August 31, 2017

Gary Riley
Lieutenant, U.S. Public Health Service
U.S. EPA Region IX, Superfund Division
75 Hawthorne Street, SFD-7-2
San Francisco, CA 94105-3901

Via Electronic Mail

SUBJECT: Transmittal - *Annual Groundwater Monitoring Report, Second Quarter 2017, Burbank Operable Unit, Burbank, California*

Dear Mr. Riley:

On Behalf of Lockheed Martin Corporation please find enclosed a copy of the Annual Groundwater Monitoring Report, Second Quarter 2016, Burbank Operable Unit, Burbank, California. This report presents the second quarter groundwater elevation measurements and groundwater quality data from the BOU monitoring well network including the Pacific Airmotive Corporation monitoring wells. A tabulation of the volume of groundwater extracted by the BOU for the reporting period is also included.

As discussed, a response to the comments provided by the U.S. EPA [EPA Review of "Annual Groundwater Monitoring Report Second Quarter 2016, Burbank Operable Unit, Burbank, California" (August 2016)] on 01 May 2017 is provided as Attachment 1 to this letter. The 2017 BOU Report has been modified based on those comments that would apply to this year's report.

If you have any questions regarding the enclosed document, please contact Stan Phillips at robert.s.phillips@lmco.com or (817) 495-0251 or myself at Thomas.villeneuve@tetratech.com or 9093825109.

Sincerely,
TETRA TECH, INC.

Thomas J. Villeneuve, P.E.
BOU and Burbank Soils Program Manager

Attachment 1 – Lockheed Martin response to EPA Review of "Annual Groundwater Monitoring Report Second Quarter 2016, Burbank Operable Unit, Burbank, California" (August 2016)

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Enclosure

cc: William Mace, City of Burbank Water and Power
Paul Williams, State Water Board Division of Drinking Water
Gloria Pak, Los Angeles Regional Water Quality Control Board
Glenn Bruck, USEPA
Lisa Hamilton, AMEC representing General Electric
Sonja Donaldson, OTIE
Kevin Murdock, CH2MHill
Stan Phillips, Lockheed Martin
Tom Davis, CDMSmith

Response to EPA Comments dated May 1, 2017 to the August 2016
Annual Groundwater Monitoring Report, Second Quarter 2016, Burbank Operble Unit, Burbank, California

	EPA Comments	Response
		It was agreed in communications with the EPA that because of the timing of the comments on the 2016 BOU Groundwater Monitoring Report, the 2016 document would not be modified, but their comments would be used to modify the 2017 Annual BOU Groundwater Monitoring Report as appropriate.
1	Section 1.0, Introduction, Page 1-1 – Third paragraph states the activities were conducted in accordance with the Revised Operational Sampling Plan (OSP). The Sampling and Analysis Plan Addendum (Tetra Tech, 2016) for low flow sampling should also be referenced here.	The OSP was updated in early 2017 and is referenced in Section 1.0 and in other places in the text were appropriate.
2	Section 2.2.1, Pump Removal, Page 2-1 – Please add a description regarding the decontamination and disposal procedures for the pumps and associated piping.	The August 2017 report (Section 2.5.1, Low-Flow Pump Installation) includes a description of how the pumps and associated piping (pulled from the wells that were modified to low-flow pumps) were decontaminated and stored for off-site disposal. It notes that the pumps and piping were were pressure washed and placed in roll-off bins for offsite disposal. Based on information provided by the Off-Site Rule (OSR) contact for USEPA Region IX, the pumps and piping will be taken to Clean Harbors in Buttonwillow, California, (one of USEPA's approved CERCLA waste facilities) after the waste profiles have been completed.
3	Section 2.4.1, Low-Flow Sampling, Pages 2-4 and 2-5 – Please add a description regarding any deviations to the SAP Addendum for low flow sampling, similar to Section 2.5 for the OSP.	Deviations from the OSP during the April 2017 monitoring event are documented in section 2.9 of the report.
4	Section 4.1, Groundwater Elevations, Page 4-1 (and Table 1) – An EPA comment on the 2015 annual groundwater monitoring report noted that water levels were collected over a 3-week period and suggested that water levels be measured over a shorter timeframe (generally 1-2 days). Per Table 1, most Spring 2016 water levels were measured over the period of April 4-7, although some measurements were collected on April 2 (1), April 9 (6), April 13 (1), April 15 (2), and April 18 (1). Although the overall window for measurements (about 2 weeks) is an improvement over 2015, efforts should be made in the future to further compress this range. Monitoring wells 3872R, MW-04, MW-05, MW-06, SW-1, and SW-5 have not been surveyed. These wells should be surveyed prior to the next groundwater monitoring event.	Not all wells are accessable during the gauging event. The field crews do what they can to collect the measurements in as short a time frame as possible. Water level measurements were collected during the April 2017 monitoring event on April 18, 19, and 20. Monitoring wells 3872R, MW-04, MW-05, MW-06, SW-1, SW-5, OW-VO1R, OW-V02R, and OW-V03R were surveyed on May 25, 2017 and OW-V08 was surveyed on June 6, 2017. The survey data was utilized in this report to calculate groundwater elevations and plot their locations. This is documented in section 2.4 of the monitoring report.
5	Section 4.2.7, Results of Stratification Testing, Pages 4-7 and 4-8 – This section describes the results of the stratification testing, notes that overall higher concentrations were found in the deeper samples compared to the shallow samples, and state that future samples will be collected from the deeper zone in these wells. Based on the data presented, EPA agrees with this approach for these wells.	Comment noted.
6	Section 6.3.2, Horizontal Gradients, Page 6-7 – This section refers to the water level evaluation for the WT HSU using the triangulated irregular network (TIN) approach, as depicted on Figure 30. However, the text should acknowledge that the direction of the horizontal gradient in triangles U, V, W, and X is to the southeast, indicating that groundwater in the area generally south of Burbank Boulevard is not likely being captured by the extraction wells.	The TIN values for those triangles that cross or are below the capture line will be acknowledged in future documents. In 2017, the groundwater contours and the TINs support that capture from the BOU extraction wells extends south to approximately West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU. The horizontal gradients calculated for triangles EE, FF, GG, and HH support partial capture in those regions. The horizontal gradients in triangles KK and LL do not support capture in those regions.
7	Sections 6.4 (Chemicals of Concern Concentration Trends) and 6.5 (Capture Zone Summary) – These sections focus on the four identified well pairs south of Burbank Boulevard. Well 3872N is not part of the four well pairs, but is identified in the OSP as essential for capture zone evaluation, mass flux evaluation, and characterization. This well showed a significant increase in PCE from 612 µg/L (2015) to 1,890 µg/L (2016). Further monitoring is required to evaluate whether this constitutes a long-term increasing trend. Please include this well in the discussion in these sections, including a possible explanation for the increased PCE concentration.	The concentration of PCE in 2017 in monitoring well 3872N was 310 ug/l. This concentration is more consistent with historical concentarations. The trend analysis for PCE in this well indicates the concentrations in the well are stable. The 2016 concentration appears anomalous. As we do with all monitoring wells that are located south of the BOU extractions wells, we will continue to watch the concentraton trends in 3872N as more data is collected.
8	Table 2 – Second Quarter 2016 Groundwater Elevation Data – It appears that the table should consist of the first three pages only; the last three pages should be deleted as they appear to repeat content from the first three pages, but have incomplete screened interval values for several wells.	The table was checked to confirm the error did not carry over into this years report.
9	Table 4 - Second Quarter 2016 Groundwater Well Maintenance Table	
9.1	The proposed maintenance items appear to capture most, but not all, of the primary maintenance related items noted in the field data sheets provided in Appendix B. For example, many of the wells were noted to have gasket seals that required replacement, which is included in Table 4. However, other problems such as missing bolts, missing locks, cracked surface pads, and standing water are not captured in Table 4. Please revise Table 4 to include all significant maintenance items.	The majority of the maintenanace items noted in 2016 field logs have been remedied and are documented in the 2017 report. In the 2017 report, the table (now Table 2) has been modified to include additional details based on the well inspection activities conducted in April 2017.
9.2	Table 4 should include a schedule to address the required repairs. Repairs should be completed in a timely manner. In addition, completed repairs can be documented in the "Prior Well Repairs" column to serve as an updated maintenance log.	Table 2 in the August 2017 report has been revised to include the prior repairs to serve as an updated maintenance log. The monitoring wells identified for repair in the 2017 report will be repaired prior to the April 2018 monitoring event.
9.3	Please identify the specific wells and approximate schedule for installation of dedicated low-flow sampling pumps in Table 4. The wells initially selected for low-flow pump installation were identified in the initial version of this table, as included in the LMC letter dated March 21, 2016 (Response to USEPA Comments - Annual Groundwater Monitoring Report Second Quarter 2015).	The installation of the new low-flow pumps is acknowledged in the 2017 report. Any new pump installations will be identifed and documented in future monitoring reports. New wells are being equiped with low flow pumps.
11	Appendix B – Field Data Sheets –The "final pump depth" should be populated for wells with dedicated pumps to meet the OSP requirement of groundwater sample collection depth. The depth can be included from known sources, such as Table 1 for low-flow pump intake depths, and/or confirmed in the field with a depth sounder. This is particularly important for wells sampled with portable low-flow pumps, such as SW-1 and SW-5, to verify that the pump is placed at the desirable depth.	The field data sheets included in the August 2017 report include the final pump intake depth of the newly installed low-flow pumps and the intake depth of any portable pumps used to collect the samples.

ANNUAL GROUNDWATER MONITORING REPORT
SECOND QUARTER 2017
BURBANK OPERABLE UNIT
BURBANK, CALIFORNIA

Prepared for:
Lockheed Martin Corporation
Corporate Energy, Environment, Safety & Health
Burbank, California

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August 2017

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ACRONYMS

bgs	below ground surface
B HSU	B-zone hydrostratigraphic unit
BOU	Burbank Operable Unit
btoc	below top of casing
Caltrans	California Department of Transportation
COV	coefficient of variation (Mann-Kendall analysis)
DO	dissolved oxygen
DQO	data quality objective
DWNL	California Department of Public Health drinking water notification level
EC	electrical conductivity
gpm	gallons per minute
HSU	hydrostratigraphic unit
LARWQCB	California Regional Water Quality Control Board, Los Angeles Region
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
Lockheed Martin	Lockheed Martin Corporation
MAROS	Monitoring and Remediation Optimization System
MCL	California Department of Public Health maximum contaminant level
MS	matrix spike
MSD	matrix spike duplicate

MSL	mean sea level
MTA	Metropolitan Transportation Agency
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/L/yr	micrograms per liter per year
mg/kg	milligrams per kilogram
NA	not applicable
ND	non-detect
ORP	oxidation-reduction potential
OSP	Revised Operational Sampling Plan
PCE	tetrachloroethene
%/yr	percent per year
PVC	polyvinyl chloride
QA	quality assurance
QC	quality control
RPD	relative percent difference
S	Mann-Kendall statistic
TCE	trichloroethene
TD	total depth
TIN	triangulated irregular network
1,2,3-TCP	1,2,3-trichloropropane
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds
WT	water table
WT HSUs	water table hydrostratigraphic units

EXECUTIVE SUMMARY

The Burbank Operable Unit (BOU) is part of the North Hollywood National Priorities List site in the San Fernando Valley. Lockheed Martin monitors groundwater within the BOU to comply with the provisions of the United States Environmental Protection Agency (USEPA) Consent Decree (Docket No. 91-4527-MRP [Tx]) filed on March 25, 1992, and California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) Cleanup and Abatement Order No. 87-161, dated December 17, 1987.

The Second Quarter 2017 BOU groundwater monitoring event was implemented in accordance with the 2017 Revised OSP; (Tetra Tech, 2017b). The intent of the program is to provide the data necessary to evaluate groundwater conditions at the BOU, including the near-field and far-field effects of the extraction well field pump and treat system.

Groundwater Monitoring Well Maintenance

In preparation for the second quarter 2017 groundwater monitoring event, several monitoring well maintenance activities were completed in March and April, 2017:

- The dedicated high-volume pumps and associated piping were removed from 52 monitoring wells and replaced with dedicated low-flow pumps.
- A total of 9 groundwater monitoring wells were redeveloped or cleaned out. This includes A-1-CW07, B-5-CW03, B-6-CW16, C-1-CW05, C-1-CW06, 3852L, 3852M, and 4949C.
- Well maintenance activities were completed at 70 of the BOU monitoring wells. This included replacement of well lid gaskets, adding or replacing well tags, re-tapping the existing bolt holes, and replacing the standard six-point bolts with five-point bolts.
- Five new groundwater monitoring wells (B-1-CW30 through B-1-CW34) were constructed in October and November 2016 within the former Plant B-1 facility, as described in the Supplemental Site Investigation Report, Former Lockheed Martin Plant B-1, Burbank, California (Tetra Tech, 2017a).
- Three observation wells (OW-VO1R, OW-VO2R, and OW-VO3R) were installed to replace existing wells, one new observation well (OW-VO8) was installed, and one observation well (OW-VO6) was repaired within the BOU between February and April 2017, in accordance

with Work Plan – Well Installation and Replacement, Burbank Operable Unit, Burbank, California (Tetra Tech, 2016d).

Groundwater Elevations and Gradients

During the second quarter 2017 groundwater monitoring event, groundwater levels were measured in 98 monitoring wells. Based on those measurements, the local shallow groundwater flow direction was predominantly southeasterly in the northwest portion of the BOU and southerly in the northeast portion of the BOU, and it converged in a flow direction toward the cones of depression created by the operation of the BOU extraction wells. The second quarter 2017 groundwater elevation data indicate that the dominant direction of shallow groundwater flow immediately south of the BOU extraction wells was reversed from its natural southeasterly flow direction, to a northerly flow direction in response to the extraction well pumping (northeasterly flow direction in the western portion of the BOU). These groundwater trends extend to Victory Boulevard in the western portion of the BOU, West Allan and Wyoming Avenue in the central-western portion of the BOU, and to Chandler Boulevard in the eastern portion of the BOU. Beyond these boundaries the groundwater flow direction shows influence from pumping, but ultimately reverts to its natural southeasterly direction.

The local groundwater flow direction in the B HSU during the second quarter 2017 groundwater monitoring event was generally the same as the local groundwater flow direction observed in the WT HSUs with a couple exceptions. The groundwater flow does not converge on BOU extraction wells VO1 through VO7 as it does in the WT HSUs but you do see a groundwater depression centered on BOU extraction well VO8.

Groundwater-elevation data for selected monitoring wells were used to evaluate horizontal hydraulic gradients (direction and magnitude) within the BOU using a TIN. This horizontal hydraulic gradient analysis was completed using data collected in the April 2017 gauging event and a TIN defined by monitoring wells distributed in the WT HSU. The TIN map prepared for the WT HSUs shows that the hydraulic gradient in the area immediately to the south of the groundwater extraction well system is directly influenced by pumping, showing very steep gradients and in some instances a reversal from the regional trend and indicating very strong hydraulic capture. Farther to the south the direction of groundwater flow appears to be affected by extraction, but the hydraulic

gradient is not as steep. The degree of hydraulic capture dissipates and may be absent completely south of most of the BOU southern boundary.

Water Quality Results

Sixty-five groundwater monitoring wells were sampled during the Second Quarter 2017 monitoring event, 42 completed in the WT HSU and 23 completed in the B HSU. The samples collected were tested for VOCs, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Twenty-one organic and two inorganic analytes were detected. Isoconcentration maps were prepared for six primary chemicals of concern: PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Results for the primary chemicals of concern were as follows:

- PCE was detected in 59 of the primary (non-duplicate) samples, 37 of which exceeded the MCL (5 µg/L). Concentrations in the WT HSUs ranged from <0.20 µg/L to 630 µg/L (monitoring well B-1-CW33). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected at the northwest corner of the former Plant B-1 and trending southeast beneath former Plant B-1 and extending to Magnolia Boulevard. Concentrations in the B HSU ranged from <0.20 µg/L to 48 µg/L (monitoring well 3850R). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected adjacent to the extraction wells on Vanowen Street.
- TCE was detected in 53 of the samples, 35 of which exceeded the MCL. The detected concentrations ranged from 0.29 µg/L (monitoring well C-1-CW05) to 240 µg/L (monitoring wells 3872L and B-1-CW13). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected downgradient of former Building 85 and extending to Magnolia Boulevard. Concentrations in the B HSU ranged from <0.29 µg/L to 32 µg/L (monitoring well 3862E). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected south of the BOU. Additionally, elevated concentrations were detected in the southern portion of the former Plant B-6 area and continuing southeast beneath former Building 85 and extending to Vanowen Street.
- 1,2,3-TCP was detected in 31 of the samples, 30 of which exceeded the DWNL (0.005 µg/L). Concentrations in the WT HSUs ranged from <0.0025 µg/L to 87 µg/L (monitoring well A-1-CW08). Concentrations exceeding the DWNL extended over much of the BOU with the highest concentrations detected down gradient of the former Plant B-6 area, north of former Building 85, and along Vanowen Street. Concentrations in the B HSU ranged from <0.0025 µg/L to 0.29 µg/L (monitoring well 3852H). Concentrations exceeding the DWNL were not as widely distributed as in the WT HSUs, with the highest concentrations detected near Burbank Boulevard.
- 1,4-Dioxane was detected in 11 of the samples, 11 of which exceeded the DWNL (1.0 µg/L). Concentrations in the WT HSUs ranged from <0.28 µg/L to 3.7 µg/L (monitoring well A-1-CW09). Concentrations exceeding the DWNL are spare, but spread out through the BOU

specifically at former Plants A-1-S, B-1, and C-1 as well as downgradient of Former Building 371. Concentrations in the B HSU ranged from <0.28 µg/L to 2.3 µg/L (monitoring well A-1-CW05). Similar to the WT HSUs, concentrations exceeding the DWNL extended around the former Plant B-6 and A-1 areas of the BOU, with the highest concentrations detected at the former Plant A-1-S.

- Total chromium was detected in 65 of the samples, 2 of which exceeded the MCL (50 µg/L). Concentrations in the WT HSUs ranged from 1.05 J (A-1-CW03R) to 82.9 µg/L (monitoring well C-1-CW07). One sample from the eastern portion of the BOU near the former Weber Aircraft facility and one sample near former Plant C-1 had concentrations detected exceeding the MCL. Concentrations in the B HSU ranged from 0.600 µg/L (monitoring well C-1-CW02 to 7.85 µg/L (3872S). No concentrations were detected that exceeded the MCL.
- Hexavalent Chromium was detected in 58 samples, 5 of which exceeded the MCL (10 µg/L). Concentrations in the WT HSUs range from 0.010 µg/L µg/L (monitoring well A-1-CW03R) to 20 µg/L (monitoring well B-1-CW17). Four of the 5 samples that exceeded the MCL are located in the central to southern portions of former Plant B-1. The other sample that exceeded the MCL is located immediately outside of the northeastern boundary of the BOU. Concentrations in the B HSU ranged from 0.021 µg/L (monitoring well 3850R) to 7.9 µg/L (monitoring well 3872S). No concentrations were detected above the MCL.

Statistical Trend Analyses

Statistical trend analyses were conducted using chemical data from the 65 monitoring wells sampled during the second quarter 2017 BOU groundwater monitoring event. The analysis was performed for the six primary chemicals of concern: PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Therefore, a total of 390 trends were tested. The MAROS, developed by the Air Force Center for Environmental Excellence (Air Force Center for Environmental Excellence, 2006), was used for the analyses. The MAROS is a statistical database application developed to assist with groundwater quality data trend analysis and long-term monitoring optimization at contaminated groundwater sites. BOU data from first quarter 1996 to second quarter 2017 were analyzed.

Statistical analysis indicated that for various reasons (insufficient data, no statistical trend, or no detections), a significant trend could not be determined for 43% of the datasets that were tested, particularly for 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Statistical analysis also indicated that 29% of the datasets had decreasing or probably decreasing concentration trends, 17% were stable, and 11% had increasing concentration trends. The trend analysis showed that those trends that were significant were generally small. Over half of the decreasing concentrations trends were for TCE and PCE concentrations, scattered throughout the BOU; about

half of the stable trends were for total chromium and hexavalent chromium concentrations; and 1,2,3-TCP and 1,4-dioxane concentrations upgradient of the BOU extraction wells in the former Plant B-6 area are generally increasing. With the exception of the increasing 1,2,3-TCP trend in monitoring wells 3852M and 3872L, all monitoring wells with increasing trends for one or more of the compounds of concern are upgradient of the BOU extraction wells or within the area captured by the extraction wells. The magnitude of the changes in concentration of 1,2,3-TCP in monitoring wells 3852M and 3872L are small (0.016 µg/L/yr and 0.006 µg/L/yr, respectively).

Capture Zone Evaluation

Several lines of evidence were examined to evaluate the extent of capture resulting from the BOU extraction system and assess the effectiveness of the system in hydraulically containing the various chemical of concern plumes within the BOU. The results of the evaluation were as follows:

- The operational data from the extraction system indicated that groundwater is being extracted and that VOC mass is still being removed from the aquifer.
- Vertical hydraulic gradients indicated that pumping from the WT HSUs is inducing or increasing upward vertical gradients between the B HSU and the WT HSUs.
- The WT-HSU potentiometric map developed from the groundwater level measurements supports that the BOU extraction wells capture groundwater across most of the BOU north of Vanowen Street and south of the extraction wells toward Chandler Boulevard and Wyoming and West Allan Avenue.
- The TIN was developed from the same data as the potentiometric maps. The TIN for the WT HSUs supports that capture from the BOU extraction wells extends south to approximately Wyoming and West Allan Avenue in the central-western portion of the BOU and Chandler in the eastern portion of the BOU.
- The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (16 results), increasing (2 results), no trend (14 results), probably decreasing (3 results), probably increasing (none), stable (8 results), and ND (5 results). The two increasing trends (1,2,3-TCP in monitoring wells 3852M and 3872L) had a limited data set (at least five analyses from each well from 2007 to 2017) and the magnitude of the change was small.

The lines of evidence suggest that the BOU extraction system exerts hydraulic control on the plumes originating from the BOU and it extends to Wyoming and West Allan Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU, and the extraction system inhibits the migration of site-related chemicals of concern.

Burbank Operable Unit Extraction System Performance

Based on the data from the BOU monthly operation reports for the current reporting period (May 2016 through April 2017), an estimated 3,129,230,274 gallons of groundwater was extracted (average extraction rate of 5,937 gallons per minute) and approximately 3,697 pounds of volatile organic compounds (VOCs) were treated by the Burbank Operable Unit (BOU) treatment system. Multiple lines of evidence suggest that at current extraction rates the BOU extraction system exerts hydraulic control in the WT HSUs that extends to West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU, and inhibits the migration of site-related chemicals of concern.

The upward hydraulic gradient (potentially pulling contaminant mass from the B HSU to the WT HSUs) exhibited in much of the southern portion of the BOU inhibits the migration of site-related chemicals of concern, where present, in the deeper HSU. The data also indicates that groundwater in the B HSU proximal to BOU extraction well VO8 is being captured by the pumping at this well.

While the BOU extraction system produces groundwater that is treated and deliver for consumption, water quality data from the treatment plant was not presented or reviewed as part of this report and therefore the second objective cannot be discussed as part of this report.

SECTION 1
INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech has prepared this report to present the results of the ongoing annual groundwater-quality monitoring for the Burbank Operable Unit (BOU) monitoring well field. The BOU is located in Burbank, California (Figure 1).

The BOU is part of the North Hollywood National Priorities List site in the San Fernando Valley. Lockheed Martin monitors groundwater within the BOU to comply with the provisions of the United States Environmental Protection Agency (USEPA) Consent Decree (Docket No. 91-4527-MRP [Tx]) filed on March 25, 1992, and California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) Cleanup and Abatement Order No. 87-161, dated December 17, 1987.

The second quarter 2017 groundwater monitoring activities were conducted in accordance with the *Revised Operational Sampling Plan* (OSP; Tetra Tech, 2017b), which describe the objectives, decision process, analytical methods, and procedures for sampling the groundwater monitoring well network. The purposes of the BOU groundwater monitoring program are to monitor the chemical plume conditions and the performance of hydraulic capture by the ongoing groundwater treatment system. The site background and current conceptual site model for the BOU are presented in Appendix A.

1.1 HISTORICAL OVERVIEW

Groundwater monitoring was first initiated at the BOU in 1986. Since the late 1990s, the Groundwater Monitoring Plan has been implemented in accordance with the 1997 *Draft Phase 2 Operational Sampling Plan* (HSI Geotrans, 1997) and with modifications requested by the regulatory community. The Groundwater Monitoring Plan has evolved to incorporate additional requests by the USEPA and the LARWQCB. The following list presents the modifications made to the Groundwater Monitoring Plan.

- June 28, 2001 – USEPA Method 8260B for volatile organic compounds (VOCs), including Freon-113 and methyl-tert-butyl ether, replaced USEPA Methods 8010 and 8020 for halogenated volatile organic and purgeable aromatic compounds, respectively. LARWQCB directed analysis of hexavalent chromium by USEPA Method 218.6 (LARWQCB, 2001).

- March 28, 2002 – Analysis for 1,2,3-trichloropropane (1,2,3-TCP) was added to the Groundwater Monitoring Plan (LARWQCB, 2002a).
- November 18, 2002 – Monitoring wells B-6-CW01, B-6-CW02, B-6-CW03, B-6-CW03R, and B-6-CW16 were added to the Groundwater Monitoring Plan to be sampled for VOCs and heavy metals, and 1,2,3-TCP was to be included in the discussion and analysis of chemicals of concern in the groundwater monitoring reports (LARWQCB, 2002b).
- December 16, 2003 – A LARWQCB letter required Lockheed Martin to sample for emergent chemicals (perchlorate, n-nitrosodimethylamine, 1,4-dioxane) in addition to 1,2,3-TCP and hexavalent chromium as part of the BOU Groundwater Monitoring Plan, and to prepare a separate technical report summarizing the results (LARWQCB, 2003).
- September 2004 – The USEPA *Five-Year Review Report for Burbank Operable Unit, San Fernando Valley (Area 1) Superfund Site, Los Angeles County, California* required that Lockheed Martin continue to "monitor upgradient wells for emerging contaminants" and "evaluate the spatial distribution and concentration of emergent contaminants with respect to the BOU" (USEPA, 2004).
- December 8, 2004 – An LARWQCB letter to Lockheed Martin provided comments on the *Technical Report on Emergent Chemicals within the Burbank Operable Unit, Burbank, California* and reduced emergent chemical sampling to specific wells (LARWQCB, 2004).
- April 27, 2005 – A Lockheed Martin letter to USEPA, with a copy to LARWQCB, requested a change in BOU Groundwater Monitoring Plan sampling schedule - from first and third quarter to second and fourth quarter (Lockheed Martin, 2005).
- October 20, 2005 – A USEPA letter to General Electric requested sampling of eight monitoring wells at the former Pacific Airmotive Corporation site (USEPA, 2005). Due to a settlement agreement between Lockheed Martin and Pacific Airmotive Corporation (an indirect wholly owned subsidiary of General Electric), Lockheed Martin is responsible for monitoring and reporting for these wells. The Pacific Airmotive Corporation groundwater monitoring event is now conducted concurrently with the BOU Groundwater Monitoring Plan on a semiannual basis.
- February 10, 2006 – A USEPA letter to Lockheed Martin requested sampling of nine BOU monitoring wells in the vicinity of former Plants B-5 and C-1 (USEPA, 2006a).
- November 3, 2006 – A USEPA letter to Lockheed Martin concurred with proposed changes to sampling frequency for specific constituents (USEPA, 2006b; USEPA, 2007).
- October 22, 2010 – A USEPA letter to Lockheed Martin requested monitoring of 14 BOU wells as part of the North Hollywood Operable Unit Baseline Sampling Program (USEPA, 2010b).
- November 3, 2010 – A USEPA email to Lockheed Martin and General Electric approved their request to combine Pacific Airmotive Corporation and BOU semiannual reports (USEPA, 2010c).
- February 25, 2011 – A USEPA letter requested Lockheed Martin and other potentially responsible parties within the San Fernando Valley to change sampling schedules to April

and October in order to coincide with basin-wide remedial investigation sampling events (USEPA, 2011).

- April, 2013 – A comprehensive sampling event was performed at the BOU (Arcadis, 2013). The goal was to collect contemporaneous data for emerging compounds with detection limits for the BOU consistent with the larger San Fernando Valley Superfund site.
- March 26, 2014 – An OSP was prepared for the BOU and submitted to the USEPA (Arcadis, 2014).
- February 16, 2016 – A monitoring well replacement evaluation was prepared and submitted to the USEPA (Tetra Tech, 2016a). This document detailed the evaluation for the replacement of three monitoring wells that were destroyed in 2015 due to California Department of Transportation (Caltrans) and Metrolink construction activities.
- March 21, 2016 – A Sampling and Analysis Plan Addendum was prepared for the BOU to describe procedures for low-flow sampling and submitted to the USEPA (Tetra Tech, 2016c).
- March 31, 2017 – the OSP was updated and a revised document was submitted to the US EPA (Tetra Tech 2017).

1.2 CURRENT GROUNDWATER MONITORING PROGRAM OBJECTIVES

The 2017 OSP (Tetra Tech, 2017b) presents a groundwater monitoring program that provides the data necessary to evaluate groundwater conditions at the BOU, including the near-field and far-field effects of the BOU extraction well field. The four primary objectives of the long-term groundwater monitoring program are to accomplish the following:

- Verify containment of the 5 micrograms per liter (µg/L) tetrachloroethene (PCE) and 100 µg/L trichloroethene (TCE) plumes in groundwater
- Collect sufficient data to evaluate groundwater extraction system performance with respect to mass removal
- Characterize the nature and extent of emerging compounds
- Characterize the nature and extent of the primary chemicals of concern (PCE and TCE) to refine and update the conceptual site model

1.3 REPORT ORGANIZATION

This report is organized into the following sections:

- Section 1 – Introduction: This section presents the purpose of the BOU Groundwater Monitoring Plan and provides a brief description of the regulatory history at the BOU.

- Section 2 – Summary of Groundwater Monitoring: This section provides a description of groundwater monitoring, measurements, and quality assurance and quality control procedures.
- Section 3 – Groundwater Sampling Data Validation: This section summarizes compliance with the data quality objectives and requirements.
- Section 4 – Groundwater Monitoring Results: This section presents the analytical results of the groundwater monitoring activities.
- Section 5 – Statistical Trend Analyses: This section assesses statistical trends in site chemicals of concern over time.
- Section 6 – Capture Zone Evaluation: This section provides an evaluation of the groundwater treatment system's effectiveness in maintaining hydraulic capture.
- Section 7 – Summary and Conclusions: This section presents analyses and conclusions with recommendations, where appropriate, for additional or reduced future monitoring.
- Section 8 – References: This section provides a list of documents referenced in this report.

Tables and figures are presented at the conclusion of the report, and in the order in which they are introduced in the text. With one exception, the appendices are presented at the conclusion of the report, and in the order in which they are introduced in the text. The laboratory reports appear in Appendix G.

SECTION 2
SUMMARY OF GROUNDWATER MONITORING

This section summarizes the second quarter 2017 groundwater monitoring and quality assurance (QA) and quality control (QC) procedures conducted at the BOU. The results from this monitoring event are discussed in Section 4. The BOU monitoring well network is shown on Figure 2.

2.1 GROUNDWATER MONITORING WELL REPLACEMENT EVALUATION

In 2016, Lockheed Martin prepared a monitoring well replacement evaluation for the replacement of monitoring wells 3860H, 4959J, and 4959H. Nearby facility monitoring wells SW-1 and SW-5 were selected to replace former monitoring wells 4959H and 4959J, respectively, and these monitoring wells were sampled as part of the current groundwater monitoring event (Tetra Tech, 2016d). A new monitoring well (to be designated as 3860HR) will be installed in the vicinity of former monitoring well 3860H; this work is anticipated to take place in summer 2017.

2.2 INSTALLATION OF GROUNDWATER MONITORING WELLS AT FORMER PLANT B-1

Between October and November 2016, five new groundwater monitoring wells (B-1-CW30 through B-1-CW34) were constructed within the former Plant B-1 facility, as described in the *Supplemental Site Investigation Report, Former Lockheed Martin Plant B-1, Burbank, California* (Tetra Tech, 2017a). The locations of the groundwater monitoring wells are shown on Figure 2. As required by the LARWQCB, the groundwater monitoring wells will be monitored quarterly for one year for total chromium, hexavalent chromium, volatile organic compounds, and emerging contaminants. After one year, the wells will be included in the routine BOU groundwater monitoring program and the constituents to be tested for and the frequency of groundwater monitoring will be reevaluated. Because these wells were sampled concurrently with the annual BOU groundwater monitoring activities, the groundwater elevations and analytical data from these wells are included in this report.

2.3 INSTALLATION OF OBSERVATION WELLS OW-VO1R, OW-VO2R, OW-VO3R, AND OW-VO8 AND REPAIR OF OW-VO6

From February through early April 2017, three observation wells (OW-VO1R, OW-VO2R, and OW-VO3R) were installed to replace existing wells, one new observation well (OW-VO8) was installed, and one observation well (OW-VO6) was repaired within the BOU in accordance with *Work Plan – Well Installation and Replacement, Burbank Operable Unit, Burbank, California (Tetra Tech, 2016d)*. The location of these wells are presented on Figure 2.

