1,2-Trichloroethane | 20.4 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 102 | 80-120% | --- | --- | |
| Trichloroethene (TCE) | 19.6 | --- | 0.400 | ug/L | 1 | 20.0 | 0.670 | 95 | 79-123% | --- | --- | |
| Trichlorofluoromethane | 31.3 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 157 | 65-141% | --- | --- | Q-54c |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.2 | --- | 2.00 | ug/L | 1 | 20.0 | ND | 126 | 70-136% | --- | --- | |
| Vinyl chloride | 23.8 | --- | 0.200 | ug/L | 1 | 20.0 | 0.670 | 116 | 58-137% | --- | --- | |
| m,p-Xylene | 43.6 | --- | 1.00 | ug/L | 1 | 40.0 | ND | 109 | 80-121% | --- | --- | |
| o-Xylene | 19.0 | --- | 0.500 | ug/L | 1 | 20.0 | ND | 95 | 78-122% | --- | --- | |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i> | | <i>Recovery: 98 %</i> | | <i>Limits: 80-120 %</i> | | <i>Dilution: 1x</i> | | | | | | |
| <i>Toluene-d8 (Surr)</i> | | <i>96 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |
| <i>4-Bromofluorobenzene (Surr)</i> | | <i>91 %</i> | | <i>80-120 %</i> | | <i>"</i> | | | | | | |

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|--|---|---|

SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 8260D

| Prep: EPA 5030C | | | | | Sample | Default | RL Prep |
|-----------------------|--------|-----------|----------------|----------------|---------------|---------------|---------|
| Lab Number | Matrix | Method | Sampled | Prepared | Initial/Final | Initial/Final | Factor |
| <u>Batch: 23J0680</u> | | | | | | | |
| A3J1203-02 | W | EPA 8260D | 10/11/23 09:30 | 10/18/23 12:43 | 5mL/5mL | 5mL/5mL | 1.00 |
| <u>Batch: 23J0752</u> | | | | | | | |
| A3J1203-01RE1 | WG | EPA 8260D | 10/11/23 09:05 | 10/19/23 13:47 | 5mL/5mL | 5mL/5mL | 1.00 |

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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|--|---|---|

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +12%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +14%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +15%. The results are reported as Estimated Values.
- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +20%. The results are reported as Estimated Values.
- Q-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
- Q-54e** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +6%. The results are reported as Estimated Values.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
- V-13** Reporting levels raised due to dilution necessary for analysis due to sample foaming in sparge vessel.

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|--|---|---|

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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|--|---|---|

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

- For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

- Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

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ORELAP ID: OR100062

Table with 3 columns: Client (Anchor QEA, LLC), Project (Columbia Helicopters), and Report ID (A3J1203 - 11 14 23 0549).

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

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Table with 6 columns: Matrix, Analysis, TNI_ID, Analyte, TNI_ID, Accreditation. Content: All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Signature of Darwin Thomas

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

| | | |
|--|---|---|
| Anchor QEA, LLC 6720 SW Macadam Ave. Suite 125 Portland, OR 97219 | Project: Columbia Helicopters Project Number: 220171-01.01 Project Manager: John Renda | Report ID: A3J1203 - 11 14 23 0549 |
|--|---|---|

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3J1203

Project/Project #: 2023 Columbia Helicopters Inc. 220171-01.01

Delivery Info:
Date/time received: 10/11/23 @ 1007 By: JS
Delivered by: Apex Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

Cooler Inspection Date/time inspected: 10/11/23 @ 1008 By: JS
Chain of Custody included? Yes No
Signed/dated by client? Yes No

| | Cooler #1 | Cooler #2 | Cooler #3 | Cooler #4 | Cooler #5 | Cooler #6 | Cooler #7 |
|----------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Temperature (°C) | <u>5.6</u> | | | | | | |
| Custody seals? (Y/N) | <u>N</u> | | | | | | |
| Received on ice? (Y/N) | <u>Y</u> | | | | | | |
| Temp. blanks? (Y/N) | <u>Y</u> | | | | | | |
| Ice type: (Gel/Real/Other) | <u>Real</u> | | | | | | |
| Condition (In/Out): | <u>Th</u> | | | | | | |

Cooler out of temp? (Y/N) Possible reason why: _____
Green dots applied to out of temperature samples? Yes No
Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 10-12-23 @ 1122 By: JS
All samples intact? Yes No Comments: _____
Bottle labels/COCs agree? Yes No Comments: _____
COC/container discrepancies form initiated? Yes No
Containers/volumes received appropriate for analysis? Yes No Comments: _____
Do VOA vials have visible headspace? Yes No NA
Comments TB - 10 11 23 = V1 MS
Water samples: pH checked: Yes No NA pH appropriate? Yes No NA pH ID: _____
Comments: _____
Additional information: TB # 3278

Labeled by: JS Witness: JR Cooler Inspected by: JS Form Y-003 R-01

Apex Laboratories

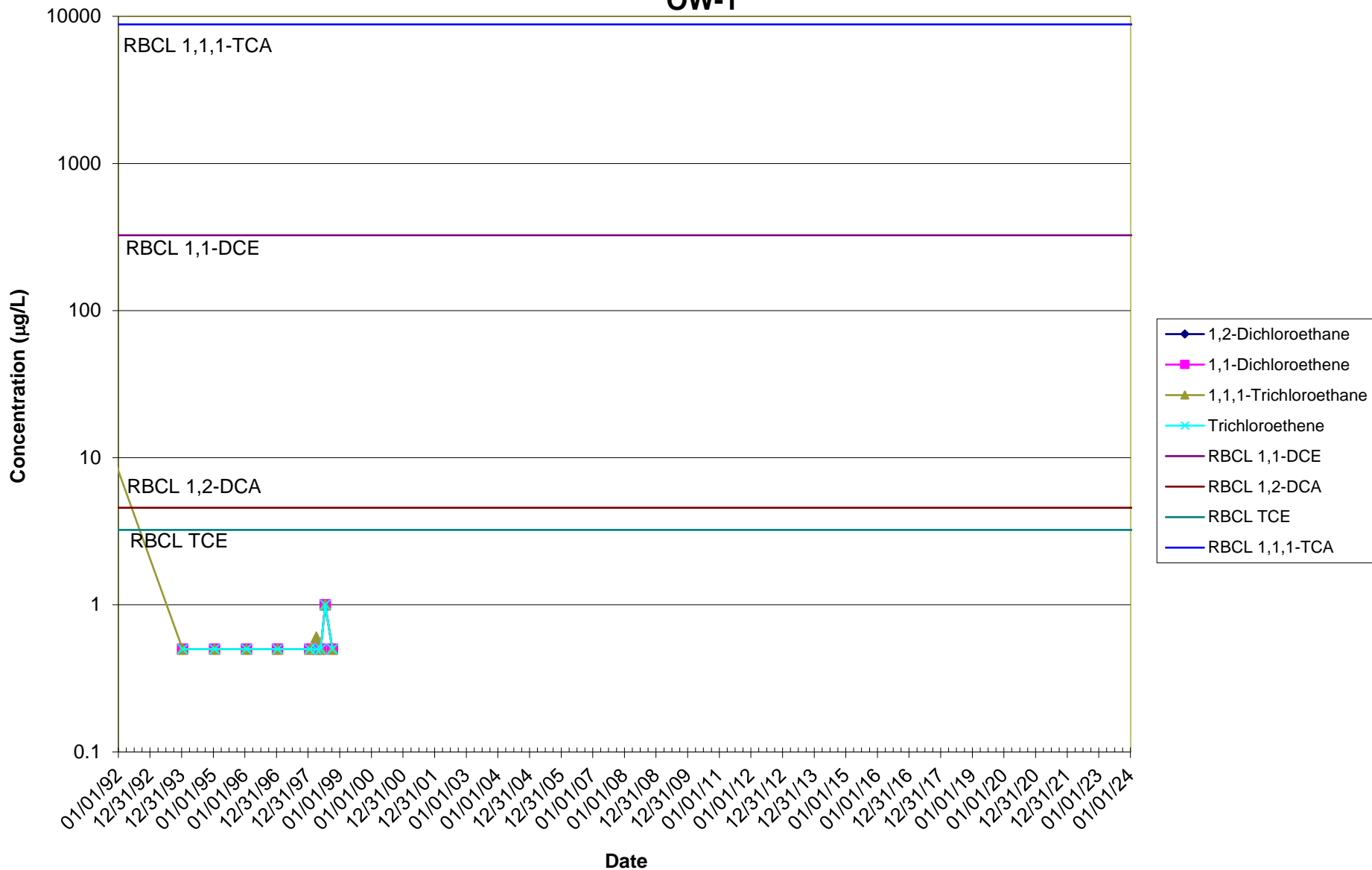
Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

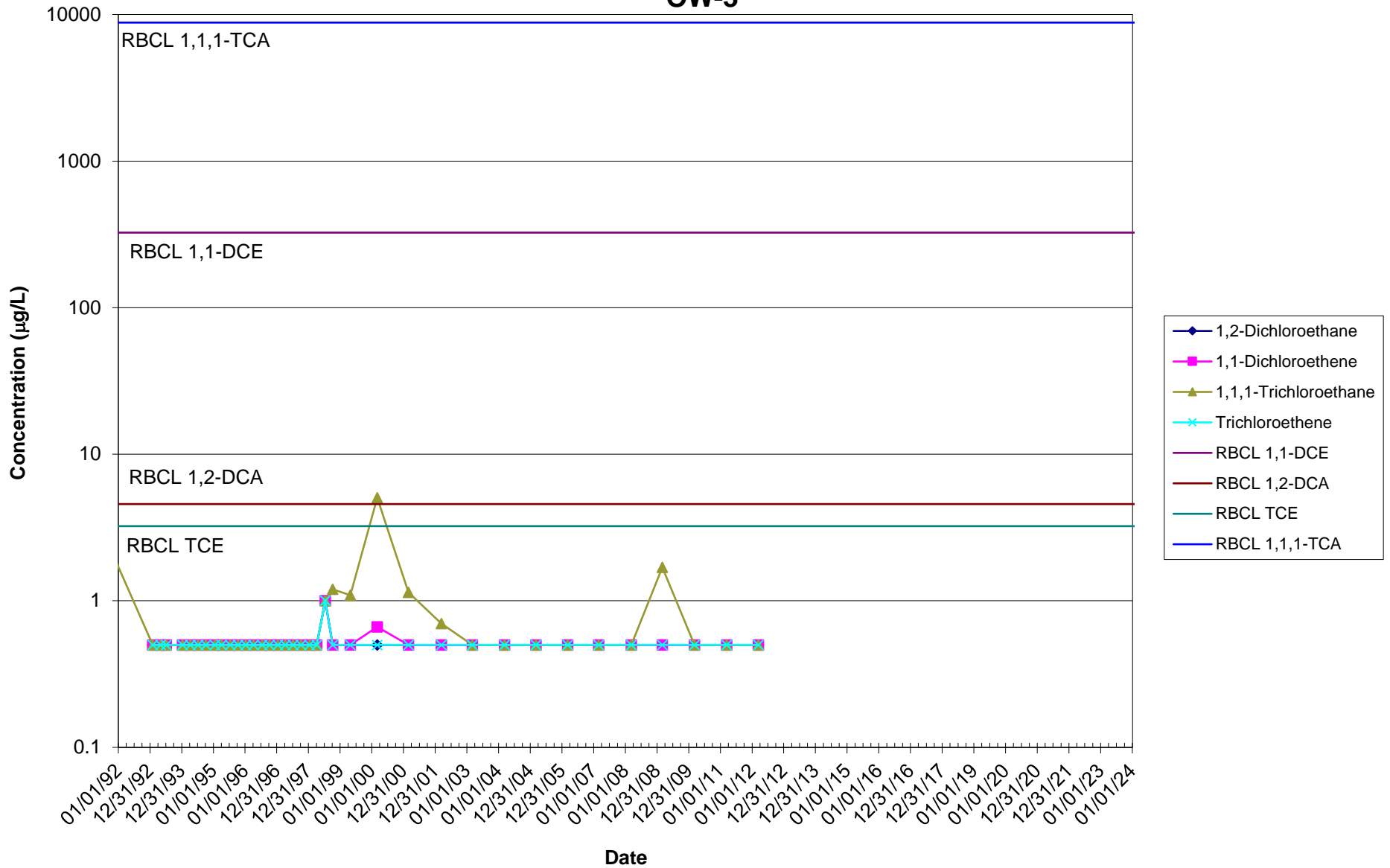
Appendix D

Volatile Organic Compound Trend Plots

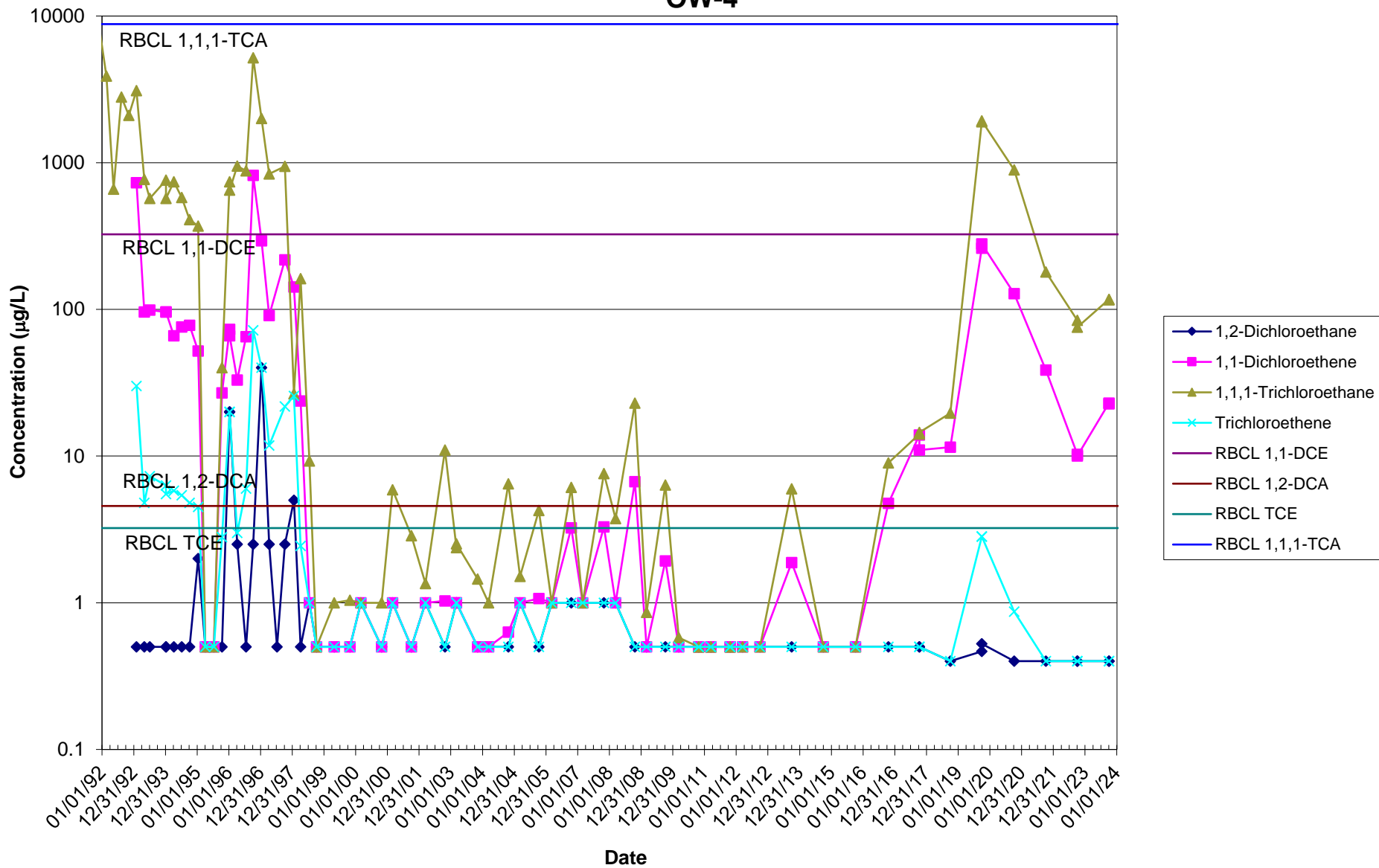
Columbia Helicopters, Inc. Time-Series Concentration Plots OW-1



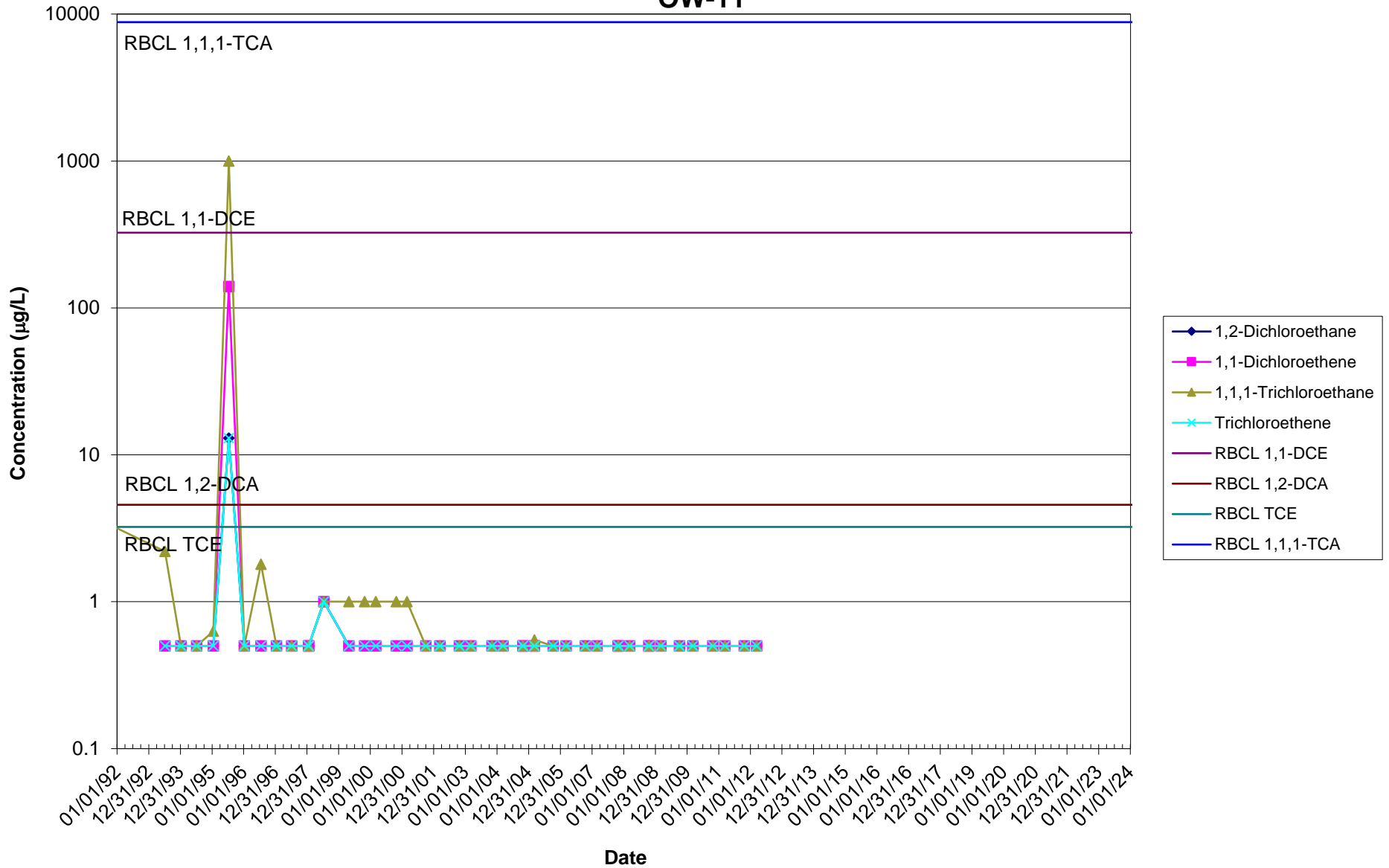
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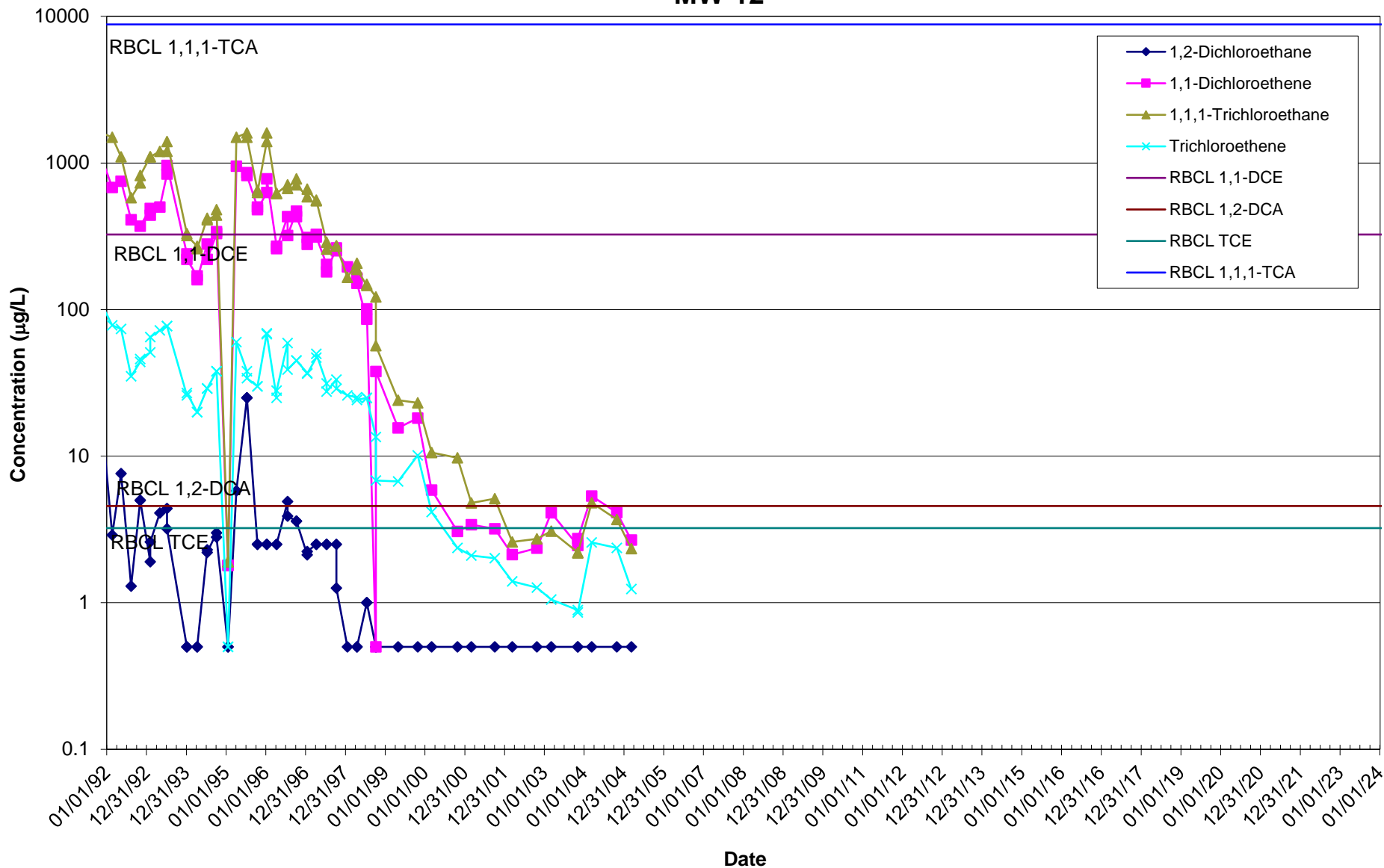
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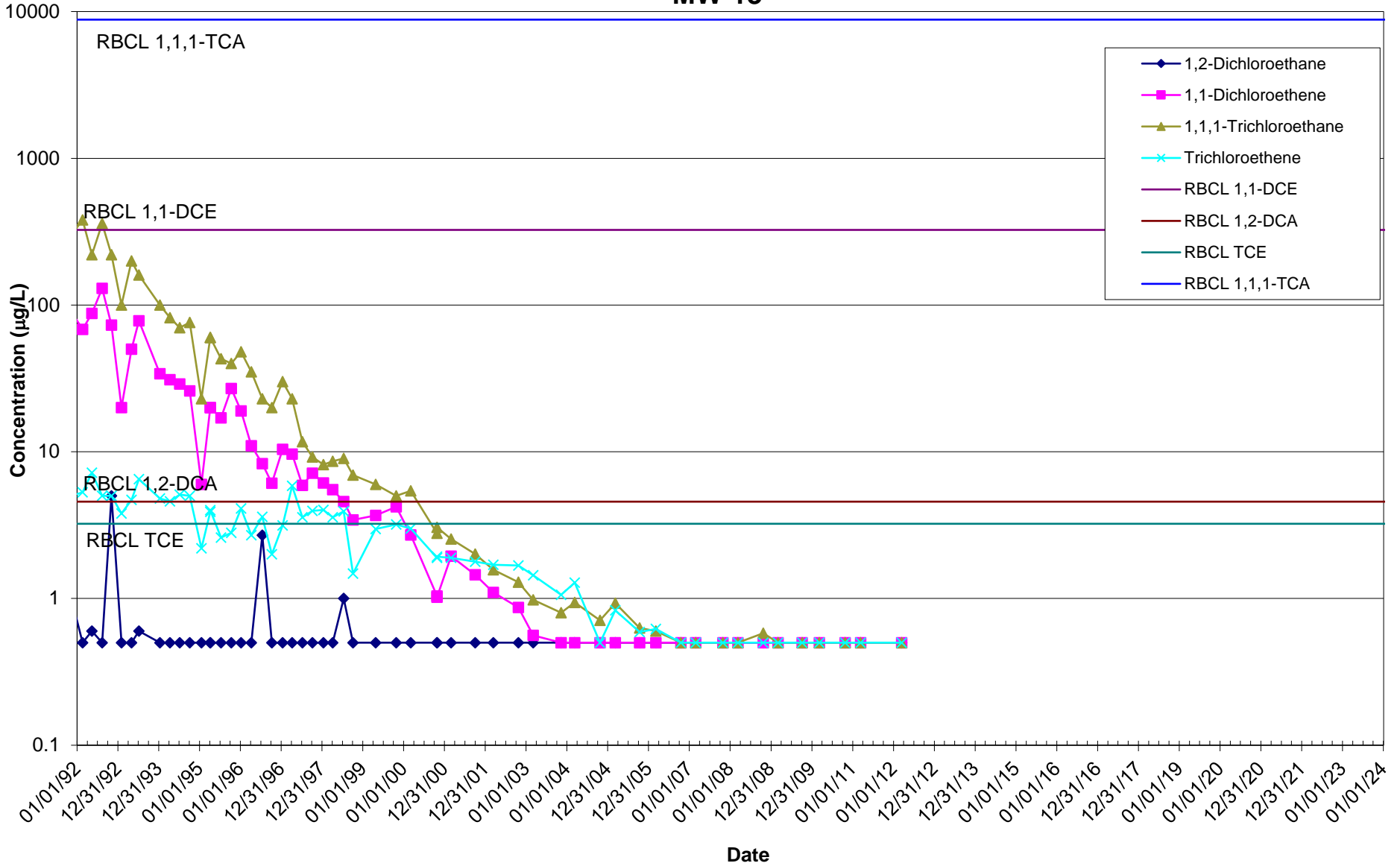
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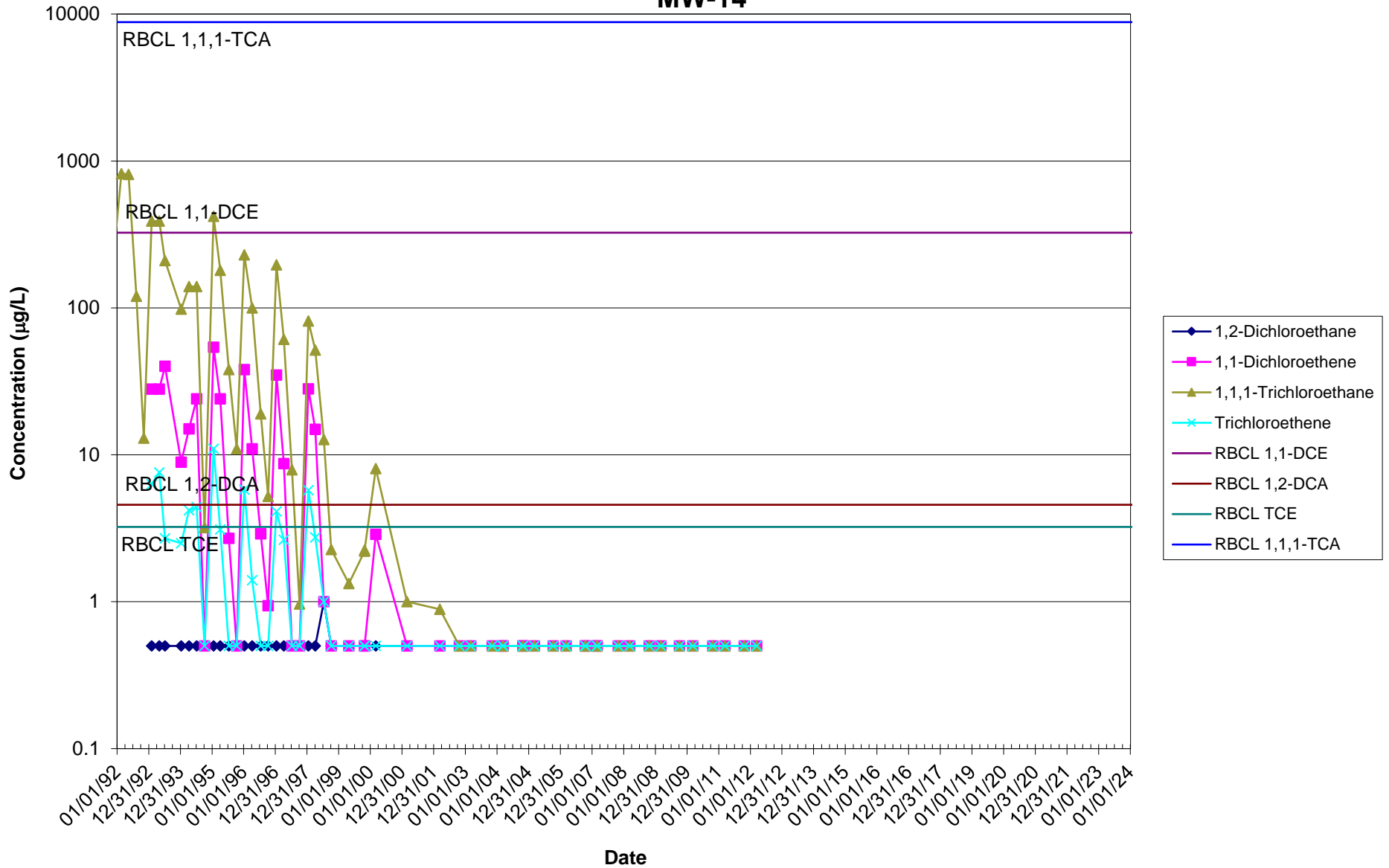
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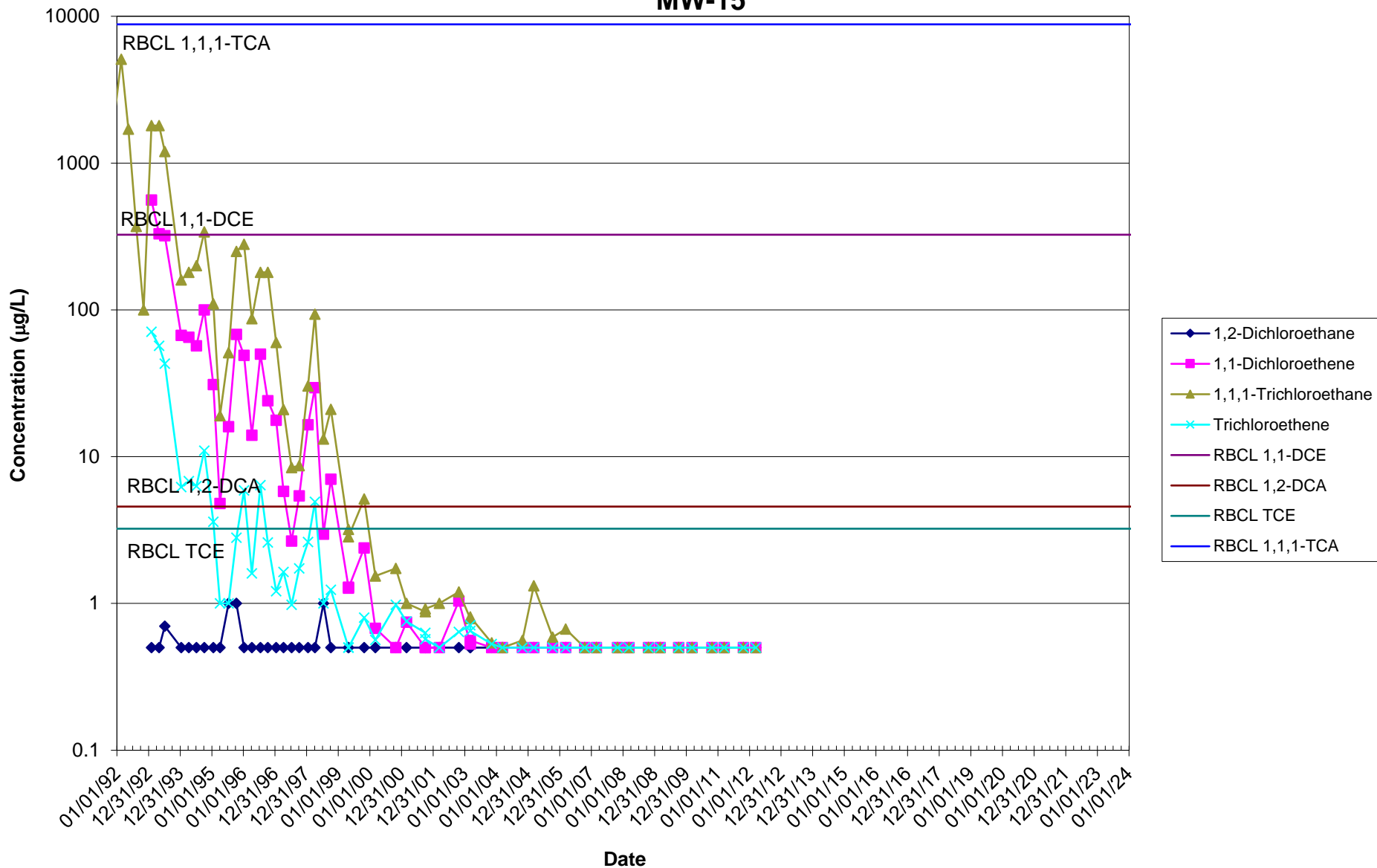
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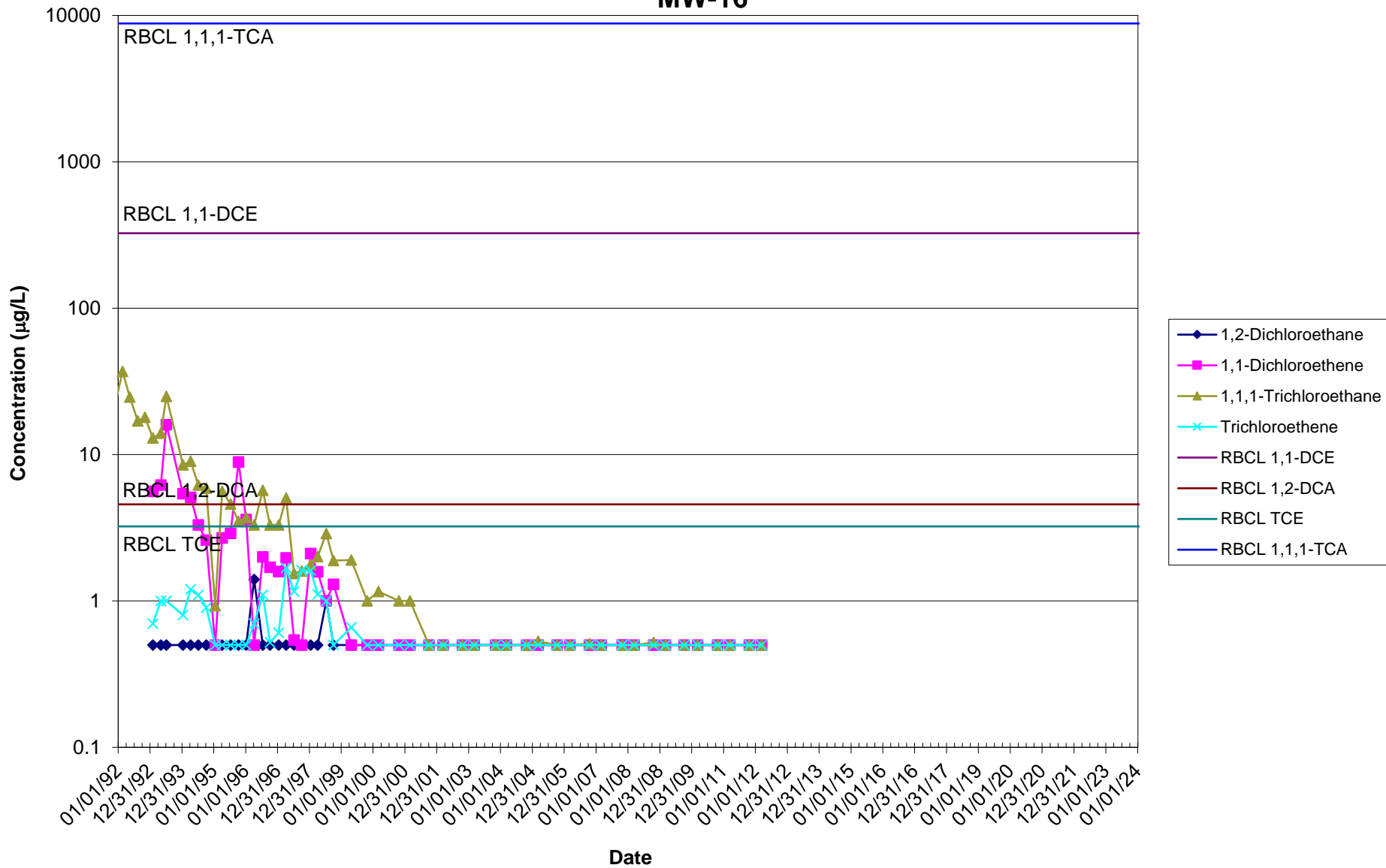