- Observation wells OW-VO2R and OW-VO3R were installed and the packer within OW-VO6 was replaced because the vertical differences in hydraulic head between the water table aquifer and deeper units measured in these wells appear to be inconsistent with expected hydraulic conditions within the groundwater monitoring network.
- Observation well OW-VO1 was originally to be rehabilitated; however, because of the well condition a new well OW-V01R was installed and OW-VO1 was abandoned.
- A new observation well was installed adjacent to extraction VO-8. The purpose OW-VO8 was evaluate the influence of VO-8 within the water table and deeper zone.

A report presenting the details of the well installations, abandonments, and repairs will be submitted under separate cover and will include the installation of replacement well 3860H-R (Section 2.1).

2.4 SURVEY OF GROUNDWATER MONITORING WELLS

On May 25 and June 6, 2017, Lockheed Martin surveyed the new observation well locations as well as the six monitoring well locations (3872R, MW-04, MW-05, MW-06, SW-1, and SW-5) identified during the April 2016 sampling event as requiring resurveying. The survey data was used to calculate groundwater elevation data at these well and will be incorporated into the EPA's database.

2.5 MONITORING WELL MAINTENANCE ACTIVITIES

2.5.1 Low-Flow Pump Installation

In November 2016, *Revised Technical Memorandum – Low-Flow Pump Intake Selection, Burbank Operable Unit, Burbank California* (Tetra Tech, 2016e) was prepared to document the transition from a high-volume to low-volume groundwater sampling protocol in 52 monitoring wells that are a part of the BOU. These 52 monitoring wells are identified on Table 1.

In March 2017, the high-flow pumps were removed in all 52 monitoring wells. However, low-flow pumps were only installed in 48 of the 52 monitoring wells. No pumps were install in the remaining

four wells (B-1-CW29, B-5-CW03, B-6-CW17, and C-1-CW06) because these wells were dry at the time of installation. All high-flow pumps and the associated piping removed from the 52 wells were pressure washed and placed in bins for offsite disposal. Based on information provided by the Off-Site Rule (OSR) contact for USEPA Region IX, the pumps and piping will be taken to Clean Harbors in Buttonwillow, California, which is on the USEPA's approved list of disposal facilities for CERCLA waste.

2.5.2 Well Redevelopment

Prior to the installation of the dedicated low-flow pumps, the 52 monitoring wells shown on Table 1 were gauged to determine if debris had accumulated in the monitoring wells. Based on the gauging results (shown on Table 1), 9 of the 52 monitoring wells had accumulated debris that completely filled the sumps (most monitoring wells have 5-feet-long sumps underlying the screened intervals) and partially obstructed the screens. The development results are described below:

- A-1-CW07: The well construction details for the well notes a total depth (TD) of 229 feet bgs. The well was noted to be dry with an initial measured TD of 214.30 feet bgs. A magnet was used to clean out any metallic debris that may have accumulated at the bottom of the well. After pulling up approximately one third of a 5-gallon bucket of debris, TD was remeasured at 210.52 feet bgs. Based on the condition of the well casing, the well was likely collapsing. Further evaluation for a replacement for A-1-CW07 is recommended.
- B-5-CW03: The well was noted to be dry during the redevelopment activities with a measured TD of 228.93 feet bgs. Alternating the use of an overshot tool to stir up the debris at the bottom of the well and a magnet was used to pull up rust and metal fragments. Overall, less than 0.25 feet of metallic debris was pulled from the bottom of the well. Approximately 2 feet of debris remains in the well.
- B-6-CW16: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 6.5 feet of sediment was removed with 2.5 feet of debris remaining in the sump.
- C-1-CW03: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 3 feet of sediment was removed with less than 0.5 feet of debris remaining in the sump.
- C-1-CW05: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 1 foot of sediment was removed with 1 foot of debris remaining in the sump.

- C-1-CW06: The well was noted to be dry during the redevelopment activities with a measured TD of 247.80 feet bgs. Alternating the use of an overshot tool to stir up the debris at the bottom of the well and a magnet was used to pull up metallic debris. No metallic debris was recovered during the use of the magnet.
- 3852L: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 2 feet of sediment was removed.
- 3852M: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 1.5 feet of sediment was removed with 2.5 feet of debris remaining in the sump.
- 4949C: The well was redeveloped by bailing, swabbing with a surge block, bailing again, and pumping until water quality parameters stabilized. All debris within the screened section of the well casing appears to have been removed. Approximately 9 feet of sediment was removed.

2.5.3 Groundwater Monitoring Well Inspections and Maintenance

The conditions of the monitoring wells that were scheduled for water level gauging or groundwater sampling were assessed during the monitoring period. The field inspection forms are included in Appendix B.

The maintenance items previously identified in 2016 were also completed in 70 of the BOU monitoring wells during the reporting period. These items included replacement of well lid gaskets, adding or replacing well tags, re-tapping the existing bolt holes, and replacing the standard six-point bolts with five-point bolts.

All 105 of the wells included in the April monitoring event were inspected as part of the monitoring event. Field logs documenting the condition of each well and the recommended maintenance are included in Appendix B. A summary of the well inspections and maintenance conducted during this reporting period are provided in Table 2.

2.6 GROUNDWATER-LEVEL MEASUREMENTS.

Groundwater levels were measured in 105 BOU monitoring wells in April 2017. Groundwater-level measurements and calculated elevation data for the second quarter of 2017 are summarized in Table 3. The procedures utilized to measure water levels are described in the *Revised Operational*

Sampling Plan (OSP; Arcadis, 2014). The field data sheets compiled during the elevation measurements are included in Appendix B.

2.7 TRANSDUCER MEASUREMENTS

Transducers are installed in 23 monitoring wells selected to collect continuous water level data (at 15-minute increments) throughout the year. During monitoring well sounding activities, data recorded by data-logging pressure transducers at the selected groundwater monitoring wells were downloaded and analyzed for the purposes of evaluating the downgradient capture boundary. Transducer data were adjusted with barometric pressure measurements and confirmed with field measurements collected with a hand-held water level meter at the time data were downloaded. The transducer data are presented in Appendix C.

2.8 GROUNDWATER SAMPLING

2.8.1 Low-Flow Sampling

A total of 74 monitoring wells were identified for sampling during the second quarter 2017 groundwater monitoring event using a low-flow sampling methodology in accordance with the procedures specified in the revised OSP (Tetra Tech, 2017b),. This includes five new groundwater monitoring wells installed in October and November 2016 at the former Plant B-1 under the direction of the LARWQCB. These wells were sampled concurrently with the OSP monitoring wells.

Groundwater samples were successfully collected from 65 monitoring wells during the second quarter 2017 groundwater monitoring event with 42 completed in the WT HSU and 23 completed in the B HSU. The remaining nine wells (3850M, 3860J, 4949C, A-1-CW07, B-1-CW29, B-5-CW03, B-6-CW17, C-1-CW06, and MW-01) were not sampled because the wells were either dry or did not have enough water for the pumps to draw a sampling. The list of monitoring wells sampled and the analytical program are presented in Table 4. Field purge logs are presented in Appendix B.

2.8.2 Quality Assurance and Quality Control

In accordance with the OSP's QA/QC guidance, duplicate samples, trip blanks, and equipment blanks were collected for each applicable analytical method to assess reproducibility and whether cross-contamination of the environmental samples occurred during sampling and handling or while

in transit. Duplicate samples were collected at a frequency of 10% to assess sampling and analytical precision. Trip blanks for VOC and 1,2,3-TCP analyses were provided by the laboratory and placed inside each cooler containing groundwater samples to be analyzed for VOCs and/or 1,2,3-TCP.

Because dedicated low-flow pumps were used, no equipment blanks were collected as part of the second quarter 2017 sampling activities. The data validation findings are discussed in Section 3.

2.9 DEVIATIONS FROM THE REVISED OPERATIONAL SAMPLING PLAN

There were some deviations from the OSP and SAP Addendum, as follows:

- Monitoring well 3850S was not gauged because the monitoring well vault was unable to be opened. The monitoring well has been added to the maintenance list and the well vault will be serviced or removed prior to the next sampling event.
- Monitoring wells A-1-CW07, B-1-CW29, B-5-CW03, B-6-CW17, C-1-CW06 and MW-01 were dry during the monitoring event. Therefore, the monitoring wells were not sampled.
- Monitoring well 3850M, 3860J, and 4949C had insufficient water to sample.

SECTION 3
GROUNDWATER SAMPLING DATA VALIDATION

The objective of data validation is to identify any questionable or invalid laboratory measurements. Data validation entails a review of the QC data and the raw data or summary data to verify that the laboratory was operating within required limits and that the analytical results were correctly transcribed from the instrument readouts. In addition, data validation indicates which, if any, environmental samples were related to out-of-control QC samples.

The data were validated using the most recent versions of the USEPA's National Functional Guidelines for data validation available at the time of project initiation, where appropriate (USEPA, 2016b and 2016c). These procedures and criteria may be modified, as necessary, to address project-specific and method-specific criteria, control limits, and procedures. Data validation consists of data screening, checking, reviewing, editing, and interpretation to document analytical data quality and to determine whether the quality is sufficient to meet the data quality objectives (DQOs).

The data validator verifies that reduction of laboratory measurements and laboratory reporting of analytical parameters is in accordance with the procedures specified for each analytical method and/or as specified in the OSP. Any deviations from the analytical method or any special reporting requirements apart from those specified in the OSP are documented.

In order to assess the suitability of analytical results to support groundwater monitoring decisions, the BOU groundwater monitoring program QC manager undertook the following procedures:

- Checked extraction and analysis holding time
- Reviewed laboratory reports and chain-of-custody documentation for errors and omissions
- Checked laboratory reports for correct reporting limits and units
- Checked surrogate, laboratory control sample (LCS), laboratory control sample duplicate (LCSD), and matrix spike (MS), and matrix spike duplicate (MSD) results
- Assessed blank results and noted any detected analytes, their respective concentrations, and any impact to associated samples
- Assessed sample internal standard responses and surrogate recoveries

- Reviewed instrument calibrations
- Compared laboratory and field duplicate sample results and noted any significant variations

Specific QA indicators were evaluated to assess the overall usability of the data. These indicators included accuracy, precision, representativeness, comparability, and completeness. The parameters are described below.

- Accuracy is established by reviewing spiked sample analysis. The LCS measures the accuracy of the instrument, and the LCS results for this dataset were all found to be within control limits. Therefore, the accuracy for the sampling event was satisfactory.
- Precision is established by calculating the relative percent difference (RPD) values for MS/MSD pairs and field duplicates. The RPD values calculated for the sampling event show that greater than 95% of the RPDs calculated were within control limits. Therefore, the precision for the sampling event was satisfactory.
- Representativeness is established by using standard field sampling techniques. Because the field sampling was conducted in accordance with the OSP and by following established standard operating procedures, the sampling is judged to have adequate representativeness. Therefore, the representativeness for the sampling event was satisfactory.
- Comparability of the data is preserved if the analytical analyses are conducted under approved and vetted USEPA analytical methods. Because the USEPA methods are constructed with comparability built into the methods, by using approved analytical methods for the BOU project, the BOU data are comparable. Therefore, the comparability for the sampling event was satisfactory.
- Completeness is measured by determining the amount of valid data produced by the laboratory as compared to the total possible data from the chain. This dataset had no rejected data, and all samples were analyzed as per the chains. The data completeness is 100%, which exceeds the 90% criterion. Therefore, the completeness for the sampling event was satisfactory.

Based upon the data review, the data are considered usable as qualified. A QA/QC summary is presented in Appendix D. Data validation summary tables are included in Appendix D as well. All testing was provided by the Eurofins Calscience, a California Department of Public Health-accredited environmental laboratory. The laboratory analytical data packages, which include all environmental, field QC, and laboratory QC results, are provided in Appendix G.

SECTION 4
GROUNDWATER MONITORING RESULTS

This section provides the results and interpretations of the groundwater monitoring event.

4.1 GROUNDWATER ELEVATIONS

Groundwater elevations for the second quarter 2017 monitoring event are presented in Table 3. Potentiometric maps based on the groundwater elevation data are shown on Figures 3 and 4 for the WT HSUs and B HSU, respectively. The potentiometric surface maps were generated using an historic understanding of groundwater flow and data from current extraction system operations.

Extraction Well	Date Observation Well was Measured	Daily Total Pumped (gallons)					
		16-Apr-17	17-Apr-17	18-Apr-17	19-Apr-17	20-Apr-17	21-Apr-17
VO1	4/19/2017	0	0	0	0	0	0
VO2	4/19/2017	1,725,798	1,717,897	1,661,598	1,729,045	1,729,484	1,728,935
VO3	4/19/2017	0	0	0	0	0	0
VO4	4/20/2017	1,124,398	1,117,581	1,075,935	1,132,763	1,135,808	1,134,567
VO5	4/20/2017	1,674,028	1,681,589	1,675,570	1,713,193	1,714,287	1,712,318
VO6	4/20/2017	0	0	0	0	0	0
VO7	4/20/2017	1,678,693	1,670,613	871,700	0	0	0
VO8	4/19/2017	0	0	832,967	1,763,441	1,737,906	1,725,718

4.1.1 Water Table Hydrostratigraphic Units

The local groundwater flow direction during the second quarter 2017 groundwater monitoring event was predominantly southeasterly in the northwest portion of the BOU and southerly in the northeast portion of the BOU, and it converged in a flow direction toward the cones of depression created by the operation of the BOU extraction wells. The second quarter 2017 groundwater elevation data indicate that the dominant direction of groundwater flow immediately south of the BOU extraction wells was reversed from its natural southeasterly flow direction, to a northerly flow direction in response to the extraction well pumping (northeasterly flow direction in the western portion of the

BOU). These groundwater trends extend to Victory Boulevard in the western portion of the BOU, West Allan and Wyoming Avenue in the central-western portion of the BOU, and to at least Chandler Boulevard in the eastern portion of the BOU. Beyond these boundaries the groundwater flow direction shows influence from pumping, but ultimately reverts to its natural southeasterly direction.

Groundwater extraction appeared to be the dominant influence on groundwater flow within the monitoring well network. Groundwater extraction created a northwest-aligned trough with respect to the water table surface, creating a series of coalescing cones of depression surrounding the BOU extraction wells, as shown on Figure 3.

4.1.2 B-Zone Hydrostratigraphic Unit

The local groundwater flow direction in the B HSU during the second quarter 2017 groundwater monitoring event, as shown on Figure 4, was generally the same as the local groundwater flow direction observed in the WT HSUs. The greater drawdown observed at extraction well V08 in the second quarter 2017 compared with the second quarter 2016 is due to the inclusion of data from new observation well OW-V08B.

4.1.3 Groundwater-Level Trends

Groundwater elevation trends were evaluated by examining annual precipitation data, cumulative pumping data from the BOU extraction system, and hydrographs for the monitoring wells included in the monitoring program. Hydrographs showing piezometric surface elevations over time were used to evaluate long-term trends in groundwater elevations (Appendix C). The hydrographs are generally dominated by a few long-term trends, as described below.

- The groundwater elevation within the BOU generally declined from 1988 to late 1992.
- The trend reversed in 1992, and groundwater elevations generally rose through early 1996 (with a minor dip in 1995).
- From early 1996 (the beginning of groundwater extraction at the BOU) through 2004, groundwater elevation generally decreased.
- From 2004 through early 2007, groundwater elevation rose.
- From early 2006 through 2010, groundwater elevation stabilized (on average).
- Groundwater elevation rose from late 2010 to the second quarter of 2013.

- Groundwater elevation declined from the second quarter of 2013 to the second quarter of 2017.

Figure 5 shows hydrographs from three clustered sets of monitoring wells and annual precipitation on the same graph. The three monitoring well clusters are from north of the extraction system in the Plant B-6 area, from near the extraction system in the Plant B-1 area, and from south of the extraction system. Each paired set of monitoring wells includes a monitoring well completed in one of the WT HSUs and one completed in the B HSU. The precipitation data are from the Valley Pumping Plant and/or the Bob Hope Airport in Burbank (Weather Warehouse, 2011; Weather Underground, 2017). Although the data are limited, prior to the startup of the BOU extraction system in 1996 there appears to be some correlation between precipitation and general water-level elevation. However, the dominant factor driving groundwater elevation changes is likely groundwater extraction in the basin and at nearby extraction wells, rather than a direct relationship to precipitation. This can be observed in the steepening hydraulic gradient between the upgradient Plant B-6 cluster and the Plant B-1 cluster after pumping began. While there are slight differences between how the monitoring well clusters from the different areas of the BOU respond over time, they generally track together. A review of the hydrographs also reveal an increase in the upward vertical gradient between all three paired monitoring wells after the BOU extraction system was started up, particularly in the B-1 pair that are nearest to the extraction system.

4.2 ANALYTICAL DATA SUMMARY

Sixty-five groundwater monitoring wells were sampled during the second quarter 2017 monitoring event. The samples collected were tested for VOCs, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Twenty-one organic and two inorganic analytes were detected. A summary by monitoring well of the validated laboratory analytical results for the analytes detected during the water quality monitoring event is presented in Table 5. Only results for analytes that were detected at concentrations above their respective method detection limits are shown in Table 5. Analytical results that were above a regulatory threshold (i.e., California Department of Public Health maximum contaminant level [MCL] or California Department of Public Health drinking water notification level [DWNL]) are shown in bold type and the cell is highlighted in Table 5. A further summary of the analytes detected, associated regulatory thresholds, number of exceedances, and the range of concentrations detected is presented in Table 6.

Figures 6 through 17 show isocontours of PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium in the WT HSUs and the B HSU based on the analytical results from the 2017 sampling event. These compounds were selected for contouring because they are considered either primary or emerging chemicals of concern. Initial contours for the groundwater concentration data were generated with C Tech's Earth Volumetric Studio software using a kriging algorithm. These contours were then adjusted by hand based on professional judgment.

4.2.1 Tetrachloroethene

PCE has an MCL of 5 µg/L. It was detected in 59 of the primary (non-duplicate) samples, 37 of which exceeded the MCL. The detected concentrations ranged from 0.20 µg/L (monitoring well B-6-CW05) to 630 µg/L (monitoring well B-1-CW33).

Concentrations in the WT HSUs ranged from <0.20 µg/L to 630 µg/L (monitoring well B-1-CW33). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected at the northwest corner of the former Plant B-1 and trending southeast beneath former Plant B-1 and extending to Magnolia Boulevard (Figure 6).

Concentrations in the B HSU ranged from <0.20 µg/L to 48 µg/L (monitoring well 3850R). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected adjacent to the extraction wells on Vanowen Street (Figure 7).

4.2.2 Trichloroethene

TCE has an MCL of 5 µg/L. It was detected in 53 of the samples, 35 of which exceeded the MCL. The detected concentrations ranged from 0.29 µg/L (monitoring well C-1-CW05) to 240 µg/L (monitoring wells 3872L and B-1-CW13).

Concentrations in the WT HSUs ranged from <0.29 µg/L to 240 µg/L (monitoring wells 3872L and B-1-CW13). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected downgradient of former Building 85 and extending to Magnolia Boulevard (Figure 8).

Concentrations in the B HSU ranged from <0.29 µg/L to 32 µg/L (monitoring well 3862E). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected south of the BOU. Additionally, elevated concentrations were

detected in the southern portion of the former Plant B-6 area and continuing southeast beneath former Building 85 and extending to Vanowen Street (Figure 9).

4.2.3 1,2,3-Trichloropropane

The analyte 1,2,3-TCP has a DWNL of 0.005 µg/L. It was detected in 31 of the samples, 30 of which exceeded the DWNL. The detected concentrations ranged from 0.0045 µg/L (monitoring well 3861F) to 87 µg/L (monitoring well A-1-CW08).

Concentrations in the WT HSUs ranged from <0.0025 µg/L to 87 µg/L (monitoring well A-1-CW08). Concentrations exceeding the DWNL extended over much of the BOU with the highest concentrations detected down gradient of the former Plant B-6 area, north of former Building 85, and along Vanowen Street (Figure 10).

Concentrations in the B HSU ranged from <0.0025 µg/L to 0.29 µg/L (monitoring well 3852H). Concentrations exceeding the DWNL were not as widely distributed as in the WT HSUs, with the highest concentrations detected near Burbank Boulevard (Figure 11).

4.2.4 1,4-Dioxane

The analyte 1,4-dioxane has a DWNL of 1.0 µg/L. It was detected in 11 of the samples, 11 of which exceeded the DWNL. The detected concentrations ranged from 1.0 µg/L (monitoring well B-1-CW11) to 3.7 µg/L (monitoring well A-1-CW09).

Concentrations in the WT HSUs ranged from <0.28 µg/L to 3.7 µg/L (monitoring well A-1-CW09). Concentrations exceeding the DWNL are limited but spread out through the BOU specifically at former Plants A-1-S, B-1, and C-1 as well as downgradient of Former Building 371(Figure 12).

Concentrations in the B HSU ranged from <0.28 µg/L to 2.3 µg/L (monitoring well A-1-CW05). Similar to the WT HSUs, concentrations exceeding the DWNL extended around the former Plant B-6 and A-1 areas of the BOU, with the highest concentrations detected at the former Plant A-1-S (Figure 13).

4.2.5 Total Chromium

Total chromium has an MCL of 50 µg/L. It was detected in 65 of the samples, 2 of which exceeded the MCL. The detected concentrations ranged from 0.600 µg/L (monitoring well C-1-CW02) to 82.9 µg/L (monitoring well C-1-CW07).

Concentrations in the WT HSUs ranged from 1.05 J (A-1-CW03R) to 82.9 µg/L (monitoring well C-1-CW07). One sample from the eastern portion of the BOU near the former Weber Aircraft facility and one sample near former Plant C-1 had concentrations detected exceeding the MCL (Figure 14).

Concentrations in the B HSU ranged from 0.600 µg/L (monitoring well C-1-CW02 to 7.85 µg/L (3872S). No concentrations were detected that exceeded the MCL (Figure 15).

4.2.6 Hexavalent Chromium

Hexavalent chromium has an MCL of 10 µg/L. It was detected in 58 samples, 5 of which exceeded the MCL. The detected concentrations ranged from 0.010 µg/L µg/L (monitoring well A-1-CW03R) to 20 µg/L (monitoring well B-1-CW17).

Concentrations in the WT HSUs range from 0.010 µg/L µg/L (monitoring well A-1-CW03R) to 20 µg/L (monitoring well B-1-CW17). Four of the 5 samples that exceeded the MCL are located in the central to southern portions of former Plant B-1. The other sample that exceeded the MCL is located immediately outside of the northeastern boundary of the BOU (Figure 16).

Concentrations in the B HSU ranged from 0.021 µg/L (monitoring well 3850R) to 7.9 µg/L (monitoring well 3872S). No concentrations were detected above the MCL (Figure 17).

SECTION 5
STATISTICAL TREND ANALYSES

Statistical trend analyses were conducted using chemical data from the 65 monitoring wells sampled as part of the 2017 BOU groundwater monitoring program. The analysis was performed for the six primary chemicals of concern: PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Therefore, a total of 390 trends were tested. The Monitoring and Remediation Optimization System (MAROS), developed by the Air Force Center for Environmental Excellence (Air Force Center for Environmental Excellence, 2006), was used for the analyses. MAROS is a statistical database application developed to assist with groundwater quality data trend analysis and long-term monitoring optimization at contaminated groundwater sites. BOU data from first quarter 1996 (i.e., full-scale implementation of the groundwater extraction system) to second quarter 2017 were analyzed. A summary of the statistical-trend analyses is provided in Appendix E.

5.1 STATISTICAL ANALYSIS METHODS

The software performs parametric and nonparametric trend analyses to evaluate temporal and spatial contaminant trends using Mann-Kendall and linear regression methods. Brief descriptions of the methods follow.

5.1.1 Mann-Kendall Analysis

This statistical procedure was used to evaluate the data for trends. It is a nonparametric statistical procedure that is well suited for analyzing trends in data over time. The Mann-Kendall test for trend is suitable for analyzing data that follow a normal or non-normal distribution pattern. The Mann-Kendall test has no distributional assumptions and allows for irregularly spaced measurement periods or missing data. The advantage with this approach involves the cases where outliers in the data would produce biased estimates of the least squares estimated slope.

5.1.2 Linear Regression Analysis

This parametric statistical procedure was used to calculate the magnitude of the trends. A parametric statistical procedure is typically used for analyzing trends in data over time and requires a normal statistical distribution of the data.

5.2 STATISTICAL TREND CATEGORIES

There are seven statistical concentration trend types derived from Mann-Kendall analysis: 1) decreasing, 2) increasing, 3) no trend (displaying two sets of conditions), 4) probably decreasing, 5) probably increasing, 6) stable, and 7) non-detect (ND; all sample results are below the detection limit). If a location has fewer than four quarters of data, then the Mann-Kendall analysis cannot be run and not applicable (NA) would be applied to the results. These statistical concentration trend types are determined by the following conditions:

Mann-Kendall Statistic (S)	Confidence in Trend	Concentration Trend
S > 0	> 95%	Increasing
S > 0	90 - 95%	Probably Increasing
S > 0	< 90%	No Trend
S ≤ 0	< 90% and COV ≥ 1	No Trend
S ≤ 0	< 90% and COV < 1	Stable
S < 0	90 - 95%	Probably Decreasing
S < 0	> 95%	Decreasing
ND	-	Non-detect
NA	-	Not applicable

Notes: > - Greater than
< - Less than
≤ - Less than or equal to
COV - Coefficient of Variation
S - Mann-Kendall statistic
ND - All results non-detect
NA - Not applicable, less than four quarters of data

The Mann-Kendall statistic (S) measures the trend in the data. Positive values indicate an increase in constituent concentrations over time, whereas negative values indicate a decrease in constituent concentrations over time. The strength of the trend is proportional to the magnitude of the Mann-Kendall Statistic (i.e., large magnitudes indicate a strong trend).

The Coefficient of Variation (COV) is a statistical measure of how the individual data points vary about the mean value. Values less than or near 1.00 indicate that the data form a relatively close

group about the mean value. Values larger than 1.00 indicate that the data show a greater degree of scatter about the mean.

"Confidence in Trend" is the statistical confidence that the constituent concentration is increasing (S>0) or decreasing (S<0).

If there were insufficient data or fewer than four sampling events, then "not applicable (NA)" was applied to the results.

5.3 RESULTS OF STATISTICAL ANALYSES

The overall results of the Mann-Kendall trend analyses are presented on Table 7. The breakdown of the overall trends were similar to 2016 but the number of stable trends decreased by approximately 5% and the number of decreasing trends increased by 5%. The number of analysis indicting insufficient data increased because of the addition of the new wells. The statistical analysis tested 390 datasets to evaluate for trends. The statistical analysis yielded a result of either insufficient data, ND, or no trend for 169 of the datasets tested. The decreasing or probably decreasing trend monitoring wells totaled 115, and the magnitude of the trends ranged from -182 to -0.0013 micrograms per liter per year (µg/L/yr). The decreasing trends as a percentage for the period analyzed ranged from -24 to -0.47 percent per year (%/yr). Sixty-six monitoring wells demonstrated a stable trend. Forty monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.00062 to 8.76 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 0.82 to 88%/yr. Four of the increasing trends as a percentage change were 20%/yr or higher. The magnitudes of the trends are discussed by chemical of concern in the following subsections. Table 8 provides a more detailed summary of the trend analysis by monitoring well for those monitoring wells demonstrating an increasing or probably increasing trend for one or more of the primary chemicals of concern. Historical chemical of concern data for each monitoring well sampled are provided in Appendix E. The table of historical data includes a summary by monitoring well of all analytical results for the six chemicals of concern.

Time versus concentration graphs for the 17 monitoring wells identified in the OSP are presented in Appendix E; monitoring well 3860H was also identified in the OSP, but the monitoring well was destroyed in 2015 so a time versus concentration graph was not included.

5.3.1 Tetrachloroethene

Figures 18 and 19 summarize the trend analysis results for PCE in the WT HSUs and B HSU, respectively. The statistical analysis for PCE yielded a result of either insufficient data, ND, or no trend for 12 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring wells totaled 37, and the magnitude of the trends ranged from -182 to -0.07. The decreasing trends as a percentage for the period analyzed ranged from -18.3 to -2.01%/yr. The decreasing trends in the WT were scattered throughout the BOU. The decreasing trends in the B HSU are primarily adjacent to the BOU extraction wells and to the north near former the Plant B-6 area. Thirteen monitoring wells demonstrated a stable trend. Three monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.02 to 3.80 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 2.92 to 3.65%/yr. There were no increasing or probably increasing trends identified in the WT HSU wells. Three increasing trend wells were identified in the B HSU. Two wells were adjacent to the BOU extraction wells and one well was upgradient of the BOU extraction wells. All three monitoring wells are within the area captured by the BOU extraction wells. The magnitude of the increasing trends and the percentage these changes in concentration represent are not large.

The following B-HSU monitoring wells exhibited increasing or probably increasing trends:

- 3850R: The 2017 concentration in this well was 48 micrograms per liter (µg/L). This well is located between extraction well VO6 and VO7 and upgradient of VO8. The magnitude of the increasing trend is 3.80 µg/L/yr and represents a change of 2.92%/yr over the period analyzed.
- B-1-CW28: The 2017 concentration in this well was 13 µg/L. This well is located between BOU extraction wells VO5 and VO6 and upgradient of VO8. The magnitude of the increasing trend is 0.91 µg/L/yr and represents a change of 3.65%/yr over the period analyzed.
- B-6-CW02: The 2017 concentration in this well was 0.56 µg/L. This well is located upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.02 µg/L/yr and represents a change of 3.29%/yr over the period analyzed. The analyte PCE has never been detected in this well at a concentration exceeding the MCL.

5.3.2 Trichloroethene

Figures 20 and 21 show the trend analysis results for TCE in the WT HSUs and the B HSU, respectively. The statistical analysis for TCE yielded a result of either insufficient data, ND, or no trend for 16 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring

wells totaled 39, and the magnitude of the trends ranged from -50 to -0.02 µg/L/yr. The decreasing trends as a percentage for the period analyzed ranged from -22 to -0.47%/yr. The decreasing trends in the WT HSUs were scattered throughout the BOU. The decreasing trends in the B HSU are primarily adjacent to or south of the BOU extraction wells. Eight monitoring wells demonstrated a stable trend. Two monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.14 to 2.38 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 1.41 to 3.83%/yr. The single increasing or probably increasing trend in the WT HSUs was 3830S, located south of former Plant B-5 and is upgradient of the BOU extraction system. The increasing trend in the B HSU was adjacent to the BOU extraction wells (within the area captured by the BOU extraction wells). The magnitude of the increasing trend and the percentage this change in concentration represent is not large.

The following WT-HSU monitoring well exhibited a probably increasing trend:

- 3830S: The 2017 concentration in this well was 85 µg/L. This well is located south of former Plant B-5 and is upgradient of the BOU extraction system. The magnitude of the probably increasing trend is 2.38 µg/L/yr and represents a change of 3.83%/yr over the period analyzed.

The following B-HSU monitoring well exhibited an increasing trend:

- 3850R: The 2017 concentration in this well was 7.8 µg/L. This well is located between extraction well VO6 and VO7 and upgradient of VO8. The magnitude of the increasing trend is 0.14 µg/L/yr and represents a change of 1.41%/yr over the period analyzed.

5.3.3 1,2,3-Trichloropropane

The analyte 1,2,3-TCP has historically been analyzed by two methods: as part of the standard VOC analyses (currently USEPA Method 8260B), which has a higher detection limit, and by low-level 1,2,3-TCP analyses (currently USEPA Method 8260B SIM), which has a lower detection limit. All 1,2,3-TCP data from 1996 to 2000 was a result of the VOC analyses (i.e., higher detection limits, generally several orders of magnitude higher than current 1,2,3-TCP concentrations). The MAROS application assigns a value of one-half of the detection limit in the case of non-detects. Therefore, the MAROS application would assign higher 1,2,3-TCP concentrations to the early 1,2,3-TCP non-detects which would skew the statistical analysis. To account for this, non-detects with high detection limits were not included in the 1,2,3-TCP statistical analysis.

Figures 22 and 23 show the trend analysis results for 1,2,3-TCP in the WT HSUs and the B HSU, respectively. The statistical analysis for 1,2,3-TCP yielded a result of either insufficient data, ND, or no trend for 44 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring wells totaled 7, and the magnitude of the trends ranged from -1.01 to -0.006 µg/L/yr. The decreasing trends as a percentage for the period analyzed ranged from -14.6 to -5.11%/yr. The decreasing trends in the WT HSUs were located at or upgradient of the extraction wells, the southwest boundary, and just south of the southern boundary of the BOU. There were no decreasing trends in the B HSU. Two monitoring wells demonstrated a stable trend. Twelve monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.00062 to 1.41 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 2.56 to 29%/yr. The increasing trends in the WT HSUs are scattered throughout the BOU and are within the area captured by the BOU extraction wells or upgradient of them, with the exception of monitoring wells 3852L, 3852M, and 3872N. The single increasing or probably increasing trend in the B HSUs was 3850R, located between extraction wells VO6 and VO7 and upgradient of VO8. With the exception of some of the Pacific Airmotive Corporation monitoring wells and monitoring well A-1-CW04, the magnitude of the increasing trends and the percentage these changes in concentration represent are not large.