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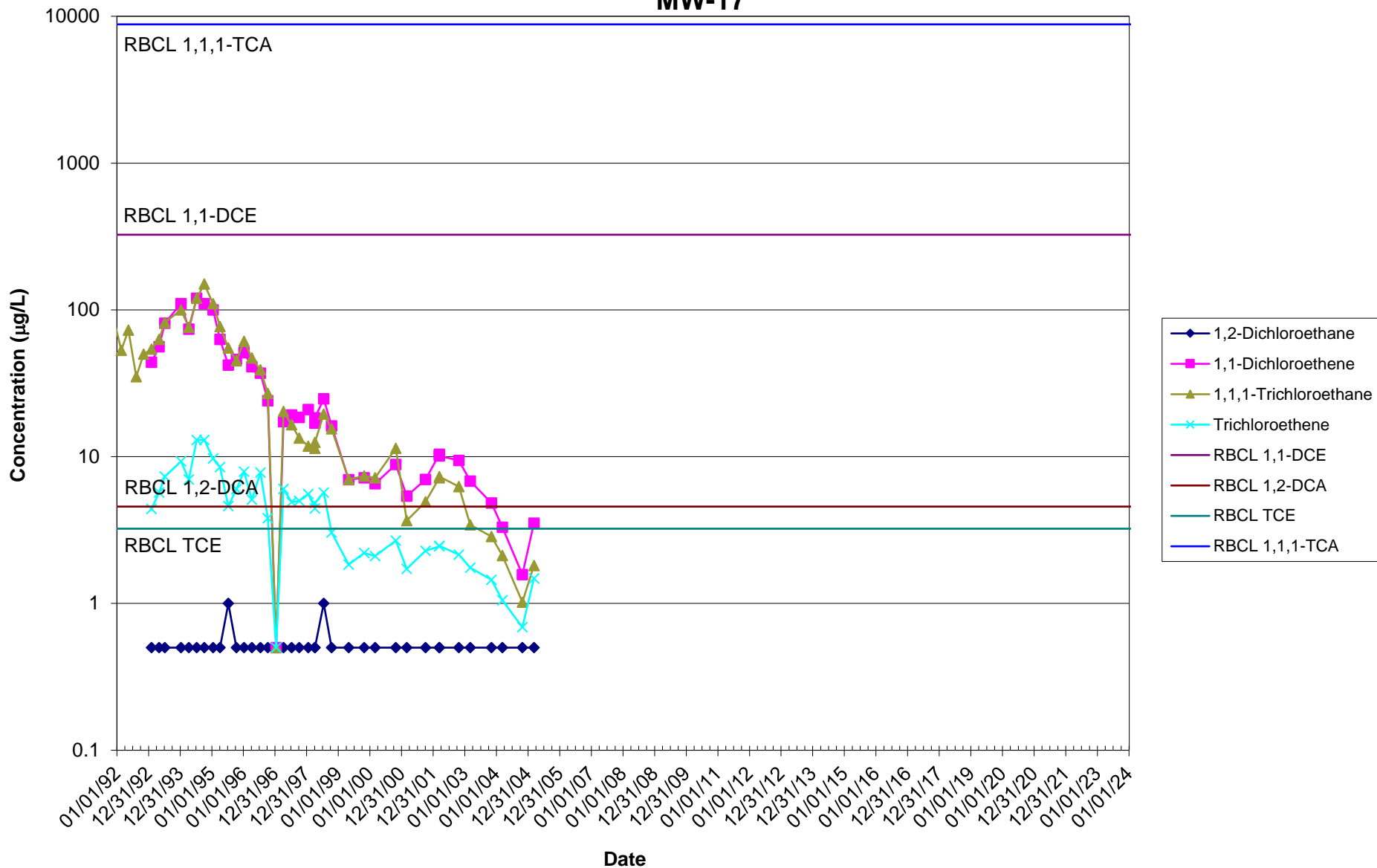
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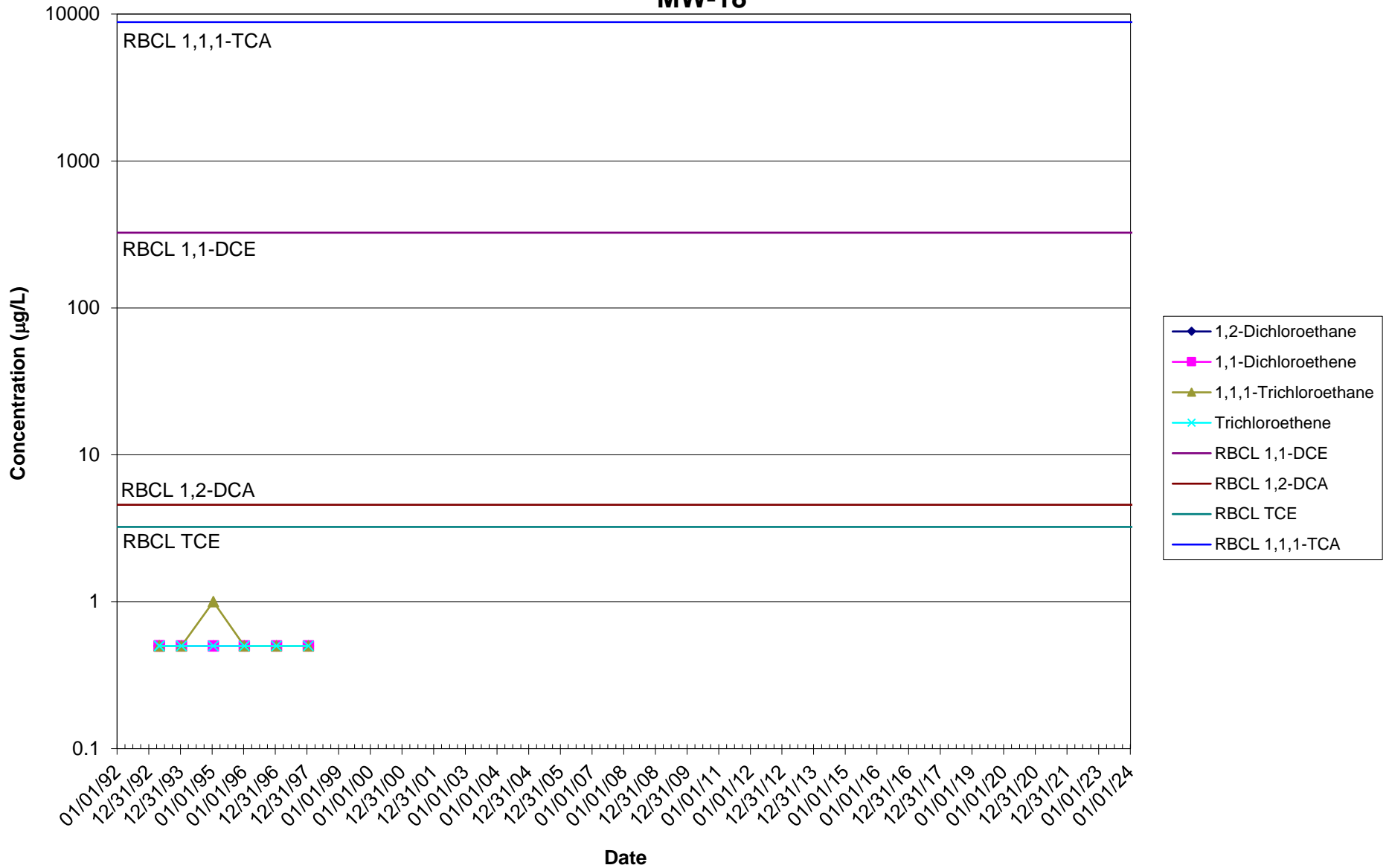
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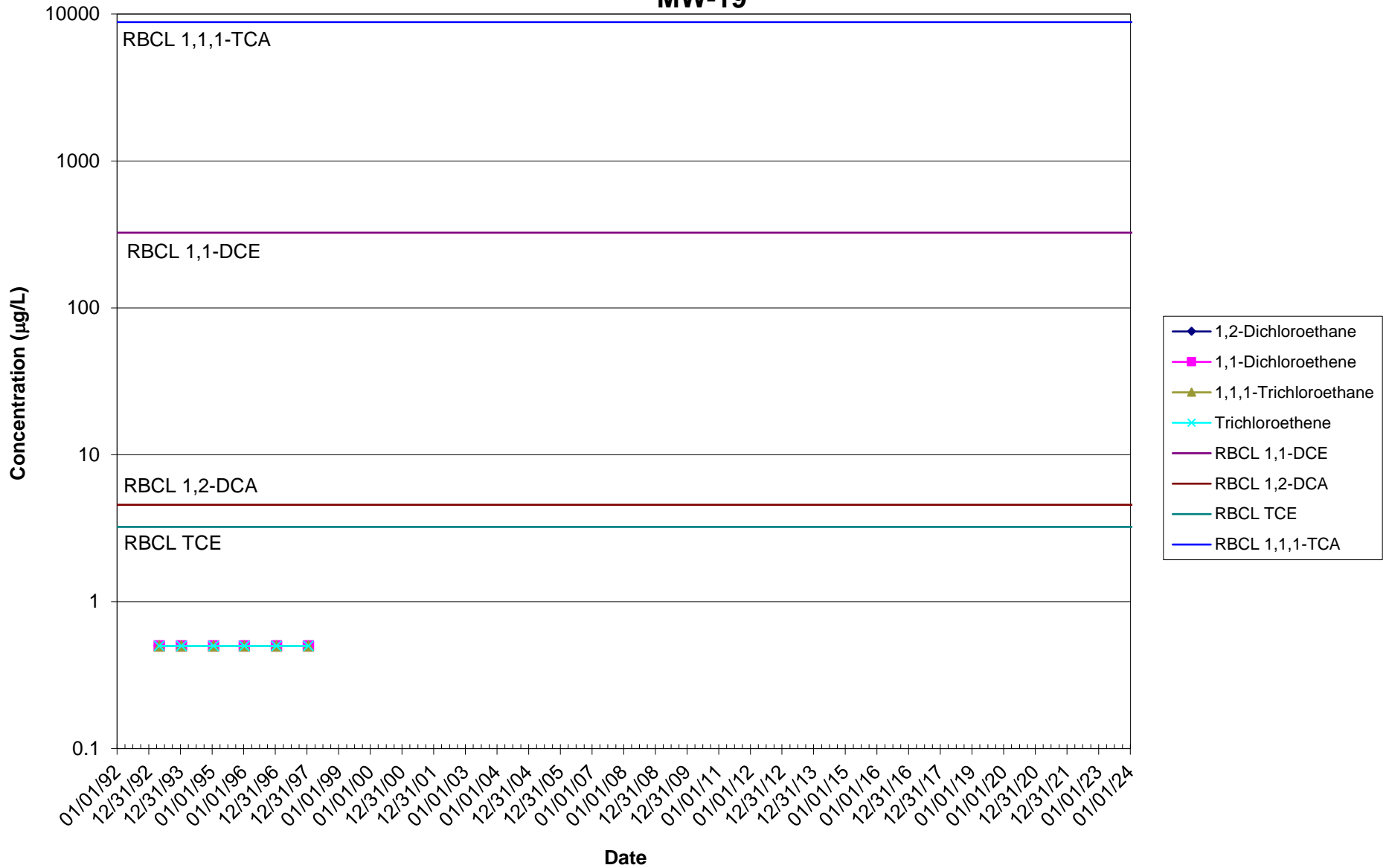
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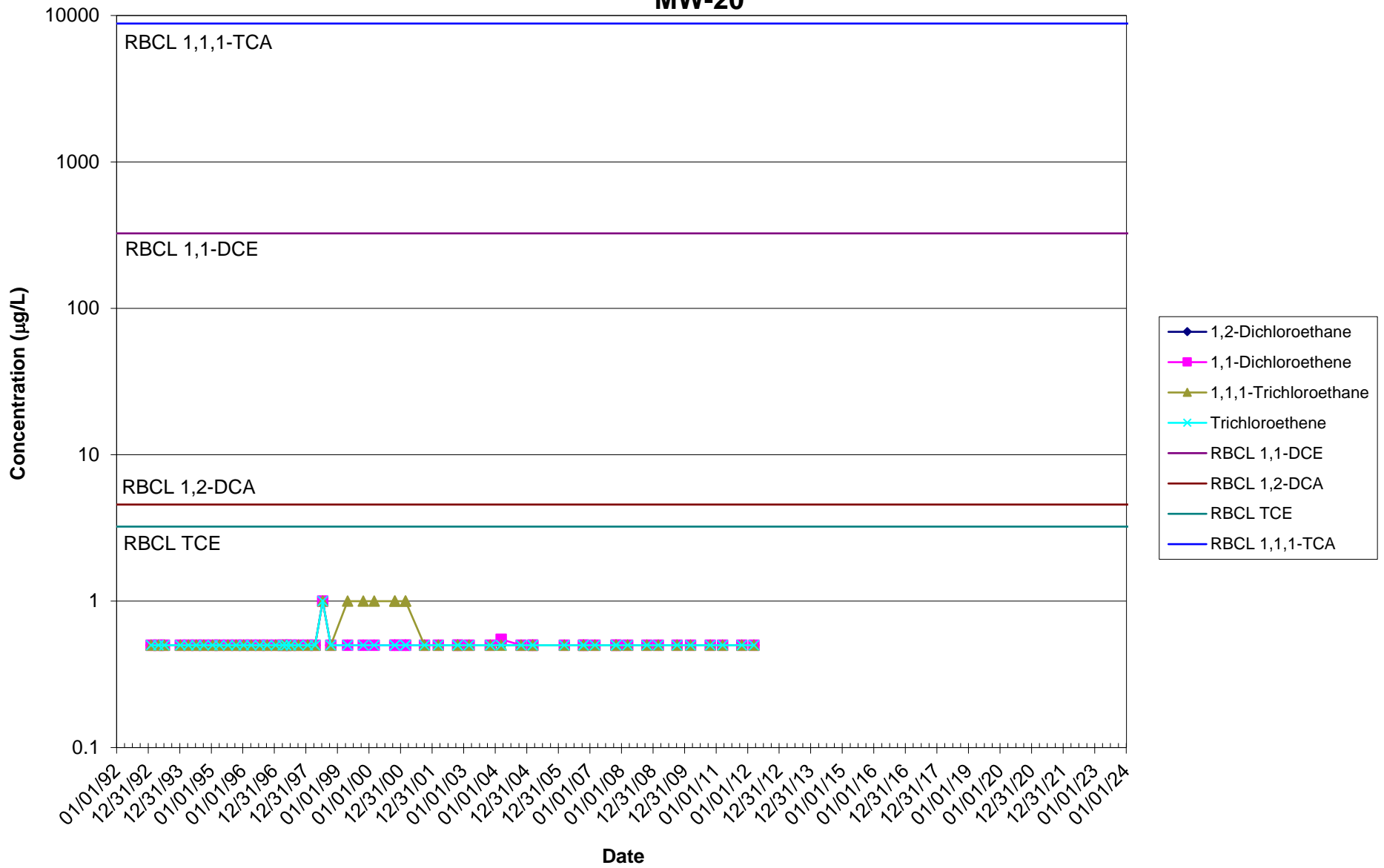
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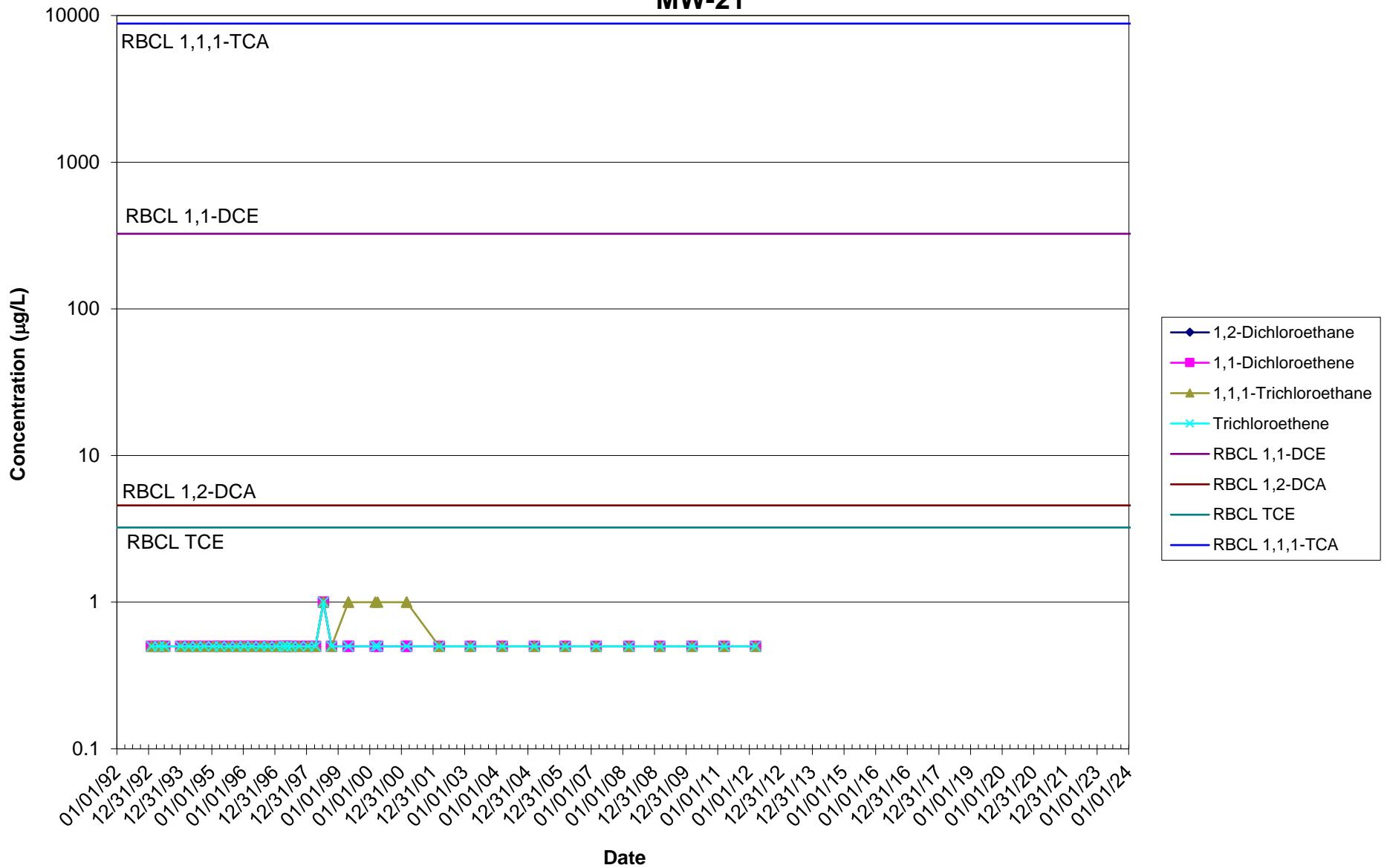
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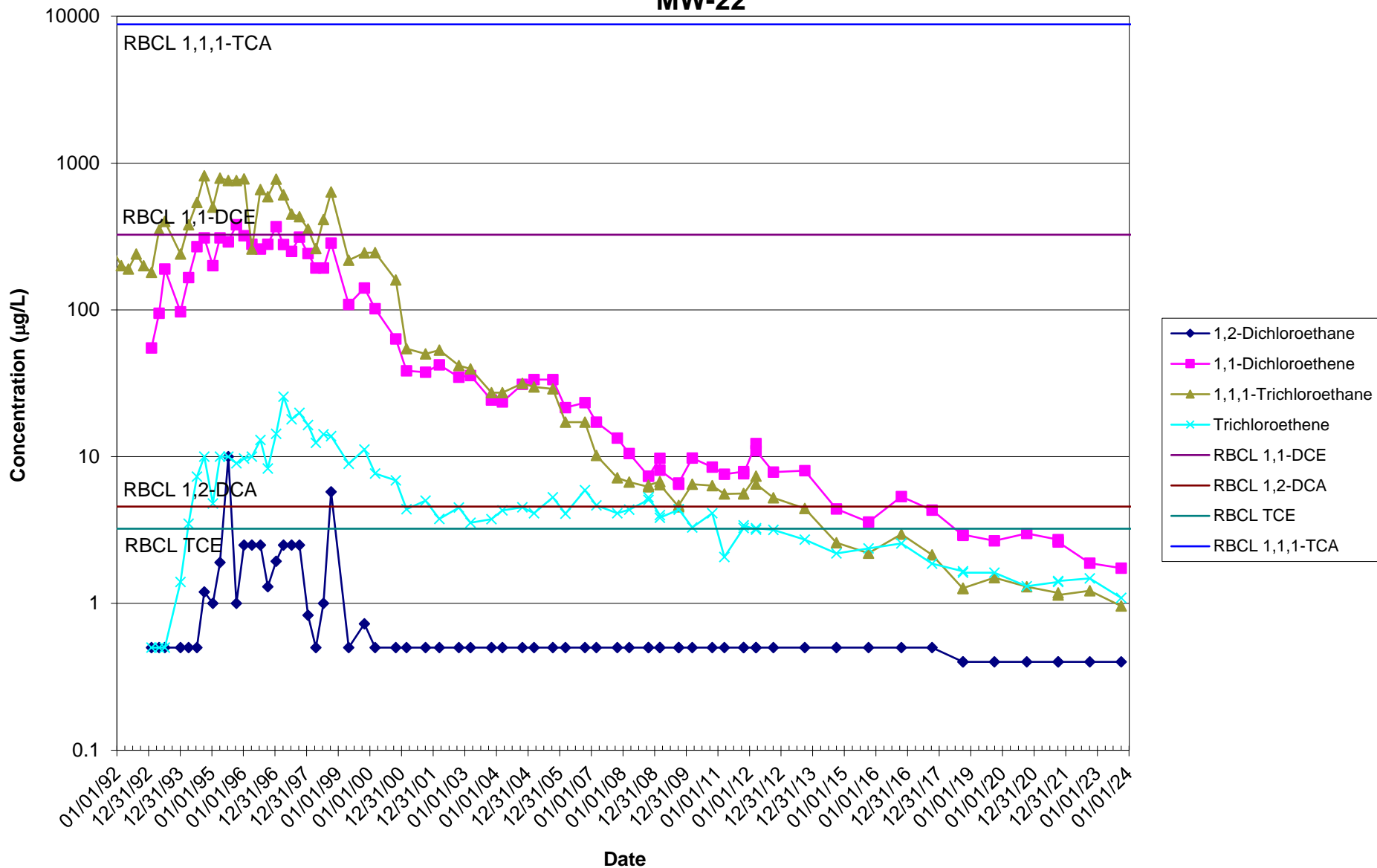
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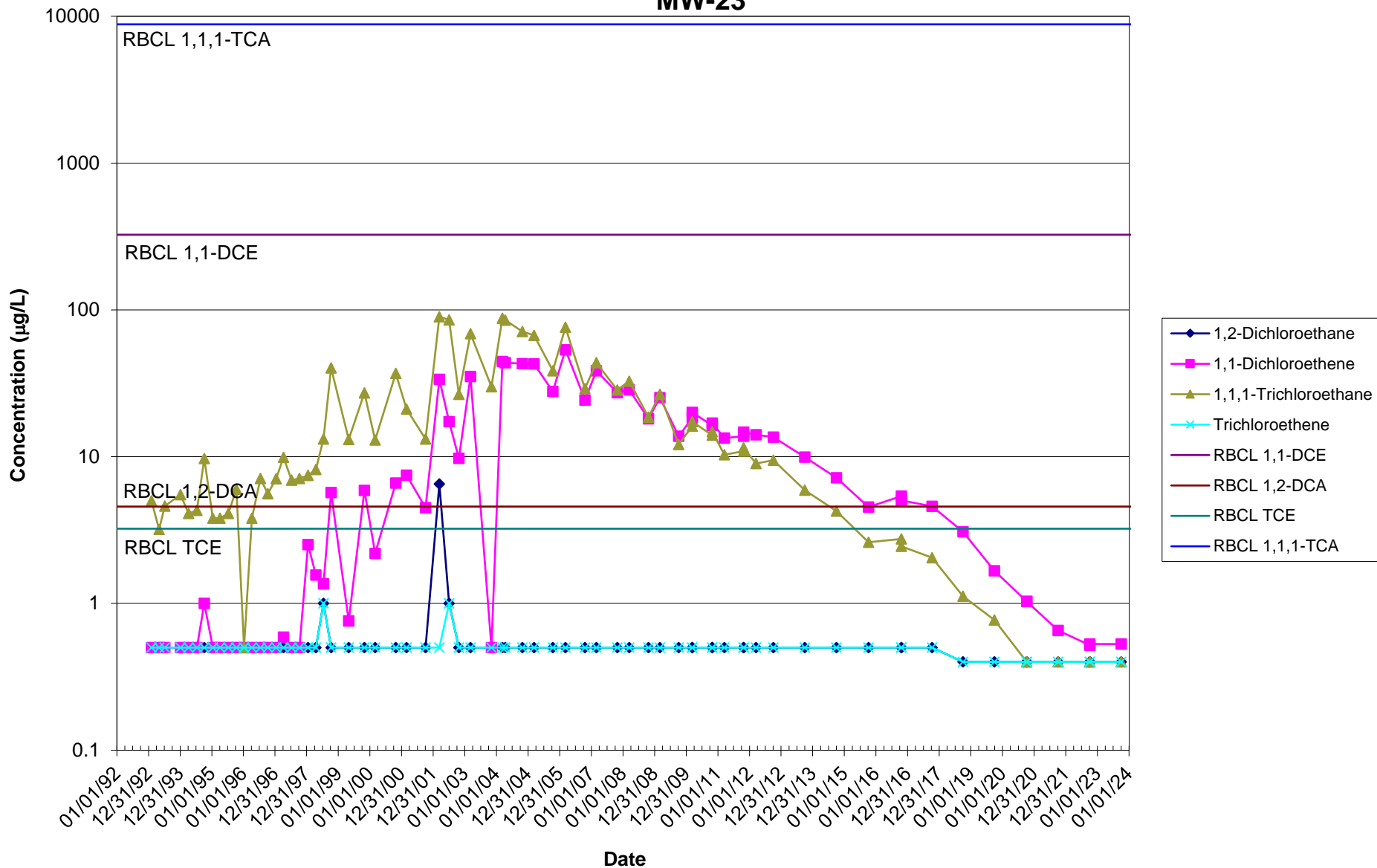
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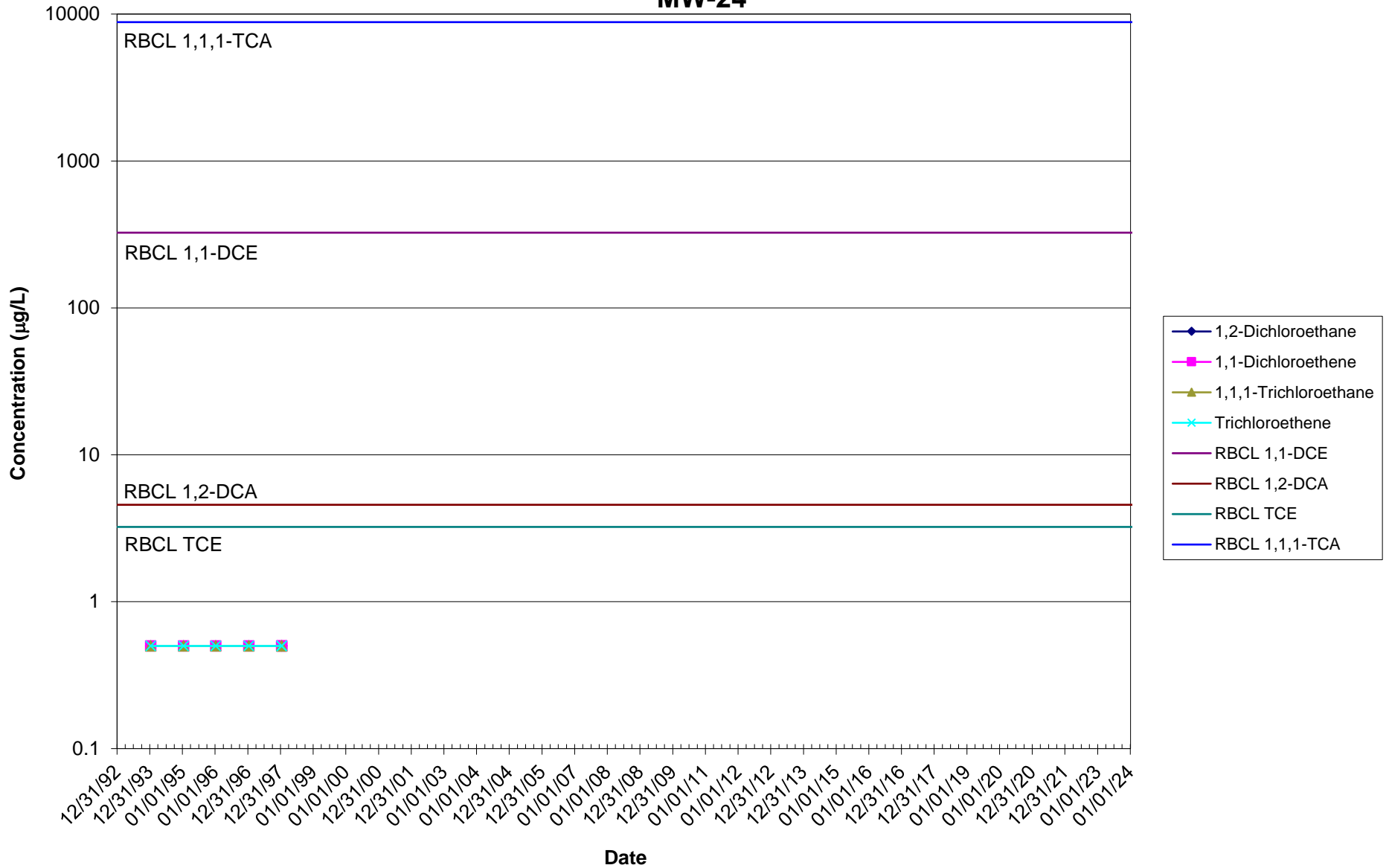
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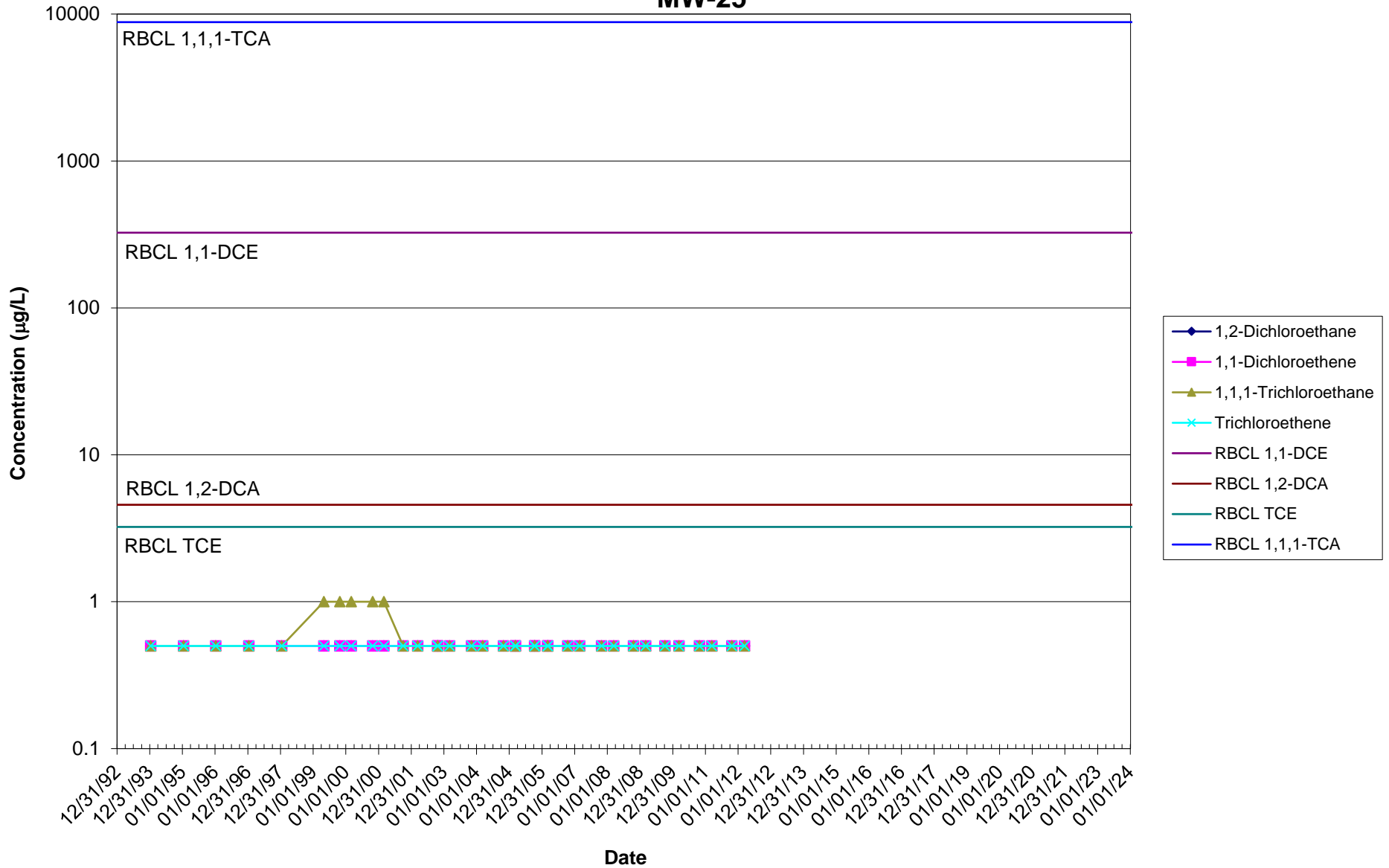
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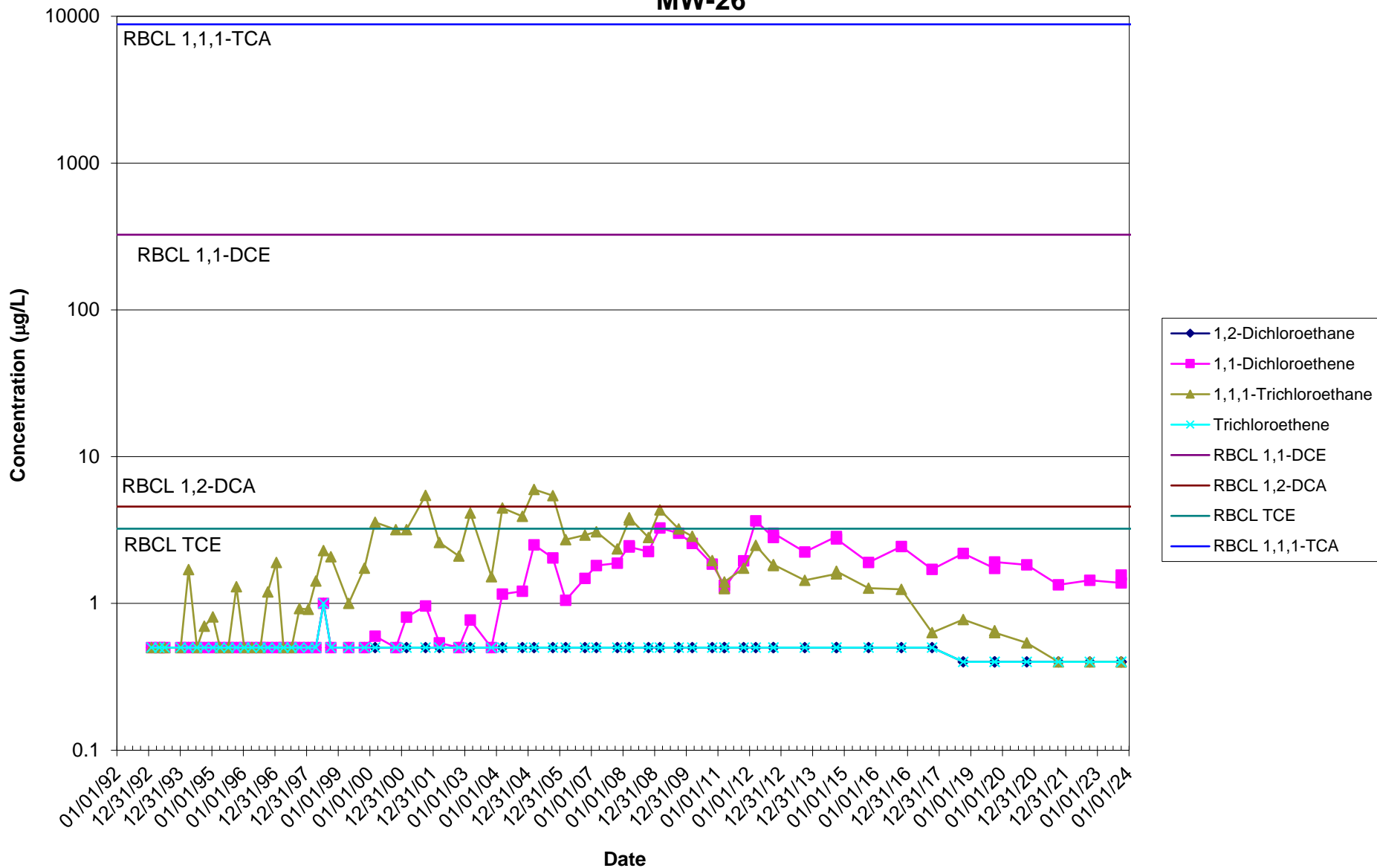
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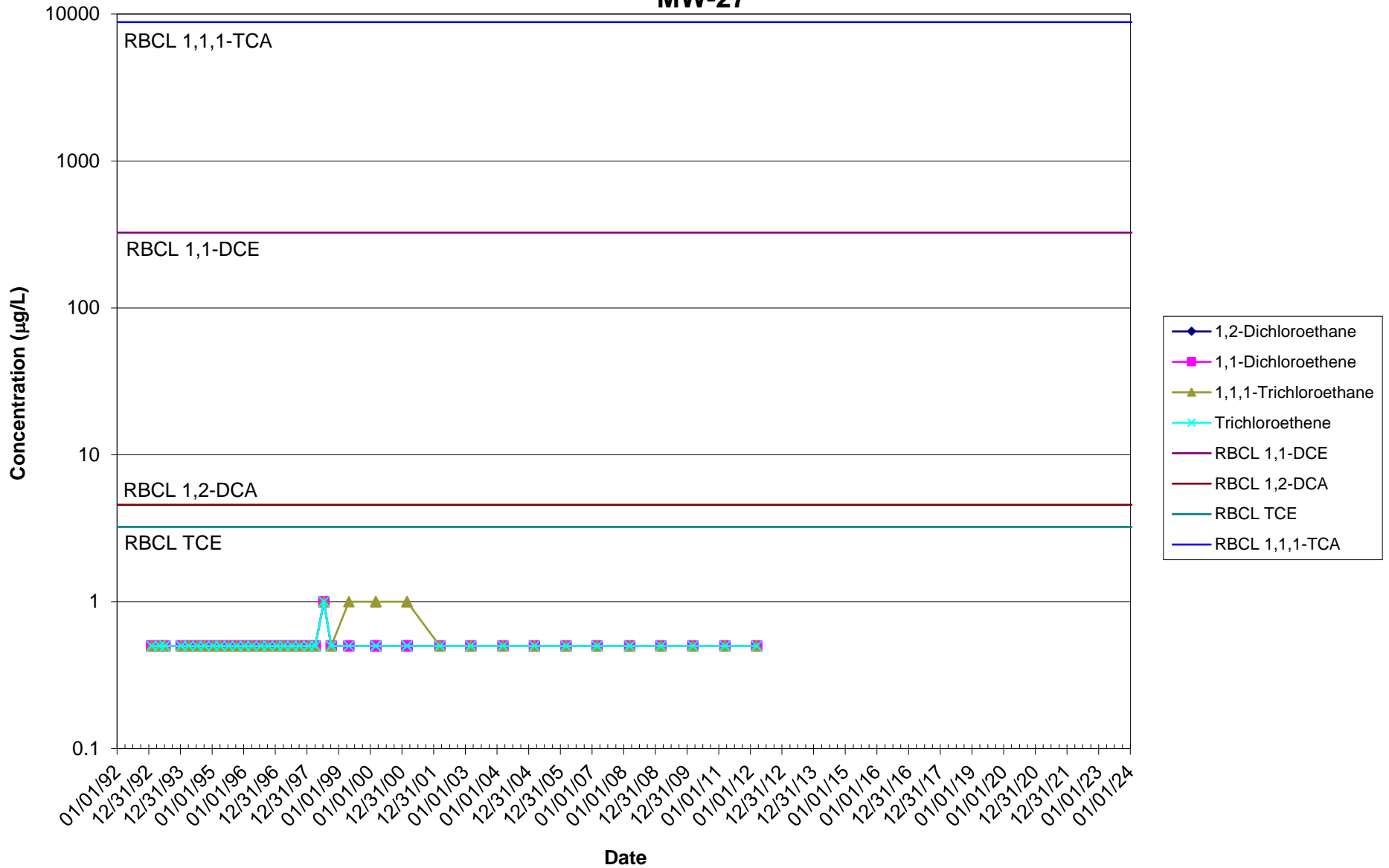