The following WT-HSU monitoring wells exhibited increasing or probably increasing trends:

- MW-03: The 2017 concentration in this well was 0.93 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.43 µg/L/yr and represents a change of 13.5%/yr over the period analyzed.
- MW-04: The 2017 concentration in this well was 0.96 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.22 µg/L/yr and represents a change of 20%/yr over the period analyzed.
- MW-07: The 2017 concentration in this well was 0.60 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.07 µg/L/yr and represents a change of 18.1%/yr over the period analyzed.
- MW-08: The 2017 concentration in this well was 0.93 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.20 µg/L/yr and represents a change of 15.7%/yr over the period analyzed.

- 3852L: The 2017 concentration in this well was 0.032 µg/L. This well is located 4,000 feet south of the nearest BOU extraction well and is at the edge of the area captured by the BOU extraction wells. The magnitude of the increasing trend is 0.0080 µg/L/yr and represents a change of 8.94 %/yr over the period analyzed.
- 3852M: The 2017 concentration in this well was 0.21 µg/L. This well is located 5,000 feet south of the nearest BOU extraction well and appears to be south of the area of influence of the BOU extraction wells. The magnitude of the increasing trend is 0.016 µg/L/yr and represents a change of 12.4%/yr over the period analyzed.
- 3872L: The 2017 concentration in this well was 0.095 µg/L. This well is located 4,750 feet south of the nearest BOU extraction well and appears to be south of the area of influence of the BOU extraction wells. The magnitude of the increasing trend is 0.006 µg/L/yr and represents a change of 11.7%/yr over the period analyzed.
- A-1-CW04: The 2017 concentration in this well was 25 µg/L. This well is located is located in the former Plant A-1 area and is upgradient of BOU extraction well VO7. The magnitude of the increasing trend is 1.78 µg/L/yr and represents a change of 29%/yr over the period analyzed.
- A-1-CW08: The 2017 concentration in this well was 87 µg/L. This well is located downgradient of the former Plant B-6 and upgradient of the BOU extraction system. The magnitude of the increasing trend is 1.41 µg/L/yr and represents a change of 2.56%/yr over the period analyzed.
- A-1-CW09: The 2017 concentration in this well was 15 µg/L. This well is located is located in the former Plant A-1 area and is upgradient of BOU extraction well VO7. The magnitude of the probably increasing trend is 0.30 µg/L/yr and represents a change of 6.75%/yr over the period analyzed.
- B-1-CW13: The 2017 concentration in this well was 13 µg/L. This well is located between and within the influence of BOU extraction wells VO5 and VO6 and upgradient of VO8. The magnitude of the increasing trend is 0.88 µg/L/yr and represents a change of 5.48%/yr over the period analyzed.

The following B-HSU monitoring well exhibited an increasing trend:

- 3850R: The 2017 concentration in this well was 0.0074 µg/L. This well is located between extraction well VO6 and VO7 and upgradient of VO8. The magnitude of the increasing trend is 0.00062 µg/L/yr and represents a change of 7.67%/yr over the period analyzed.

5.3.4 1,4-Dioxane

Figures 24 and 25 show the trend analysis results for 1,4-dioxane in the WT HSUs and the B HSU, respectively. The statistical analysis for 1,4-dioxane yielded a result of either insufficient data, ND, or no trend for 30 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring wells totaled 11, and the magnitude of the trends ranged from -24 to -0.01 µg/L/yr. The decreasing trends as a percentage for the period analyzed ranged from -24 to -2.92%/yr. The

decreasing trends in the WT HSUs are scattered throughout the BOU. There was one probably decreasing trends in the B HSU, 3850R, located between extraction well VO6 and VO7 and upgradient of VO8. Thirteen monitoring wells demonstrated a stable trend. Eleven monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.003 to 0.53 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 1.08 to 11.5%/yr. The increasing trends in the WT and B HSUs were generally adjacent to and north of the extraction wells. All of the increasing trend monitoring wells are upgradient of the extraction wells or within the area captured by the BOU extraction wells. The magnitude of the increasing trends and the percentage these changes in concentration represent are not large.

The following WT-HSU monitoring wells exhibited increasing or probably increasing trends:

- MW-03: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.07 µg/L/yr and represents a change of 7.12%/yr over the period analyzed.
- MW-04: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.06 µg/L/yr and represents a change of 7.67%/yr over the period analyzed.
- MW-08: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.53 µg/L/yr and represents a change of 11.0%/yr over the period analyzed.
- 3852F: The 2017 concentration in this well was 1.5 µg/L. This well is located 5,000 feet south of the nearest BOU extraction well and appears to be south of the area of influence of the BOU extraction wells. The magnitude of the increasing trend is 0.06 µg/L/yr and represents a change of 10.6%/yr over the period analyzed.
- A-1-CW09: The 2017 concentration in this well was 3.7 µg/L. This well is located in the former Plant A-1 area and upgradient of BOU extraction well VO7. The magnitude of the probably increasing trend is 0.16 µg/L/yr and represents a change of 9.49%/yr over the period analyzed.
- B-1-CW13: The 2017 concentration in this well was 2.0 µg/L. This well is located between and within the influence of BOU extraction wells VO5 and VO6 and upgradient of VO8. The magnitude of the increasing trend is 0.05 µg/L/yr and represents a change of 5.66%/yr over the period analyzed.
- B-1-CW17: The 2017 concentration in this well was 2.9 µg/L. This well is located on the downgradient edge of the influence of the extraction well VO1. The magnitude of the

increasing trend is 0.09 µg/L/yr and represents a change of 8.94%/yr over the period analyzed.

- C-1-CW08: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located within the former Plant C-1 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.04 µg/L/yr and represents a change of 4.4%/yr over the period analyzed.

The following B-HSU monitoring wells exhibited increasing or probably increasing trends:

- B-6-CW14: The 2017 concentration in this well was 1.8 µg/L. This well is located in the former Plant B-1 area and upgradient of the BOU extraction system. The magnitude of the increasing trend is 0.10 µg/L/yr and represents a change of 11.5%/yr over the period analyzed.
- C-1-CW02: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located upgradient of the former Plant C-1 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.02 µg/L/yr and represents a change of 4.75%/yr over the period analyzed.
- C-1-CW05: The analyte 1,4-dioxane was not detected in this well in 2017. This well is located east of the former Plant B-5 area. The magnitude of the increasing trend is 0.003 µg/L/yr and represents a change of 1.08%/yr over the period analyzed. The analyte 1,4-dioxane has never been detected in this well at a concentration exceeding the notification level.

5.3.5 Total Chromium

Figures 26 and 27 show the trend analysis results for total chromium in the WT HSUs and the B HSU, respectively. The statistical analysis for total chromium yielded a result of either insufficient data, ND, or no trend for 40 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring wells totaled ten, and the magnitude of the trends ranged from -15.3 to -0.10 µg/L/yr. The decreasing trends as a percentage for the period analyzed ranged from -11.0 to -0.77%/yr. The decreasing trends in the WT and B HSUs are scattered throughout the BOU. Twelve monitoring wells demonstrated a stable trend. Three monitoring wells demonstrated an increasing or probably increasing trend, and the magnitude of the trends ranged from 0.13 to 0.42 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 5.29 to 7.85%/yr. All of the increasing trend monitoring wells in the WT and B HSUs are located adjacent to or upgradient of the BOU extraction wells, and within the area captured by the extraction wells. The magnitude of the increasing trends and the percentage these changes in concentration represent are not large.

The following WT-HSU monitoring wells exhibited increasing or probably increasing trends:

- 3860K: The 2017 concentration in this well was 3.44 µg/L. This well is located is located downgradient of the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the probably increasing trend is 0.22 µg/L/yr and represents a change of 5.48%/yr over the period analyzed. Total chromium has never been detected in this well at a concentration exceeding the MCL.
- B-6-CW16: The 2017 concentration in this well was 28.9 µg/L. This well is located downgradient of the former Plant B-6 and upgradient of the BOU extraction system. The magnitude of the increasing trend is 0.42 µg/L/yr and represents a change of 7.85%/yr over the period analyzed. Total chromium has never been detected in this well at a concentration exceeding the MCL.

The following B-HSU monitoring well exhibited a probably increasing trend:

- B-6-CW02: The 2017 concentration in this well was 2.95 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the probably increasing trend is 0.13 µg/L/yr and represents a change of 5.29%/yr over the period analyzed. Total chromium has never been detected in this well at a concentration exceeding the MCL.

5.3.6 Hexavalent Chromium

Figures 28 and 29 show the trend analysis results for hexavalent chromium in the WT HSUs and the B HSU, respectively. The statistical analysis for hexavalent chromium yielded a result of either insufficient data, ND, or no trend for 27 of the monitoring wells tested. The decreasing or probably decreasing trend monitoring wells totaled 11, and the magnitude of the trends ranged from -2.81 to -0.01 µg/L/yr. The decreasing trends as a percentage for the period analyzed ranged from -12.6 to -2.19%/yr. The decreasing trends in the WT HSUs are scattered across the BOU. The three decreasing trends in the B HSU are located at Building 371 and just immediately south of the BOU extraction wells. Eighteen monitoring wells demonstrated a stable trend. Nine monitoring wells demonstrated increasing or probably increasing trends, and the magnitude of the trends ranged from 0.03 to 8.76 µg/L/yr. The increasing trends as a percentage for the period analyzed ranged from 0.82 to 88 %/yr. The trends in the WT HSUs appear to be primarily located adjacent to or upgradient of the BOU extraction wells, and within the area captured by the extraction wells. The increasing trends in the B HSU are primarily south of the extraction wells and appears to be outside of the area captured by the extraction wells.

The following WT-HSU monitoring wells exhibited increasing or probably increasing trends:

- MW-04: The 2017 concentration in this well was 2.2 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.05 µg/L/yr and represents a

change of 3.65%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.

- MW-08: The 2017 concentration in this well was 2.1 µg/L. This well is located within the former Pacific Airmotive Corporation/Plant B-6 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.10 µg/L/yr and represents a change of 7.12%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.
- 3870D: The 2017 concentration in this well was 17 µg/L. The well is located in the northeast corner of the BOU east of Interstate 5. The well appears to be upgradient of the BOU extraction system. The magnitude of the increasing trend is 8.76 µg/L/yr and represents a change of 88%/yr over the period analyzed.
- 3872N: The 2017 concentration in this well was 6.7 µg/L. This well is located 4,750 feet south of the nearest BOU extraction well and appears to be south of the area of influence of the BOU extraction wells. The magnitude of the increasing trend is 2.49 µg/L/yr and represents a change of 80%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.
- C-1-CW03: The 2017 concentration in this well was 0.88 µg/L. This well is located upgradient of the former Plant C-1 area and is upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.03 µg/L/yr and represents a change of 7.67%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.

The following B-HSU monitoring well exhibited a probably increasing trend:

- 3851N: The current concentration in this well is 1.2 µg/L. The well is located 2000 feet south of the nearest BOU extraction well. The magnitude of the increasing trend is 0.01 µg/L/yr and represents a change of 2.19 %/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.
- 3852H: The 2017 concentration in this well was 1.1 µg/L. This well is located 4,750 feet south of the nearest BOU extraction well and appears to be south of the area of influence of the BOU extraction wells. The magnitude of the probably increasing trend is 0.01 µg/L/yr and represents a change of 0.82%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.
- 3861F: The 2017 concentration in this well was 4.9 µg/L. The well is located 1600 feet south of the nearest BOU extraction well and appears to be on the downgradient edge of the influence of the BOU extraction wells. The magnitude of the increasing trend is 0.04 µg/L/yr and represents a change of 1.41 %/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.
- B-6-CW02: The 2017 concentration in this well was 2.5 µg/L. This well is located upgradient of the BOU extraction wells. The magnitude of the increasing trend is 0.03 µg/L/yr and represents a change of 4.02%/yr over the period analyzed. Hexavalent chromium has never been detected in this well at a concentration exceeding the MCL.

5.4 COMPOUNDS OF CONCERN COMPARISON

During the USEPA's review of the 2013 BOU Annual Groundwater Monitoring and Emerging Compounds Report (Arcadis 2013), the USEPA requested that the analytical results for the compounds of concern (PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium) be compared to previous results to look for increases in concentrations. The concern was that limited or variable datasets can be problematic for statistical analysis and that inspection of the most recent data may identify a possible increasing trend before statistical analysis will. Specifically it was requested that the data be evaluated for the three following criteria:

- Criteria 1- Determine if detected concentration represents a new maximum for that monitoring well
- Criteria 2 - Determine if detected concentration exceeds the water-quality objectives for the first time in a period of two years
- Criteria 3 - Determine if the concentration is greater than the previous reported concentration by a factor of 50% or more and if it is in excess of the water quality objectives

Sixty-five monitoring wells were sampled and tested in 2017 and there are six primary compounds of concern, therefore, each of the three criteria were applied against 390 datasets. The same datasets used for the statistical analysis (January 1996 to the present) was used for this evaluation as well. Table 9 presents the result of the analysis and the matrix below summarizes the results.

- Criteria 1 – 40 of the 390 results represented a new maximum
- Criteria 2 – 3 of the 390 results represented a new exceedance of the MCL/DWNL since May 2014
- Criteria 3 – 29 of the 390 results represented an exceedance of the MCL/DWNL and the concentration was more than 50% higher than the last known concentration for that monitoring well.

Summary of Data Comparison						
	Wells That Met Criteria 1: New Maximum Concentration		**Wells That Met Criteria 2: New Exceedance of MCL/DWNL since March 2016**		**Wells That Met Criteria 3: Exceedance of the MCL/DWNL and 50% Higher than Last Measured Concentration**	
Analyte	**Number of Wells**	**Concentration Range (µg/L)**	**Number of Wells**	**Concentration Range (µg/L)**	**Number of wells**	**Concentration Range (µg/L)**
PCE	5	13.0 - 630	0	NA	7	14.0 - 630
TCE	5	0.29 - 200	0	NA	11	12.0 - 240
1,2,3-TCP	5	0.0011 - 25	0	NA	5	0.057 - 25
1,4-Dioxane	5	1.5 - 3.7	1	1.5	4	1.5 - 3.7
Total Chromium	2	0.028 - 17	1	16	1	16
Hexavalent Chromium	15	29 - 47	1	82.9	1	82.9
Total	40	NA	3	NA	29	NA

Note: NA – not applicable

The following observations were made while compiling these data:

- Several of the cases where one or more of these criteria were met were for monitoring wells where analytical detection limits have decreased, resulting in current detections at concentrations well below the former detection limits. The reduced detection limits are generally due to increased sensitivities of the analytical methods.
- Many monitoring wells have limited datasets (as few as four or five analyses since 1996) and provide less perspective over time or previous data for comparison.
- Some of the cases where these criteria were met were in areas where there is likely downgradient migration from higher concentration areas; or small upward changes in concentration in areas of known impacts.
- Five new wells were installed in the Plant B-1 area 2016. Twelve of the criteria 1 and eight of the criteria 3 exceedances were associated with those new wells.

Neither criteria 1, 2, or 3 identified any changes in concentration or plume morphology beyond those already presented on the isoconcentration maps or identified in the trend analysis that warrant further investigation at this time.

SECTION 6
CAPTURE ZONE EVALUATION

The systematic approach outlined in the USEPA guidance document *A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems* (USEPA, 2008) was followed to assess the current status of hydraulic capture at the BOU. Data collected from October 2016 through early April 2017 were evaluated to assess capture. The lines of evidence collected from the site and used to complete the evaluation included the following: summation of extraction system operation, evaluation of the measured groundwater levels, analysis of hydraulic gradients (horizontal and vertical), concentration trend analyses, and a review of water-level trends during the reporting period. The following sections present a summary of each of these diagnostic components.

6.1 BOU EXTRACTION SYSTEM

The City of Burbank compiles extraction well discharge rates and water treatment plant operational data in monthly operations reports that are provided to the California Department of Public Health and the USEPA. These reports include the total daily volume of water pumped from each of the BOU extraction wells and the influent/effluent concentrations of the contaminants of concern. Table 10 provides a summary of monthly groundwater production from each of the eight groundwater extraction wells from May 2016 through April 2017.

Based on the data from the BOU monthly operation reports for the current reporting period (May 2016 through April 2017), an estimated 3,129,230,274 gallons of groundwater was extracted (average extraction rate of 5,937 gallons per minute) and approximately 3,697 pounds of volatile organic compounds (VOCs) were treated by the Burbank Operable Unit (BOU) treatment system (see Table 11). The estimated mass of VOCs removed by the BOU extraction wells and treatment system are based on the average monthly influent concentrations of total VOCs and the total volume of influent to the water treatment plant.

Since inception of the treatment system in 1996 through April 2017, the BOU has extracted an estimated 64,387,442,880 gallons of groundwater and removed approximately 259,422 pounds of VOCs. A summary of the cumulative volume of water and estimated mass of VOCs treated by year from 1996 through April 2017 is provided in Appendix F.

All eight BOU extractions wells operated during the period reported. Extraction wells VO2, VO4, VO6, and VO8 were operating 91%, 79%, 78% and 80% of the period reported, respectively, and produced approximately 65% of the total volume pumped. The remaining four extraction wells were operating 34% to 52% of the period reported, and produced approximately 5% to 12% of the total volume pumped.

6.2 MEASURED GROUNDWATER LEVELS

Figures 3 and 4 present the potentiometric surface contours in the WT HSUs and the B HSU, respectively. Elevation data shown on both figures indicate that groundwater flows from northwest toward southeast across the BOU. The best indication of the steady-state hydraulic gradient (absent the effects of groundwater extraction) is shown in the western area of the Bob Hope Airport where groundwater flows from northwest to southeast at a gradient of 0.002 foot/foot.

Groundwater extraction appeared to be the dominant influence on groundwater flow within the monitoring well network. Groundwater extraction created a northwest-aligned trough with respect to the water table, creating a series of coalescing cones of depression beneath the BOU extraction wells. All of the BOU extraction wells are located in a linear alignment along or projecting east of Vanowen Street with the exception of VO8, which is located one block south of VO6. Figure 3 shows, in detail, the considerable cone of depression formed by the BOU extraction well system to capture contaminated groundwater present in the WT HSUs. Figure 3 also shows that the dominant direction of groundwater flow immediately south of the BOU was reversed from its natural southeasterly flow direction, as it followed a northerly flow direction into the cones of depression created by the BOU extraction wells. The influence of VO8 can be seen in the southward extension of the extraction system cone of depression apparent to the south of VO5 and VO6 toward Victory Boulevard (Figure 3 and 4).

The local groundwater flow direction in the B HSU was generally the same as the local groundwater flow direction observed in the WT HSUs: toward the southeast and converging on the area of groundwater extraction.

There appears to be a hydraulic divide in the vicinity of monitoring wells 3862D and 3872Q, in which the water table elevation contours exhibited changes in direction. These changes in direction

indicate the approximate location of the southern limit of hydraulic capture, which is shown on Figure 3.

The data from select monitoring wells equipped with pressure transducers were converted to hydrographs and are presented in Appendix C. The result is a series of very detailed hydrographs for the reporting period from October 2016 through April 2017. From October 2016 through early April 2017, the groundwater levels in BOU monitoring wells generally declined.

The following observations are based upon a review of the data presented in the hydrographs in Appendix C:

- Graph C-7: Groundwater monitoring wells 3851M (WT HSUs) and 3851N (B HSU), located approximately 1,300 feet southwest of extraction well VO8, 2,000 feet southwest of extraction well VO6, and 1,800 feet south of extraction well VO7, exhibited influence from changes in pumping in all three BOU extraction wells. The influence from changes in pumping was up to 0.6 feet in magnitude. The greatest influence seems to be from changes in pumping at VO8. There was consistently approximately 0.5 feet of head difference between these two monitoring wells indicating an upward vertical gradient.
- Graph C-9: Groundwater monitoring well 3852L (WT HSUs), located approximately 2,800 feet south of extraction well VO8, 4,000 feet south of extraction well VO6, and 4,200 feet south of extraction well VO7, exhibited a slight response to changes in pumping in VO8. There was no observable response to changes in pumping in VO6 or VO7.
- Graph C-12: Groundwater monitoring well 3861D (WT HSUs), located approximately 190 feet southwest of extraction well VO3, 180 feet south of extraction well VO4, and 2,500 feet east of extraction well VO8, exhibited response to changes in pumping in all three extraction wells. The response to pumping was typically less than 0.5 feet in magnitude. Groundwater monitoring well 3861F (B HSU), co-located with 3861D, exhibited response to changes in pumping in all three BOU extraction wells. The response to changes in pumping was up to 1 foot in magnitude, and the greatest influence appeared to be from VO8. There was consistently approximately 4 feet of head difference between these two monitoring wells indicating a vertical gradient upward.
- Graph C-15: Groundwater monitoring well 3871H (WT HSUs), located approximately 2,300 feet south of extraction well VO1 and 2,700 feet southeast of extraction well VO2, exhibited response to changes in pumping in both VO1 and VO2. The response to changes in pumping in VO1 was greater (up to 1.25 feet, compared to 1 foot from pumping in VO2). Water levels fluctuated up to 2.5 feet when both pumps were operating.
- Graph C-19: Groundwater monitoring well 3880 (WT HSUs), located approximately 2,600 feet northeast of extraction well VO1, exhibited a slight response to changes in pumping in VO1.
- Graph C-22: Groundwater monitoring well A-1-CW04 (WT HSUs), located approximately 1,100 feet west of extraction well VO7 and 2,600 feet northwest of extraction well VO8,

exhibited significant response to changes in pumping in VO7 and slight response to changes in pumping in VO8. Groundwater monitoring well A-1-CW05 (B HSU), approximately co-located with A-1-CW04, exhibited response to pumping in both VO7 and VO8. There was consistently approximately 1 foot or more of head difference between these two monitoring wells indicating an upward vertical gradient.

- Graph C-24: Groundwater monitoring well B-1-CW12 (WT HSUs), located approximately 600 feet east of extraction well VO1, historically exhibited significant response to pumping in VO1, with fluctuations up to 2 feet or more in magnitude when pumping stops and starts in extraction well VO1. Groundwater monitoring well B-1-CW11 (B HSU), co-located with B-1-CW12, exhibited responses to pumping rate changes in VO1, with fluctuations generally on the order of 1 to 1.5 feet in magnitude. There is consistently more than 5 feet of head difference between these two monitoring wells indicating a vertical gradient upward. The shallow WT HSU is controlled by pumping from the western end of the groundwater extraction system. While pumping influenced the B HSU, water levels in the both zones declined during the reporting period.
- Graph C-25: Groundwater monitoring well B-1-CW13 (WT HSUs), located approximately 500 feet west of extraction well VO5 and 800 feet east of extraction well VO6, exhibited response to changes in pumping in both VO5 and VO6. The response to changes in pumping in VO5 was greater (2.5 feet or greater, compared to 1.5 feet from changes in pumping in VO6). The water levels fluctuated up to 3 feet when both pumps were operating.
- Graph C-27: Groundwater monitoring well B-1-CW17 (WT HSUs), located approximately 2,000 feet southeast of extraction well VO1, exhibited some response to changes in pumping in VO1, with fluctuations up to 0.2 feet in magnitude. Groundwater monitoring well B-1-CW20 (B HSU), located approximately 1,500 feet southeast of extraction well VO1, appeared to exhibit a larger response to changes in pumping in VO1, with fluctuations generally on the order of 0.75 feet in magnitude.
- Graph C-28: Groundwater monitoring well B-1-CW25 (WT HSUs), located approximately 300 feet east of extraction well VO4 and 600 feet west of extraction well VO3, exhibited response to changes in pumping in both VO3 and VO4. The response to changes in pumping in VO4 was greater (up to 3 feet). The largest influence was when both extraction wells were pumping.

Figure 30 shows changes in the elevation of the WT HSUs from six monitoring wells within the BOU: monitoring wells B-6-CW-17 and 3850V (upgradient of the BOU extraction wells); monitoring well B-1-CW25 (between BOU extraction wells VO3 and VO4); and monitoring wells 3861D and Tt-PW-02 (downgradient of the BOU extraction wells VO3 and VO4). Unfortunately B-6-CW-17 is dry and the data is not useable. These monitoring wells represent a line that approximately parallels the direction of groundwater flow from northwest (upgradient) to southeast (downgradient). Water levels in the upgradient monitoring wells were higher than either the downgradient or extraction system monitoring wells. Due to their proximity to the BOU extraction wells, the water levels in the extraction well monitoring wells showed the greatest fluctuations from

changes in pumping. Data presented in Figure 30 also show that the water level in Tt-PW-02, the farthest downgradient monitoring well on the hydrograph, is higher than the extraction system monitoring wells. The water level in 3861D, located between the extraction system monitoring wells and Tt-PW-02, was general higher than the water level in the extraction system monitoring wells and lower than monitoring well Tt-PW-02. Supporting that during the period represented, the groundwater along the profile represented by the graph is flowing toward the extraction system.

6.3 HYDRAULIC GRADIENTS

6.3.1 Vertical Gradients

Groundwater-elevation data for selected monitoring well-cluster sets were used to evaluate the vertical hydraulic gradient at various points in the BOU and potential vertical groundwater flow. The vertical gradient (i) between the B HSU and the WT HSUs was calculated for the monitoring well-cluster sets by the following formula:

$i = dh/dl$,

where dh equals the difference between the groundwater elevations in the B HSU and overlying HSU, and dl equals the distance between the midpoint of the B HSU monitoring well screen and the midpoint of the saturated portion of the overlying HSU monitoring well screen. The direction and magnitude of the vertical gradient between the B HSU and the overlying WT HSUs at each monitoring well-cluster set are presented in Table 12.

The results indicate that there was a predominately upward vertical gradient over much of the BOU. This upward gradient is caused by the influence due to groundwater extraction (due to the fact that the BOU extraction wells are predominantly drawing from the WT HSUs), which lowers the WT HSUs' water level to elevations below the top of the B HSU's potentiometric surface. The magnitude of the upward gradient was generally greater in the monitoring well clusters that are closer to the BOU extraction wells.

A number of the transducers were installed in monitoring well clusters so the vertical hydraulic gradient can be evaluated. Monitoring well clusters near BOU extraction wells (B-1-CW12 [WT HSUs] and B-1-CW11 [B HSU]; Appendix C, Graph C-24) appear to show an upward vertical hydraulic gradient as a result of pumping from the WT HSUs. Similar upward gradients are observed

on the hydrographs for B-1-CW17 (WT HSUs) and B-1-CW20 (B HSU); 3861D (WT HSUs) and 3861F (B HSU); and 3851M (WT HSUs) and 3851N (B HSU); and A-1-CW04 (WT HSUs) and A-1-CW05 (B HSU) (Appendix C, Graphs C-27, C-12, C-7, and C-22, respectively). It should be noted that upward vertical hydraulic gradients are demonstrated over the full six-month period, suggesting that all pumping configurations from October 2016 through early April 2017 were capable of maintaining upward gradients for these subsets of monitoring wells.

6.3.2 Horizontal Gradients

Groundwater-elevation data for selected monitoring wells were used to evaluate horizontal hydraulic gradients (direction and magnitude) within the BOU using a triangulated irregular network (TIN). This horizontal hydraulic gradient analysis was completed using data collected during the April 2017 gauging event and TINs defined by monitoring wells distributed in the WT HSUs and the B HSU. The TIN segments established for this evaluation are shown on Figures 31 and 32 for the WT HSUs and the B HSU, respectively. As shown on these figures, the TIN cells are located adjacent to and immediately downgradient of the BOU extraction system. Consequently, the application of this diagnostic tool can help determine the near-well and downgradient extent of capture generated by the BOU extraction system.

A total of 38 TIN segments were defined for the WT HSUs (A through LL) and 25 TIN segments were defined for the B HSU (A through Y) to determine the direction and magnitude of the horizontal hydraulic gradients in the respective HSUs (Figures 31 and 32).

6.3.2.1 WT HSU TIN Results

Based on review of Figure 31, the hydraulic gradient in the area immediately to the south and east of the groundwater extraction well system are directly influenced by pumping, showing steep gradients and in some instances a reversal from the southeast-oriented regional trend, indicating strong hydraulic capture.

South of Victory Boulevard (triangles AA, BB, and CC), the direction of groundwater flow appears to ultimately result in flow toward the extraction system, but the hydraulic gradient is not as steep. Further to the south, the horizontal gradients calculated for triangles EE, FF, GG, and HH support partial capture in this region. However, the horizontal gradients in triangles KK and LL do not support capture in those regions.

6.3.2.2 B-Zone HSU TIN Results

The TIN map prepared for the B HSU (Figure 32) shows that groundwater directly adjacent to extraction well VO8 is influenced by pumping, and the influence quickly dissipates to the south, southwest, and west.

6.4 CHEMICALS OF CONCERN CONCENTRATION TRENDS

Concentration trends constitute another element in the evaluation of hydraulic capture. Per the guidance provided in *A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems* (USEPA, 2008), contaminant concentrations should be monitored at locations downgradient of the capture zone to demonstrate capture. Contaminant concentrations can be monitored at two types of downgradient locations: sentinel monitoring wells or downgradient performance monitoring wells. Sentinel monitoring wells are located downgradient of the capture zone and concentrations are below background concentrations. Downgradient performance monitoring wells are located downgradient of the capture zone and are impacted above background concentrations. Four monitoring well pairs completed in both the WT-HSU and the B-HSU have been identified as downgradient performance monitoring wells: 3852M (WT HSUs) and 3852N (B HSU), 3862D (WT HSUs) and 3862E (B HSU), 3872L (WT HSUs) and 3872M (B HSU), and 3872Q (WT HSUs) and 3872S (B HSU). All of these monitoring wells are located south of Burbank Boulevard.

Results of the statistical trend analyses for the chemicals of concern are presented on Figures 18 through 29. Results presented on these figures correspond to the Mann-Kendall and the linear regression tests performed on data points covering the time period from first quarter 1996 to the most recent sampling event in April 2017, as presented in Section 5 and Appendix E. As discussed in Section 5 of this report, there are seven statistical concentration trend types that can be derived for the Mann-Kendall analysis: 1) decreasing, 2) increasing, 3) no trend (displaying two sets of conditions), 4) probably decreasing, 5) probably increasing, 6) stable, and 7) non-detect (ND; all sample results are below the detection limit). If a location has fewer than four quarters of data, then the Mann-Kendall analysis cannot be run and not applicable (NA) would be applied to the results. Trends for the 4 pairs of monitoring wells identified above are discussed by analyte below.

6.4.1 Tetrachloroethene Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (six monitoring wells: 3852M, 3852N, 3862D, 3862E, 3872M, and 3872Q), increasing (none), no trend (one monitoring well: 3872L), probably decreasing (one monitoring well: 3872S), probably increasing (none), stable (none), and ND (none). The magnitudes of the decreasing and probably decreasing trends ranged from -34 to -0.93 micrograms per liter per year (µg/L/yr) in the WT HSUs and from -3.5 to -0.09 µg/L/yr in the B HSU.

6.4.2 Trichloroethene Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (seven monitoring wells: 3852M, 3852N, 3862D, 3862E, 3872M, 3872Q, and 3872S), increasing (none), no trend (one monitoring well: 3872L), probably decreasing (none), probably increasing (none), stable (none), and ND (none). The magnitudes of the decreasing trends were -30 to -0.42 µg/L/yr in the WT HSUs and -1.64 to -0.03 µg/L/yr in the B HSU.

6.4.3 1,2,3-Trichloropropane Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (one monitoring well: 3872Q), increasing (two monitoring wells: 3852M and 3872L), no trend (five monitoring wells: 3852N, 3862D, 3862E, 3872M, and 3872S), probably decreasing (none), probably increasing (none), stable (none), and ND (none). The magnitude of the single decreasing trend was -0.023 µg/L/yr in the WT HSUs. The magnitude of the increasing trend wells in the WT HSUs was 0.006 µg/L/yr and 0.016 µg/L/yr.

6.4.4 1,4-Dioxane Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (one monitoring well: 3862D), increasing (none), no trend (none), probably decreasing (none), probably increasing (none), stable (two monitoring wells: 3852M and 3862E), and ND (five monitoring wells: 3852N, 3872L, 3872M, 3872Q, and 3872S). The magnitude of the single decreasing trend in the WT HSUs was -0.01 µg/L/yr.

6.4.5 Total Chromium Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (none), increasing (none), no trend (three monitoring wells: 3852N, 3862E, and 3872Q), probably decreasing (two monitoring wells: 3852M and 3862D), probably increasing (none), stable (three monitoring wells: 3872L, 3872M, and 3872S), and ND (none). The magnitude of the decreasing trend wells was -0.14 µg/L/yr and -0.11 µg/L/yr (WT HSUs).

6.4.6 Hexavalent Chromium Concentration Trends

The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (one monitoring well: 3862D), increasing (none), no trend (four monitoring wells: 3852M, 3852N, 3872L, and 3872M), probably decreasing (none), probably increasing (none), stable (three monitoring wells: 3862E, 3872Q, and 3872S), and ND (none). The magnitude of the decreasing trend was -0.50 µg/L/yr (WT HSUs).