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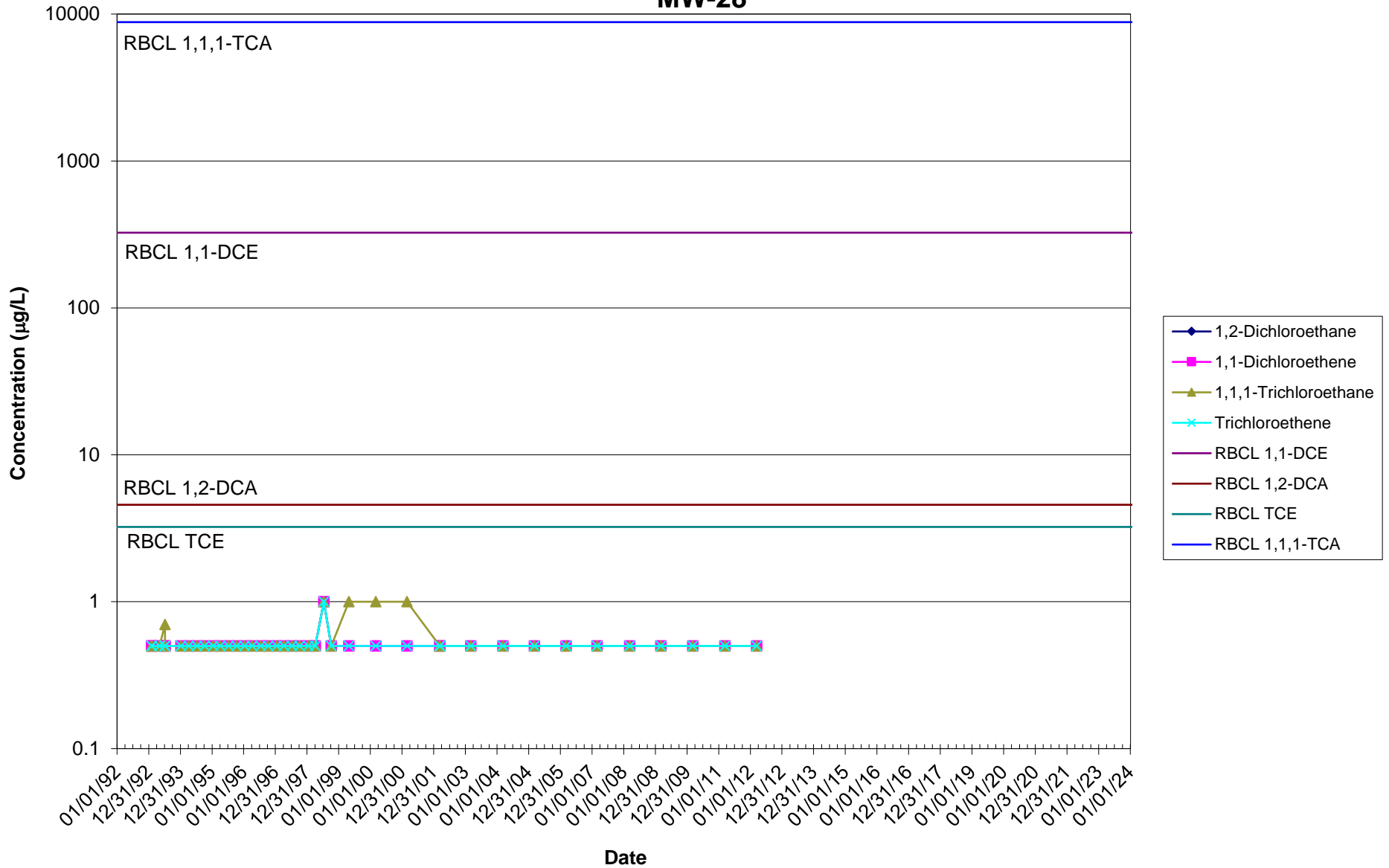
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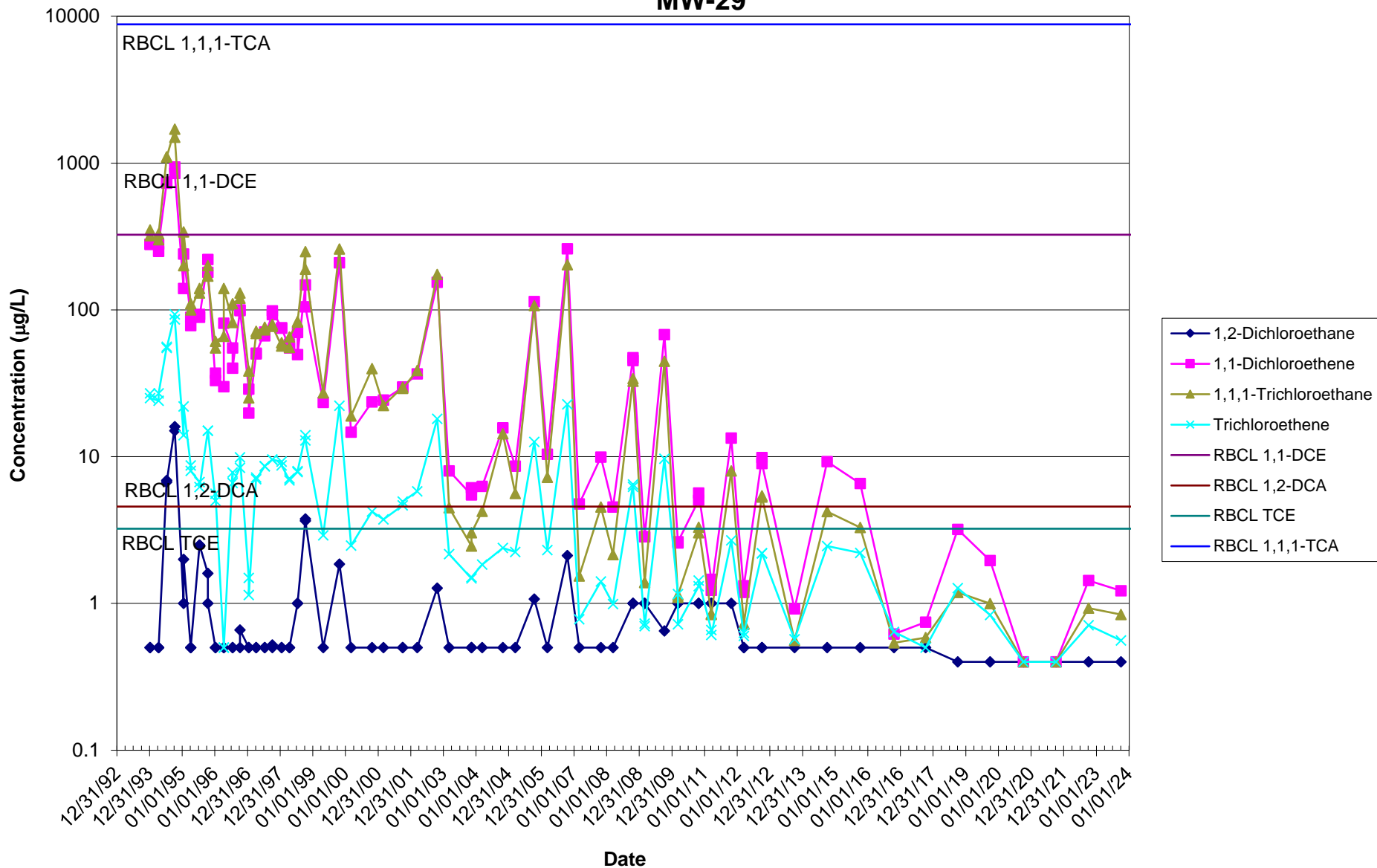
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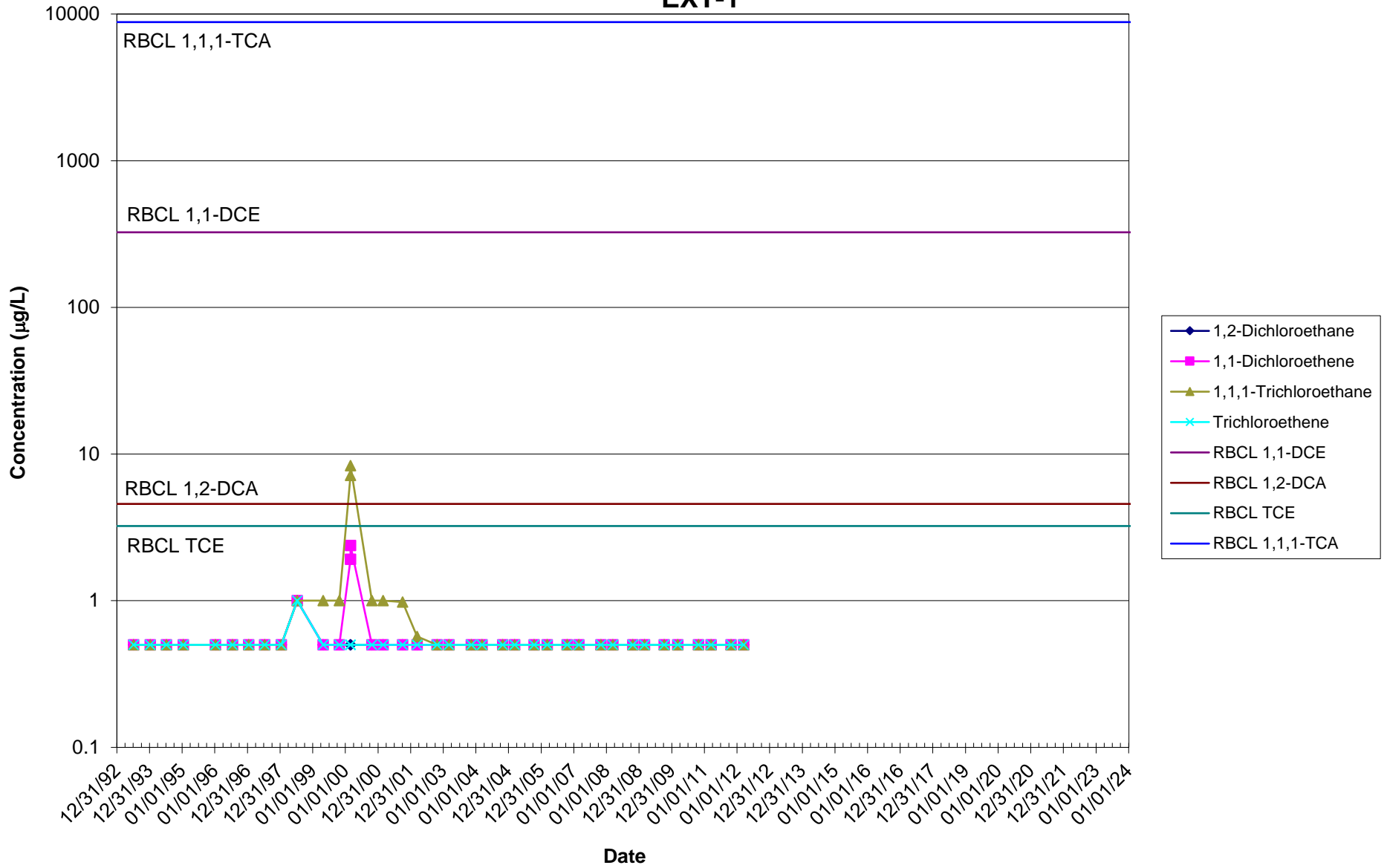
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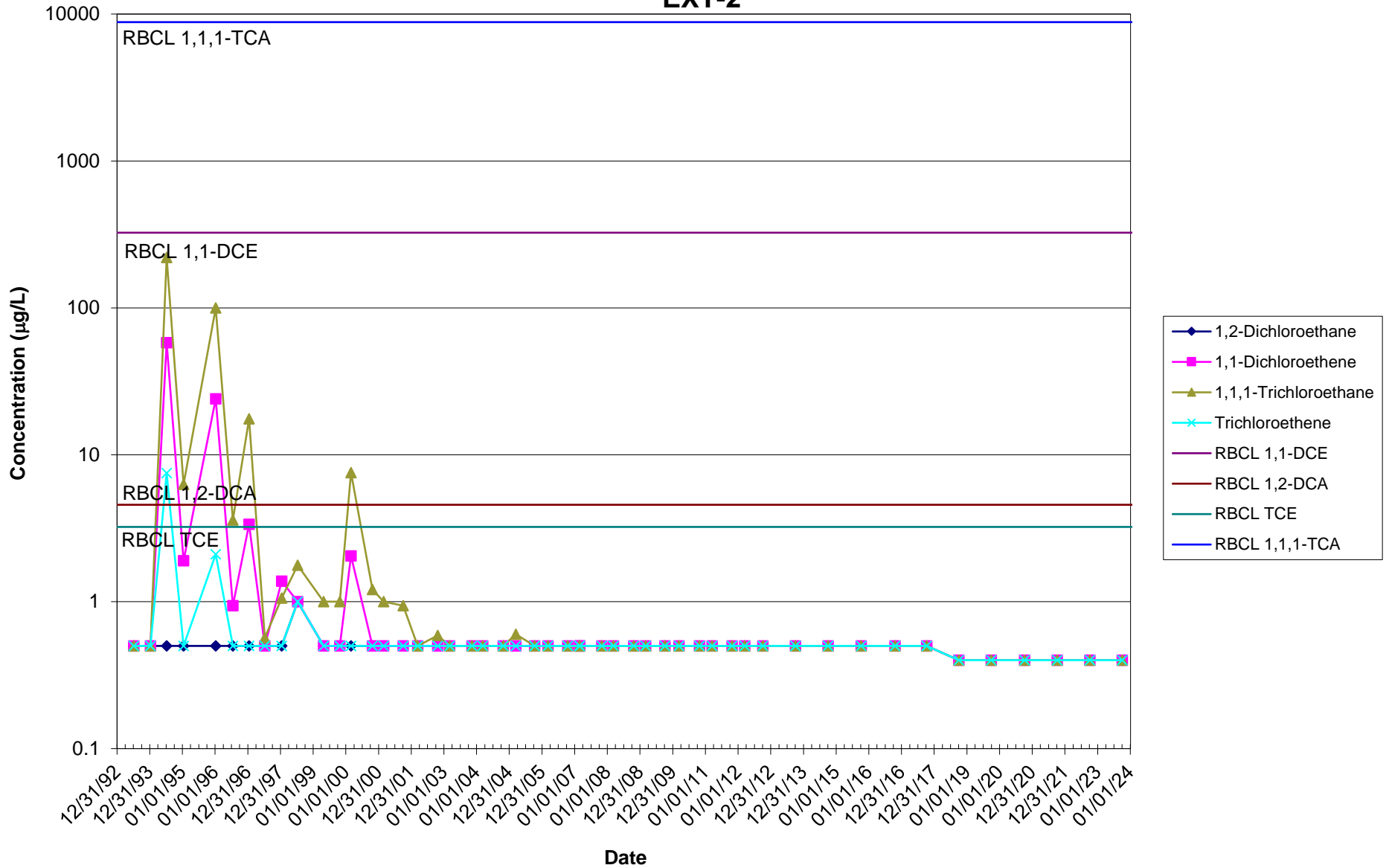
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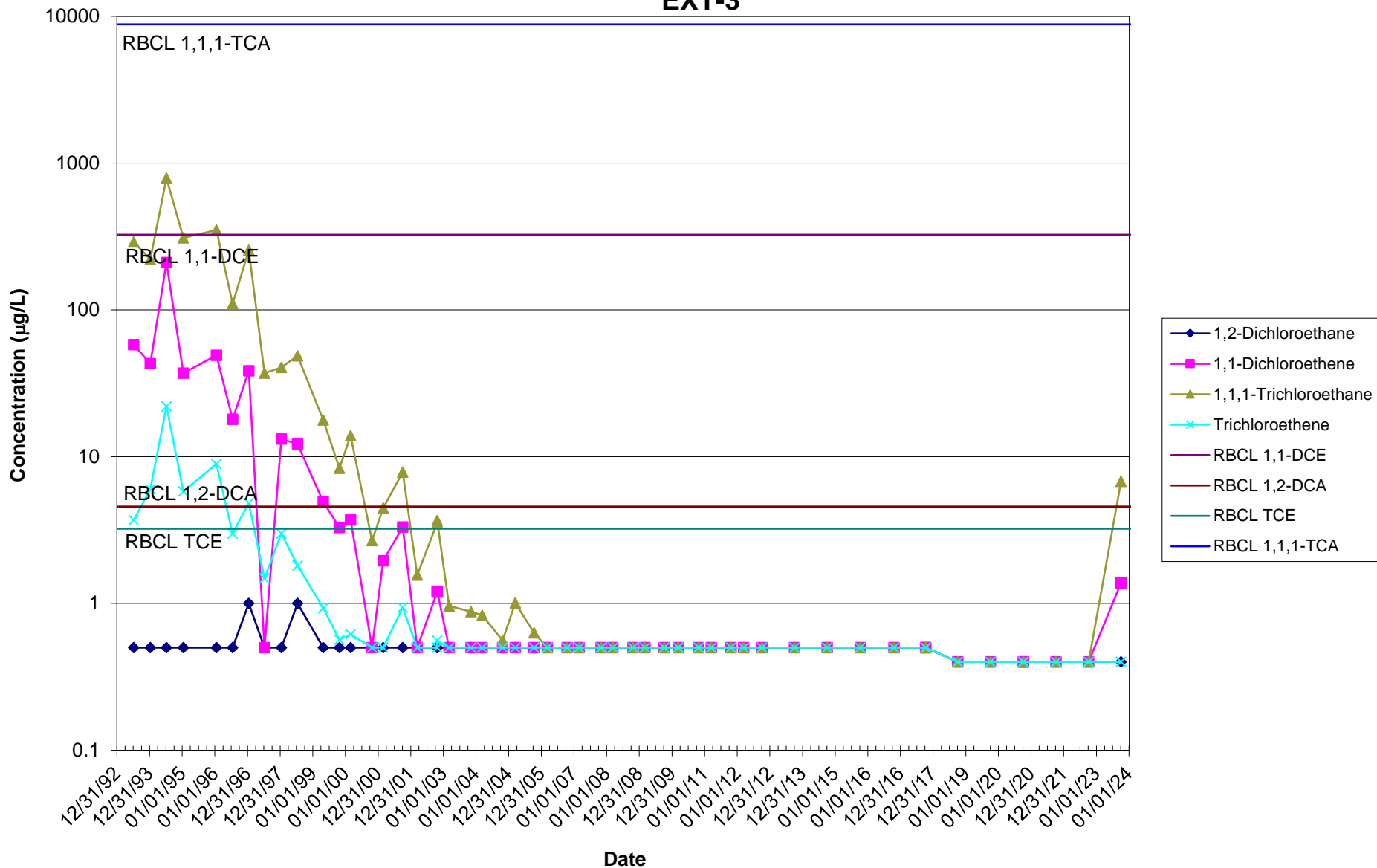
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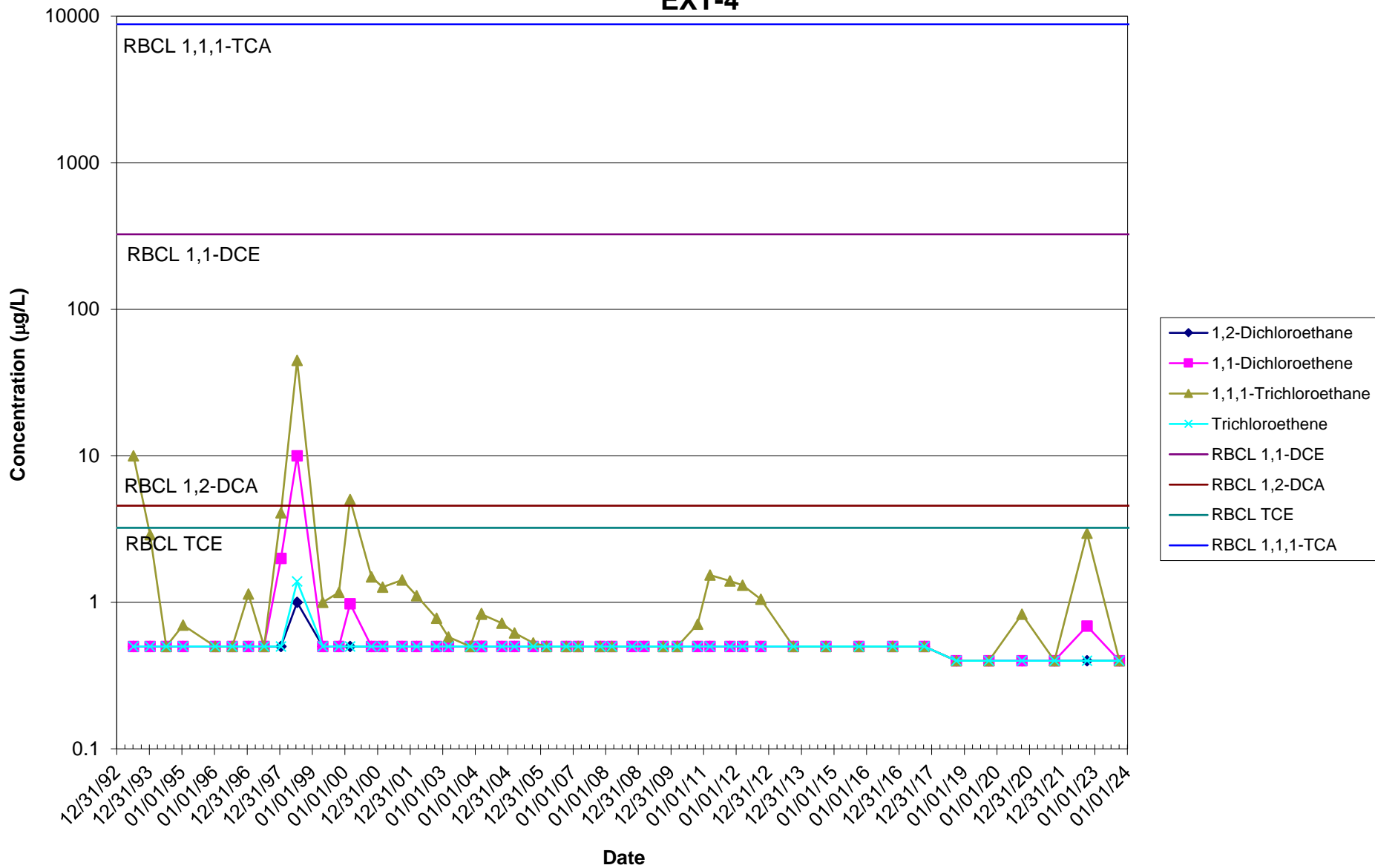
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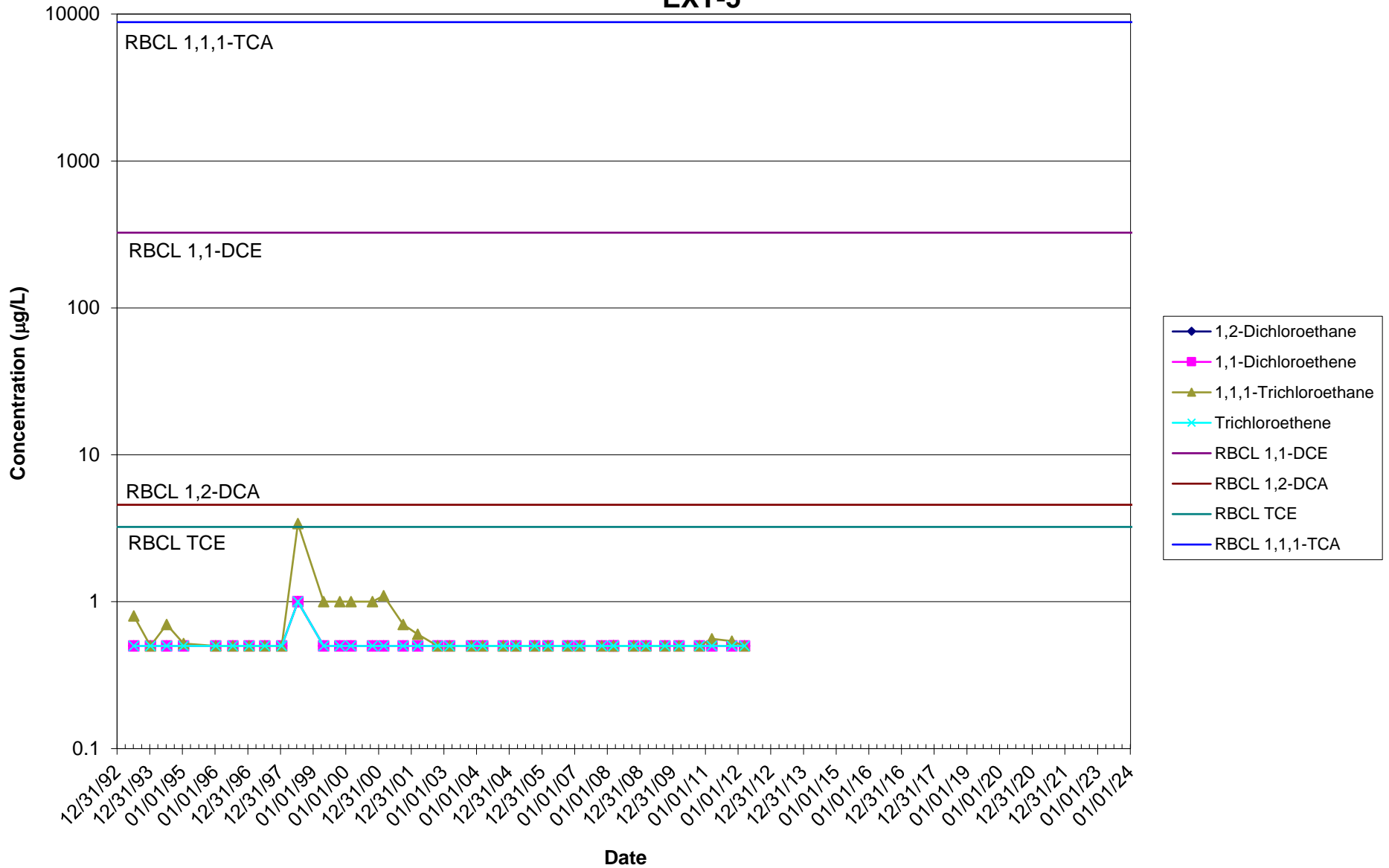
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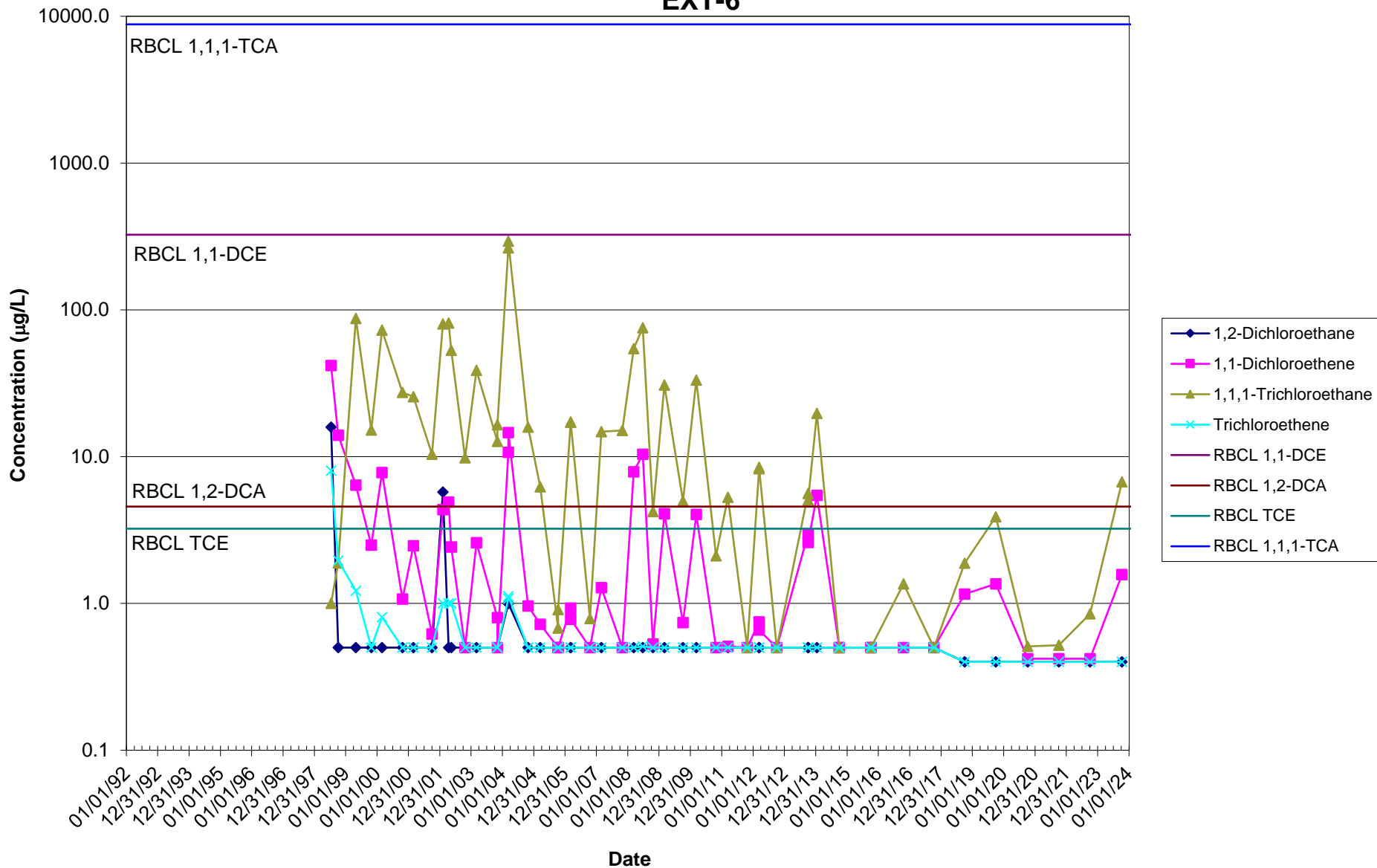
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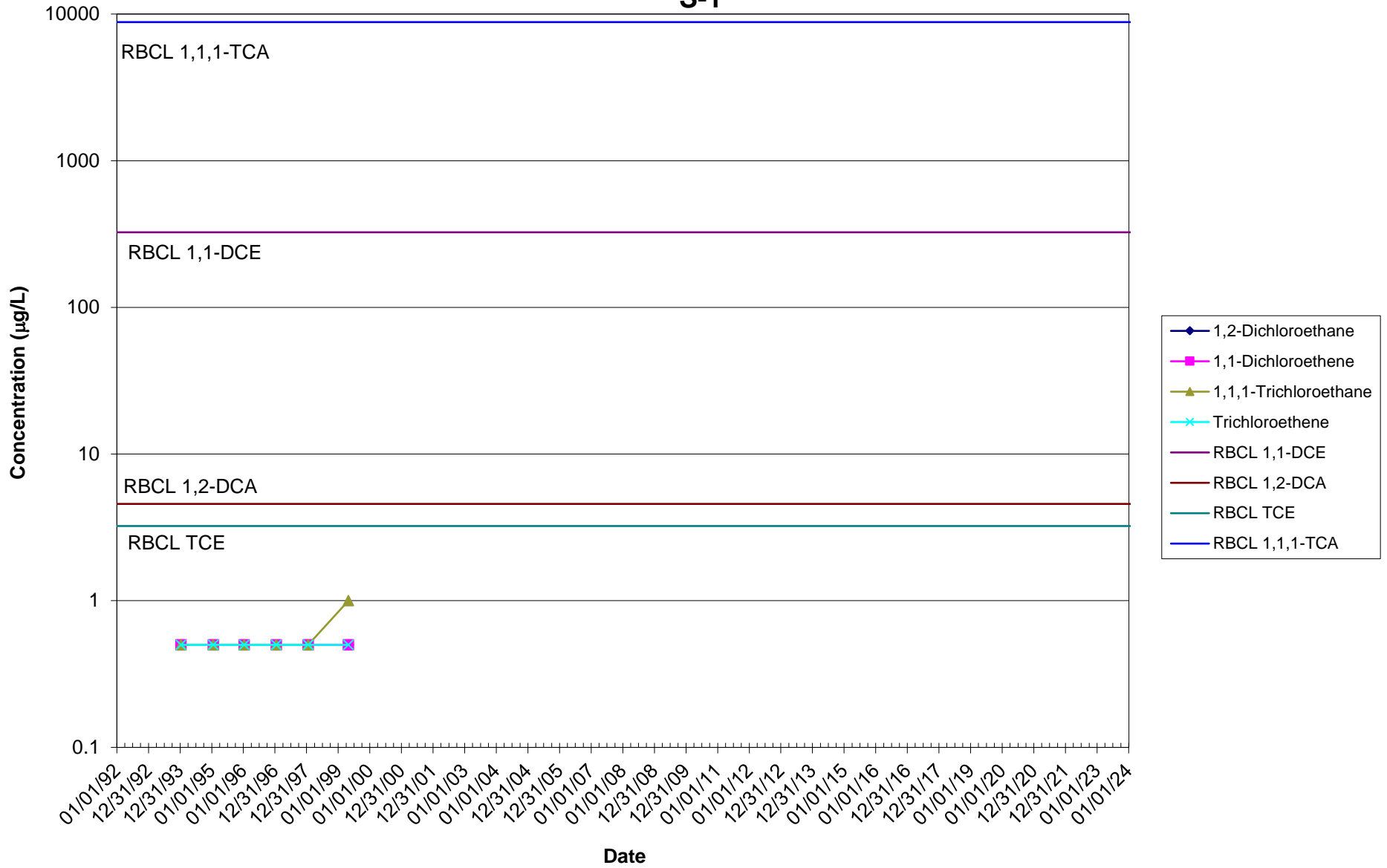
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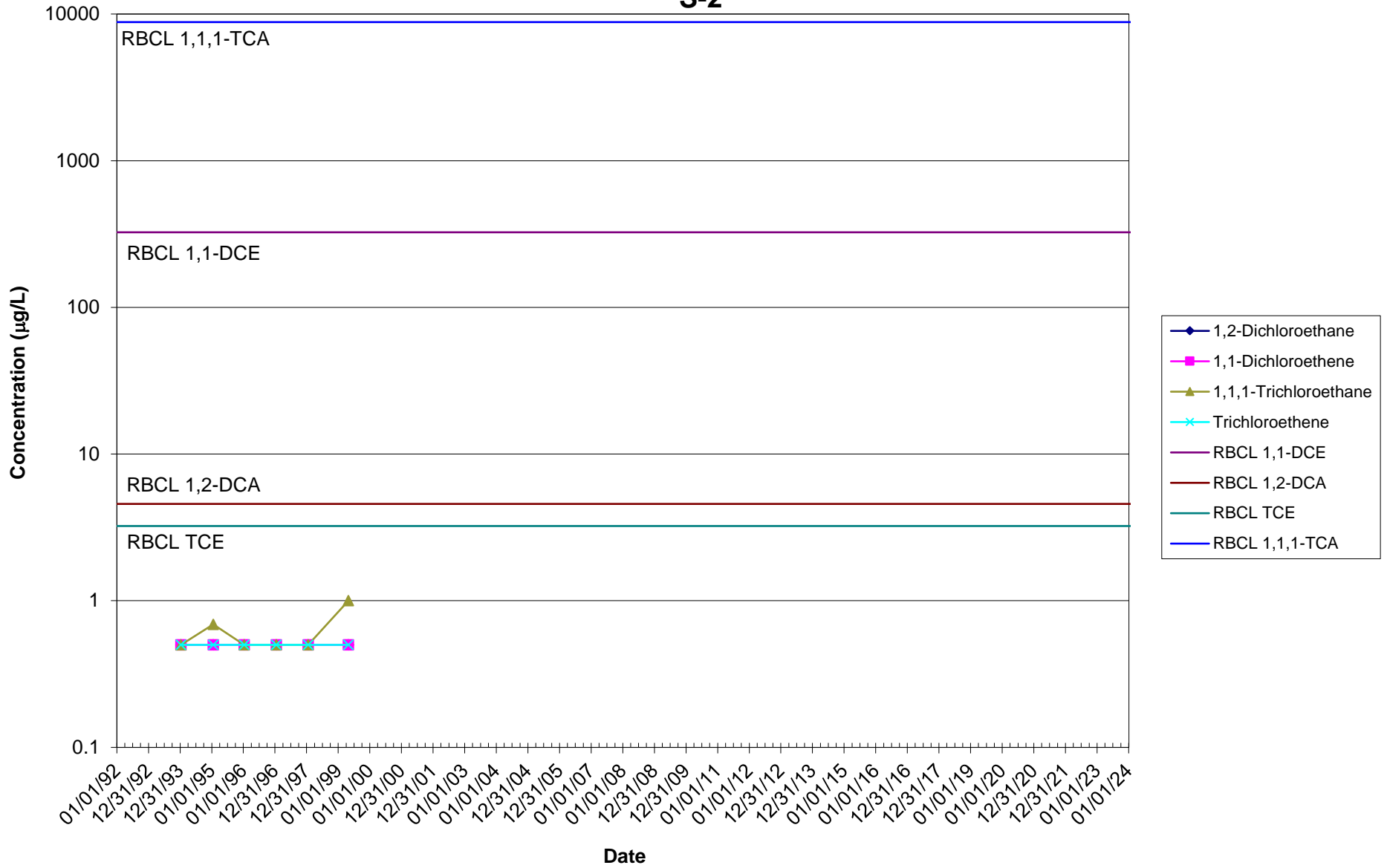
Columbia Helicopters, Inc. Time-Series Concentration Plots EXT-6