6.5 CAPTURE ZONE SUMMARY

For this report, several lines of evidence were examined to evaluate the extent of capture resulting from the BOU extraction system and assess the effectiveness of the system in hydraulically containing the various chemical of concern plumes within the BOU. The lines of evidence included the following:

- The operational data from the extraction system indicated that groundwater is being extracted and that significant VOC mass is being removed from the aquifer.
- Vertical hydraulic gradients indicated that pumping from the WT HSUs is inducing or increasing upward vertical gradients between the B HSU and the WT HSUs.
- The WT-HSU potentiometric map developed from the groundwater level measurements supports that the BOU extraction wells capture groundwater across most of the BOU north of Vanowen Street and south of the extraction wells toward Chandler Boulevard and Wyoming and West Allan Avenue (Figure 3).
- The TIN for the WT HSUs were developed from the same data as the potentiometric maps. The TIN supports that capture from the BOU extraction wells extends south to approximately West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU.

- The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (16 results), increasing (2 results), no trend (14 results), probably decreasing (3 results), probably increasing (none), stable (8 results), and ND (5 results). The two increasing trends (1,2,3-TCP in monitoring wells 3852M and 3872L) had a limited data set (at least five analyses from each well from 2007 to 2017) and the magnitude of the change was small.

The lines of evidence suggest that the BOU extraction system exerts lateral hydraulic control for the extent of contaminants of concern within the BOU. The BOU extraction system can be expected to inhibit the migration of site-related chemicals of concern that are present within the WT HSUs upgradient (north) of the southern limits of hydraulic control in each hydrostratigraphic unit. This interpretation is consistent with past BOU groundwater monitoring reports and recent modelling within the San Fernando Valley (Tetra Tech, 2015c).

SECTION 7
CONCEPTUAL SITE MODEL EVALUATION

The groundwater monitoring results for the second quarter 2017 do not materially differ from results obtained during previous groundwater monitoring events, with the exception that as shown in Figure 5 the overall groundwater elevation at the site continues to drop, also drawdown in the vicinity of extraction well V08 is now depicted on the potentiometric surface maps (Figure 3 and 4). This difference is due to the inclusion of water level data from newly-installed observation wells OW-V08A and OW-V08B rather than changes in field conditions, and represents an improvement in the accuracy of depiction of the cone of depression around the BOU extraction well field. This new data helps better define the influence extraction well VO8 is having on both the water table and the B HSUs. The repair and/or replacement of OWVO1, OW-VO2, OW-VO3, and OW-VO6 has helped to better define the influence of their associated BOU extraction wells. The new wells at Plant B-1 have refined the potentiometric and the isoconcentration mapping in that area as well.

SECTION 8
SUMMARY AND CONCLUSIONS

The Second Quarter 2017 BOU groundwater monitoring event was implemented in accordance with the 2017 Revised OSP; (Tetra Tech, 2017b). The intent of the program is to provide the data necessary to evaluate groundwater conditions at the BOU, including the near-field and far-field effects of the extraction well field.

8.1 GROUNDWATER MONITORING WELL MAINTENANCE

In preparation for the second quarter 2017 groundwater monitoring event, several monitoring well maintenance activities were completed in March and April, 2017:

- The dedicated high-volume pumps and associated piping were removed from 52 monitoring wells and replaced with dedicated low-flow pumps.
- A total of 9 groundwater monitoring wells were redeveloped, cleaned out, or attempted to be cleaned out. This includes A-1-CW07, B-5-CW03, B-6-CW16, C-1-CW05, C-1-CW06, 3852L, 3852M, and 4949C.
- Additional well maintenance activities were completed at 70 of the BOU monitoring wells. This included replacement of well lid gaskets, adding or replacing well tags, re-tapping the existing bolt holes, and replacing the standard six-point bolts with five-point bolts.

8.2 GROUNDWATER ELEVATIONS AND GRADIENTS

During the second quarter 2017 groundwater monitoring event, groundwater levels were measured in 105 monitoring wells. Groundwater elevation contours for the WT HSUs and B HSU are shown on Figures 3 and 4, respectively. Based on those measurements, the local shallow groundwater flow direction was predominantly southeasterly in the northwest portion of the BOU and southerly in the northeast portion of the BOU, and it converged in a flow direction toward the cones of depression created by the operation of the BOU extraction wells. The second quarter 2017 groundwater elevation data indicate that the dominant direction of groundwater flow immediately south of the BOU extraction wells was reversed from its natural southeasterly flow direction, to a northerly flow direction in response to the extraction well pumping (northeasterly flow direction in the western portion of the BOU). These groundwater trends extend to Victory Boulevard in the western portion of the BOU, West Allan and Wyoming Avenue in the central-western portion of the BOU, and to at

least Chandler Boulevard in the eastern portion of the BOU. Beyond these boundaries the groundwater flow direction shows influence from pumping, but ultimately reverts to its natural southeasterly direction.

The local groundwater flow direction in the B HSU during the second quarter 2017 groundwater monitoring event was generally the same as the local groundwater flow direction observed in the WT HSUs. The greater drawdown observed at extraction well V08 in the second quarter 2017 compared with the second quarter 2016 is due to the inclusion of data from new observation well OW-V08B.

Groundwater-elevation data for selected monitoring wells were used to evaluate horizontal hydraulic gradients (direction and magnitude) within the BOU using a TIN. This horizontal hydraulic gradient analysis was completed using data collected during the April 2017 gauging event and TINs defined by monitoring wells distributed in the WT HSUs and the B HSU. These TIN cells are located adjacent to and immediately downgradient of the BOU extraction system. Consequently, the application of this diagnostic tool can help determine the near-well and downgradient extent of capture generated by the BOU extraction system.

Based on the TIN map for the WT HSUs, the hydraulic gradient in the area immediately to the south and east of the groundwater extraction well system are directly influenced by pumping, showing steep gradients and in some instances a reversal from the southeast-oriented regional trend, indicating strong hydraulic capture. Farther to the south, the direction of groundwater flow appears to ultimately result in flow toward the extraction system, but the hydraulic gradient is not as steep. The degree of hydraulic capture dissipates along the southwestern operable unit boundary during the second quarter 2017 monitoring event.

Based on the TIN map for the B HSU, groundwater directly adjacent to extraction well VO8 is influenced by pumping, and the influence quickly dissipates to the south, southwest, and west.

8.3 WATER QUALITY RESULTS

Sixty-five groundwater monitoring wells were sampled during the Second Quarter 2017 monitoring event, 42 completed in the WT HSU and 23 completed in the B HSU. The samples collected were tested for VOCs, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium.

The data were validated using the most recent versions of the USEPA's *National Functional Guidelines* for data validation available at the time of project initiation, where appropriate (USEPA, 2008 and 2010a). Based upon the data review, the data are considered usable as qualified. All testing was provided by the Eurofins Calscience, a California Department of Public Health-accredited environmental laboratory.

Twenty-one organic and two inorganic analytes were detected. Isoconcentration maps were prepared for six primary chemicals of concern: PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium.

- PCE was detected in 59 of the primary (non-duplicate) samples, 37 of which exceeded the MCL (5 µg/L). Concentrations in the WT HSUs ranged from <0.20 µg/L to 630 µg/L (monitoring well B-1-CW33). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected at the northwest corner of the former Plant B-1 and trending southeast beneath former Plant B-1 and extending to Magnolia Boulevard. Concentrations in the B HSU ranged from <0.20 µg/L to 48 µg/L (monitoring well 3850R). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected adjacent to the extraction wells on Vanowen Street.
- TCE was detected in 53 of the samples, 35 of which exceeded the MCL. The detected concentrations ranged from 0.29 µg/L (monitoring well C-1-CW05) to 240 µg/L (monitoring wells 3872L and B-1-CW13). Concentrations exceeding the MCL extended over much of the BOU with the highest concentrations detected downgradient of former Building 85 and extending to Magnolia Boulevard. Concentrations in the B HSU ranged from <0.29 µg/L to 32 µg/L (monitoring well 3862E). Concentrations exceeding the MCL were not as widely distributed as in the shallower HSUs, with the highest concentrations detected south of the BOU. Additionally, elevated concentrations were detected in the southern portion of the former Plant B-6 area and continuing southeast beneath former Building 85 and extending to Vanowen Street.
- 1,2,3-TCP was detected in 31 of the samples, 30 of which exceeded the DWNL (0.005 µg/L). Concentrations in the WT HSUs ranged from <0.0025 µg/L to 87 µg/L (monitoring well A-1-CW08). Concentrations exceeding the DWNL extended over much of the BOU with the highest concentrations detected down gradient of the former Plant B-6 area, north of former Building 85, and along Vanowen Street. Concentrations in the B HSU ranged from <0.0025 µg/L to 0.29 µg/L (monitoring well 3852H). Concentrations exceeding the DWNL were not as widely distributed as in the WT HSUs, with the highest concentrations detected near Burbank Boulevard.
- 1,4-Dioxane was detected in 11 of the samples, 11 of which exceeded the DWNL (1.0 µg/L). Concentrations in the WT HSUs ranged from <0.28 µg/L to 3.7 µg/L (monitoring well A-1-CW09). Concentrations exceeding the DWNL are spare, but spread out through the BOU specifically at former Plants A-1-S, B-1, and C-1 as well as downgradient of Former Building 371. Concentrations in the B HSU ranged from <0.28 µg/L to 2.3 µg/L (monitoring well A-1-CW05). Similar to the WT HSUs, concentrations exceeding the DWNL extended

around the former Plant B-6 and A-1 areas of the BOU, with the highest concentrations detected at the former Plant A-1-S.

- Total chromium was detected in 65 of the samples, 2 of which exceeded the MCL (50 µg/L). Concentrations in the WT HSUs ranged from 1.05 J (A-1-CW03R) to 82.9 µg/L (monitoring well C-1-CW07). One sample from the eastern portion of the BOU near the former Weber Aircraft facility and one sample near former Plant C-1 had concentrations detected exceeding the MCL. Concentrations in the B HSU ranged from 0.600 µg/L (monitoring well C-1-CW02 to 7.85 µg/L (3872S). No concentrations were detected that exceeded the MCL.
- Hexavalent Chromium was detected in 58 samples, 5 of which exceeded the MCL (10 µg/L). Concentrations in the WT HSUs range from 0.010 µg/L µg/L (monitoring well A-1-CW03R) to 20 µg/L (monitoring well B-1-CW17). Four of the 5 samples that exceeded the MCL are located in the central to southern portions of former Plant B-1. The other sample that exceeded the MCL is located immediately outside of the northeastern boundary of the BOU. Concentrations in the B HSU ranged from 0.021 µg/L (monitoring well 3850R) to 7.9 µg/L (monitoring well 3872S). No concentrations were detected above the MCL.

8.4 STATISTICAL TREND ANALYSES

Statistical trend analyses were conducted using chemical data from the 65 monitoring wells sampled during the second quarter 2017 BOU groundwater monitoring event. The analysis was performed for the six primary chemicals of concern: PCE, TCE, 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Therefore, a total of 390 trends were tested. The MAROS, developed by the Air Force Center for Environmental Excellence (Air Force Center for Environmental Excellence, 2006), was used for the analyses. The MAROS is a statistical database application developed to assist with groundwater quality data trend analysis and long-term monitoring optimization at contaminated groundwater sites. BOU data from first quarter 1996 to second quarter 2017 were analyzed.

Statistical analysis indicated that for various reasons (insufficient data, no statistical trend, or no detections), a significant trend could not be determined for 43% of the datasets that were tested, particularly for 1,2,3-TCP, 1,4-dioxane, total chromium, and hexavalent chromium. Statistical analysis also indicated that 29% of the datasets had decreasing or probably decreasing concentration trends, 17% were stable, and 11% had increasing concentration trends. The trend analysis showed that those trends that were significant were generally small. Over half of the decreasing concentrations trends were for TCE and PCE concentrations, scattered throughout the BOU; about half of the stable trends were for total chromium and hexavalent chromium concentrations; and 1,2,3-TCP and 1,4-dioxane concentrations upgradient of the BOU extraction wells in the former Plant B-6 area are generally increasing. With the exception of the increasing 1,2,3-TCP trend in

monitoring wells 3852M and 3872L, all monitoring wells with increasing trends for one or more of the compounds of concern are upgradient of the BOU extraction wells or within the area captured by the extraction wells. The magnitude of the changes in concentration of 1,2,3-TCP in monitoring wells 3852M and 3872L are small (0.016 µg/L/yr and 0.006 µg/L/yr, respectively).

8.5 CAPTURE ZONE EVALUATION

Several lines of evidence were examined to evaluate the extent of capture resulting from the BOU extraction system and assess the effectiveness of the system in hydraulically containing the various chemical of concern plumes within the BOU. The lines of evidence included the following:

- The operational data from the extraction system indicated that groundwater is being extracted and that VOC mass is still being removed from the aquifer.
- Vertical hydraulic gradients indicated that pumping from the WT HSUs is inducing or increasing upward vertical gradients between the B HSU and the WT HSUs.
- The WT-HSU potentiometric map developed from the groundwater level measurements supports that the BOU extraction wells capture groundwater across most of the BOU north of Vanowen Street and south of the extraction wells toward Chandler Boulevard and Wyoming and West Allan Avenue.
- The TIN for the WT HSUs were developed from the same data as the potentiometric maps. The TIN supports that capture from the BOU extraction wells extends south to approximately West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU.
- The trend analysis for the eight downgradient performance monitoring wells yielded the following results: insufficient data (none), decreasing (16 results), increasing (2 results), no trend (14 results), probably decreasing (3 results), probably increasing (none), stable (8 results), and ND (5 results). The two increasing trends (1,2,3-TCP in monitoring wells 3852M and 3872L) had a limited data set (at least five analyses from each well from 2007 to 2017) and the magnitude of the change was small.

The lines of evidence suggest that the BOU extraction system exerts hydraulic control on the plumes originating from the BOU and it extends to near West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU, and the extraction system inhibits the migration of site-related chemicals of concern.

8.6 BURBANK OPERABLE UNIT EXTRACTION SYSTEM PERFORMANCE

Based on the data from the BOU monthly operation reports for the current reporting period (May 2016 through April 2017), an estimated 3,129,230,274 gallons of groundwater was extracted (average extraction rate of 5,937 gallons per minute) and approximately 3,697 pounds of volatile organic compounds (VOCs) were treated by the Burbank Operable Unit (BOU) treatment system. Per the 1997 Explanation of Significant Difference (USEPA, 1997), the USEPA contends that:

> The City of Burbank can substantially accept and has committed to accept, an average of 9,000 gpm from the interim remedy facilities.
>
> Due to elimination of reinjection from the project, the Burbank OU groundwater extraction rate will not be a continuous 9,000 gpm. The instantaneous extraction rate will fluctuate with the City of Burbank's water demand. In recognition of the likelihood that it will not be possible to extract groundwater at a rate of 9,000 gpm, twenty-four hours a day, three hundred and sixty-five days a year, EPA is specifying that the new extraction rate will be achieved as an average rate, not an instantaneous rate.
>
> EPA has also decided to suspend the 9,000 gpm extraction rate requirement during times when nitrate levels in the extracted groundwater exceed 50 mg/L as nitrate.

Multiple lines of evidence suggest that at current extraction rates the BOU extraction system exerts hydraulic control in the WT HSUs that extends to near to near West Allan and Wyoming Avenue in the central-western portion of the BOU and Chandler Boulevard in the eastern portion of the BOU, and inhibits the migration of site-related chemicals of concern. The upward hydraulic gradient (potentially pulling contaminant mass from the B HSU to the WT HSUs) exhibited in much of the southern portion of the BOU inhibits the migration of site-related chemicals of concern, where present, in the deeper HSU.

The *Revised Operational Sampling Plan* (Tetra Tech, 2017b) states the following:

> The Record of Decision for the Burbank Operable Unit was signed in June 1989. An Explanation of Significant Difference was signed in November 1990 and a second Explanation of Significant Difference was signed in February 1997. The selected remedy

addressed the volatile organic compound- contaminated groundwater plume in the Burbank area. As described in the Record of Decision and Explanations of Significant Differences, the interim remedial action selected for the Burbank Operable Unit was designed to achieve two objectives:

1. To partially control the movement and spread of groundwater contaminants in the Burbank Operable Unit area, while contributing to aquifer restoration
2. To address the public health threat posed by contamination of the City of Burbank's public water supply wells by providing residents in the area with a water supply that meets State and Federal drinking water standards.

Based on the data and the analyses presented in this report, Tetra Tech concludes that the first objective of the remedial action is being met. While the BOU extraction system produces groundwater that is treated and deliver for consumption, water quality data from the treatment plant was not presented or reviewed as part of this report and therefore the second objective cannot be discussed as part of this report.

8.7 RECOMMENDATIONS

The following recommendations are proposed for the BOU groundwater monitoring program:

- Implement the repairs identified during the monitoring well inspections.
- Continue performing the monitoring well inspections annually.
- Install and sample the replacement monitoring well for 3860H (as described in the *Work Plan – Well Installation and Replacement* (Tetra Tech, 2016d).
- Evaluate a replacement monitoring well for A-1-CW07.
- Reduce the transducer recording frequency. Currently, transducers record data in 15-minute increments. Recommend changing the frequency to record data every 6 hours.
- Remove transducer from B-6-CW17 and evaluate placement nearby well.

SECTION 9
REFERENCES

1. Air Force Center for Environmental Excellence, 2006. Monitoring and Remediation Optimization System (MAROS) Software Version 2.2 User's Guide. Air Force Center for Environmental Excellence. Updated March 2006.

2. Arcadis, 2013. *2013 Annual Groundwater Monitoring and Emerging Compound Report, Burbank Operable Unit, Burbank, California.* August

3. Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*.California Geological Survey Special Report 217, Plate 9. July.

4. HSI Geotrans, 1997. *Draft Phase 2 Operational Sampling Plan, Burbank Operable Unit, Burbank, California. Prepared for Lockheed Martin, 2550 North Hollywood Way, Suite 306, Burbank, California 91505*.

5. Lockheed Martin Corporation (LMC) 2005. Letter to the U.S. Environmental Protection Agency. April 27, 2005.

6. Los Angeles Regional Water Quality Control Board (LARWQCB), 2001. Comments on the *Semiannual Groundwater Monitoring Report, Second Quarter and Third Quarter 2000, Burbank Operable Unit*. Letter to Earth Tech dated June 28.

7. LARWQCB, 2002a. Heavy Metals in Soils and Groundwater, former Lockheed Martin Plant B-1 (File No. 104.0676)(Cleanup and Abatement Order No. 87-161). Letter to Lockheed Martin Corporation dated March 28.

8. LARWQCB, 2002b. Comments on the *Semiannual Groundwater Monitoring Report, Fourth Quarter 2001 and First Quarter 2002, Burbank Operable Unit*. Letter to Lockheed Martin Corporation dated November 18.

9. LARWQCB, 2003. Requirement for a Technical Report on Emergent Chemicals Sampling, Pursuant to California Water Code Section 13267, Burbank Operable Unit. Letter to Lockheed Martin Corporation dated December 16.

10. LARWQCB, 2004. Comments on the *Technical Report on Emergent Chemicals within the Burbank Operable Unit, Burbank, California*. Letter to Lockheed Martin dated December 8.

11. Tetra Tech, 2015a. *Annual Groundwater Monitoring Report, Second Quarter 2015, Burbank Operable Unit, Burbank, California*. August.

12. Tetra Tech, 2015b. *Revised Summary of Monitoring Well Destruction Activities along San Fernando Road, Burbank Operable Unit, Burbank, California*. September 15.

13. Tetra Tech, 2015c. *Technical Memorandum – Capture Analysis at the Burbank Operable Unit, San Fernando Valley Basin, California*. November.

14. Tetra Tech, 2016a. *Revised - Well Replacement Evaluation, Burbank Operable Unit, Burbank, California*. February.

15. Tetra Tech, 2016b. *Technical Memorandum – Pump Intake Selection, Burbank Operable Unit, Burbank, California*. March 9.

16. Tetra Tech, 2016c. *Technical Memorandum – Sampling and Analysis Plan Addendum*. March 21.

17. Tetra Tech, 2016d. *Work Plan – Well Installation and Replacement, Burbank Operable Unit, Burbank, California*. April.

18. Tetra Tech, 2016e. *Revised Technical Memorandum – Low-Flow Pump Intake Selection, Burbank Operable Unit, Burbank, California*. November 10.

19. Tetra Tech, 2017a. *Supplemental Site Investigation Report, Former Lockheed Martin Plant B-1, Burbank, California*. January.

20. Tetra Tech, 2017b. *Revised Operational Sampling Plan – Addendum, Burbank Operable Unit, Burbank, California*. February.

21. United States Environmental Protection Agency (USEPA), 1997. *EPA Superfund Explanation of Significant Differences: San Fernando Valley (Area 1), EPA ID: CAD980894893, OU 03, North Hollywood, CA, 02/12/1997. EPA/ESD/R09-97/037*. February 12.

22. USEPA, 2004. *U.S. EPA Five-Year Review Report for Burbank Operable Unit, San Fernando Valley (Area 1) Superfund Site, Los Angeles County, California*. September.

23. USEPA, 2005. Letter to General Electric Company. October 20.

24. USEPA, 2006a. Letter to Lockheed Martin Corporation. February 10.

25. USEPA, 2006b. Letter to Lockheed Martin Corporation. November 3.

26. USEPA, 2007. Letter to General Electric Company. June 8.

27. USEPA, 2008. *U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Methods Superfund Data Review*. OSWER 9240.1-48 EPA-540-R-08-01. June.

28. USEPA, 2010a. *U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*. OSWER 9240.1-51, EPA-540-R-10-011). October.

29. USEPA, 2010b. Letter to Lockheed Martin Corporation. October 22.

30. USEPA, 2010c. Email correspondence to Lockheed Martin Corporation and General Electric Company. November 3.

31. USEPA, 2011. Letter to Lockheed Martin and Potentially Responsible Parties. February 25.

32. USEPA, 2013. *Second Five-Year Review Report for San Fernando Valley (Area 1) Superfund Site, North Hollywood and Burbank, Los Angeles County, California*. September 30.

33. USEPA, 2016a. *RE: Recommendation from the Second Five-Year Review Report for San Fernando Valley (Area 1) Superfund Site, North Hollywood and Burbank, Los Angeles County*. August 9.

34. USEPA, 2016b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. OLEM 9355.0-133, EPA-540-R-2016-001, September.

35. USEPA, 2016c. *National Functional Guidelines for Superfund Organic Methods Data Review.* OLEM 9355.0-134, EPA-540-R-2016-002, September.

36. Weather Underground, 2017. "Precipitation Data for Burbank, CA". Website: http://www.wunderground.com/history/airport/KBUR. Accessed on April 29.

37. Weather Warehouse, 2011. "Burbank Valley Pump Precipitation Data 1991-2010". Website: http://weather-warehouse.com. Accessed on March 3.

38. Well Survey: KDM Meridian, Inc. 2012.Projection: NAD83 NSRS2007 State Plane California V,FIPS0405 FT US.

TABLES

Table 1
Wells Scheduled for Low-Flow Sampling
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Casing Diameter (inches)	Proposed Pump Composition	April 2017 Depth to Groundwater (feet btoc)	Total Depth of Well (feet btoc)	Selected Depth of Pump Intake (feet btoc)
3830Q	5	PVC	235.16	235.16	344.5
3830S	5	PVC	235.31	235.31	250.5
3831Q	5	PVC	198.30	198.30	239.5
3850M	5	PVC	228.15	228.15	226.5
3850N	5	PVC	203.31	203.31	209.5
3850R	5	PVC	198.35	198.35	341.5
3850U	5	PVC	228.25	228.25	228.5
3851M	5	PVC	191.19	191.19	207.2
3851N	5	PVC	184.37	190.49	314.5
3852F	5	PVC	142.77	148.03	166.6
3852H	5	PVC	146.25	149.65	291.0
3852L	5	PVC	156.93	164.95	173.1
3852M	5	PVC	132.62	136.91	217.5
3852N	5	PVC	137.32	137.94	292.5
3860J	5	PVC	197.06	203.34	204.5
3860K	5	Stainless Steel	204.45	212.21	224.5
3861D	5	PVC	157.67	164.20	174.5
3862D	5	PVC	127.27	133.36	183.5
3862E	5	PVC	124.68	130.38	270.5
3871H	5	PVC	131.22	138.19	220.0
3871J	5	PVC	127.26	132.80	278.5
3872L	5	PVC	105.09	110.68	174.5
3872M	5	PVC	100.88	106.58	296.0
3872N	5	Stainless Steel	102.68	108.49	133.5
3872Q	5	PVC	114.70	120.81	127.5
3872S	5	PVC	111.32	117.30	284.5
3880	5	PVC	151.50	157.24	164.5
4949C	5	PVC	258.59	268.00	266.5
A-1-CW02	5	PVC	216.20	222.80	354.5
A-1-CW03R	5	PVC	219.75	226.96	264.5
A-1-CW04	5	PVC	211.19	217.52	232.4
A-1-CW05	5	PVC	209.70	216.18	365.5

Table 1
Wells Scheduled for Low-Flow Sampling
Lockheed Martin Corporation
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Well ID	Casing Diameter (inches)	Proposed Pump Composition	April 2017 Depth to Groundwater (feet btoc)	Total Depth of Well (feet btoc)	Selected Depth of Pump Intake (feet btoc)
A-1-CW08	5	PVC	217.86	226.60	229.5
A-1-CW09	5	PVC	209.92	217.67	221.5
B-1-CW11	5	PVC	144.80	150.40	322.0
B-1-CW12	5	PVC	151.22	155.58	164.5
B-1-CW17	5	PVC	135.64	140.51	157.3
B-1-CW20	5	PVC	134.75	140.55	294.5
B-1-CW25	5	PVC	178.16	185.95	184.5
B-1-CW27	5	PVC	172.68	178.36	323.5
B-1-CW28	5	PVC	185.4	191.69	335.5
B-1-CW29	5	PVC	165.43	Dry Well	165.5
B-5-CW02	5	PVC	226.37	232.6	344.5
B-5-CW03	5	PVC	226.07	Dry Well	225.5
B-6-CW02	5	PVC	227.02	234.04	334.5
B-6-CW14	5	PVC	232.58	240.76	354.5
B-6-CW17	5	PVC	266.63	Dry Well	264.5
C-1-CW02	5	PVC	264.23	270.59	386.5
C-1-CW03	5	PVC	264.43	271.01	274.5
C-1-CW05	5	PVC	246.39	251.71	380.5
C-1-CW06	5	PVC	Dry	Dry Well	246.5
C-1-CW07	5	PVC	256.78	264.71	312

Notes: bgs = below ground surface
btoc = below top of casing

Table 2
Second Quarter 2017 Groundwater Well Maintenance Table

2017 BOU Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Street Address	Property Description	Property Owner	Wells With Transducer	Wells With Nitrogen Well Packers	Dedicated Pump Type	Dedicated High-Volume Pump Model	Dedicated Low-Flow Pump Model	Depth of Low-Flow Pump Intake *(feet bgs)*	Total Depth *(feet bgs)*	Screen Interval *(feet bgs)*	Well Repairs to Date	Notes	Proposed Maintenance
3830Q	Clybourn Ave. south of Vanowen Street	Sidewalk						BESST P200	344.5	360	335 - 355	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3830R	Clybourn Ave. south of Vanowen Street	Sidewalk				●	1 HP / 230 V			316	291 - 311			
3830S	Clybourn Ave. south of Vanowen Street	Sidewalk						BESST P200	250.5	263	218 - 258	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3831Q	Clybourn Ave north of W. Victory Blvd.	Sidewalk						BESST P200	239.5	255	230-250	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		2017: Repair apron surrounding well monument. Low priority, complete in near future.
3850M	Winona Ave. east of N Ontario Street	Burbank Water and Power Yard	Burbank Public Works					BESST P200	226.5	237	182 - 232	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant 24 hours prior to arrival. Nomex shirt and hard hat required.	
3850N	Vanowen Street west of N. Ontario Street	Street						BESST P200	209.5	220	165 - 215	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Traffic control required	
3850P	Vanowen Street west of N. Ontario Street	Street				●	3/4 HP / 230 V			256	231 - 251		Traffic control required	
3850Q	Vanowen Street west of N. Ontario Street	Street				●	1 HP / 230 V			322	277 - 317		Traffic control required	
3850R	Vanowen Street west of N. Ontario Street	Street						BESST P200	341.5	352	337 - 347	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Traffic control required	
3850S	Thornton Avenue east of N. Niagra St.	Street				●	1/2 HP / 230 V			238	183 - 233		Missing 230V plug on pump power lead	
3850T	N. Ontario Street north of Burton Ave.	Street				●	1/2 HP / 230 V			244	194 - 239		Traffic control required	
3850U	N. Ontario Street south of Winona Ave.	Street						BESST P200	228.5	239	189 - 234	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Traffic control required	
3850V	N. California Street cul de sac	Street		●		●	1/2 HP / 230 V			248	203 - 243			
3850W	N. Ontario Street north of Floyd	Street				●	1/2 HP / 230 V			245	200 - 240			
3851M	N. Hollywood Way parking lot of BOU	Parking Lot	City of Burbank	●				BESST P200	207.2	220	165 - 215	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3851N	N. Hollywood Way parking lot of BOU	Parking Lot	City of Burbank	●				BESST P200	314.5	330	305 - 325	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3851P	N. Hollywood Way parking lot of BOU	Parking Lot	City of Burbank			●	1 HP / 230 V			385	370 - 380			
3852F	N Avon Street south of Burbank Blvd.	Sidewalk						BESST P200	166.6	185	125 - 175	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3852G	N Avon Street south of Burbank Blvd.	Sidewalk				●	1/2 HP / 230 V			221	196 - 216			
3852H	N Avon Street south of Burbank Blvd.	Sidewalk						BESST P200	291	304	269 - 299	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3852J	Lima Street east sw at grammar school	Sidewalk		Barologger		●	1/2 HP / 230V			282	257 - 277		Pump plug needs rewiring	
3852K	Lima Street east sw at grammar school	Sidewalk				●	3/4 HP / 230 V			238	213 - 233			
3852L	Lima Street east sw at grammar school	Sidewalk		●				BESST P200	173.1	184	139 - 179	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3852M	N. Catalina Street north of Chandler Blvd.	Sidewalk						BESST P200	217.5	233	208 - 228	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3852N	N. Catalina Street north of Chandler Blvd.	Sidewalk						BESST P200	292.5	308	283 - 303	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3860J	Lincoln Street and Rosita Ave.	Street	City of Burbank					BESST P200	204.5	215	170 - 210	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3860K	N. Naomi Ave Fire Department	LA Fire Station	Los Angeles County					BESST P200	224.49	235	180 - 230	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant 24 hours prior to arrival	
3861D				●				BESST P200	174.5	185	130 - 180	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3861E						●	3/4 HP / 230 V			248	201 - 241	2014: Obstruction removed from well		
3861F				●				QED	314	328	303 - 323	2016: High-volume pump removed and low-flow pump installed 2017: Replaced well gasket; replaced interior well tag; replaced bolts.		
3862C						●	1/2 HP / 230 V			135	90 - 130	2006: Pump serviced - January 26, 2006		
3862D				●				BESST P200	183.5	199	174 - 194	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3862E								BESST P200	270.5	281	256 - 276	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3870D	Irving Dr. at Kaeler St							QED	182.5	195	140 - 190	2016: Low-flow pump installed 2017: replaced interior well tag		

Table 2
Second Quarter 2017 Groundwater Well Maintenance Table

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Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Street Address	Property Description	Property Owner	Wells With Transducer	Wells With Nitrogen Well Packers	Dedicated Pump Type	Dedicated High-Volume Pump Model	Dedicated Low-Flow Pump Model	Depth of Low-Flow Pump Intake *(feet bgs)*	Total Depth *(feet bgs)*	Screen Interval *(feet bgs)*	Well Repairs to Date	Notes	Proposed Maintenance
3870E	Irving Dr. at Kaeler St									520	475 - 515		No pump	
3871G						●	1/2 HP / 230 V			140	95 - 135	2005: Pump serviced - November 22, 2005		
3871H				●				BESST P200	220	246	200 - 241	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3871J								BESST P200	278.5	289	274 - 284	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3872K								BESST P200	174.5	125	70 - 120	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3872L						●	1/2 HP / 230 V			195	160 - 190			
3872M								BESST P200	296	309	274 - 304	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3872N								BESST P200	133.5	149	124 - 144	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3872P							1/2 HP / 230 V			254	229 - 249			
3872Q								BESST P200	127.5	138	93 - 133	2016: Ant colony cleared 2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3872R							1/2 HP / 230 V			228	193 - 223	2017: Surveyed		
3872S								BESST P200	284.5	300	275 - 295	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
3880	Amherst Drive south of N 3rd Street	Sidewalk		●				BESST P200	164.5	175	120 - 170	2014: Well developed on 3/27/14 2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
4948	Along San Fernando Road	Railroad right-of-way	SCRRA / Metrolink					QED	291.5	302	247 - 297	2012-2013: Pump removed 2016: low-flow pump installed 2017: replaced well gasket; replaced interior well tag; replaced bolts.	Located in railroad ROW	
4949C	Along San Fernando Road	Railroad right-of-way	SCRRA / Metrolink					BESST P200	266.5	277	222 - 272	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Located in railroad ROW. Pump not functioning (2016)	
A-1-CW01						●	1.0 HP / 230V			570	560 - 570			
A-1-CW02	Located in VSP airport parking lot	Private Parking Lot						BESST P200	354.5	362	350 - 360	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant prior to arrival	
A-1-CW03	Located in VSP airport parking lot	Private Parking Lot				●	1/2 HP / 230 V			200	175 - 195		Generally dry	
A-1-CW03R	Located in VSP airport parking lot							BESST P200	264.5	285	245 - 285	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant prior to arrival	
A-1-CW04		Private Parking Lot	LA Graphic Company	●				BESST P200	232.4	245	200 - 240	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Provide 2-day notice (prefers email contact) to property owner/tenant prior to arrival	
A-1-CW05	2220 N. Hollywood Way, Burbank, CA	Airport Budget Car Rental Parking Lot	Budget Car Rental Company	●				BESST P200	365.5	381	336 - 376	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
A-1-CW06						●	1/2 HP / 115 V			557	522 - 552			
A-1-CW07	Located in Yahoo parking lot	Yahoo Parking Lot	Yahoo							229	174 - 224	2014 Well developed and pump removed April 2014 2016: well redeveloped 2017: Well dry; replaced well box; replaced interior well tag. Used magnet to clear metal debris in well.	Unable to get to water table because of debris/obstruction. Well has likely collapsed.	2017: Recommend abandonment and replacement of well.
A-1-CW08	Bob Hope Airport	Airport Parking Lot C	City of Burbank					BESST P200	229.5	240	175 - 235	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Provide 2-day notice to property owner/tenant prior to arrival.	
A-1-CW09								BESST P200	221.5	232	187 - 227	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		2017: Apron surrounding well monument may need to be repaired. Low priority, complete in near future.
B-1-CW11				●				BESST P200	322	335	300 - 330	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
B-1-CW12				●				BESST P200	164.5	175	120 - 170	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
B-1-CW13	Located in Kid's Castle parking lot	Kid's Castle Parking Lot	Kid's Castle	●				●	205.5	215	150 - 210	2014: Well developed April 2014; pump removed April 2014; low-flow pump installed 2016; Replaced well gasket; replaced interior well tag; replaced bolts.		
B-1-CW16	Located in Disney Parking lot	Disney Parking Lot	The Walt Disney Co.			●	1/2 HP / 230 V			195	140 - 190	2005: Pump serviced - November 29, 2005	Pump is potentially bad	
B-1-CW17	Located in Costco parking lot	Costco Parking Lot	Costco	●				BESST P200	157.3	170	125 - 165	2017: Installed low-flow pump; replaced interior well tag; replaced bolts (penta-bolts).	Traffic control required	2017: Requires larger gasket replacement due to size of manhole cover. Replace with new gasket before April 2018 monitoring event.
B-1-CW20		Dirt Lot		●				BESST P200	294.5	310	285 - 305	2017: Installed low-flow pump; replaced interior well tag; replaced bolts (penta-bolts).		2017: Requires larger gasket replacement due to size of manhole cover. Replace with new gasket before April 2018 monitoring event.