Columbia Helicopters, Inc. Time-Series Concentration Plots S-1

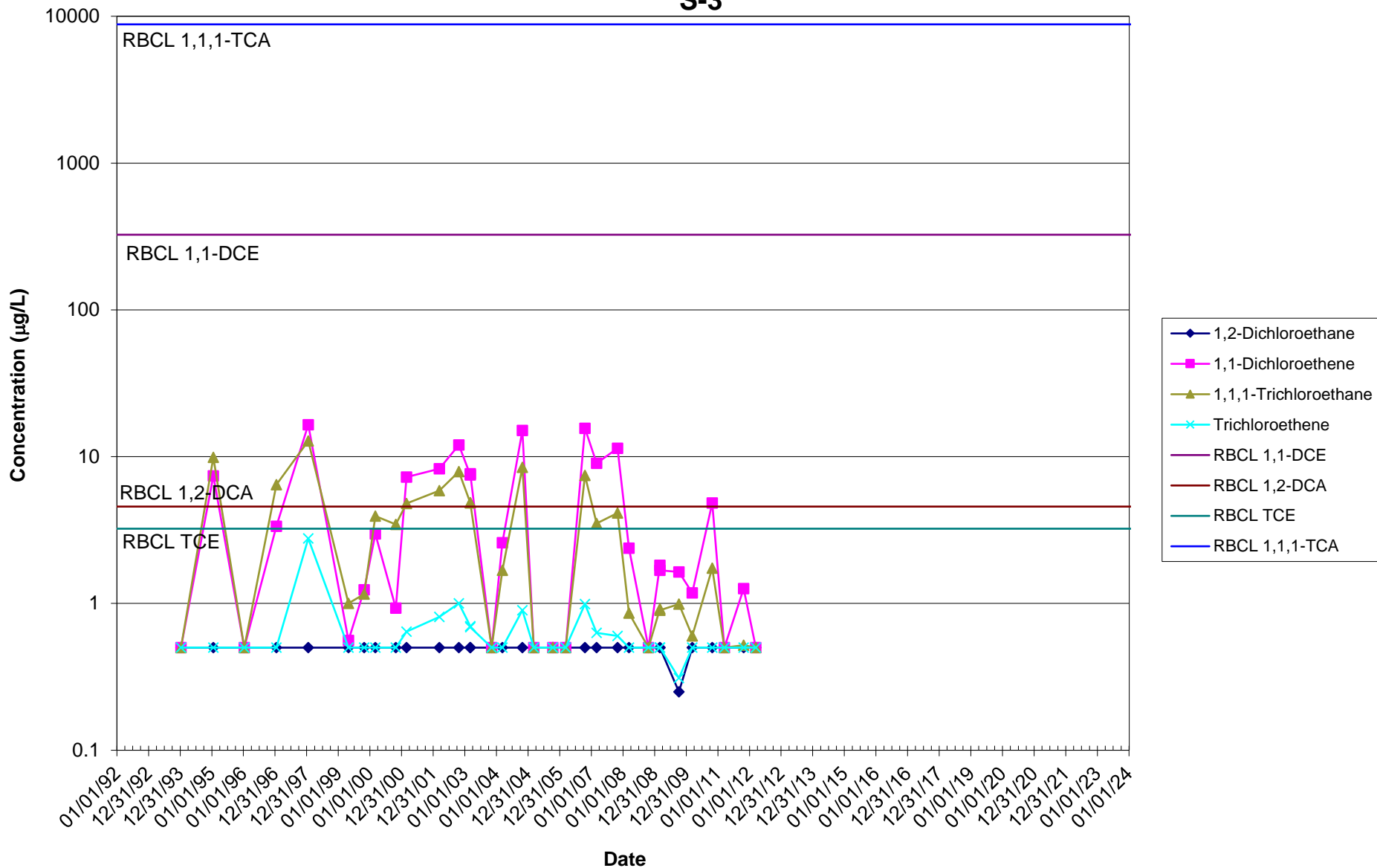


Columbia Helicopters, Inc. Time-Series Concentration Plots S-2

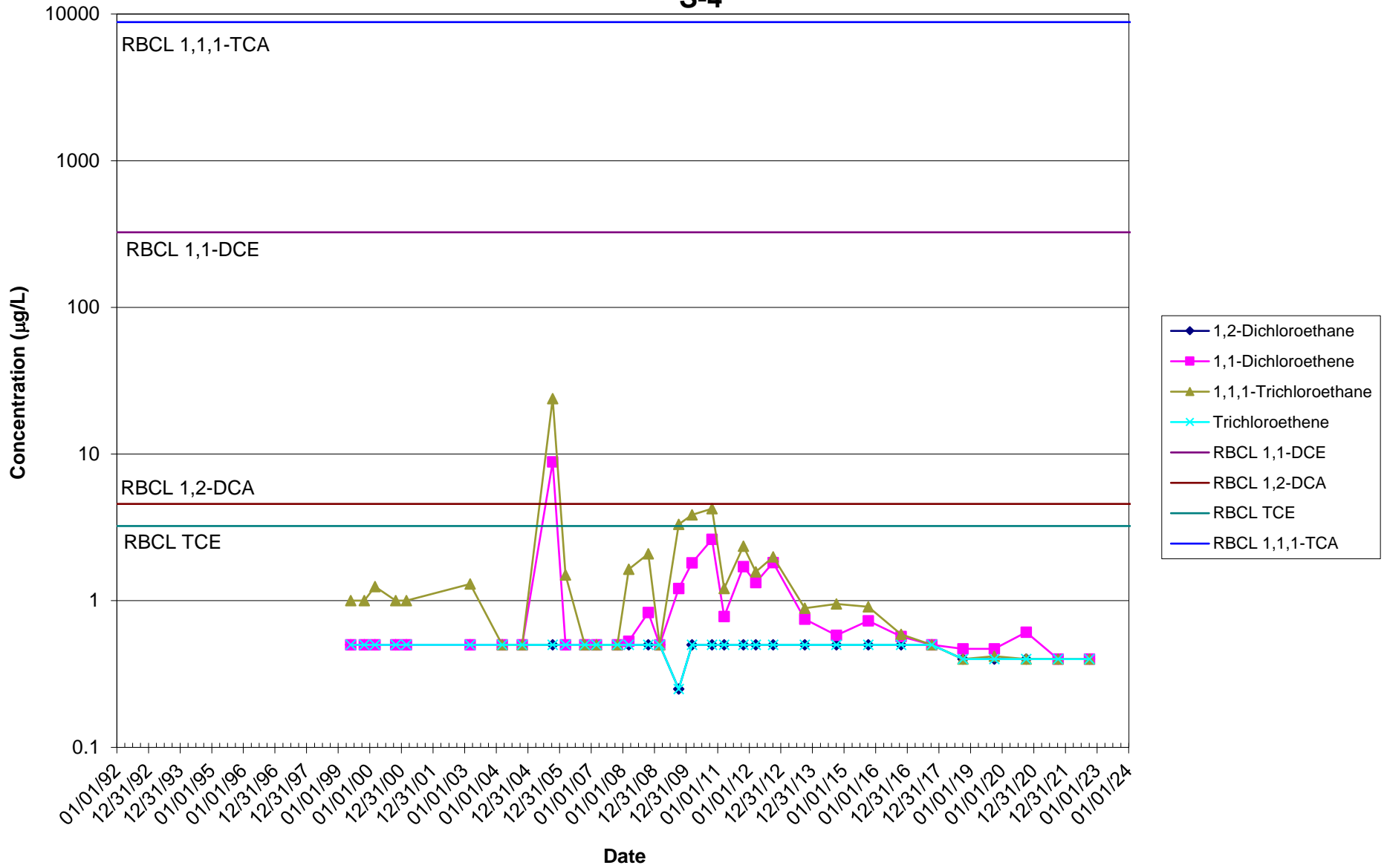


Columbia Helicopters, Inc. Time-Series Concentration Plots

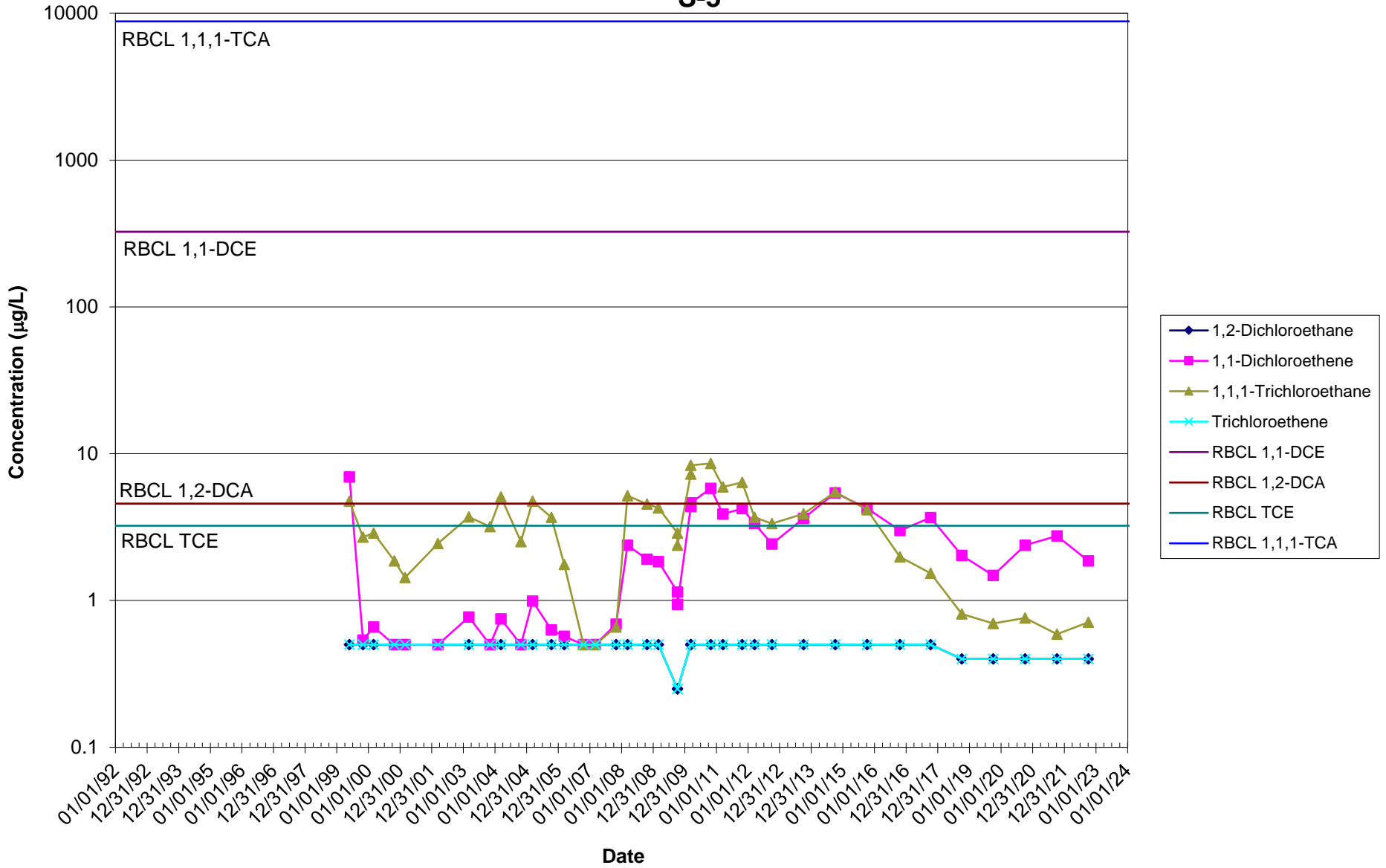
S-3



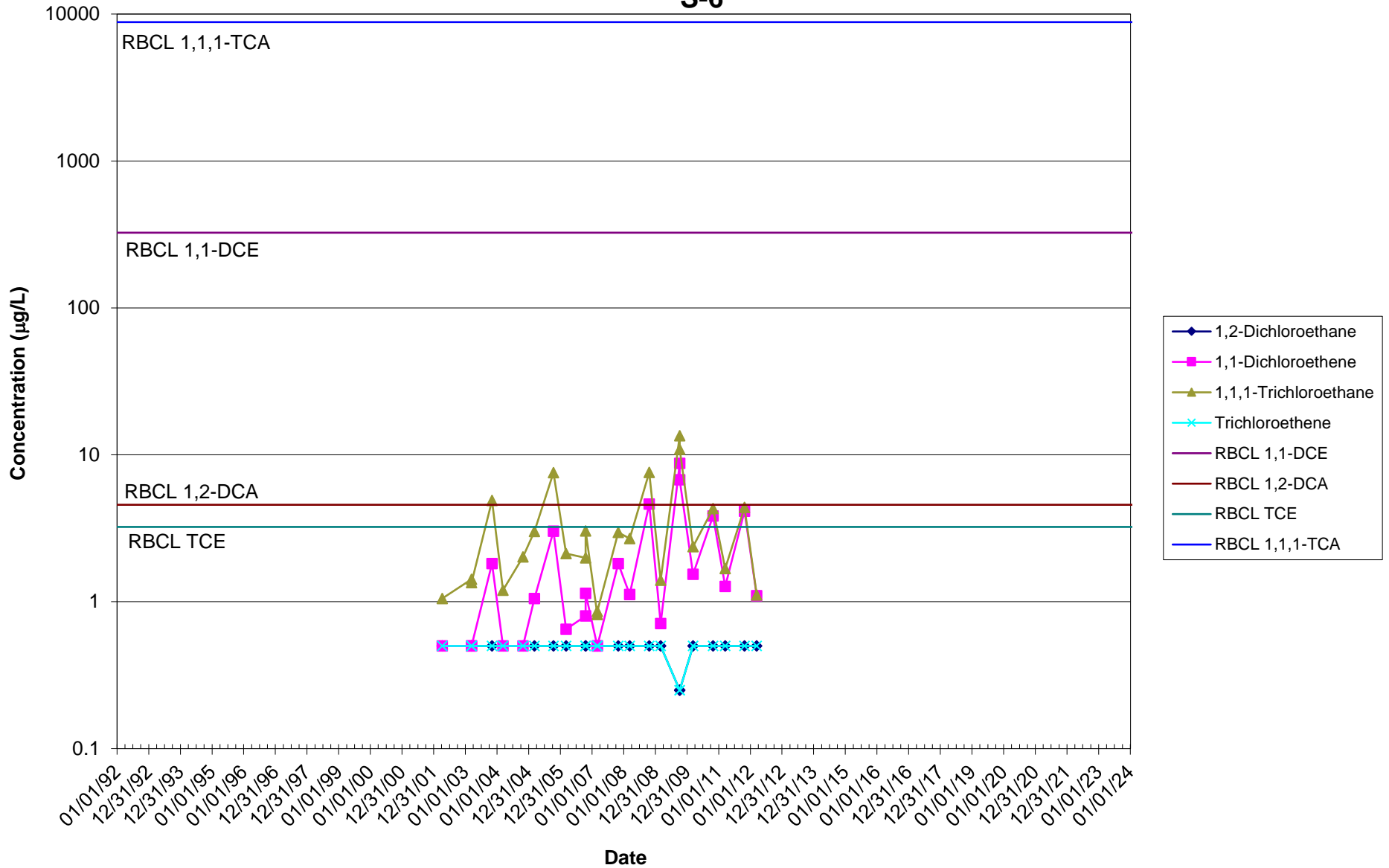
Columbia Helicopters, Inc. Time-Series Concentration Plots S-4



Columbia Helicopters, Inc. Time-Series Concentration Plots S-5



Columbia Helicopters, Inc. Time-Series Concentration Plots S-6



Appendix E
Data Validation Memorandum

Data Validation Report – EPA Stage 2A

November 29, 2023

Project: Columbia Helicopters, Inc.

Project Number: 230171-01.01

This report summarizes the review of analytical results for twelve water samples, two field duplicates, one transfer blank, and two trip blanks collected from October 2 to 11, 2023. Samples were collected by Anchor QEA, LLC, and submitted to Apex Laboratories, LLC (Apex), in Tigard, Oregon. The samples were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (USEPA) method 8260D.

Apex sample data group numbers A3J0956 and A3J1203 were reviewed in this report. Sample IDs and blind codes are presented in Table 1.

Table 1
Sample IDs and Blind Codes

| Sample ID | Blind Code | Lab Sample ID |
|----------------|---------------|---------------|
| MW-26 | CHI-100223-01 | A3J0956-01 |
| MW-26 (FD) | CHI-100223-02 | A3J0956-02 |
| Anderson | CHI-100223-03 | A3J0956-03 |
| Buehler | CHI-100223-04 | A3J0956-04 |
| MW-23 | CHI-100323-05 | A3J0956-05 |
| MW-22 | CHI-100323-06 | A3J0956-06 |
| MW-29 | CHI-100323-07 | A3J0956-07 |
| OW-4 | CHI-100323-08 | A3J0956-08 |
| OW-4 (FD) | CHI-100323-09 | A3J0956-09 |
| Transfer Blank | CHI-100323-10 | A3J0956-10 |
| CHI | CHI-100423-11 | A3J0956-11 |
| EXT-2 | CHI-100423-12 | A3J0956-12 |
| EXT-3 | CHI-100423-13 | A3J0956-13 |
| EXT-4 | CHI-100423-14 | A3J0956-14 |
| Trip Blank | TB-100423 | A3J0956-15 |
| EXT-6 | CHI-101123-15 | A3J1203-01 |
| Trip Blank | TB-101123 | A3J1203-02 |

Notes:

CHI: Columbia Helicopters, Inc.

FD: field duplicate

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance (QA)/quality control (QC) guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory control limits and the following guidelines:

- USEPA, 1986. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846, Third Edition).
- USEPA, 2020. National Functional Guidelines for Organic Superfund Methods Data Review.

Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Field Documentation

Field documentation was checked for completeness and accuracy. The chain-of-custody forms were signed by Apex at the time of sample receipt; the samples were received within the recommended temperature range and in good condition.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyzed within holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequency. All method blanks were free of target analytes.

Field Quality Control

Trip Blank and Transfer Blank

Two trip blanks and one transfer blank were submitted with this sample set and were free of target analytes.

Field Duplicates

Two field duplicate samples were collected in association with these sample sets. Detected results are summarized in Table 2.

Table 2
Field Duplicate Results Summary

| Analyte | CHI-100223-01 | CHI-100223-02 | RPD | Difference | Control Limit |
|--------------------|---------------|---------------|-----|------------|---------------|
| 1,1-Dichloroethane | 0.66 µg/L | 0.72 µg/L | -- | 0.06 µg/L | 0.40 µg/L |
| 1,1-Dichloroethene | 1.38 µg/L | 1.56 µg/L | -- | 0.18 µg/L | 0.40 µg/L |

| Analyte | CHI-100323-08 | CHI-100323-09 | RPD | Difference | Control Limit |
|------------------------|---------------|---------------|-----|------------|---------------|
| Chloroethane | 15 µg/L | 15.8 µg/L | -- | 0.80 µg/L | 5.00 µg/L |
| 1,1-Dichloroethene | 23 µg/L | 22.7 µg/L | 1% | -- | -- |
| cis-1,2-Dichloroethene | 6.93 µg/L | 6.77 µg/L | 2% | -- | -- |
| 1,1,1-Trichloroethane | 117 µg/L | 116 µg/L | 1% | -- | -- |
| 1,1-Dichloroethane | 489 µg/L | 535 µg/L | 9% | -- | -- |

Notes:

--: not applicable

µg/L: micrograms per liter

RPD: relative percent difference

Relative percent difference (RPD) values may be exaggerated for results near the reporting limit (RL), so results that are less than five times the RL are evaluated by the difference between them using a control limit of \pm RL. RPD values were evaluated using the laboratory control limit of \pm 30%. All results were within control limits, and no results were qualified.

Surrogate Recoveries

All surrogate recoveries were within the laboratory control limits.

Laboratory Control Samples

Laboratory control samples (LCS) were analyzed at the required frequencies. LCS recoveries were within laboratory control limits with the following exceptions:

- Trichlorofluoromethane in the LCS in batch 23J0216 recovered above the laboratory control limit. Associated sample results were below detection, so no data were qualified.
- Bromomethane, carbon tetrachloride, chloroethane, and trichlorofluoromethane in the LCS in batch 23J0269 recovered above the laboratory control limit. Associated sample results were below detection, so no data were qualified.
- Dichlorodifluoromethane, trans-1,3-dichloropropene, methylene chloride, trichlorofluoromethane, and 1,1,2-trichloro-1,2,2-trifluoroethane in the LCS in batch 23J0273 recovered above the laboratory control limit. Associated sample results were below detection, so no data were qualified.
- Chloroethane and trichlorofluoromethane in the LCS in batch 23J0330 recovered above the laboratory control limit. No samples in this batch had these analytes reported, so no data were qualified.
- Dichlorodifluoromethane, methylene chloride, trichlorofluoromethane, and 1,1,2-trichloro-1,2,2-trifluoroethane in the LCS in batch 23J0680 recovered above the laboratory control limit. Associated sample results were below detection, so no data were qualified.

- Carbon tetrachloride, chloroethane, and trichlorofluoromethane in the LCS in batch 23J0752 recovered above the laboratory control limit. Associated sample results were below detection, so no data were qualified.

Matrix Spike Samples

Matrix spike (MS) samples were analyzed at the required frequency; however, no matrix spike duplicate samples were analyzed. MS samples analyzed on non-project samples were not evaluated. MS recoveries were within laboratory control limits, with the exception of cis-1,3-dichloropropene recovering below the laboratory control limit in the MS analyzed on sample CHI-100323-05. The associated parent sample result was qualified "UJ" to indicate a possible low bias. Trichlorofluoromethane and 1,1,2-trichloro-1,2,2-trifluoroethane also recovered above the laboratory control limit in the same sample; however, the associated parent sample results were below detection, so no data were qualified.

Laboratory Duplicates

No duplicate samples were analyzed with this sample set. Duplicate samples analyzed on non-project samples were not evaluated.

Reporting Limits

RLs were acceptable as reported. All values were reported using the laboratory RLs. Values were reported as undiluted or, when diluted, the RL reflects the dilution factor.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical method, and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the surrogate, LCS, and MS recovery values, with the exceptions noted previously. Precision was acceptable as demonstrated by the field duplicate results. Results were acceptable as reported or as qualified.