Table 2
Second Quarter 2017 Groundwater Well Maintenance Table

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Well ID	Street Address	Property Description	Property Owner	Wells With Transducer	Wells With Nitrogen Well Packers	Dedicated Pump Type	Dedicated High-Volume Pump Model	Dedicated Low-Flow Pump Model	Depth of Low-Flow Pump Intake *(feet bgs)*	Total Depth *(feet bgs)*	Screen Interval *(feet bgs)*	Well Repairs to Date	Notes	Proposed Maintenance
B-1-CW25	Within the line of production wells on Vanowen Street	Street	City of Burbank	●				BESST P200	184.5	195	150 - 190	2017: Installed low-flow pump; placed well gasket; placed interior well tag		2017: Replace lid. Current lid does not have holes to bolt lid onto the monument. Replace lid and add gasket before April 2018 monitoring event
B-1-CW27	Within the line of production wells on Vanowen Street	Street	City of Burbank					BESST P200	323.5	339	314 - 334	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
B-1-CW28	Located in Kid's Castle parking lot	Kid's Castle Parking Lot	Kid's Castle					BESST P200	335.5	351	326 - 346	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
B-1-CW29	100 ft NW of NW corner of building (City size well lid)	Hometown Buffet Parking Lot						BESST P200	165.5	176	131 - 171	2017: Replaced interior well tag. Pump not placed because well is dry.	City size well lid, 100 ft NW of Hometown Buffet; traffic control required	2017: Requires larger gasket replacement due to size of manhole cover. Replace with new gasket before April 2018 monitoring event.
B-1-CW30								QED	183	196	156 - 196		2016: well installed.	
B-1-CW31								QED	188.5	205	165 - 206		2016: well installed.	
B-1-CW32								QED	163.6	180	140 - 180		2016: well installed.	
B-1-CW33								QED	204	218	179 - 219		2016: well installed.	
B-1-CW34								QED	169	185	145 - 185		2016: well installed.	
B-5-CW01	4400 block of Empire Avenue	Southwest Parking Lot	Union Pacific			●	1 1/2 HP / 230 V			552	542 - 552			
B-5-CW02	4400 block of Empire Avenue	Southwest Parking Lot	Union Pacific	●				BESST P200	344.5	350	340 - 350	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	10/13/12- AEC installed combo lock: 1717 to access with big trailer.	
B-5-CW03	4400 block of Empire Avenue	Southwest Parking Lot	Union Pacific	●				BESST P200	225.5	231	211 - 231	2012: Drop pipe repaired 2017: eplaced well gasket; replaced interior well tag; replaced bolts.Pump not placed because well was dry.		
B-6-CW01						●	1 1/2 HP / 230 V			590	580 - 590			
B-6-CW02				●				BESST P200	334.5	340	330 - 340	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
B-6-CW03						●	1/2 HP / 230 V			215	185 - 215		Generally dry	
B-6-CW03R	Located in a trucking/movie parking lot (Spots 187 and 241)	Trucking/Movie Parking Lot				●	1/2 HP / 230 V			265	240 - 260	2005: Pump serviced - November 23, 2005	Pump requires 230V extension cord for sampling. No starter box required	
B-6-CW04						●	2 HP / 230 V			520	510 - 520		Notify property owner/tenant 24 hours prior to access	
B-6-CW05		Commercial - Ford Property	Ford					●	349.5	355	345 - 355	2016: Low-flow pump installed 2017: Replaced well gasket; replaced interior well tag; replaced bolts.	Notify property owner/tenant 24 hours prior to access	
B-6-CW06		Commercial - Ford Property	Ford			●	1/2 HP / 230 V			235	215 - 235		Notify property owner/tenant 24 hours prior to access	
B-6-CW07						●	1 1/2 HP / 230V			502	492 - 502			
B-6-CW08	Bob Hope Airport	Private Parking Lot						●	366	371	361 - 371	2016: Pump removed and low-flow pump installed 2017: replaced well gasket; replaced interior well tag; replaced bolts.		
B-6-CW09	Bob Hope Airport	Private Parking Lot				●	1/2 HP / 230 V			262	242 - 262			2017: Apron surrounding well monument may need to be repaired. Low priority, complete in near future.
B-6-CW10	Bob Hope Airport	Airport Parking Lot A						●	249	258	203 - 253	2014: Obstruction removed April 2014 2016: low-flow pump installed 2017: replaced well gasket; replaced interior well tag; replaced bolts.	Notify property owner/tenant 24 hours prior to access	
B-6-CW14	Bob Hope Airport	Airport Parking Lot A						BESST P200	354.5	370	325 - 365	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant 24 hours prior to access.	
B-6-CW15						●	3/4 HP / 230 V			615	560 - 610			
B-6-CW16										265	210 - 260		No pump	

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B-6-CW17		Private Parking Lot; between stall 187 & 241		●				BESST P200	264.5	275	240 - 270	2017: placed interior well tag; Pump not placed because well was dry.		
C-1-CW01						●	2 HP / 230 V							
C-1-CW02		Private Parking Lot		●				BESST P200	386.5	392	382 - 392	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant 24 to 48 hours prior to access	
C-1-CW03		Private Parking Lot						BESST P200	274.5	280	259 - 280	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).	Notify property owner/tenant 24 hours prior to access	
C-1-CW04						●	2 HP / 230 V			662	652 - 662			
C-1-CW05								BESST P200	380.5	386	376 - 386	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
C-1-CW06								BESST P200	246.5	248	232 - 252	2017: replaced well gasket; replaced interior well tag; replaced bolts (penta bolts). Pump not placed because well was dry.		
C-1-CW07	Bob Hope Airport	Atlantic Charter Planes	Burbank Regional Airport Authority					BESST P200	312	336	290 - 320	2017: Installed low-flow pump; replaced well gasket; replaced interior well tag; replaced bolts (penta-bolts).		
C-1-CW08	Bob Hope Airport	Atlantic Charter Planes	Burbank Regional Airport Authority					●	277	292	245 - 285	2015: Pump removed 2016: low-flow pump installed 2017: Replaced well gasket; replaced interior well tag; replaced bolts.		
MW-01	3003 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)							242	180 - 240		No pump; padlock combination 6752; generally dry	
MW-02	3003 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)							242	180 - 240		No pump; padlock combination 6752; generally dry	
MW-03	3003 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)					●	267	283	220 - 280	2014: Well developed and pump removed 2016: low-flow pump installed	Padlock combination 6752; generally dry	
MW-04	2940 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)					●	255	265	200 - 260	2016: Low-flow pump installed 2017: Surveyed.		
MW-05	2940 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)							270	205 - 265	Surveyed 2017	No pump	
MW-06	2940 North Hollywood Way, Burbank, CA	Commercial	General Electric (formerly PAC site)							265	200 - 260	Surveyed 2017	No pump	
MW-07	2840 North Hollywood Way, Burbank, CA	Commercial - Within Kino Flo property	General Electric (formerly PAC site)					●	250	260	195 - 255	Low-flow pump installed 2016	Notify property owner/tenant 48 hours prior to access. Tenant prefers morning sampling.	
MW-08	2840 North Hollywood Way, Burbank, CA	Commercial - Within Kino Flo property	General Electric (formerly PAC site)					●	243.5	260	195 - 255	Low-flow pump installed 2016	Notify property owner/tenant 48 hours prior to access. Tenant prefers morning sampling.	
SW-1								●		267	207 - 237 242 - 262	2016: Well developed 2017: Surveyed		2017: Need to repair cap. Repair cap prior to April 2018 monitoring event.
SW-5								●		258	196 - 226 231 - 251	2016: Well developed 2017: Surveyed		
Tt-PW-01	Located S. curbside on Kittridge Street at Buena Vista	Street	City of Burbank							235	185 - 225	2017: Added well tag	Traffic control required. No Pump.	
Tt-PW-02	Located W. curbside on Lincoln Street at Burbank Blvd	Street	City of Burbank	●						235	179 - 219	2017: Added well tag	Traffic control required. No Pump.	
OW-VO1A					●					330	76 - 263	2017: Abandonded		
OW-VO1B					●					330	301 - 325	2017: Abandonded		
OW-VO1AR										325	140 - 250	2017: Installed and developed		2017: Install transducer prior to April 2018 monitoring event.
OW-VO1BR										325	300 - 325	2017: Installed and developed		
OW-VO2A										330	92 - 264	2017: Abandonded		
OW-VO2B										330	303 - 322	2017: Abandonded		
OW-VO2AR										320	150 - 260	2017: Installed and developed		2017: Install transducer prior to April 2018 monitoring event.
OW-VO2BR										320	305 - 350	2017: Installed and developed		

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OW-VO3A					●					340	79 - 271	2017: Abandonded		
OW-VO3B					●					340	310 - 329	2017: Abandonded		
OW-VO3AR										335	160 - 270	2017: Installed and developed		2017: Install transducer prior to April 2018 monitoring event.
OW-VO3BR										335	315 - 335	2017: Installed and developed		
OW-VO4A										360	110 - 282			2017: Install transducer prior to April 2018 monitoring event.
OW-VO4B										360	320 - 350			
OW-VO5A	Located on Vanowen Street	Street	City of Burbank		●					370	110 - 283		Traffic control required	2017: Install transducer prior to April 2018 monitoring event.
OW-VO5B	Located on Vanowen Street	Street	City of Burbank		●					370	321 - 360		Traffic control required	
OW-VO6A	Located on Vanowen Street	Street	City of Burbank		●					360	120 - 273	Concrete apron surrounding manhole repaired; replaced packer.	Traffic control required	2017: Install transducer prior to April 2018 monitoring event.
OW-VO6B	Located on Vanowen Street	Street	City of Burbank		●					360	312 - 350	Concrete apron surrounding manhole repaired; replaced packer.	Traffic control required	
OW-VO7A	Located on Vanowen Street	Street	City of Burbank		●					360	120 - 273		Traffic control required	2017: Install transducer prior to April 2018 monitoring event.
OW-VO7B	Located on Vanowen Street	Street	City of Burbank		●					360	312 - 350		Traffic control required	
OW-VO8A	Located in Burbank Fire Department Training Facility Yard	Burbank FD Yard	Burbank FD		●					345	170-280		Key to gate on west side of the facility (Ontario St.) is available for check out at the BOU treatment facility.	2017: Install transducer prior to April 2018 monitoring event.
OW-VO8B	Located in Burbank Fire Department Training Facility Yard	Burbank FD Yard	Burbank FD		●					345	325-345			

NOTES:
Historical information included in this matrix is a collaboration of information provided by Lockheed Martin, dated 9/14/11 and information obtained from the United States Environmental Protection Agency San Fernando Valley database.
bgs = below ground surface
btoc = below top of casing
EPA = ENVIRONMENTAL PROTECTION AGENCY
HP = horsepower
NA = NOT APPLICABLE
NR = NON-ROUTINE
O = OPERATIONAL MONITORING WELL
HSU = ydrostratigraphic unit
OSP = Operational Sampling Plan
PAC = Pacific Airmotive Corporation
WELL
R = ROUTINE MONITORING WELL
SVOC = SEMI-VOLATILE ORGANIC COMPOUND
TCP = TRICHLOROPROPANE
TDS = TOTAL DISSOLVED SOLIDS
SCRRA = Southern CaliforniaRegional Rail Authority
V = volt
VOC = VOLATILE ORGANIC COMPOUND
WB =CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD REQUIRED WELL
WT = water table
X = OPERATIONAL SAMPLING PLAN

Table 3
Second Quarter 2016 Groundwater Elevation Data

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Well ID	Screened HSU	Screened Interval (feet bgs)	Date Measured	Time Measured	Well Casing Elevation (feet MSL)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet MSL)
3830Q	B	335 - 355	4/18/2017	15:01	702.56	235.16	467.40
3830S	X/A (WT)	218 - 258	4/18/2017	15:10	702.37	235.31	467.06
3831Q	A (WT)	230 - 250	4/18/2017	10:22	660.31	198.30	462.01
3850M	X (WT)	182 - 232	4/20/2017	10:02	684.67	228.15	456.52
3850N	X (WT)	165 - 215	4/20/2017	11:11	658.07	203.31	454.76
3850Q	Y	277 - 317	4/20/2017	11:13	655.87	198.88	456.99
3850R	B	337 - 347	4/20/2017	11:14	657.49	198.35	459.14
3850S	A'/X (WT)	183 - 233	NA	NA	668.04	NA	NA
3850T	A'/X (WT)	194 - 239	4/19/2017	14:28	680.30	224.58	455.72
3850U	A'/X (WT)	189 - 234	4/19/2017	14:14	684.83	228.25	456.58
3850V	A'/X (WT)	203 - 243	4/18/2017	9:55	693.20	233.75	459.45
3850W	A'/X (WT)	200 - 240	4/18/2017	13:43	693.01	233.45	459.56
3851M	X/A (WT)	165 - 215	4/19/2017	10:12	650.35	191.19	459.16
3851N	B	305 - 325	4/19/2017	10:09	650.10	190.49	459.61
3852F	X (WT)	125 - 175	4/18/2017	10:01	607.65	148.03	459.62
3852G	A (WT)	196 - 216	4/18/2017	10:34	607.85	147.71	460.14
3852H	B	269 - 299	4/18/2017	10:10	607.93	149.65	458.28
3852L	X (WT)	139 - 179	4/18/2017	9:45	623.05	164.95	458.10
3852M	A (WT)	208 - 228	4/18/2017	9:15	593.45	136.91	456.54
3852N	B	283 - 303	4/18/2017	9:21	593.47	137.94	455.53
3860J	X (WT)	170 - 210	4/18/2017	8:01	660.22	203.34	456.88
3860K	A'/X (WT)	180 - 230	4/18/2017	10:28	667.57	212.21	455.36
3861D	X (WT)	130 - 180	4/19/2017	9:40	617.88	164.20	453.68
3861E	A (WT)	201 - 241	4/19/2017	9:44	615.96	163.60	452.36
3861F	B	303 - 323	4/19/2017	9:37	617.46	159.94	457.52
3862D	A (WT)	174 - 194	4/18/2017	8:31	587.50	133.36	454.14
3862E	B	256 - 276	4/18/2017	8:35	587.35	130.38	456.97
3870D	K (WT)	140 - 190	4/18/2017	7:47	639.78	169.28	470.50
3871H	A (WT)	200 - 241	4/18/2017	8:46	591.34	138.19	453.15
3871J	B	274 - 284	4/18/2017	8:52	591.14	132.80	458.34
3872L	A (WT)	160 - 190	4/18/2017	8:08	562.68	110.68	452.00
3872M	B/OA	274 - 304	4/18/2017	8:12	564.35	106.58	457.77
3872N	X (WT)	124 - 144	4/18/2017	8:20	560.77	108.49	452.28
3872Q	A' (WT)	93 - 133	4/18/2017	7:49	575.25	120.81	454.44
3872R	A (WT)	193 - 223	4/18/2017	7:54	575.00	120.87	454.13
3872S	B	275 - 295	4/18/2017	7:57	574.95	117.30	457.65
3880	K (WT)	120 - 170	4/18/2017	7:35	620.06	157.24	462.82
4948	A/Y (WT)	247 - 297	4/19/2017	7:22	763.46	291.49	471.97

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Well ID	Screened HSU	Screened Interval (feet bgs)	Date Measured	Time Measured	Well Casing Elevation (feet MSL)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet MSL)
4949C	A (WT)	222 - 272	4/19/2017	7:30	733.32	268.00	465.32
A-1-CW02	B	350 - 360	4/19/2017	10:45	684.64	222.80	461.84
A-1-CW03R	A (WT)	245 - 285	4/19/2017	10:42	685.09	226.96	458.13
A-1-CW04	A (WT)	200 - 240	4/19/2017	14:03	677.81	217.52	460.29
A-1-CW05	B	336 - 376	4/19/2017	14:14	677.91	216.18	461.73
A-1-CW07	X (WT)	174 - 224	4/19/2017	14:45	674.35	Dry Well	TD 210.54
A-1-CW08	X (WT)	175 - 235	4/19/2017	14:35	682.74	226.60	456.14
A-1-CW09	X (WT)	187 - 227	4/18/2017	12:17	673.80	217.67	456.13
B-1-CW11	B	300 - 330	4/19/2017	7:37	610.05	150.40	459.65
B-1-CW12	A' (WT)	120 - 170	4/19/2017	7:35	609.85	155.58	454.27
B-1-CW13	X (WT)	150 - 210	4/20/2017	8:17	651.49	200.05	451.44
B-1-CW16	A' (WT)	140 - 190	4/19/2017	10:29	639.07	186.94	452.13
B-1-CW17	A'/X (WT)	125 - 165	4/19/2017	9:09	596.35	140.51	455.84
B-1-CW20	B	285 - 305	4/19/2017	9:21	600.23	140.55	459.68
B-1-CW25	A' (WT)	150 - 190	4/19/2017	8:20	636.54	185.95	450.59
B-1-CW27	B	314 - 334	4/19/2017	8:16	636.93	178.36	458.57
B-1-CW28	B	326 - 346	4/20/2017	8:30	650.15	191.69	458.46
B-1-CW29	A' (WT)	131 - 171	4/19/2017	7:57	623.12	Dry Well	171.65
B-1-CW30	A' (WT)	156 - 196	4/19/2017	7:51	622.10	169.80	452.30
B-1-CW31	A' (WT)	165 - 205	4/19/2017	7:44	620.89	170.59	450.30
B-1-CW32	A' (WT)	139 - 179	4/19/2017	9:14	602.92	148.16	454.76
B-1-CW33	A' (WT)	178 - 218	4/19/2017	8:07	639.96	189.80	450.16
B-1-CW34	A' (WT)	144 - 184	4/19/2017	7:30	609.47	154.32	455.15
B-5-CW02	B	340 - 350	4/18/2017	14:32	697.67	232.60	465.07
B-5-CW03	A (WT)	211 - 231	4/18/2017	14:40	697.26	Dry Well	TD 228.35
B-6-CW02	B	330 - 340	4/18/2017	10:06	699.99	234.04	465.95
B-6-CW05	B	345 - 355	4/18/2017	13:23	725.42	258.07	467.35
B-6-CW08	B	361 - 371	4/19/2017	12:56	727.06	259.90	467.16
B-6-CW09	X/A (WT)	242 - 262	4/19/2017	12:59	727.04	Dry Well	TD 257.95
B-6-CW10	X (WT)	203 - 253	4/19/2017	15:06	710.11	247.00	463.11
B-6-CW14	B	325 - 365	4/19/2017	14:08	704.79	240.76	464.03
B-6-CW16	X/A (WT)	210 - 260	4/18/2017	14:00	714.62	250.78	463.84
B-6-CW17	A/Y (WT)	240 - 270	4/19/2017	13:31	742.39	Dry Well	NA
C-1-CW02	B	382 - 392	4/18/2017	12:57	740.07	270.59	469.48
C-1-CW03	A (WT)	259 - 280	4/18/2017	13:00	740.39	271.01	469.38
C-1-CW05	B	376 - 386	4/18/2017	12:31	720.87	251.71	469.16
C-1-CW06	A (WT)	232 - 252	4/18/2017	12:40	720.91	Dry Well	TD 247.12
C-1-CW07	Y (WT)	290 - 320	4/19/2017	9:39	729.74	264.71	465.03

Table 3
Second Quarter 2016 Groundwater Elevation Data

2016 BOU Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Screened HSU	Screened Interval (feet bgs)	Date Measured	Time Measured	Well Casing Elevation (feet MSL)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet MSL)
C-1-CW08	A (WT)	245 - 285	4/19/2017	9:30	731.72	264.40	467.32
MW-01	A'/X (WT)	180 - 240	4/18/2017	9:01	719.39	Dry Well	TD 240.25
MW-02	A'/X (WT)	180 - 240	4/18/2017	8:55	720.05	Dry Well	TD 238.71
MW-03	X/A (WT)	220 - 280	4/18/2017	8:45	720.63	257.09	463.54
MW-04	X/A (WT)	200 - 260	4/18/2017	9:27	702.29	240.90	461.39
MW-05	X/A (WT)	205 - 265	4/18/2017	9:09	705.34	243.04	462.30
MW-06	X/A (WT)	200 - 260	4/18/2017	9:15	705.67	Dry Well	TD 241.04
MW-07	X/A (WT)	195 - 255	4/18/2017	9:44	698.00	237.82	460.18
MW-08	X/A (WT)	195 - 255	4/18/2017	9:34	702.95	243.26	459.69
OW-VO1A-R	WT	140 - 250	4/19/2017	8:03	619.15	167.62	451.53
OW-VO1B-R	B	300 - 325	4/19/2017	8:57	619.13	162.48	456.65
OW-VO2A-R	WT	150 - 260	4/19/2017	8:43	622.82	179.15	443.67
OW-VO2B-R	B	305 - 320	4/19/2017	8:47	622.84	164.71	458.13
OW-VO3A-R	WT	160 - 270	4/19/2017	8:27	627.12	176.72	450.40
OW-VO3B-R	B	315 - 335	4/19/2017	8:30	627.14	169.19	457.95
OW-VO4A	WT	110 - 282	4/20/2017	8:52	639.72	185.85	453.87
OW-VO4B	B	320 - 350	4/20/2017	8:55	639.66	182.23	457.43
OW-VO5A	WT	110 - 283	4/20/2017	11:03	645.68	199.13	446.55
OW-VO5B	B	321 - 360	4/20/2017	11:04	645.61	188.40	457.21
OW-VO6A	WT	120 - 273	4/20/2017	11;10	656.45	202.23	454.22
OW-VO6B	B	312 - 350	4/20/2017	11:09	656.38	197.72	458.66
OW-VO7A	WT	120 - 273	4/20/2017	11:19	668.65	211.99	456.66
OW-VO7B	B	312 - 350	4/20/2017	11:25	668.86	209.95	458.91
OW-VO8A	WT	170 - 280	4/19/2017	9:55	645.70	192.61	453.09
OW-VO8B	B	325 - 345	4/19/2017	9:08	645.67	191.44	454.23
Tt-PW-01	A	185 - 225	4/20/2017	11:31	611.96	156.66	455.30
Tt-PW-02	A	179 - 219	4/20/2017	11:48	603.18	147.45	455.73
SW-1	X/A (WT)	207 - 237 242 - 262	4/18/2017	8:15	714.71	244.75	469.96
SW-5	X/A/Y (WT)	196 - 226 231 - 251	4/18/2017	8:27	694.59	235.37	459.22

Notes:
A = A hydrostratigraphic unit
A' = A' hydrostratigraphic unit
B = B hydrostratigraphic unit
btoc = below top of casing
HSU = hydrostratigraphic unit
MSL - mean sea level
OA = older alluvium
NA = not available
WT = water table
X = X hydrostratigraphic unit
Y = Y hydrostratigraphic unit

Table 4
Second Quarter 2016 Sampling Matrix

2016 BOU Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	HSU	October Water Level Wells	April Water Level Wells	*Laboratory Analyses*					Identified in Draft 2014 OSP for Time v. Concentration Evaluation
				VOCs (USEPA Method 8260B)	1,2,3-TCP (USEPA Method 8260B SIM)	Hexavalent Chromium (USEPA Method 218.6)	Total Chromium (USEPA Methods 6010B)	1,4-Dioxane (USEPA Method 8270C[M] Isotope Dilution)	
3830Q	B		●	X	X	X	X	X	
3830R	Y (WT)								
3830S	X/A (WT)		●	X	X	X	X	X	
3831Q	A (WT)	●	●	X	X	X	X	X	Potential trending of TCE plume; BOU boundary
3850M	X (WT)		●	X	X	X	X	X	
3850N	X (WT)		●	X	X	X	X	X	Potential trending of TCE plume; near pumping zone
3850P	A (WT)								
3850Q	Y (WT)		●						
3850R	B	●	●	X	X	X	X	X	
3850S	A'/X (WT)		●						
3850T	A'/X (WT)		●						
3850U	A'/X (WT)		●	X	X	X	X	X	
3850V	A'/X (WT)	● T	● T						
3850W	A'/X (WT)		●						
3851M	X/A (WT)	● T	● T	X	X	X	X	X	
3851N	B	● T	● T	X	X	X	X	X	
3851P	OA								
3852F	X (WT)		●	X	X	X	X	X	
3852G	A (WT)	●	●						
3852H	B	●	●	X	X	X	X	X	
3852J	Y (WT)								
3852K	A (WT)								
3852L	X (WT)	● T	● T	X	X	X	X	X	Capture zone boundary
3852M	A (WT)	●	●	X	X	X	X	X	
3852N	B	●	●	X	X	X	X	X	
3860J	X (WT)		●	X	X	X	X	X	

Table 4
Second Quarter 2016 Sampling Matrix

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Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	HSU	October Water Level Wells	April Water Level Wells	*Laboratory Analyses*					Identified in Draft 2014 OSP for Time v. Concentration Evaluation
				VOCs (USEPA Method 8260B)	1,2,3-TCP (USEPA Method 8260B SIM)	Hexavalent Chromium (USEPA Method 218.6)	Total Chromium (USEPA Methods 6010B)	1,4-Dioxane (USEPA Method 8270C[M] Isotope Dilution)	
3860K	A'/X (WT)		●	X	X	X	X	X	
3861D	X (WT)	● T	● T	X	X	X	X	X	Capture zone evaluation
3861E	A (WT)		●						
3861F	B	● T	● T	X	X	X	X	X	
3862C	A' (WT)								
3862D	A (WT)	●	●	X	X	X	X	X	Increasing TCE and PCE trends
3862E	B	●	●	X	X	X	X	X	
3870D	K (WT)		●	X	X	X	X	X	
3870E	K								
3871G	A' (WT)								
3871H	A (WT)	● T	● T	X	X	X	X	X	Increasing TCE and PCE trends
3871J	B		●	X	X	X	X	X	
3872K	A' (WT)	●							
3872L	A (WT)		●	X	X	X	X	X	
3872M	B/OA	●	●	X	X	X	X	X	
3872N	X (WT)		●	X	X	X	X	X	
3872P	Y (WT)								
3872Q	A' (WT)	●	●	X	X	X	X	X	
3872R	A (WT)		●						
3872S	B	●	●	X	X	X	X	X	
3880	K (WT)	● T	● T	X	X	X	X	X	
4948	A/Y (WT)		●	X	X	X	X	X	
4949C	A (WT)		●	X	X	X	X	X	
A-1-CW01	OA								
A-1-CW02	B		●	X	X	X	X	X	

Table 4
Second Quarter 2016 Sampling Matrix

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Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	HSU	October Water Level Wells	April Water Level Wells	*Laboratory Analyses*					Identified in Draft 2014 OSP for Time v. Concentration Evaluation
				VOCs (USEPA Method 8260B)	1,2,3-TCP (USEPA Method 8260B SIM)	Hexavalent Chromium (USEPA Method 218.6)	Total Chromium (USEPA Methods 6010B)	1,4-Dioxane (USEPA Method 8270C[M] Isotope Dilution)	
A-1-CW03	X (WT)								
A-1-CW03R	A (WT)		●	X	X	X	X	X	
A-1-CW04	A (WT)	● T	● T	X	X	X	X	X	
A-1-CW05	B	● T	● T	X	X	X	X	X	
A-1-CW06	OA								
A-1-CW07	X (WT)		●	X	X	X	X	X	Elevated COC concentrations and upgradient capture zone evaluation
A-1-CW08	X (WT)		●	X	X	X	X	X	
A-1-CW09	X (WT)	●	●	X	X	X	X	X	Cross-gradient capture zone analysis
B-1-CW11	B	● T	● T	X	X	X	X	X	
B-1-CW12	A' (WT)	● T	● T	X	X	X	X	X	Elevated COC concentrations and adjacent to pumping zone
B-1-CW13	X (WT)	● T	● T	X	X	X	X	X	
B-1-CW16	A'/X (WT)		●						
B-1-CW17	A'/X (WT)	● T	● T	X	X	X	X	X	Elevated COC concentrations and hydraulic capture
B-1-CW20	B	● T	● T	X	X	X	X	X	
B-1-CW25	A' (WT)	● T	● T	X	X	X	X	X	Elevated COC concentrations and adjacent to pumping zone
B-1-CW27	B	●	●	X	X	X	X	X	
B-1-CW28	B	●	●	X	X	X	X	X	
B-1-CW29	A' (WT)		●	X	X	X	X	X	Elevated COC concentrations and upgradient capture zone evaluation
B-1-CW30	A' (WT)		●	X	X	X	X	X	
B-1-CW31	A' (WT)		●	X	X	X	X	X	
B-1-CW32	A' (WT)		●	X	X	X	X	X	
B-1-CW33	A' (WT)		●	X	X	X	X	X	
B-1-CW34	A' (WT)		●	X	X	X	X	X	
B-5-CW01	OA								
B-5-CW02	B	● T	● T	X	X	X	X	X	
B-5-CW03	A (WT)	● T	● T	X	X	X	X	X	1,2,3-TCP trend and cross gradient capture zone

Table 4
Second Quarter 2016 Sampling Matrix

2016 BOU Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	HSU	October Water Level Wells	April Water Level Wells	*Laboratory Analyses*					Identified in Draft 2014 OSP for Time v. Concentration Evaluation
				VOCs (USEPA Method 8260B)	1,2,3-TCP (USEPA Method 8260B SIM)	Hexavalent Chromium (USEPA Method 218.6)	Total Chromium (USEPA Methods 6010B)	1,4-Dioxane (USEPA Method 8270C[M] Isotope Dilution)	
B-6-CW01	OA								
B-6-CW02	B	● T	● T	X	X	X	X	X	
B-6-CW03	X (WT)								
B-6-CW03R	A (WT)								
B-6-CW04	OA								
B-6-CW05	B		●	X	X	X	X	X	
B-6-CW06	X (WT)								
B-6-CW07	OA								
B-6-CW08	B		●	X	X	X	X	X	
B-6-CW09	X/A (WT)		●						
B-6-CW10	X (WT)		●	X	X	X	X	X	
B-6-CW14	B		●	X	X	X	X	X	
B-6-CW15	OA								
B-6-CW16	X/A (WT)		●	X	X	X	X	X	
B-6-CW17	A/Y (WT)	● T	● T	X	X	X	X	X	
C-1-CW01	OA								
C-1-CW02	B	● T	● T	X	X	X	X	X	
C-1-CW03	A (WT)		●	X	X	X	X	X	
C-1-CW04	OA								
C-1-CW05	B		●	X	X	X	X	X	
C-1-CW06	A (WT)		●	X	X	X	X	X	Elevated TCE concentrations and western BOU boundary
C-1-CW07	Y (WT)		●	X	X	X	X	X	Chromium detections and upgradient capture evaluation
C-1-CW08	A (WT)		●	X	X	X	X	X	Chromium detections and upgradient capture evaluation
MW-01	A'/X (WT)		●	X	X	X	X	X	Elevated COC concentrations and potential mass flux zone
MW-02	A'/X (WT)								
MW-03	X/A (WT)		●	X	X	X	X	X	
MW-04	X/A (WT)		●	X	X	X	X	X	
MW-05	X/A (WT)		●						

Table 4
Second Quarter 2016 Sampling Matrix

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Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	HSU	October Water Level Wells	April Water Level Wells	*Laboratory Analyses*					Identified in Draft 2014 OSP for Time v. Concentration Evaluation
				VOCs (USEPA Method 8260B)	1,2,3-TCP (USEPA Method 8260B SIM)	Hexavalent Chromium (USEPA Method 218.6)	Total Chromium (USEPA Methods 6010B)	1,4-Dioxane (USEPA Method 8270C[M] Isotope Dilution)	
MW-06	X/A (WT)		●						
MW-07	X/A (WT)		●	X	X	X	X	X	
MW-08	X/A (WT)		●	X	X	X	X	X	
SW-1	X/A (WT)		●	X	X	X	X	X	
SW-5	X/A/Y (WT)		●	X	X	X	X	X	
Tt-PW-01	A (WT)		●						
Tt-PW-02	A (WT)	● T	● T						

Notes:
B = B hydrostratigraphic unit
BOU = Burbank Operable Unit
COC = chemical of concern
HSU = hydrostratigraphic unit
PCE = tetrachloroethene
T = well with transducer
TCE - trichloroethene
TCP = trichloropropane
VOCs = volatile organic compounds
USEPA = United States Environmental Protection Agency
WT = water table
?? = screened HSU information not available

Table 5
Second Quarter 2017 Groundwater Analytical Data

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Sampling Location	Screened HSU	Sample Date	Chromium, Total	Hexavalent Chromium	Acetone	Bromo-dichloro-methane	Methyl-tert-butyl-ether	Carbon Tetra-chloride	Chloro-form	Dichloro-difluoro-methane	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	1,2-Dichloro-propane	Naphthalene	Tetrachloro-ethene	Toluene	1,1,2-Trichloro-1,2,2-Trifluoro-ethane	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloro-ethene	Trichloro-fluoro-methane	1,2,3-Trichloro-propane	1,4-Dioxane
All results are reported in µg/L unless otherwise stated.																									
3830Q	B	4/4/2017	0.770 Jq	0.19	<4.0	<0.20	<0.20	<0.20	<0.20	0.78 Jq	0.62	<0.20	<0.28	0.51	<0.20	<0.40	0.50	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
3830S	X/A (WT)	4/4/2017	4.03	0.93	<16	<0.80	1.6 Jq	<0.80	1.4 Jq	<1.6	<0.80	<0.80	<1.1	<0.80	<0.80	<1.6	2.9	<0.80	<0.96	<0.80	<0.80	**85**	<0.80	<0.0025	<0.28
3831Q	A (WT)	4/4/2017	21.3	<0.0099	<4.0	<0.20	<0.20	0.28 Jq	0.66	<0.40	0.21 Jq	<0.20	<0.28	0.40 Jq	<0.20	<0.40	1.2	<0.20	<0.24	<0.20	<0.20	**9.2**	<0.20	**0.011**	<0.28
3850M	X (WT)	Not sampled																							
3850N	X (WT)	4/13/2017	10.1	9.0	<4.0	<0.20	<0.20	**1.8**	3.2	<0.40	<0.20	0.38 Jq	0.87	0.26 Jq	0.21 Jq	<0.40	**13**	<0.20	0.27 Jq	<0.20	0.43 Jq	**19**	<0.20	**0.56 J-c**	<0.28
3850R	B	4/13/2017	0.850 Jq	0.021	<8.0	<0.40	<0.40	<0.40	<0.40	<0.80	<0.40	<0.40	<0.56	0.58 Jq	<0.40	<0.80	**48**	<0.40	<0.48	<0.40	<0.40	**7.8**	<0.40	**0.0074**	<0.28
3850U	A'/X (WT)	4/25/2017	9.19	0.87	<4.0	<0.20	<0.20	0.35 Jq	1.5	<0.40	<0.20	0.44 Jq	**6.9**	0.35 Jq	<0.20	<0.40	**27**	<0.20	4.9	0.23 Jq	<0.20	**19**	<0.20	**1.6 Jc**	**1.4**
3851M	X/A (WT)	4/3/2017	3.03	1.9	<9.2 Uk	<0.20	<0.20	**0.53**	0.62	<0.40	<0.20	<0.20	0.57	0.24 Jq	<0.20	<0.40	2.2	0.35 Jq	<0.24	<0.20	<0.20	**12**	<0.20	**0.057**	<0.28
3851N	B	4/4/2017	1.72	1.2	5.7 Jq	<0.20	<0.20	<0.20	<0.20	1.2	0.28 Jq	<0.20	<0.28	<0.20	<0.20	<0.40	0.67	<0.20	<0.24	<0.20	<0.20	0.56	<0.20	<0.0025	<0.28
3852F	X (WT)	4/12/2017	3.15	2.7	<4.0	0.20 Jq	<0.20	0.44 Jq	0.51	1.1	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	1.0	<0.20	<0.24	<0.20	<0.20	0.58	<0.20	**0.027**	**1.5**
3852H	B	4/12/2017	2.32	1.1	<4.0	<0.20	<0.20	**1.6**	6.9	0.91 Jq	<0.20	**2.1**	<0.28	<0.20	<0.20	<0.40	1.5	<0.20	<0.24	<0.20	0.29 Jq	**7.2**	<0.20	**0.29**	<0.28
3852L	X (WT)	4/5/2017	4.48	1.8	4.5 Jq	<0.20	<0.20	0.28 Jq	0.46 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	1.3	<0.20	**0.032**	<0.28
3852M	A (WT)	4/3/2017	1.53 Jf	0.63	<5.4 UJk, f	<0.20	<0.20	**1.2**	1.5	<0.40	<0.20	**1.0**	0.69	<0.20 UJf	<0.20	<0.40	**8.8**	<0.20	<0.24	<0.20	0.25 Jq	**12**	<0.20	**0.21**	<0.28
3852N	B	4/3/2017	3.22	2.5	<7.4 Uk	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	3.8	<0.20	<0.24	<0.20	<0.20	2.6	<0.20	<0.0025	<0.28
3860J	X (WT)	Not sampled																							
3860K	A'/X (WT)	4/4/2017	3.44	1.9	<40	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	**17**	2.3 Jq	<2.0	<4.0	**200**	<2.0	8.5	<2.0	<2.0	**210**	<2.0	**32**	<0.28
3861D	X (WT)	4/7/2017	8.94	6.8	4.1 Jq	<0.20	<0.20	0.41 Jq	1.2	7.1	<0.20	<0.20	<0.28	0.21 Jq	<0.20	<0.40	**24**	0.41 Jq	<0.24	<0.20	<0.20	**160 J-c**	<0.20	**0.0056**	<0.28
3861F	B	4/7/2017	5.56	4.9	7.2 Jq	<0.20	<0.20	<0.20	0.39 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**7.0**	<0.20	<0.24	<0.20	<0.20	4.1	<0.20	0.0045 Jq	<0.28
3862D	A (WT)	4/5/2017	9.01	8.5	<8.0	<0.40	<0.40	**1.1**	0.89 Jq	1.5 Jq	<0.40	<0.40	<0.56	<0.40	<0.40	<0.80	**14**	<0.40	<0.48	<0.40	<0.40	**89**	<0.40	**0.023**	<0.28
3862E	B	4/10/2017	1.66	1.0	<4.0	<0.20	<0.20	0.40 Jq	0.29 Jq	0.87 Jq	<0.20	<0.20	0.58	0.21 Jq	<0.20	<0.40	**15**	<0.20	<0.24	<0.20	<0.20	**32**	<0.20	**0.013**	<0.28
3870D	K (WT)	4/5/2017	18.6	**17**	<4.0	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
3871H	A (WT)	4/7/2017	11.4	9.6	<32	<1.6	<1.6	<1.6	<1.6	<3.2	<1.6	<1.6	<2.2	<1.6	<1.6	<3.2	**120**	<1.6	<1.9	<1.6	<1.6	**140**	<1.6	**0.084**	<0.28
3871J	B	4/7/2017	4.47	3.8	5.5 Jq	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.25 Jq	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
3872L	A (WT)	4/3/2017	5.90	4.4	<4.0	<0.20	<0.20	<0.20	0.59	<0.40	<0.20	<0.20	<0.28	0.23 Jq	<0.20	<0.40	**300**	<0.20	<0.24	<0.20	<0.20	**240**	<0.20	**0.095**	<0.28
3872M	B/OA	4/3/2017	4.87	4.4	<4.7 Uk	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	3.9	<0.20	<0.24	<0.20	<0.20	2.0	<0.20	<0.0025	<0.28
3872N	X (WT)	4/3/2017	7.88	6.7	<9.3 Uk	<0.20	<0.20	<0.20	0.70	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**310**	<0.20	<0.24	<0.20	<0.20	**120**	<0.20	**0.31**	<0.28
3872Q	A' (WT)	4/5/2017	1.26	0.68	<16	<0.80	<0.80	<0.80	<0.80	<1.6	<0.80	<0.80	<1.1	<0.80	<0.80	<1.6	**83**	<0.80	<0.96	<0.80	<0.80	**30**	<0.80	**0.045**	<0.28
3872S	B	4/5/2017	7.85	7.9	<4.0	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
3880	K (WT)	4/5/2017	7.94	6.7	<4.0	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
4948	A/Y (WT)	4/14/2017	5.03	0.82	<4.0	<0.20	<0.20	<0.20	0.33 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	3.8	<0.20	<0.24	<0.20	<0.20	1.3	<0.20	<0.0025	<0.28
4949C	A (WT)	Not sampled																							
A-1-CW02	B	4/11/2017	3.65	<0.0099	<4.0	<0.20	<0.20	<0.20	0.29 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**21**	<0.20	0.41 Jq	<0.20	<0.20	4.2	<0.20	<0.0025	<0.28
A-1-CW03R	A (WT)	4/13/2017	1.05	0.010 Jq	<4.0	<0.20	<0.20	0.42 Jq	21	<0.40	<0.20	<0.20	0.45 Jq	0.46 Jq	<0.20	<0.40	**57**	<0.20	<0.24	<0.20	<0.20	**22**	<0.20	**0.63**	<0.28
A-1-CW04	A (WT)	4/10/2017	1.64	0.88	4.7 Jq	<0.20	<0.20	**0.91**	3.6	0.88 Jq	<0.20	0.42 Jq	0.76	<0.20	0.50	<0.40	**5.2**	<0.20	1.3	<0.20	**7.4**	4.8	<0.20	**25 J+c**	**2.0**
A-1-CW05	B	4/10/2017	0.622 Jq	<0.0099	<4.0 UJf	<0.20	<0.20	<0.20	<0.20	0.84 Jq	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	4.0	<0.20	<0.24	<0.20	<0.20	0.44 Jq	<0.20	<0.0025	**2.3**
A-1-CW07	X (WT)	Not sampled																							
A-1-CW08	X (WT)	4/6/2017	1.76	1.2	<8.0	<0.40	<0.40	**1.0**	30	<0.80	<0.40	<0.40	1.4	<0.40	<0.40	<0.80	**28**	<0.40	<0.48	<0.40	<0.40	**69**	<0.40	**87**	<0.28
A-1-CW09	X (WT)	4/11/2017	2.24	1.4	<4.0	<0.20	0.44 Jq	**1.1**	3.8	<0.40	<0.20	0.38 Jq	0.74	<0.20	0.52	<0.40	**5.9**	<0.20	1.9	<0.20	**7.5**	**5.9**	<0.20	**15**	**3.7**
B-1-CW11	B	4/5/2017	3.19	2.7	<4.0	<0.20	<0.20	<0.20	0.48 Jq	2.6	<0.20	0.21 Jq	<0.28	0.95	<0.20	<0.40	2.3	<0.20	<0.24	<0.20	<0.20	0.78	0.29 Jq	<0.0025	**1.0**
B-1-CW12	A' (WT)	4/4/2017	11.5	11	<4.0	<0.20	<0.20	<0.20	1.5	2.5	<0.20	<0.20	1.9	1.1	<0.20	<0.40	**5.5**	<0.20	<0.24	<0.20	<0.20	**14**	<0.20	<0.0025	<0.28
B-1-CW13	X (WT)	4/12/2017	2.76	2.0	<16	<0.80	<0.80	**3.1**	15	<1.6	<0.80	<0.80	**7.9**	<0.80	<0.80	<1.6	**100**	<0.80	5.1	<0.80	<0.80	**240**	<0.80	**13 J+c**	**2.0**
B-1-CW17	A'/X (WT)	4/4/2017	24.6	**20**	<16	<0.80	<0.80	<0.80	4.3	<1.6	<0.80	<0.80	2.9	3.2	<0.80	<1.6	**70**	<0.80	<0.96	<0.80	<0.80	**94**	<0.80	<0.0025	**2.9**
B-1-CW20	B	4/13/2017	3.46	2.1	<4.0	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.34 Jq	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
B-1-CW25	A' (WT)	4/24/2017	8.01	3.8	4.1 Jf, q	<0.20	<0.20	<0.20	2.6	<0.40	<0.20	<0.20	0.62	<0.20	<0.20	<0.40	**72**	<0.20	0.92	<0.20	<0.20	**19**	<0.20	**0.022**	<0.28
B-1-CW27	B	4/10/2017	6.11	5.2	<4.0	<0.20	<0.20	<0.20	0.32 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	4.0	<0.20	<0.24	<0.20	<0.20	2.3	<0.20	<0.0025	<0.28
B-1-CW28	B	4/12/2017	0.983 Jq	<0.0099	<4.0	<0.20	<0.20	<0.20	0.35 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**13**	<0.20	<0.24	<0.20	<0.20	3.2	<0.20	<0.0025	<0.28
B-1-CW29	A' (WT)	Not sampled																							
B-1-CW30	A' (WT)	4/6/2017	33.3	0.59	<40	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.8	<2.0	<2.0	<4.0	**110**	<2.0	<2.4	<2.0	<2.0	**200**	<2.0	<0.0025	<0.28
B-1-CW31	A' (WT)	4/6/2017	21.7	**16**	<8.0	<0.40	<0.40	<0.40	<0.40	<0.80	<0.40	<0.40	<0.56	<0.40	<0.40	<0.80	**55**	<0.40	<0.48	<0.40	<0.40	**47**	<0.40	<0.0025	<0.28
B-1-CW32	A' (WT)	4/5/2017	47.4	8.8	<16	<0.80	<0.80	<0.80	5.6	<1.6	<0.80	<0.80	<1.1	4.1	<0.80	<1.6	**14**	<0.80	<0.96	<0.80	<0.80	**110**	<0.80	**0.011**	<0.28
B-1-CW33	A' (WT)	4/6/2017	14.9	0.44	<80	<4.0	<4.0	<4.0	<4.0	<8.0	<4.0	<4.0	**17**	<4.0	<4.0	<8.0	**630**	<4.0	15	<4.0	<4.0	**180**	<4.0	**0.87 J-c**	**1.2**
B-1-CW34	A' (WT)	4/5/2017	32.1	**16**	<4.0	<0.20	0.23 Jq	<0.20	1.4	<0.40	<0.20	<0.20	0.50	**7.8**	<0.20	<0.40	**13**	<0.20	<0.24	<0.20	<0.20	**22**	<0.20	<0.0025	<0.28
B-5-CW02	B	4/10/2017	0.679 Jq	<0.0099	<4.0	<0.20	<0.20	<0.20	<0.20	0.91 Jq	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.70	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28

Table 5
Second Quarter 2017 Groundwater Analytical Data

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Sampling Location	Screened HSU	Sample Date	Chromium, Total	Hexavalent Chromium	Acetone	Bromo-dichloro-methane	Methyl-tert-butyl-ether	Carbon Tetra-chloride	Chloro-form	Dichloro-difluoro-methane	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	1,2-Dichloro-propane	Naphthalene	Tetrachloro-ethene	Toluene	1,1,2-Trichloro-1,2,2-Trifluoro-ethane	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloro-ethene	Trichloro-fluoro-methane	1,2,3-Trichloro-propane	1,4-Dioxane
All results are reported in µg/L unless otherwise stated.																									
B-5-CW03	A (WT)	Not sampled																							
B-6-CW02	B	4/6/2017	2.95	2.5	<4.0 UJf	<0.20	<0.20	<0.20	0.35 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.56	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
B-6-CW05	B	4/11/2017	1.72	0.10	<4.0	<0.20	0.24 Jq	<0.20	0.27 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.20 Jq	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
B-6-CW08	B	4/11/2017	0.834 Jq	0.028	<4.0	<0.20	0.24 Jq	<0.20	0.27 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**12**	<0.20	0.43 Jq	<0.20	<0.20	3.2	<0.20	<0.0025	<0.28
B-6-CW10	X (WT)	4/24/2017	2.55	0.28	<4.0	<0.20	<0.20	**0.50**	1.7	<0.40	<0.20	<0.20	<0.28	0.35 Jq	<0.20	<0.40	**30**	<0.20	0.34 Jq	<0.20	<0.20	**13**	<0.20	**1.5 J+c**	<0.28
B-6-CW14	B	4/6/2017	1.77	1.2	4.5 Jq	<0.20	<0.20	<0.20	0.29 Jq	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	**22**	<0.20	<0.24	<0.20	<0.20	**5.1**	<0.20	<0.0025	**1.8**
B-6-CW16	X/A (WT)	4/25/2017	28.9	1.4	<4.0	<0.20	<0.20	0.46 Jq	0.84	<0.40	<0.20	<0.20	**8.4**	<0.20	<0.20	<0.40	**6.9**	<0.20	1.3	0.42 Jq	<0.20	3.9	<0.20	<0.0025	<0.28
B-6-CW17	A/Y (WT)	Not sampled																							
C-1-CW02	B	4/11/2017	0.600 Jq	<0.0099	<4.0	<0.20	<0.20	<0.20	<0.20	0.86 Jq	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
C-1-CW03	A (WT)	4/25/2017	2.66	0.88	<4.0	0.34 Jq	<0.20	<0.20	0.74	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	0.38 Jq	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
C-1-CW05	B	4/6/2017	0.735 Jq	0.18	<4.0	<0.20	<0.20	<0.20	<0.20	1.9	1.1	<0.20	<0.28	0.30 Jq	<0.20	<0.40	0.68	<0.20	<0.24	<0.20	<0.20	0.29 Jq	<0.20	<0.0025	<0.28
C-1-CW06	A (WT)	Not sampled																							
C-1-CW07	Y (WT)	4/12/2017	**82.9**	<0.0099	<4.0	<0.20	<0.20	0.37 Jq	0.29 Jq	0.94 Jq	<0.20	<0.20	0.44 Jq	<0.20	<0.20	<0.40	3.2	<0.20	<0.24	<0.20	<0.20	0.72	<0.20	<0.0025	**2.8**
C-1-CW08	A (WT)	4/12/2017	7.57	1.1	<4.0	<0.20	<0.20	**0.52**	0.33 Jq	0.99 Jq	<0.20	<0.20	0.48 Jq	<0.20	<0.20	<0.40	1.5	<0.20	<0.24	<0.20	<0.20	0.36 Jq	<0.20	<0.0025	<0.28
MW-01	A'/X (WT)	Not sampled																							
MW-03	X/A (WT)	4/7/2017	2.97	2.7	4.1 Jq	<0.20	<0.20	**0.78**	2.6	<0.40	<0.20	0.32 Jq	**7.2**	0.25 Jq	<0.20	<0.40	**32**	<0.20	2.9	<0.20	<0.20	**12**	0.34 Jq	**0.93**	<0.28
MW-04	X/A (WT)	4/10/2017	2.49	2.2	11	<0.20	<0.20	**1.1**	1.5	<0.40	<0.20	0.22 Jq	2.5	<0.20	<0.20	0.82 Jq	**29**	<0.20	1.3	<0.20	<0.20	**21**	0.34 Jq	**0.96**	<0.28
MW-07	X/A (WT)	4/7/2017	2.62	1.9	4.0 Jq	<0.20	<0.20	0.34 Jq	1.9	<0.40	<0.20	0.23 Jq	2.9	<0.20	<0.20	<0.40	**34**	<0.20	3.9	<0.20	<0.20	**17**	<0.20	**0.60**	<0.28
MW-08	X/A (WT)	4/7/2017	2.81	2.1	6.3 Jq	<0.20	<0.20	**0.57**	4.3	<0.40	<0.20	<0.20	2.1	<0.20	<0.20	0.45 Jq	**71**	<0.20	3.4	<0.20	<0.20	**24**	<0.20	**0.93**	<0.28
SW-1	X/A (WT)	4/25/2017	6.53	5.6	<4.0	0.80	<0.20	<0.20	3.3	<0.40	<0.20	<0.20	<0.28	<0.20	<0.20	<0.40	<0.20	<0.20	<0.24	<0.20	<0.20	<0.29	<0.20	<0.0025	<0.28
SW-5	X/A/Y (WT)	4/10/2017	**57**	4.7	11 Jq	<0.40	<0.40	**0.67 Jq**	0.94 Jq	<0.80	0.60 Jq	<0.40	3.8	<0.40	<0.40	<0.80	**51**	<0.40	3.1	<0.40	<0.40	**32**	<0.40	<0.0025	<0.28
MCL/DWNL (µg/L)			50	10	--	80	13	0.5	80	1000 (1)	5	0.5	6	6	5	17 (1)	5	150	1,200	200	5	5	150	0.005 (1)	1 (1)

Notes:

Only analytes positively detected are presented in this table. For a complete list, refer to the laboratory data package.
µg/L - micrograms per liter
<# - Analyte not detected; method detection limit concentration is shown.
A = A hydrostratigraphic unit
A' = A' hydrostratigraphic unit
B = B hydrostratigraphic unit
OA = older alluvium
X = X hydrostratigraphic unit
Y = Y hydrostratigraphic unit
HSU = hydrostratigraphic unit
WT = water table
DWNL - California Department of Public Health drinking water notification level
MCL - California Department of Public Health maximum contaminant level
MDL - Method detection limit

Bold - MCL or DWNL exceeded
(1) - DWNL
"--" - MCL or DWNL not available.
J, J-, J+: - The analyte was positively identified, but the analyte concentration is an estimated value. The "J" qualifier may also be accompanied by a "+" sign or a "-"sign which indicates a positive or negative bias of the qualified result
U - The analyte was found in a field blank; the detection in the field sample is suspected as coming from cross contamination not native to the sample, and the detection level was raised and the data was qualified as not detected
UJ - Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision.
c - The Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recoveries were outside control limits
f - The duplicate samples Relative Percent Difference (RPD) was outside the control limit
p - The result was qualified based on professional judgment
q - The analyte detection was below the Practical Quantitation Limit (PQL)
k - The analyte was found in a field blank

Table 6
Second Quarter 2016 Summary of Chemicals Detected

2016 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Organic Analytes Detected	Total Number of Samples Analyzed (1)	Total Number of Detections (1)	Number of Detections Exceeding MCL or DWNL (1)	MCL / DWNL (µg/L)	Minimum Concentration Detected (µg/L)	Maximum Concentration Detected (µg/L)
1,4-Dioxane	65	11	11	1 (2)	1.0	3.7
Acetone	65	13	0	--	4.0	11
Bromodichloromethane	65	3	0	80 (3)	0.20	0.80
Methyl tert-Butyl Ether	65	5	0	13	0.230	1.6
Carbon Tetrachloride	65	25	15	0.5	0.280	3.1
Chloroform	65	45	0	80 (3)	0.27	6.9
Dichlorodifluoromethane	65	16	0	1,000 (2)	0.78	7.1
1,1-Dichloroethane	65	5	0	5	0.21	1.1
1,2-Dichloroethane	65	10	2	0.5	0.21	2.1
1,1-Dichloroethene	65	24	6	6	0.44	17
cis-1,2-Dichloroethene	65	19	1	6	0.21	7.8
1,2-Dichloropropane	65	3	0	5	0.21	0.52
Naphthalene	65	2	0	17 (2)	0.45	0.82
Tetrachloroethene	65	59	37	5	0.20	630
Toluene	65	2	0	150	0.35	0.41
1,1,2-Trichloro-1,2,2-Trifluoro-ethane	65	17	0	1,200	0.27	8.5
1,1,1-Trichloroethane	65	2	0	200	0.23	0.42
1,1,2-Trichloroethane	65	5	2	5	0.25	7.5
Trichloroethene	65	53	35	5	0.29	240
Trichlorofluoromethane	65	3	0	150	0.29	0.34
1,2,3-Trichloropropane	65	31	30	0.005 (2)	0.0045	87
Inorganic Analytes Detected	**Total Number of Samples Analyzed (1)**	**Total Number of Detections (1)**	**Number of Detections Exceeding MCL or DWNL (1)**	**MCL / DWNL (µg/L)**	**Minimum Concentration Detected (µg/L)**	**Maximum Concentration Detected (µg/L)**
Total Chromium	65	65	2	50	0.600	82.9
Hexavalent Chromium	65	58	3	10	0.010	20.0

Notes:
DWNL - California Department of Public Health drinking water notification level
MCL - California Department of Public Health maximum contaminant level
" -- " - MCL or DWNL not established
(1) - Number of detections excludes sample duplicates, secondary stratification samples, trip blanks, and equipment blanks
(2) - DWNL
(3) - MCL for total trihalomethanes
µg/L - micrograms per liter

Table 7
Summary of Mann-Kendall Test Results

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Analyte	Wells Tested	Insufficient Data	Non-detect	No Trend	Decreasing Trend	Probably Decreasing Trend	Stable Trend	Probably Increasing Trend	Increasing Trend
1,2,3-Trichloropropane	65	5	7	32	5	2	2	3	9
1,4-Dioxane	65	5	13	12	8	3	13	5	6
Tetrachlorothene	65	5	2	5	35	2	13	0	3
Trichloroethene	65	5	3	8	35	4	8	1	1
Hexavalent Chromium	65	5	0	22	7	4	18	4	5
Total Chromium	65	5	0	35	5	5	12	1	2
Total Analysis	390	30	25	114	95	20	66	14	26

Table 8
Summary of Mann-Kendall and Linear Regression Results for Increasing Trend Wells

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

	Analyte:	1,2,3-Trichloropropane			1,4-Dioxane			Tetrachlorothylene			Trichloroethylene			Hexavalent Chromium			Total Chromium		
Sample Location	Screened HSU	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)	Trend	Magnitude (%/yr)	Magnitude (µg/L/y)
3830S	X/A (WT)	No Trend			No Trend			Decreasing	-3.83	-0.61	Probably Increasing	3.83	2.38	No Trend			No Trend		
3850R	B	Probably Increasing	7.67	0.00062	No Trend			Increasing	2.92	3.80	Increasing	1.41	0.14	No Trend			No Trend		
3851N	B	Probably Decreasing	-10.8	-0.0013	Stable			Decreasing	-14.4	-4.18	Decreasing	-14.8	-1.32	Probably Increasing	2.19	0.01	No Trend		
3852F	X (WT)	No Trend			Probably Increasing	10.6	0.06	Stable			No Trend			No Trend			No Trend		
3852H	B	No Trend			Probably Decreasing	-3.10	-0.01	Decreasing	-2.92	-0.53	Decreasing	-2.01	-0.36	Probably Increasing	0.82	0.01	No Trend		
3852L	X (WT)	Probably Increasing	8.94	0.0080	Decreasing	-4.02	-0.01	No Trend			No Trend			No Trend			No Trend		
3852M	A (WT)	Increasing	12.4	0.016	Stable			Decreasing	-2.92	-0.93	Decreasing	-2.01	-0.42	No Trend			Probably Decreasing	-3.47	-0.14
3860K	A'/X (WT)	No Trend			Stable			Decreasing	-4.93	-182	Decreasing	-2.37	-16.4	Stable			Probably Increasing	5.48	0.22
3861F	B	No Trend			Non-detect			Decreasing	-4.56	-1.41	Decreasing	-4.02	-0.52	Probably Increasing	1.41	0.04	No Trend		
3870D	K (WT)	Non-detect			Decreasing	-17.3	-0.07	Non-detect			Non-detect			Increasing	88	8.76	No Trend		
3872L	A (WT)	Increasing	11.7	0.006	Non-detect			No Trend			No Trend			No Trend			Stable		
3872N	X (WT)	No Trend			Stable			Stable			Stable			Increasing	80	2.49	Stable		
A-1-CW04	A (WT)	Increasing	29	1.78	Stable			Decreasing	-10.6	-64	Decreasing	-9.67	-16.4	Stable			No Trend		
A-1-CW08	X (WT)	Probably Increasing	2.56	1.41	No Trend			Decreasing	-3.47	-6.24	Stable			Stable			No Trend		
A-1-CW09	X (WT)	Increasing	6.75	0.30	Increasing	9.49	0.16	Decreasing	-10.4	-32	Decreasing	-9.49	-10.4	No Trend			No Trend		
B-1-CW13	X (WT)	Increasing	5.48	0.88	Increasing	5.66	0.05	Decreasing	-6.75	-81	Decreasing	-4.75	-37	Stable			No Trend		
B-1-CW17	A'/X (WT)	No Trend			Increasing	8.94	0.09	Stable			Decreasing	-4.02	-9.23	Decreasing	-3.47	-1.28	Decreasing	-2.19	-0.90
B-1-CW28	B	No Trend			Stable			Increasing	3.65	0.91	Decreasing	-0.47	-0.02	Stable			No Trend		
B-6-CW02	B	No Trend			Non-detect			Increasing	3.29	0.02	Non-detect			Probably Increasing	4.02	0.03	Increasing	5.29	0.13
B-6-CW14	B	No Trend			Increasing	11.5	0.10	No Trend			No Trend			Stable			Probably Decreasing	-3.47	-0.10
B-6-CW16	X/A (WT)	No Trend			Stable			Decreasing	-6.75	-7.43	Decreasing	-6.39	-1.66	No Trend			Increasing	7.85	0.42
C-1-CW02	B	No Trend			Probably Increasing	4.75	0.02	Decreasing	-2.92	-0.07	Stable			No Trend			No Trend		
C-1-CW03	A (WT)	No Trend			Decreasing	-3.83	-0.05	Decreasing	-3.29	-0.29	Decreasing	-2.56	-0.02	Increasing	7.67	0.03	No Trend		
C-1-CW05	B	No Trend			Probably Increasing	1.08	0.00	Stable			No Trend			Stable			Decreasing	-4.75	-0.11
C-1-CW08	A (WT)	No Trend			Probably Increasing	4.4	0.04	Decreasing	-13.1	-8.02	Decreasing	-16.1	-1.59	Probably Decreasing	-2.92	-0.01	No Trend		
MW-03	X/A (WT)	Increasing	13.5	0.43	Increasing	7.12	0.07	Stable			Decreasing	-2.92	-0.55	No Trend			No Trend		
MW-04	X/A (WT)	Increasing	20	0.22	Probably Increasing	7.67	0.06	Stable			Decreasing	-2.92	-0.44	Increasing	3.65	0.05	Stable		
MW-07	X/A (WT)	Increasing	18.1	0.07	No Trend			Stable			Decreasing	-2.56	-0.25	No Trend			Stable		
MW-08	X/A (WT)	Increasing	15.7	0.20	Increasing	11.0	0.53	Decreasing	-3.47	-3.47	Probably Decreasing	-3.83	-1.69	Increasing	7.12	0.10	Stable		

Notes:

Shading identifies increasing and probably increasing trends

Highlighting indicates locations where the magnitude of the increasing or probably increasing trend represents greater than a 20% change per year

µg/L/yr - microgram per liter per year
%/yr - percent change per year
A - A hydrostratigraphic unit
A' - A' hydrostratigraphic unit
B - B hydrostratigraphic unit
X - X hydrostratigraphic unit
HSU - hydrostratigraphic unit
WT - water table