Data Qualifier Definitions

- U Indicates the compound or analyte was analyzed for but not detected at or above the specified limit.
- UJ Indicates the compound or analyte of interest was analyzed for but not detected and the specified limit reported is estimated.

Table 3
Data Qualification Summary

| Sample ID | Parameter | Analyte | Reported Result | Qualified Result | Reason |
|---------------|-----------|-------------------------|-----------------|------------------|----------------|
| CHI-100323-05 | VOCs | cis-1,3-Dichloropropene | 1.00U µg/L | 1.00UJ µg/L | MS %R below CL |

Notes:

µg/L: microgram per liter

%R: percent recovery

CL: control limit

References

USEPA (U.S. Environmental Protection Agency), 1986. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA-530/SW-846.

USEPA, 2020. *National Functional Guidelines for Organic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. United States Environmental Protection Agency. EPA-540-R-20-005. November 2020.

Appendix F

Memorandum Documenting Data Search

Memorandum

December 1, 2022

To: File 230171-01.01

From: James Melton, Anchor QEA, LLC

Re: Columbia Helicopters, Inc., Aurora, Oregon, Well and Development Review

Affected Properties

Affected properties include the following:

- Clackamas County: Township 3S, Range 1W, Section 36, Tax Lot Nos. 800 and 805
- Marion County: Township 4S, Range 1W, Section 02, Tax Lot No. 100; Township 4S, Range 1W, Section 01, Tax Lot No. 300

Additional properties within 1,000 feet of the horizontal extent of the plume include the following:

- Clackamas County: Township 3S, Range 1W, Section 36, Tax Lot Nos. 801, 802, and 900
- Marion County: Township 4S, Range 1W, Section 01, Tax Lot No. 200

The lot directly north of the site in Township 3S, Range 1W, Section 35 was not included in the search because it is not an affected property.

These properties are identified by tax lot on Figure 1.

Building Permits

Contact information is as follows:

- Clackamas County Building Department: (503) 742-4240
- Marion County Building Department: (503) 588-5147

Addresses provided by the Marion County Assessor's Office ([503] 588-5144) were used to obtain the permit information from the Marion County Building Department.

The following is a summary of affected properties in Clackamas County between December 2, 2022, and December 1, 2023 (obtained online at <https://accela.clackamas.us/CitizenAccess/>):

- Lot 800 (Parcel No. 00835476), 14591 NE Arndt Road: No permits were obtained.
- Lot 801 (Parcel No. 00835485), 23800 NE Airport Road: No permits were obtained.
- Lot 802 (Parcel No. 00835494), 23788 NE Airport Road: No permits were obtained.
- Lot 805 (Parcel No. 00835500), 14585 Arndt Road: No permits were obtained.
- Lot 900 (Parcel No. 00835519), 14601 Arndt Road: No permits were obtained.

The following is a summary of affected properties in Marion County between December 2, 2022, and December 1, 2023 (obtained online at <https://aca-oregon.accela.com/oregon/>):

- Lot 100 (Tax Lot No. 041W0100100), 14452 Arndt Road: No permits were obtained.
- Lot 200 (Tax Lot No. 041W0100200), 14658 Arndt Road: No permits were obtained.
- Lot 300 (Tax Lot No. 041W0100300), 14658 Arndt Road: No permits were obtained.

Water Rights

Contact information is as follows:

- Oregon Water Resources Department, Water Rights Information System, https://apps.wrd.state.or.us/apps/wr/wrinfo/wr_platcard.aspx

Platcard reports were generated for Township 3S, Range 1W, Sections 35 and 36 and Township 4S, Range 1W, Sections 1 and 2. Copies of the platcard reports are included in Attachment 1.

Between December 2, 2022, and December 1, 2023, no new water rights were issued for the affected properties or within 1,000 feet of the horizontal extent of the plume.

Water Supply and Monitoring Wells

The Oregon Water Resources Department online GRID database (https://apps.wrd.state.or.us/apps/gw/well_log/Default.aspx) was searched for wells within 1,000 feet of the horizontal extent of the plume. The following is a summary of findings between December 2, 2022, and December 1, 2023:

- Township 3S, Range 1W, Section 35: No new wells were identified.
- Township 3S, Range 1W, Section 36: No new wells were identified.
- Township 4S, Range 1W, Section 01: No new wells were identified.
- Township 4S, Range 1W, Section 02: No new wells were identified.

Zoning Changes

Contact information is as follows:

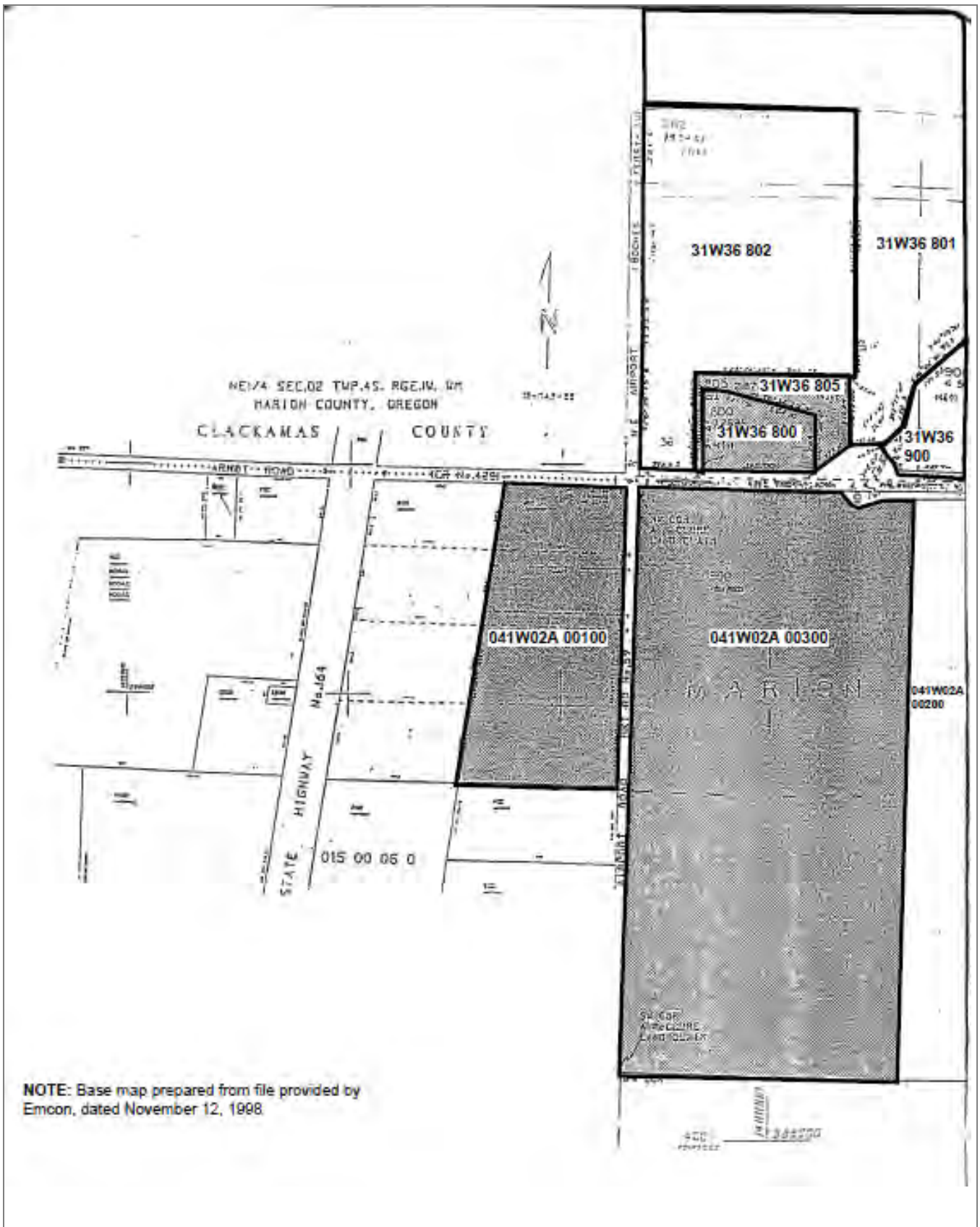
- Clackamas County Office of Land Use and Planning: (503) 742-4500
- Marion County Planning Division: (503) 588-5038

The Marion County Planning Division and Clackamas County Office of Land Use and Planning were contacted via phone on December 1, 2023, to determine whether there had been zoning changes in the area of Columbia Helicopters, Inc. For affected properties in Clackamas and Marion counties between December 2, 2022, and December 1, 2023, the following zoning changes were made:

- Township 4S, Range 1W, Section 02, Tax Lot No. 100: No zoning changes were made.
- Township 4S, Range 1W, Section 01, Tax Lot No. 200: No zoning changes were made.
- Township 4S, Range 1W, Section 01, Tax Lot No. 300: No zoning changes were made.

- Township 3S, Range 1W, Section 36, Tax Lot No. 800: No zoning changes were made.
- Township 3S, Range 1W, Section 36, Tax Lot No. 801: No zoning changes were made.
- Township 3S, Range 1W, Section 36, Tax Lot No. 802: No zoning changes were made.
- Township 3S, Range 1W, Section 36, Tax Lot No. 805: No zoning changes were made.
- Township 3S, Range 1W, Section 36, Tax Lot No. 900: No zoning changes were made.

Figure



Filepath: \\Stumptown1\Portland\Projects\Columbia_Helicopters_Inc\CHI\Monitoring reports\4Q2020-Annual 2020\03 Appendices\Appendix F - File Review\Figure 1.docx



Figure 1
Well and Development Review Tax Lots
 Well and Development Review Memorandum
 Columbia Helicopters, Inc.

Attachment A

Water Rights Platcard Reports



Search Criteria

Meridian: **Willamette** Township: **3** South Range: **1** West Section: **35** Records per Page: **100**

[Platcards](#) [Maps](#)
[Learn about](#) * [View Map](#)

| Water Right | Changing Xfers | Priority | Use | Use Status | DLC | Gov't Lot | qq(40); q(160) | NE NE | NW NE | SW NE | SE NE | NE NW | NW NW | SW NW | SE NW | NE SW | NW SW | SW SW | SE SW | NE SE | NW SE | SW SE | SE SE | Unknown QQ |
|---|----------------|-----------|------------------|------------|-----|-----------|----------------|--------|-------|-------|--------|-------|-------|--------|--------|-------|-------|--------|-------|-------|--------|-------|-------|------------|
| Select Cert:84657 OR * <u>Additional Info:</u> HARLEY F HIGGINS App: G14286 Permit: G13081 Cert: 84657 | | 4/1/1996 | AGRICULTURE USES | | | | | * | | | | | | | | | | | | | | | | |
| Select Cert:43214 OR * <u>Additional Info:</u> OREGON DEPARTMENT OF TRANSPORTATION App: G3254 Permit: G2951 Cert: 43214 | | 10/7/1965 | COMMERCIAL USES | | | | | | * | | | * | | | | | | | | | | | | |
| Select Permit: G 8690 CN <u>Additional Info:</u> EXIT 282A DEVELOPMENT CO. LLC App: G9327 Permit: G8690 | T13841 | 7/25/1979 | IRRIGATION | | CN | | | | | -25- | | | | -21.1- | -22.1- | -0.3- | | -32.2- | | | -30.5- | | | |
| Select Claim:GR 554 * <u>Additional Info:</u> DONALD R DURETTE Claim: GR554 | | 9/30/1951 | IRRIGATION | | | | | | | | | 15.3 | | | | | | | | | | | | |
| Select Claim:GR 1599 * <u>Additional Info:</u> EARL BARBER Claim: GR1599 | | 8/20/1950 | IRRIGATION | | | | | | | | | | | | | 9 | 31 | | | | | | | |
| Select Cert:43216 OR * <u>Additional Info:</u> CROWN ZELLERBACH CORP. App: G4374 Permit: G4126 Cert: 43216 | | 9/10/1968 | IRRIGATION | | | | | | | | | | | | | | | | | 15.4 | | | 5.2 | |
| Select Cert:43331 OR * <u>Additional Info:</u> HAROLD A/EMMA LANGDON App: G4868 Permit: G4583 Cert: 43331 | | 5/8/1969 | IRRIGATION | | | | | 13.7 | 19.4 | | | | | | | | | | | | | | | |
| Select Cert:43887 OR CN <u>Additional Info:</u> MRS RUTH BETTY LANGDON BERHEIM App: G4285 Permit: G4034 Cert: 43887 | | 3/18/1968 | IRRIGATION | | CN | | | -17.1- | -4.5- | -16- | -35.4- | | | | | | | | | -0.5- | -4- | | | |

| | | | | | | | | | | | | | | | | | | | |
|--|-----------|---|----|------|------|------|-----|------|--|--|------|--|--|--|--|--|--|--|--|
| Select Cert:53302 OR * <u>Additional Info:</u> ALBERT TROUTMAN App: R57190 Permit: R7249 Cert: 53302 | 3/20/1978 | STORAGE | 55 | | | * | * | | | | | | | | | | | | |
| Select Cert:53303 OR * <u>Additional Info:</u> ALBERT TROUTMAN App: S57191 Permit: S43040 Cert: 53303 | 3/20/1978 | SUPPLEMENTAL IRRIGATION (Suppl'mtl) | 55 | 15.3 | 15.9 | 26.9 | 1.1 | 15.7 | | | 26.2 | | | | | | | | |

Acreage Legend: 12.25 Regular
acrage

~~12.25~~ Acreage is on a canceled
right

(12.25) Acreage is part of a transfer and has not been proven up on yet
(inchoate)

[12.25] Acreage has been
suspended

* Acreage is not
specified

| | | | | | | | | | | | | | | | | | | | |
|--|------------|--------------------------------------|--|--|--|--------|------|------|--------|---|--|------|------|--|--|---|---|---|--|
| <u>Additional Info:</u> MERLE STAEHELY App: G11039 Permit: G10203 Cert: 65245 | | | | | | | | | | | | | | | | | | | |
| Select Cert:92283 OR * <u>Additional Info:</u> CARL SNYDER App: G12647 Permit: G11653 Cert: 92283 | 8/30/1991 | IRRIGATION | | | | | | | | | | 26.5 | 31.3 | | | | | | |
| Select Inchoate: T 13040 CF (REG) * <u>Additional Info:</u> MONTECUCCO FARMS LLC App: G11039 Permit: G10203 | 7/26/1983 | IRRIGATION | | | | (38.8) | | | (33.7) | | | | | | | | | | |
| Select Cert:94314 (T 13040 RR) * <u>Additional Info:</u> MERLE STAEHELY App: G11039 Permit: G10203 Cert: 94314 | 7/26/1983 | IRRIGATION | | | | | 30.1 | 39.4 | | | | | | | | | | | |
| Select Cert:72953 OR * <u>Additional Info:</u> OREGON WATER RESOURCES DEPARTMENT App: IS73532 Cert: 72953 | 8/5/1993 | POLLUTION ABATEMENT (INSTREAM) | | | | * | | | | | | | | | | * | * | * | |
| Select Cert:33644 OR * <u>Additional Info:</u> ARCHIE HESS App: R34518 Permit: R2575 Cert: 33644 | 12/19/1950 | STORAGE | | | | | | | | * | | | | | | | | | |

Acreage Legend: 12.25 Regular acreage ~~12.25~~ Acreage is on a canceled right (12.25) Acreage is part of a transfer and has not been proven up on yet (inchoate) [12.25] Acreage has been suspended * Acreage is not specified

| | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|
| Permit: R13179 Cert: 94523 | | | | | | | | | | | | | | | | | | | | |
| Select Cert:94523 OR * 8/29/2001 STORAGE Additional Info: STEPHEN HARMS App: R84863 Permit: R13179 Cert: 94523 | | | | | | | | | | * | | | | | | | | | | |
| Select Cert:94523 OR * 8/29/2001 WILDLIFE Additional Info: STEPHEN HARMS App: R84863 Permit: R13179 Cert: 94523 | | | | | | | | | | * | | | | | | | | | | |

Acreage Legend: 12.25 Regular acreage ~~12.25~~ Acreage is on a canceled right (12.25) Acreage is part of a transfer and has not been proven up on yet (inchoate) [12.25] Acreage has been suspended * Acreage is not specified

Appendix G

Annual Contamination Notices



December 18, 2023

Robin Winston
PO BOX 649
Aurora, OR 97002

Dear Neighbor:

As you are aware, Columbia Helicopters, Incorporated (CHI), has been working with the Oregon Department of Environmental Quality (DEQ) for several years to address groundwater contamination in the vicinity of our facility. We are writing you because your property is potentially affected by this groundwater contamination.

In 1998, DEQ finalized its selection of the remedial action required for this contamination. Among other things, the remedy included the following:

- A groundwater extraction and treatment system on the CHI property
- Additional soil remediation on our property
- Monitoring of wells in the vicinity of our property to confirm that natural attenuation is continuing
- Replacement of specified water wells at some of our neighbors' properties, and certain institutional controls

This letter is part of the institutional controls reminding you that the shallow groundwater in portions of your property may contain chlorinated solvents and that you should not use the shallow groundwater.

CHI has successfully implemented most of the requirements of the remedy selected by the DEQ. We have completed soil remediation on our property and the remedial action implemented to date is working well with contaminant concentrations steadily dropping throughout the project area.

In December 2015, Columbia Helicopters requested DEQ's permission to discontinue pumping EXT-6 due to two consecutive monitoring events below 1-year risk-based concentration levels (RBCLs). Permission to discontinue pumping EXT-6 was granted by the DEQ and pumping from EXT-6 has ceased effective February 5, 2016. There have been no exceedances since shutdown in the last monitoring events (October 2022 and 2023). Please call me if you would like a copy of any results or if you would like to discuss the project.


On September 21, 2018, a Certificate of Completion was filed with the State of Oregon, documenting that CHI has satisfactorily completed remedial actions with 1-year RBCLs achieved at all locations monitored. Long-term Monitoring and institutional controls will continue until the lower of the MCLs or the RBCLs for a 26-year exposure limit is attained.

Despite the progress of the remedial action, please remember that the shallow groundwater (groundwater within 90 feet of the surface) under portions of your property may have contamination and should not be used for drinking water or other purposes.

If you elect to install any new wells in the affected areas, the wells should be installed into the deep aquifer and special drilling and construction techniques should be used to prevent migration of contaminants from the shallow aquifer into the deeper aquifer. To the extent that these special drilling and construction techniques cost more than the installation of conventional wells, CHI is willing to reimburse you for the reasonable cost difference. CHI also is willing to pay for reasonable costs of proper abandonment and replacement of any wells that are proved to require replacement because of groundwater contamination from CHI. In order to obtain such reimbursement, please contact me well in advance of contracting for any such work. CHI can give you up-to-date information on the groundwater contamination and can assist you in getting the work done in the most cost-effective manner.

Columbia Helicopters will provide you annual updates on the progress of the remedial action. In the meantime, please feel free to contact Brett Baird, HSE Manager, at 503-678-1222 EXT. 6151 if you have any questions. You may also contact Donald E. Hanson, the DEQ project manager, at 541-687-734 with your questions.

Sincerely,
Columbia Helicopters, Inc.

A handwritten signature in cursive script that reads "Brett Baird".

Brett Baird



December 18, 2023

John Staehely
14658 Arndt Rd, NE
Aurora, OR 97002

Dear Neighbor:

As you are aware, Columbia Helicopters, Incorporated (CHI), has been working with the Oregon Department of Environmental Quality (DEQ) for several years to address groundwater contamination in the vicinity of our facility. We are writing you because your property is potentially affected by this groundwater contamination.

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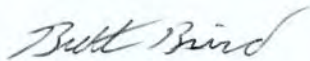
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Sincerely,
Columbia Helicopters, Inc.

A handwritten signature in cursive script that reads "Brett Baird".

Brett Baird



December 18, 2023

Cheryl Brown & Joan Arens
14585 Arndt Rd, NE
Aurora, OR 97002

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In 1998, DEQ finalized its selection of the remedial action required for this contamination. Among other things, the remedy included the following:

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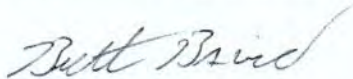
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Columbia Helicopters, Inc.

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Brett Baird