Table 9
Noted Changes In Concentrations in Second Quarter 2017

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Sampling Location	Screened HSU	Sample Date	Compound	Q2 2017 Concentration (µg/L)	New Maximum Concentration (Y/N)	Exceeds MCL/DWNL First Time in Two Years (Y/N)	>1.5X Increase Since Most Recently Reported Concentration and Exceeds MCL/DWNL	Comments
3851M	X/A (WT)	4/3/2017	1,2,3-TCP	**0.057**	**N**	N	**Y**	Concentration was similar in 2015 (0.053 µg/L) and the concentration in 2016 was (0.034 µg/L); trend analysis indicates the concentration are stable
3872L	A (WT)	4/3/2017	1,2,3-TCP	**0.095**	**Y**	N	**Y**	Trend analysis identified an increasing trend with a magnitude of
A-1-CW04	A (WT)	4/10/2017	1,2,3-TCP	**25**	**Y**	N	**Y**	Trend analysis identified an increasing trend with a magnitude of
A-1-CW09	X (WT)	4/11/2017	1,2,3-TCP	**15.0**	**Y**	N	N	Trend analysis identified an increasing trend with a magnitude of
B-1-CW32	A' (WT)	4/5/2017	1,2,3-TCP	**0.011**	**Y**	N	N	New well installed in late 2016, this is the second time it has been sampled; first result was 0.0086 µg/L
B-6-CW10	X (WT)	4/24/2017	1,2,3-TCP	**1.50**	**Y**	N	**Y**	Concentration in 2014 (0.981 µg/L) and the concentration was 0.485 µg/L in 2016; trend analysis indicates there is no trend
MW-08	X/A (WT)	4/7/2017	1,2,3-TCP	**0.93**	N	N	**Y**	Trend analysis identified an increasing trend with a magnitude of
3852F	X (WT)	4/12/2017	1,4-Dioxane	**1.50**	**Y**	**Y**	**Y**	This well has been tested for this compound seven times and it has been detected near the detection limits twice (0.75 µg/L in 2016 and 1.5 µg/L in 2017); trend analysis identified a probably increasing trend with a magnitude of (0.06 µg/L/yr)
A-1-CW04	A (WT)	4/10/2017	1,4-Dioxane	**2.00**	N	N	**Y**	Concentrations detected in 2014 and 2015 were very similar; trend analysis indicates the concentration are stable
A-1-CW09	X (WT)	4/11/2017	1,4-Dioxane	**3.70**	**Y**	N	**Y**	Trend analysis identified an increasing trend with a magnitude of
B-1-CW13	X (WT)	4/12/2017	1,4-Dioxane	**2.00**	**Y**	N	**Y**	Trend analysis identified an increasing trend with a magnitude of
B-1-CW17	A'/X (WT)	4/4/2017	1,4-Dioxane	**2.90**	**Y**	N	N	Trend analysis identified an increasing trend with a magnitude of
B-6-CW14	B	4/6/2017	1,4-Dioxane	**1.80**	**Y**	N	N	Trend analysis identified an increasing trend with a magnitude of
3851N	B	4/4/2017	Hex Chrome	1.20	**Y**	N	N	Trend analysis identified a probably increasing trend with a magnitude of (0.01 µg/L/yr)

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Sampling Location	Screened HSU	Sample Date	Compound	Q2 2017 Concentration (µg/L)	New Maximum Concentration (Y/N)	Exceeds MCL/DWNL First Time in Two Years (Y/N)	>1.5X Increase Since Most Recently Reported Concentration and Exceeds MCL/DWNL	Comments
3852F	X (WT)	4/12/2017	Hex Chrome	2.70	**Y**	N	N	Concentration was similar in 2013 (2.5 µg/L) and the concentration in 2016 was (1.57 µg/L); trend analysis indicates no trend
3852N	B	4/3/2017	Hex Chrome	2.50	**Y**	N	N	Concentration in 2015 was (2.1 µg/L) and the concentration in 2016 was (1.5 µg/L); trend analysis indicates no trend
3861D	X (WT)	4/7/2017	Hex Chrome	6.80	**Y**	N	N	Concentration in 2004 was (5.8 µg/L), in 2014 the concentration was (4.3 µg/L) and the concentration in 2016 was (3.03 µg/L); trend analysis indicates the concentrations are stable
3861F	B	4/7/2017	Hex Chrome	4.90	**Y**	N	N	The concentration in 2016 was (3.89 µg/L); trend analysis identified an probably increasing trend with a magnitude of (0.04 µg/L/yr)
3870D	K (WT)	4/5/2017	Hex Chrome	17.00	**Y**	N	N	The concentration in 2015 was (16.3 µg/L); trend analysis identified an increasing trend with a magnitude of (8.76 µg/L/yr)
3871H	A (WT)	4/7/2017	Hex Chrome	9.60	**Y**	N	N	Concentration in 2004 was (7.8 µg/L), in 2015 the concentration was (6.21 µg/L) and the concentration in 2016 was (2.81 µg/L); trend analysis indicates no trend
3872L	A (WT)	4/3/2017	Hex Chrome	4.40	**Y**	N	N	Concentration in 2015 the concentration was (3.78 µg/L) and the concentration in 2016 was (2.93 µg/L); trend analysis indicates no trend
3872M	B/OA	4/3/2017	Hex Chrome	4.40	**Y**	N	N	Concentration in 2015 the concentration was (3.97 µg/L) and the concentration in 2016 was (3.13 µg/L); trend analysis indicates no trend
3872N	X (WT)	4/3/2017	Hex Chrome	6.70	**Y**	N	N	Concentration in 2015 the concentration was (5.51 µg/L) and the concentration in 2016 was (2.84 µg/L); trend analysis identified an increasing trend with a magnitude of (2.49 µg/L/yr)
3872S	B	4/5/2017	Hex Chrome	7.90	**Y**	N	N	Concentration in 2007 was (7.4 µg/L), in 2015 the concentration was (6.38 µg/L) and the concentration in 2016 was (4.47 µg/L); trend analysis indicates the concentrations are stable
B-1-CW27	B	4/10/2017	Hex Chrome	5.20	**Y**	N	N	Concentration in 2006 was (4.5 µg/L) and the concentration in 2016 was (3.89 µg/L); trend analysis indicates no trend
B-1-CW31	A' (WT)	4/6/2017	Hex Chrome	**16.0**	**Y**	**Y**	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (6.0 µg/L)

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Sampling Location	Screened HSU	Sample Date	Compound	Q2 2017 Concentration (µg/L)	New Maximum Concentration (Y/N)	Exceeds MCL/DWNL First Time in Two Years (Y/N)	>1.5X Increase Since Most Recently Reported Concentration and Exceeds MCL/DWNL	Comments
B-6-CW02	B	4/6/2017	Hex Chrome	2.50	**Y**	N	N	Trend analysis identified an probably increasing trend with a magnitude of (0.03 µg/L/yr)
C-1-CW08	A (WT)	4/12/2017	Hex Chrome	1.10	**Y**	N	N	Concentrations have been similar in the past; trend analysis identified a probably decreasing trend with a magnitude of (-0.01 µg/L/yr); trend is likely a result of past elevataed detection
3872L	A (WT)	4/3/2017	PCE	**300**	N	N	**Y**	Concentration has been an order of magnitude higher in the past; trend analysis identified no trend
B-1-CW30	A' (WT)	4/6/2017	PCE	**110**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (54.0 µg/L)
B-1-CW31	A' (WT)	4/6/2017	PCE	**55**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (15.0 µg/L)
B-1-CW32	A' (WT)	4/5/2017	PCE	**14.0**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (8.5 µg/L)
B-1-CW33	A' (WT)	4/6/2017	PCE	**630**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (390.0 µg/L)
B-1-CW34	A' (WT)	4/5/2017	PCE	**13.0**	**Y**	N	N	New well installed in late 2016, this is the second time it has been sampled; first result was (8.7 µg/L)
MW-08	X/A (WT)	4/7/2017	PCE	**71**	N	N	**Y**	Concentrations were two orders of magnitude higher in the past; concentration in 2015 was (150 µg/L); trend analysis identified a decreasing trend with a magnitude of (-3.47 µg/L/yr)
SW-5	X/A/Y (WT)	4/10/2017	PCE	**51**	N	N	**Y**	Concentrations were two orders of magnitude higher in the past; this is the third time it has been sampled in the recent past; trend analysis identified a decreasing trend with a magnitude of (-12.3 µg/L/yr)
3851M	X/A (WT)	4/3/2017	TCE	**12.0**	N	N	**Y**	Concentrations were three orders of magnitude higher in the past; concentration in 2016 was (8 ug/L); trend analysis identified a decreasing trend with a magnitude of (-2.11 µg/L/yr)
3861D	X (WT)	4/7/2017	TCE	**160**	N	N	**Y**	Concentrations were an order of magnitude higher in the past; concentration in 2014 was (604 ug/L); trend analysis identified a decreasing trend with a magnitude of (-48 µg/L/yr)

Table 9
Noted Changes In Concentrations in Second Quarter 2017

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Sampling Location	Screened HSU	Sample Date	Compound	Q2 2017 Concentration (µg/L)	New Maximum Concentration (Y/N)	Exceeds MCL/DWNL First Time in Two Years (Y/N)	>1.5X Increase Since Most Recently Reported Concentration and Exceeds MCL/DWNL	Comments
3872L	A (WT)	4/3/2017	TCE	**240**	N	N	**Y**	Concentrations in the past were three times higher but in the recent past they have been at least three times less; trend analysis identified no trend
B-1-CW25	A' (WT)	4/24/2017	TCE	**19.0**	N	N	**Y**	Concentrations were three orders of magnitude higher in the past; concentration in 2015 was (22.6 ug/L); trend analysis identified a decreasing trend with a magnitude of (-31 µg/L/yr)
B-1-CW30	A' (WT)	4/6/2017	TCE	**200**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (110 µg/L)
B-1-CW31	A' (WT)	4/6/2017	TCE	**47**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (4.5 µg/L)
B-1-CW32	A' (WT)	4/5/2017	TCE	**110**	**Y**	N	**Y**	New well installed in late 2016, this is the second time it has been sampled; first result was (64 µg/L)
B-1-CW34	A' (WT)	4/5/2017	TCE	**22**	**Y**	N	N	New well installed in late 2016, this is the second time it has been sampled; first result was (17 µg/L)
C-1-CW05	B	4/6/2017	TCE	0.29	**Y**	N	N	This is the first time the compound has been detected in this well; it appears to be the result of lower detection limits
MW-04	X/A (WT)	4/10/2017	TCE	**21**	N	N	**Y**	Concentrations were similar in 2015 (19.9 µg/L), trend analysis identified a decreasing trend with a magnitude of (-0.44 µg/L/yr)
MW-07	X/A (WT)	4/7/2017	TCE	**17.0**	N	N	**Y**	Concentration in 2015 was (5.35 µg/L) and the concentration in 2016 was (4.59 µg/L); trend analysis identified a decreasing trend with a magnitude of (-0.25 µg/L/yr)
MW-08	X/A (WT)	4/7/2017	TCE	**24**	N	N	**Y**	Concentrations were an order of magnitude higher in the past; concentration in 2015 was (87 ug/L); trend analysis identified a decreasing trend with a magnitude of (-1.69 µg/L/yr)
SW-5	X/A/Y (WT)	4/10/2017	TCE	**32**	N	N	**Y**	Concentrations were an order of magnitude higher in the past; this is the third time it has been sampled in the recent past; trend analysis identified a decreasing trend with a magnitude of (-4.85 µg/L/yr)
B-1-CW32	A' (WT)	4/5/2017	Total Chrome	47	**Y**	N	N	New well installed in late 2016, this is the second time it has been sampled; first result was (40.9 µg/L)
B-6-CW16	X/A (WT)	4/25/2017	Total Chrome	29	**Y**	N	N	Concentration in 2016 (23.7 µg/L), trend analysis identified an increasing trend with a magnitude of (0.42 µg/L/yr)

Table 9
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Sampling Location	Screened HSU	Sample Date	Compound	Q2 2017 Concentration (µg/L)	New Maximum Concentration (Y/N)	Exceeds MCL/DWNL First Time in Two Years (Y/N)	>1.5X Increase Since Most Recently Reported Concentration and Exceeds MCL/DWNL	Comments
C-1-CW07	Y (WT)	4/12/2017	Total Chrome	**82.9**	N	**Y**	**Y**	Concentration in 2016 (11.7 µg/L), trend analysis identified no trend

Notes: DWNL - California Department of Public Health drinking water notification level
MCL - California Department of Public Health maximum contaminant level
µg/L - micrograms per liter
µg/L/yr - micrograms per liter per year
ND - non-detect
N - no concentration is not a new maximum or does not exceed criteria identified
A - A hydrostratigraphic unit
A' - A' hydrostratigraphic unit
B - B hydrostratigraphic unit
HSU - hydrostratigraphic unit
OA - older alluvium
WT -water table
X - X hydrostratigraphic unit
Y - Y hydrostratigraphic unit
Y - Concentration does exceed criteria identified

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Table 10
BOU Production Well Summary
(May 2016 - April 2017)

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

		Total Monthly Production (gallons)									Average Extraction Rate (gallons per minute)
	Well ID	**VO1**	**VO2**	**VO3**	**VO4**	**VO5**	**VO6**	**VO7**	**VO8**	**Total by Month**	
2016	**May**	28,616,295	37,208,392	27,394,427	41,072,402	40,542,979	20,637,562	41,451,497	49,320,176	**286,243,730**	**6,412**
	June	571,681	53,445,131	24,811,787	39,301,456	37,640,906	51,694,036	20,270,469	60,314,584	**288,050,050**	**6,668**
	July	-	59,185,274	32,240,131	42,138,516	34,179,392	40,985,136	43,564,857	63,706,435	**315,999,741**	**7,079**
	August	-	60,585,079	38,791,661	38,526,405	13,019,758	61,282,842	45,196,555	65,848,687	**323,250,987**	**7,241**
	September	26,730,150	55,059,895	37,591,086	12,976,492	27,376,333	50,482,522	31,388,050	64,173,133	**305,777,661**	**7,078**
	October	34,943,823	51,271,534	21,517,247	17,017,096	54,008,821	50,470,789	7,662,822	65,959,475	**302,851,607**	**6,784**
	November	23,820,148	45,063,453	36,761,590	19,494,567	21,034,408	51,299,476	21,632,647	62,648,411	**281,754,700**	**6,522**
	December	32,955,587	47,295,508	36,525,519	38,095,851	19,804,424	54,303,409	21,728,022	3,062,537	**253,770,857**	**5,685**
2017	**January**	1,152,352	50,469,832	15,728,860	23,962,929	50,986,876	22,826,682	29,503,661	1,059,593	**195,690,785**	**4,384**
	February	3,817,474	29,802,263	3,048,151	25,921,324	24,685,919	30,252,631	11,931,934	44,424,476	**173,884,172**	**4,164**
	March	102,292	43,611,211	-	30,838,723	26,157,378	49,977,025	7,821,701	52,037,951	**210,546,281**	**4,717**
	April	-	42,226,358	-	27,767,266	32,980,590	28,343,824	15,323,277	44,768,388	**191,409,703**	**4,431**
	Total by Well	**152,709,802**	**575,223,930**	**274,410,459**	**357,113,027**	**382,417,784**	**512,555,934**	**297,475,492**	**577,323,846**	**3,129,230,274**	**5,937**

Table 11
BOU Mass Removal Summary
May 2016 - April 2017

2016 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Reporting Month	Volume of Water Extracted by Month (gallons)	Average Influent Total VOCs Concentration (µg/L)	VOC Mass Removed (lbs)
May 2016	286,243,730	110.6	264.2
June 2016	288,050,050	150.1	360.7
July 2016	315,999,741	154.5	407.3
August 2016	323,250,987	147.0	396.7
September 2016	305,777,661	130.4	332.8
October 2016	302,851,607	138.0	348.8
November 2016	281,754,700	137.2	322.6
December 2016	253,770,857	184.8	391.5
January 2017	195,690,785	175.6	286.8
February 2017	173,884,172	123.6	179.4
March 2017	210,546,281	119.1	209.2
April 2017	191,409,703	123.5	197.3
TOTAL	**3,129,230,274**	**TOTAL**	**3,697**

Notes: VOCs - volatile organic compounds
lbs - pounds
µg/L - micrograms per liter

Table 12
Second Quarter 2017 Vertical Gradient Calculations

2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Well ID	HSU	Surface Elevation (feet MSL)	Top of Well Screen Elevation (feet MSL)	Bottom of Well Screen Elevation (feet MSL)	April 2017		
					Groundwater Elevation (feet MSL)	Elevation of Screen Midpoint* (feet MSL)	Vertical Gradient
B-1-CW12	WT	609.85	489.85	439.85	155.58	297.72	-1.941
B-1-CW11	B	610.05	310.05	280.05	150.40	295.05	(up)
B-1-CW25	WT	636.54	486.54	446.54	185.95	316.24	-2.289
B-1-CW27	B	636.93	322.93	302.93	178.36	312.93	(up)
B-1-CW13	WT	651.49	501.49	441.49	200.05	320.77	-1.263
B-1-CW28	B	650.15	324.15	304.15	191.69	314.15	(up)
3850N	WT	658.07	493.07	443.07	203.31	323.19	-0.645
3850R	B	657.49	320.49	310.49	198.35	315.49	(up)
3861D	WT	617.88	487.88	437.88	164.20	301.04	1.245
3861F	B	617.46	314.46	294.46	159.94	304.46	(up)
3851M	WT	650.35	485.35	435.35	191.19	313.27	0.032
3851N	B	650.10	345.10	325.10	190.49	335.10	(up)
B-5-CW03	WT	697.26	486.26	466.26	228.35	347.31	-0.792
B-5-CW02	B	697.67	357.67	347.67	232.60	352.67	(up)
C-1-CW06	WT	720.91	488.91	468.91	Dry Well	NA	NA
C-1-CW05	B	720.87	344.87	334.87	251.71	339.87	
3852F	WT	607.65	482.65	432.65	148.03	290.34	-0.048
3852H	B	607.93	338.93	308.93	149.65	323.93	(down)
3852M	WT	593.45	385.45	365.45	136.91	375.45	0.014
3852N	B	593.47	310.47	290.47	137.94	300.47	(down)
3872Q	WT	575.25	482.25	442.25	120.81	281.53	0.417
3872S	B	574.95	299.95	279.95	117.30	289.95	(up)

Notes:

* = Mid water column used for WT HSU wells if the water level is below the top of the screen

A = A-zone

B = B-zone

HSU = hydrostratigraphic unit

MSL = mean sea level

NA = not applicable

WT = water table

FIGURES

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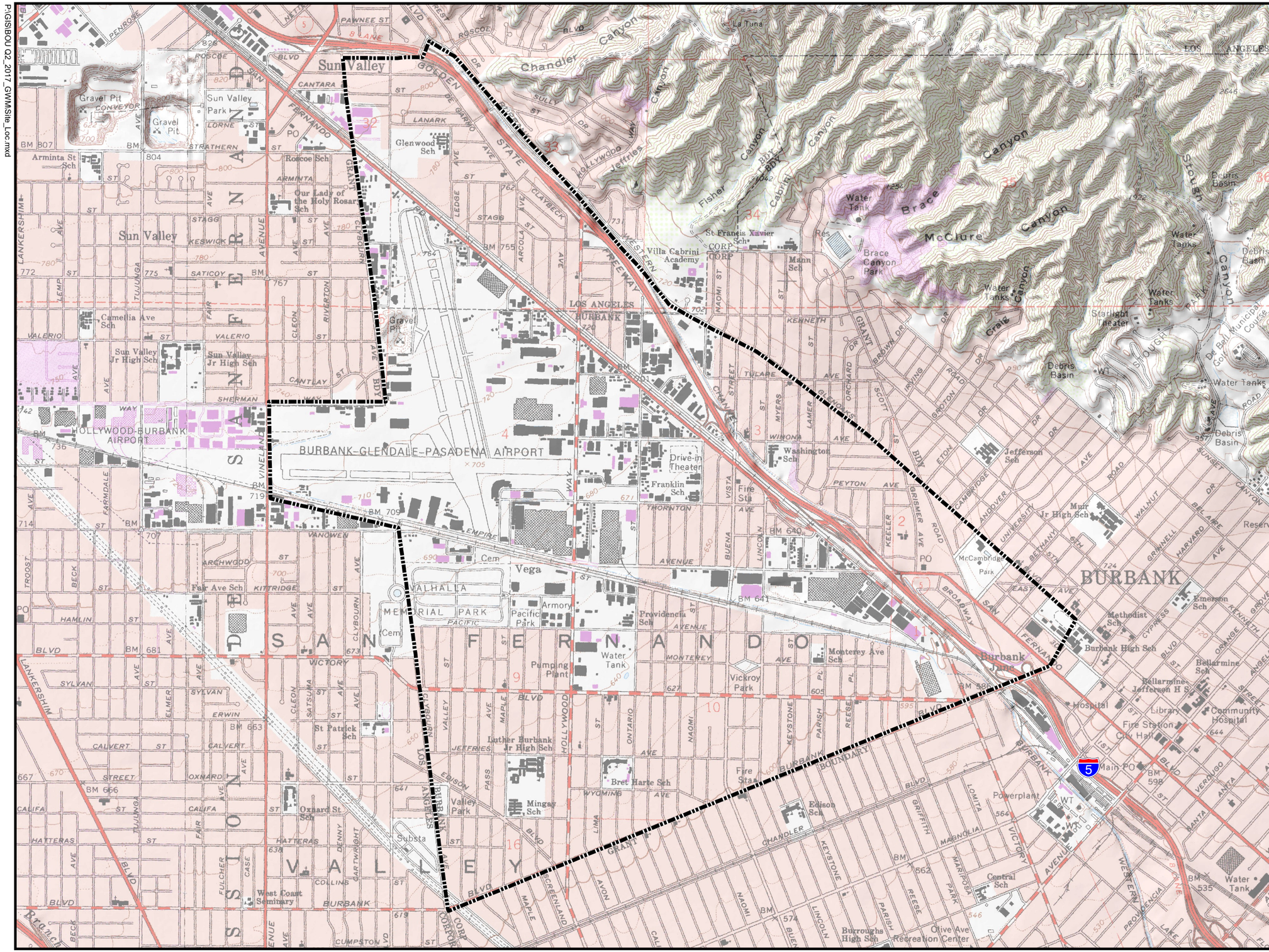


0 1,000 2,000 Feet

Burbank Operable Unit Boundary

Source:
USGS 7.5' topographic map, Burbank, California, 1972.
USGS 7.5' topographic map, Van Nuys, California, 1972.

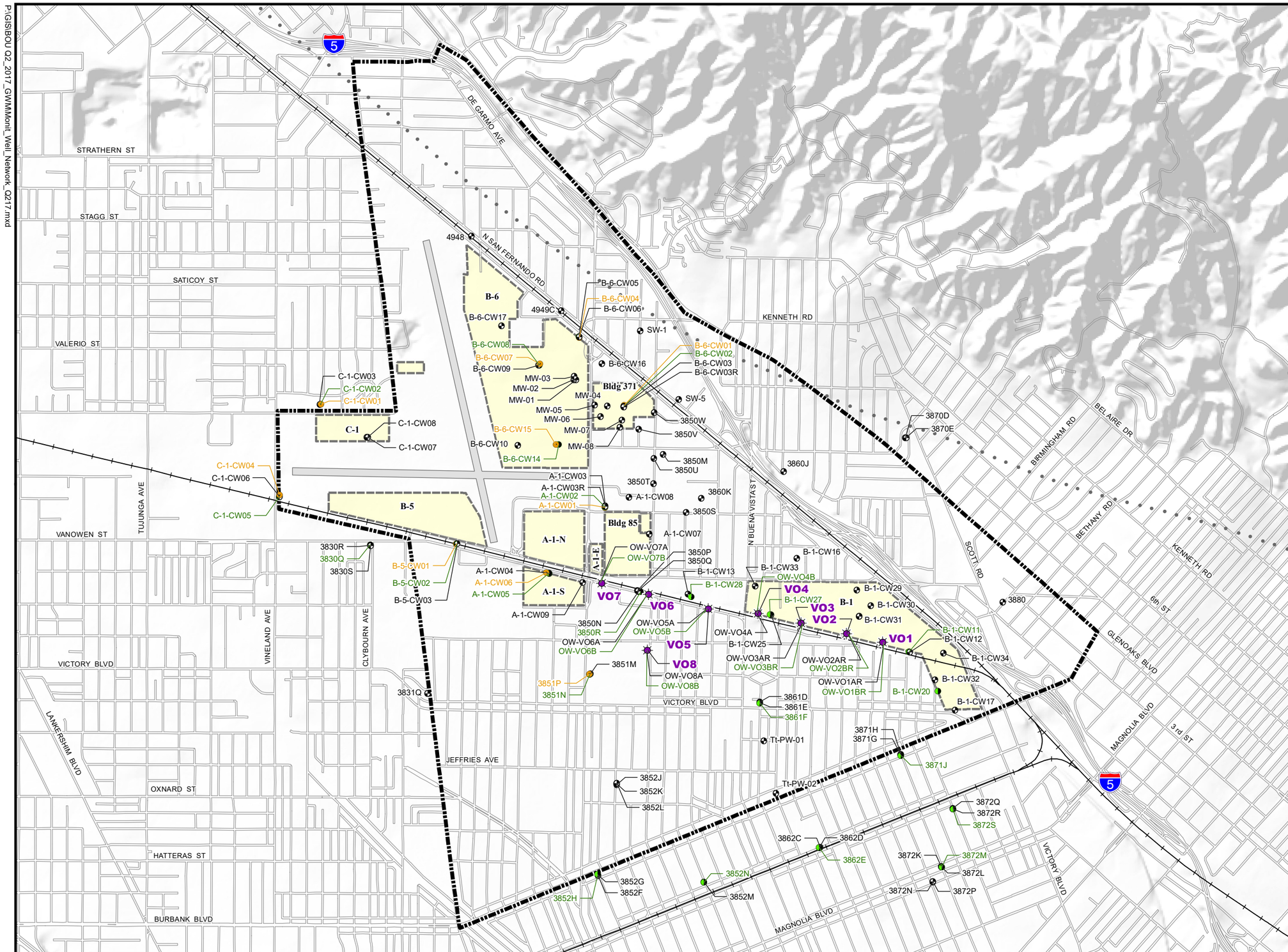
BURBANK OPERABLE UNIT

Site Location Map

TETRA TECH

Figure 1

P:\GIS\BOU Q2_2017_GWM\Monit_Well_Network_Q217.mxd



Notes:
* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

WT - Water Table
B - B-Zone
HSU - Hydrostatigraphic Unit

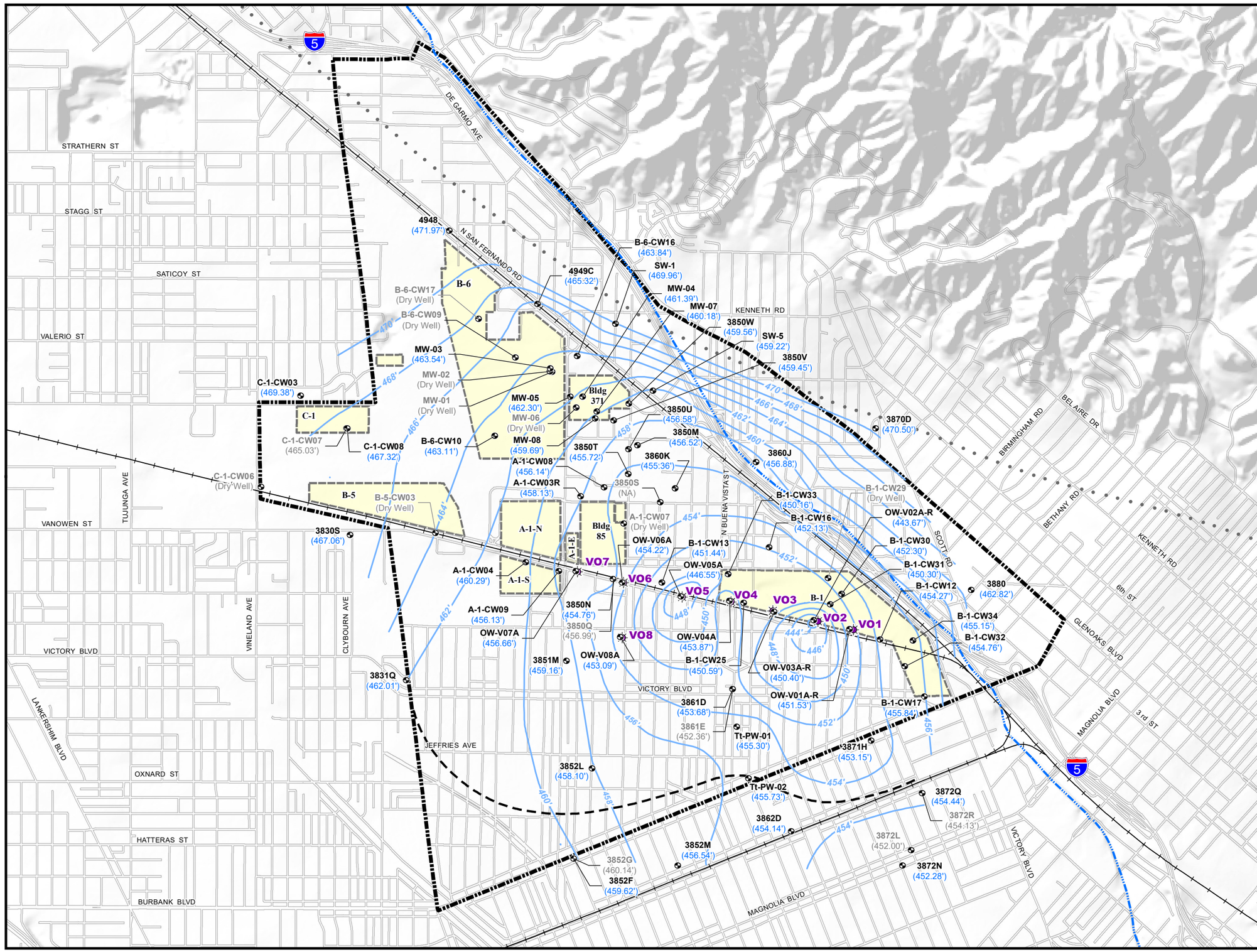
BURBANK OPERABLE UNIT

Monitoring Well Network

TETRA TECH

Figure 2

P:\GIS\BOU Q2_2017_GWM\GW_Elev_WT_HSU_Q217.mxd



0 1,000 2,000 Feet

- Monitoring Well
- Extraction Well
- Groundwater Elevation Contour (ft amsl)
- Burbank Channel
- Approximate Southern Limit of Hydraulic Capture
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:

Gray well label indicates well not used for contouring.

Groundwater elevation measurements collected between 4/14/17 and 4/20//17; most measurements collected between 4/18/17 and 4/20/17.

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V,

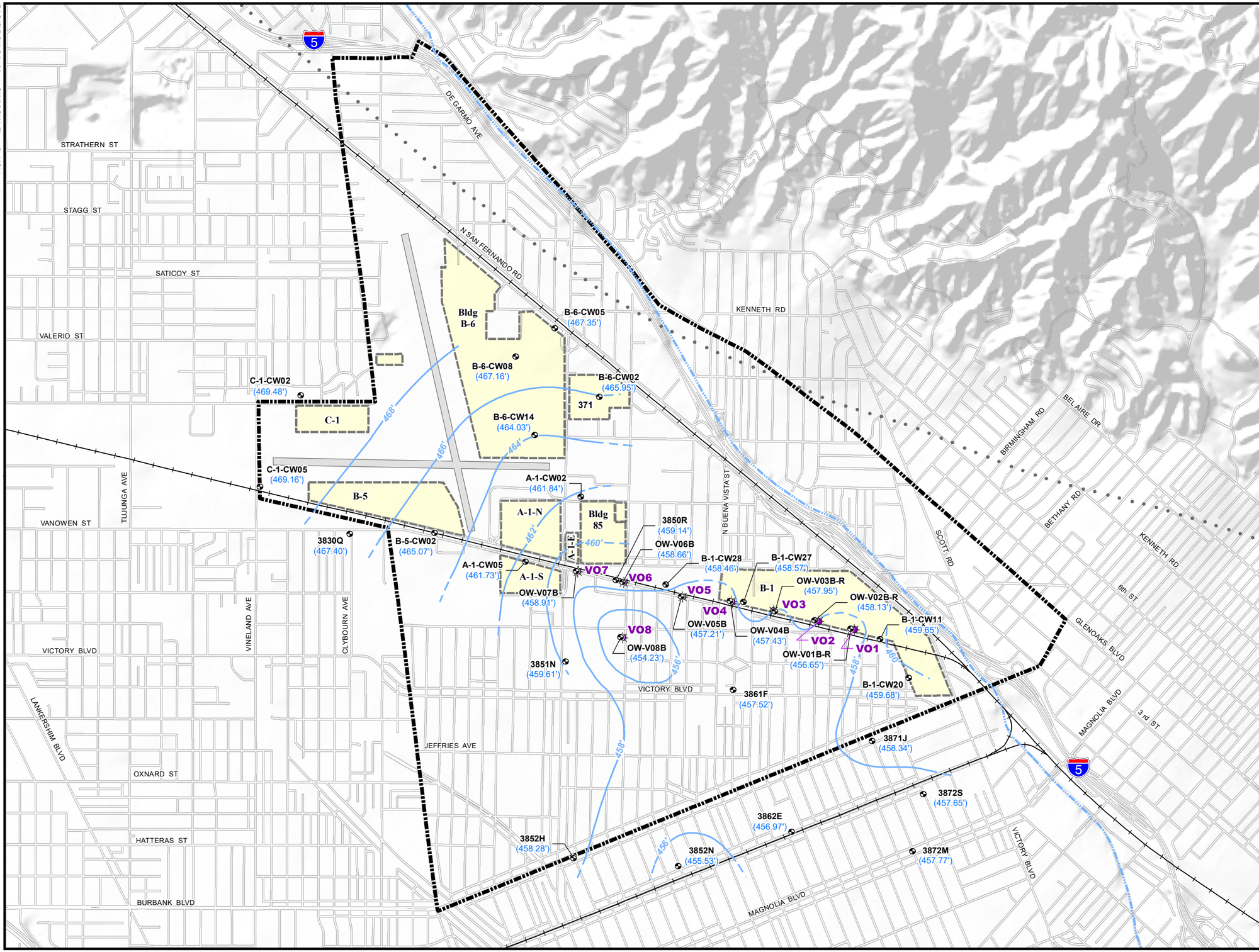
BURBANK OPERABLE UNIT

Second Quarter 2017
Water Table Elevation Map

TETRA TECH

Figure 3

P:\GIS\BOU Q2_2017_GWM\GW_Elev_B_HSU.mxd



0 1,000 2,000 Feet

- Monitoring Well
- Extraction Well
- Groundwater Elevation Contour (ft amsl) (dashed where inferred)
- Burbank Channel
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:

Gray well label indicates well not used for contouring.

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Groundwater elevation measurements collected between 4/4/16 and 4/15//16; most measurements collected between 4/4/16 and 4/7/16.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

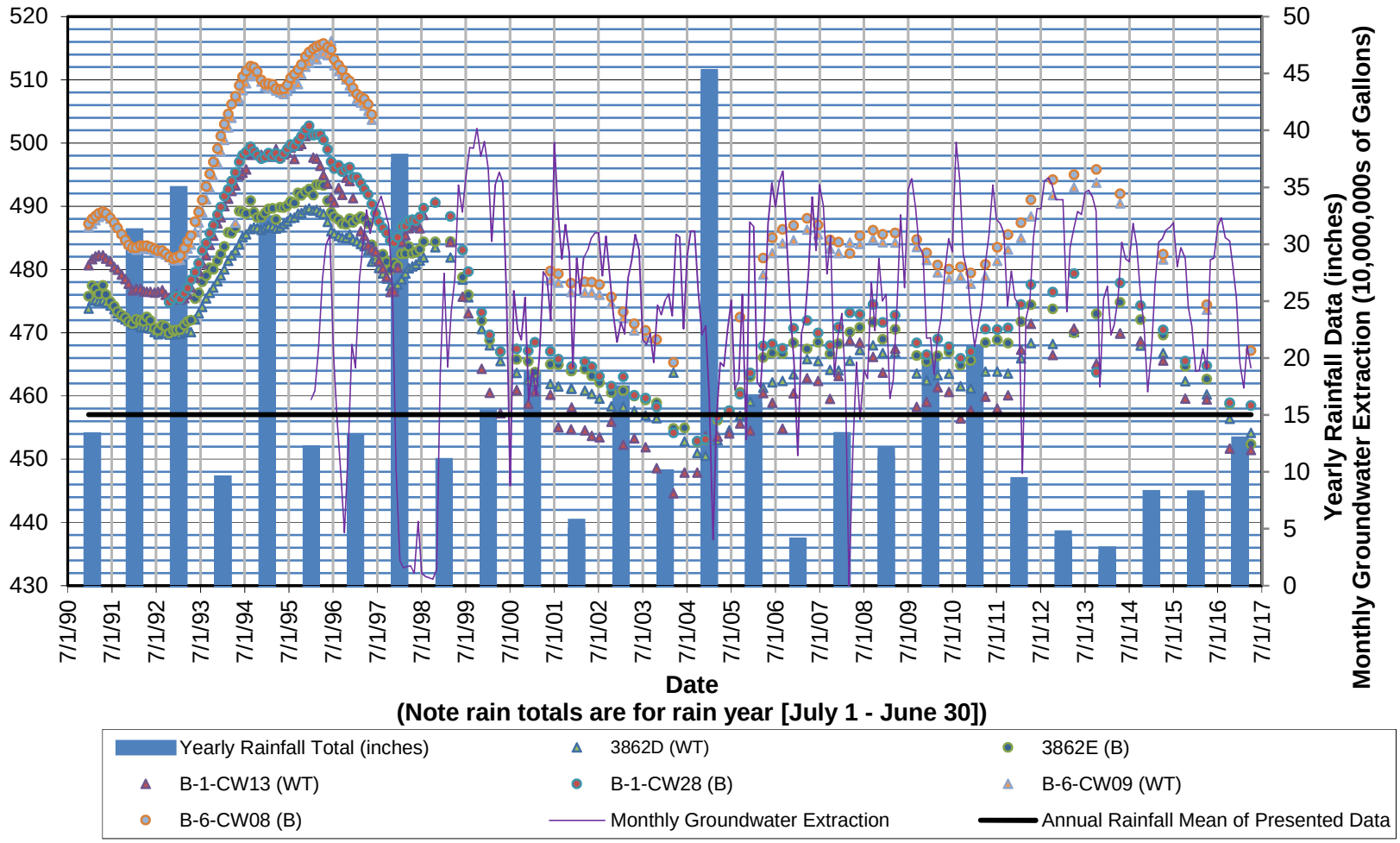
BURBANK OPERABLE UNIT

Second Quarter 2017 B-Zone Potentiometric Surface Elevation Map

TETRA TECH

Figure 4

Figure 5 - Annual Precipitation and Hydrographs of Select Water Table and B-Zone Wells



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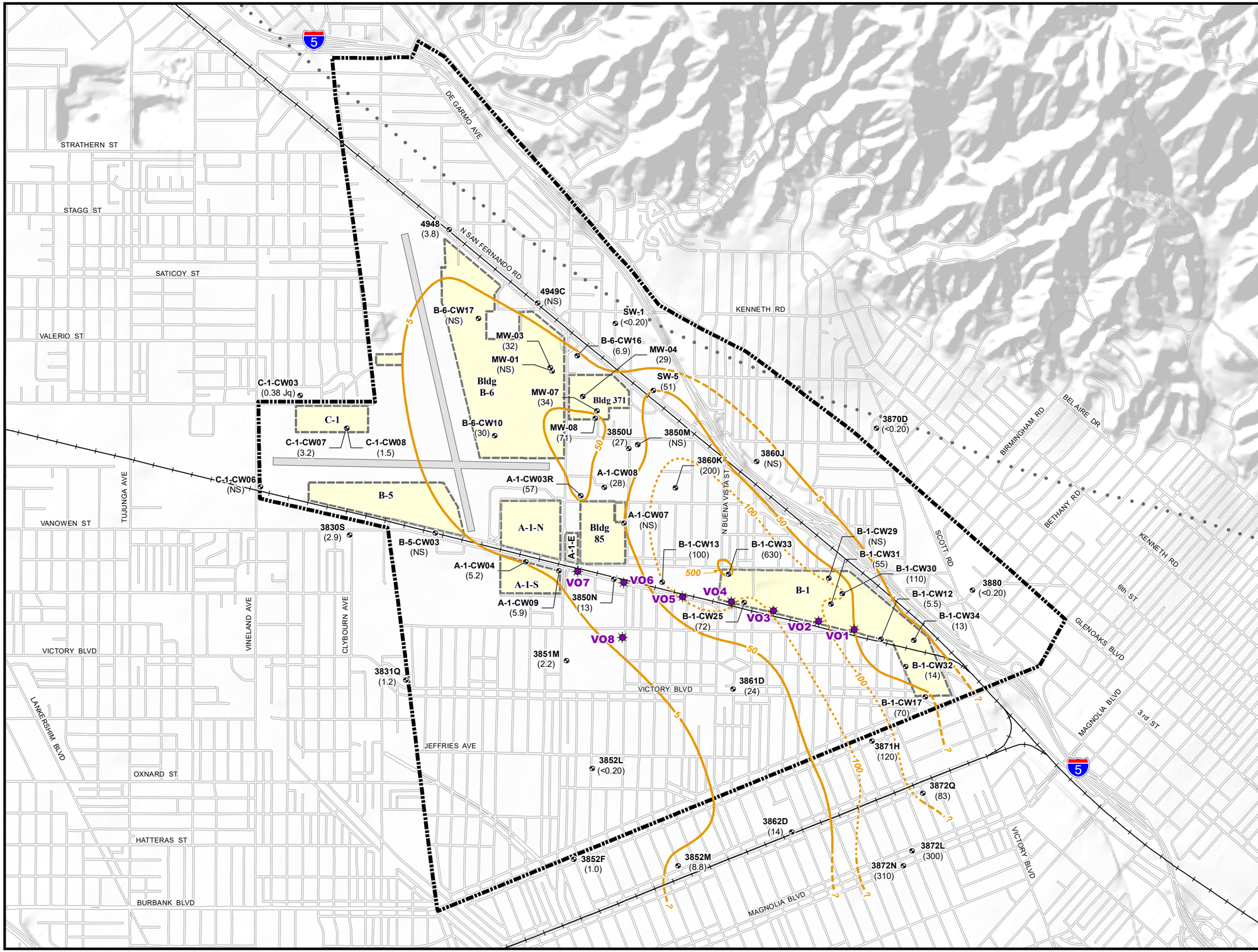


N

0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Tetrachloroethene Isoconcentration
(concentrations range from <0.20 µg/L to 630 µg/L — dashed where inferred)

Intermediate Isoconcentration Contour

Railroad

Burbank Operable Unit Boundary

Approximate Concealed Trace of the Verdugo Fault*

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

NS - Not sampled

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

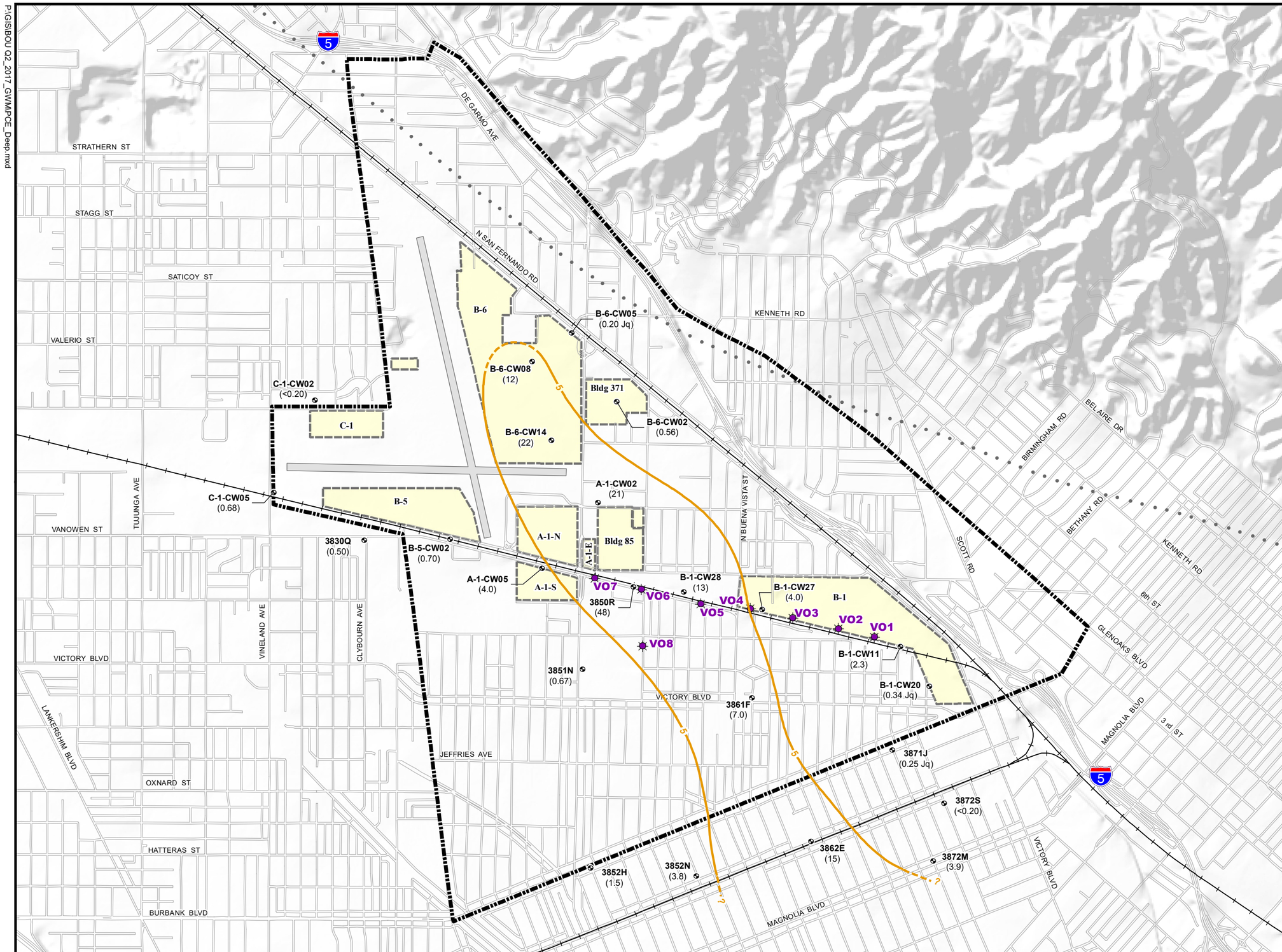
BURBANK OPERABLE UNIT

Tetrachloroethene Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 6

P:\GIS\BOU Q2_2017_GWM\PCE_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Tetrachloroethene Isoconcentration
(concentrations range from <0.20 µg/L to 48 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

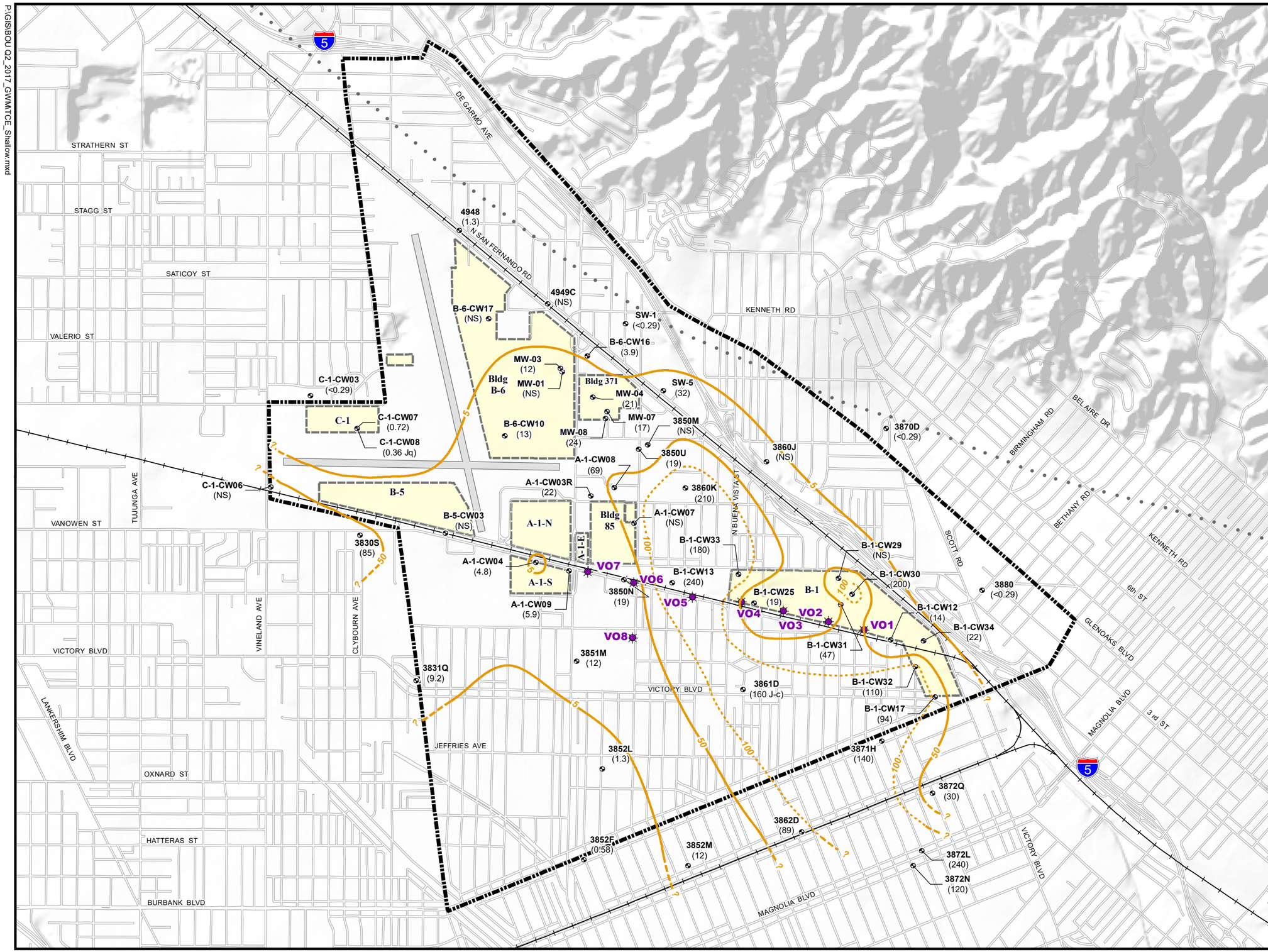
BURBANK OPERABLE UNIT

Tetrachloroethene Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 7

P:\GIS\BOU Q2_2017_GWM\TCE_Shallow.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Trichloroethene Isoconcentration
(concentrations range from <0.29 µg/L to 240 µg/L — dashed where inferred)

Intermediate Isoconcentration Contour

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

J - The analyte was positively identified, but the analyte concentration is an estimated value.

c - The Matrix Spike and/or Matrix Spike Duplicate recoveries were outside control limits.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

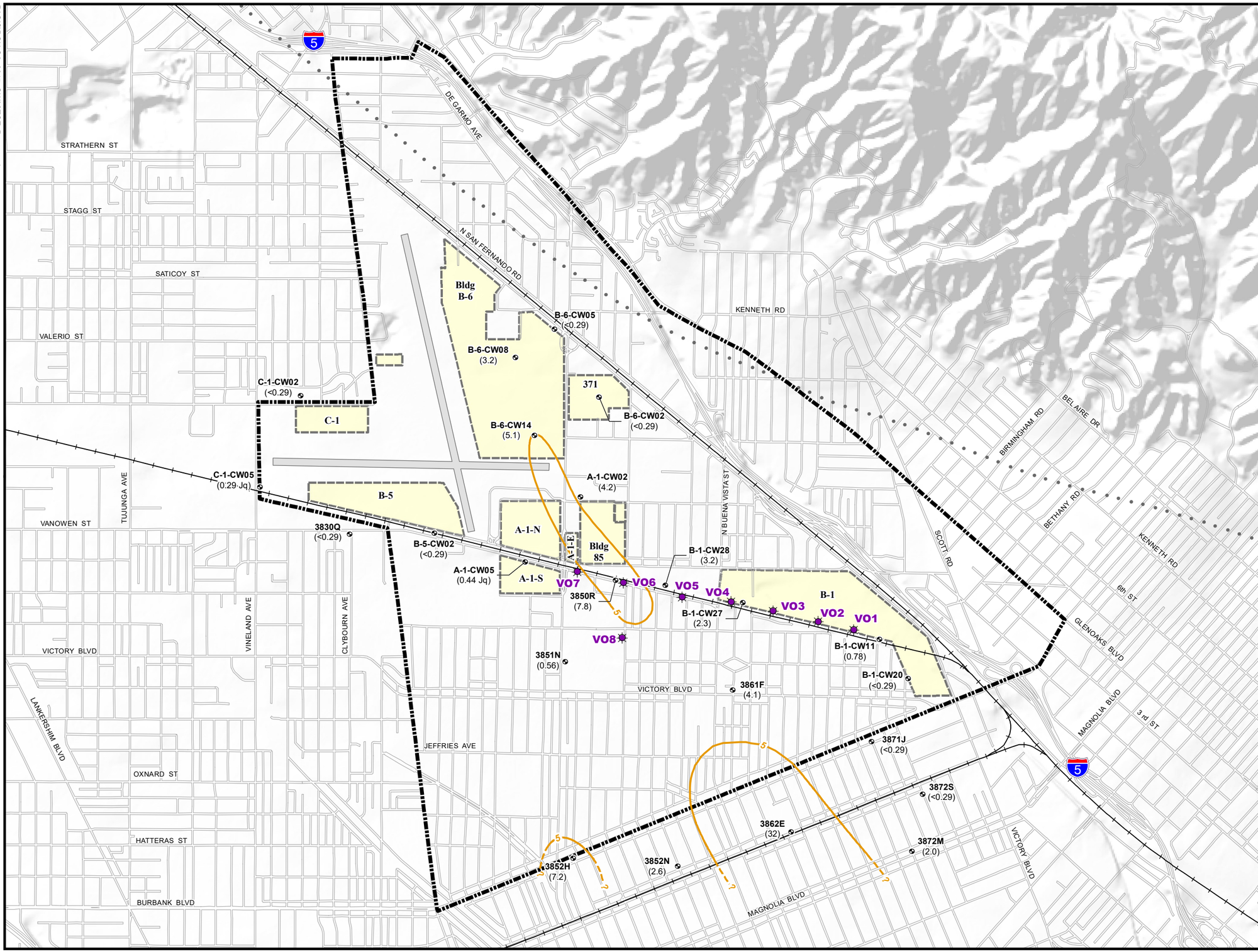
BURBANK OPERABLE UNIT

Trichloroethene Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 8

P:\GIS\BOU Q2_2017_GWMTCE_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Trichloroethene Isoconcentration
(concentrations range from <0.29 µg/L to 32.0 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/l

J - The analyte was positively identified, but the analyte concentration is an estimated value.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

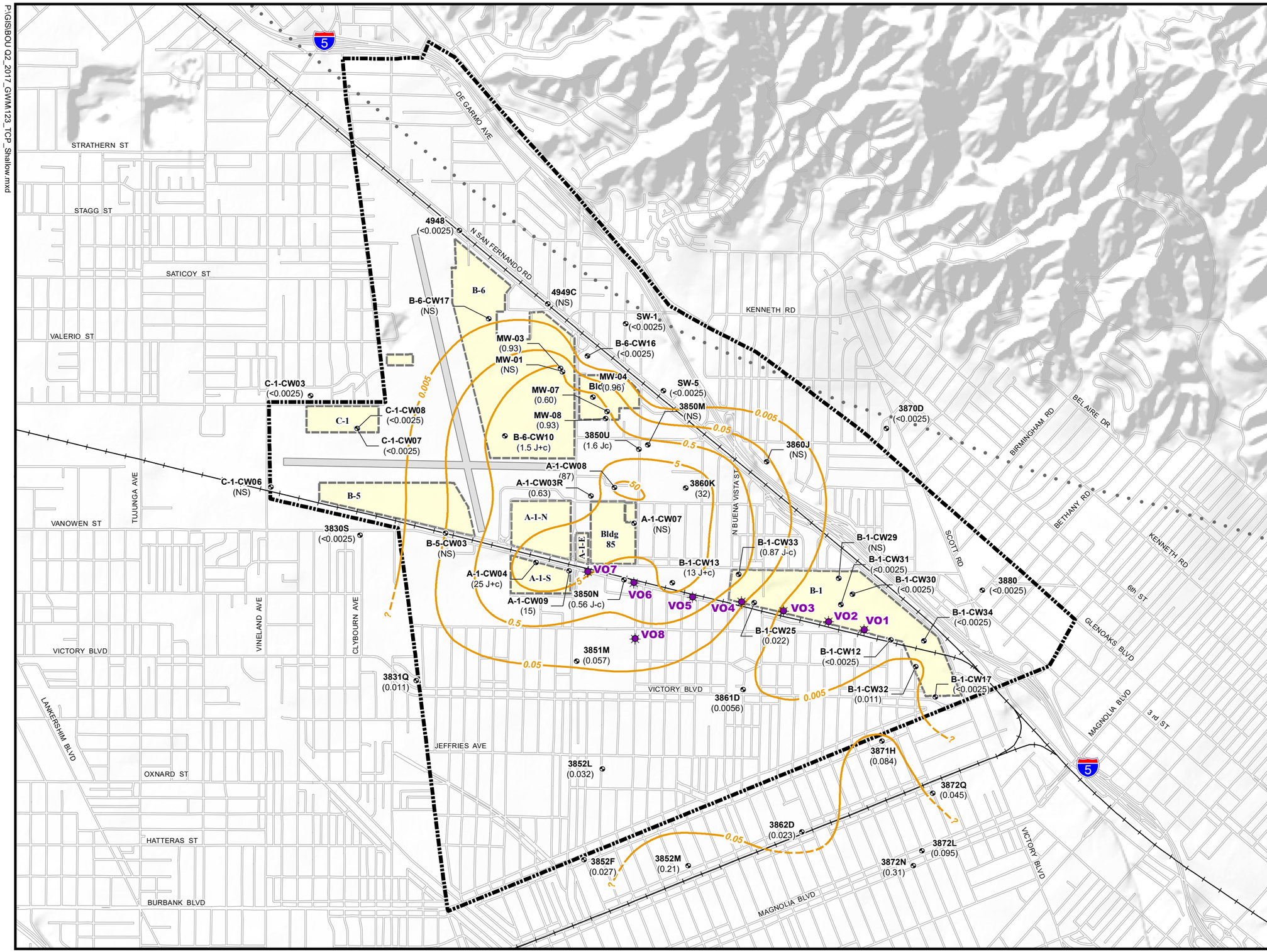
BURBANK OPERABLE UNIT

Trichloroethene Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 9

P:\GIS\BOU Q2_2017_GWM\123_TCP_Shallow.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

1,2,3-Trichloropropane Isoconcentration
(concentrations range from <0.0025 µg/L to 87 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 0.005 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

c - The matrix spike and/or matrix spike duplicate recoveries were outside control limits.

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

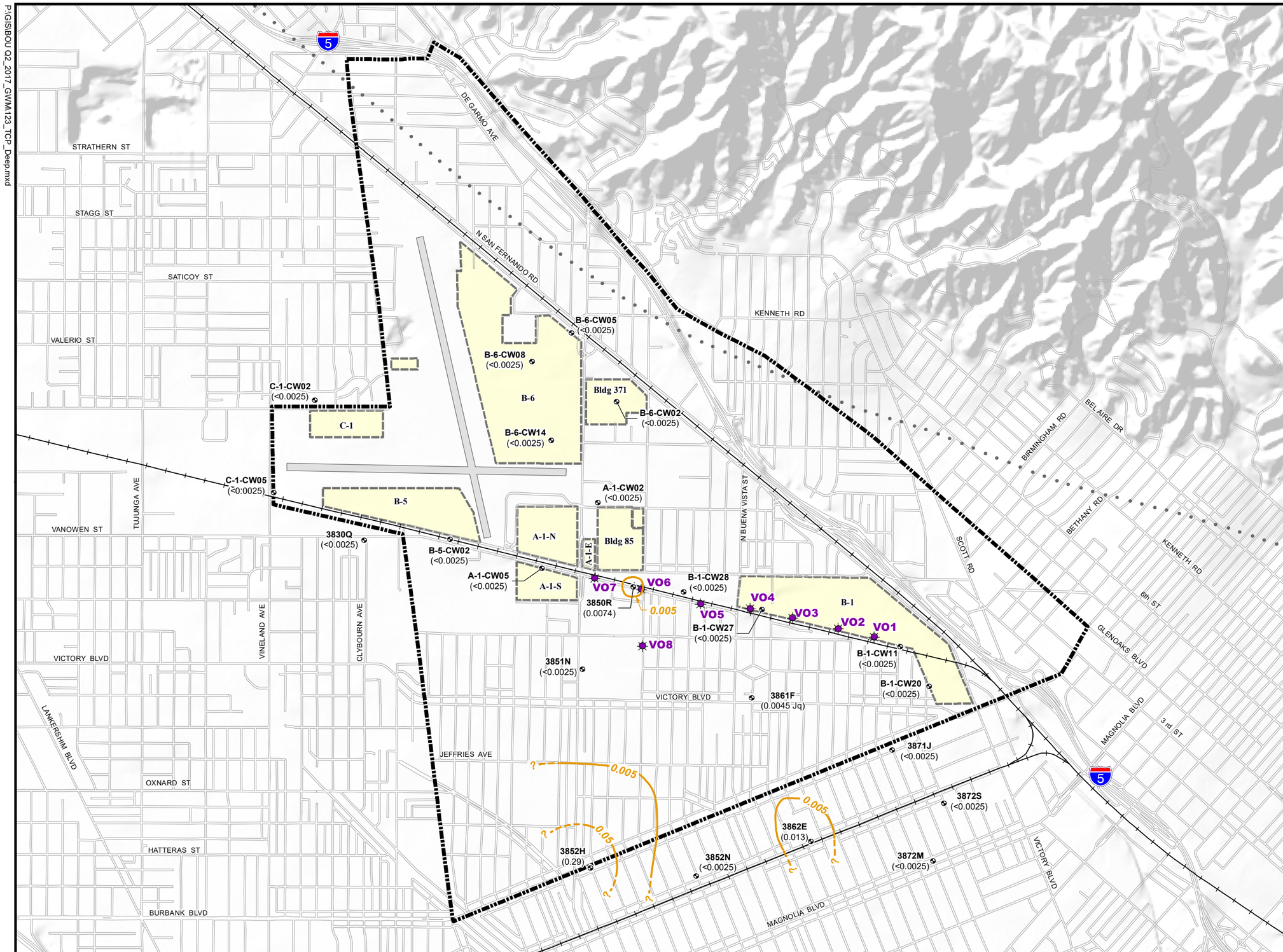
BURBANK OPERABLE UNIT

1,2,3-Trichloropropane Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 10

P:\GIS\BOU Q2_2017_GWM\123_TCP_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

1,2,3-Trichloropropane Isoconcentration (concentrations range from <0.0025 µg/L to 0.29 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 0.005 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

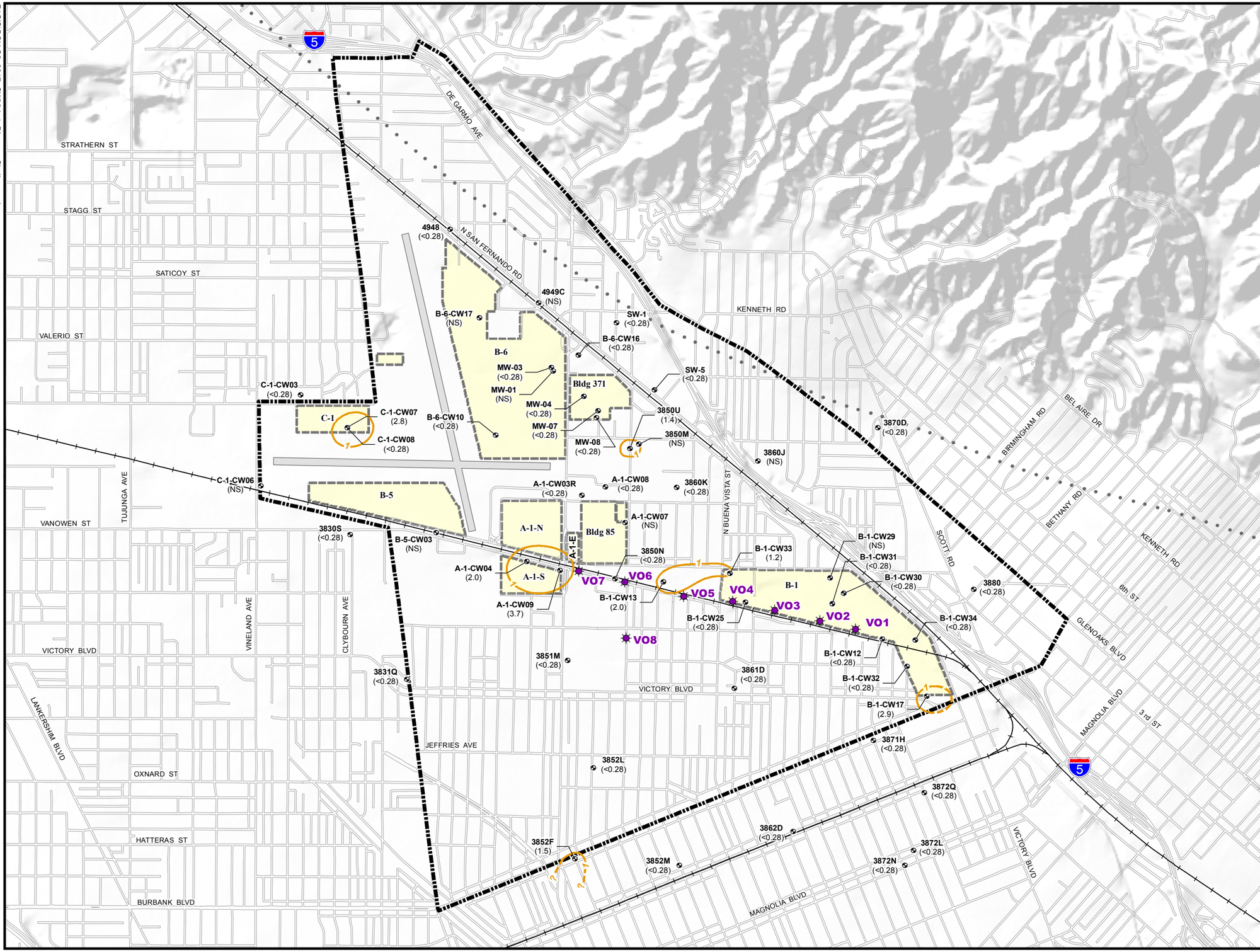
BURBANK OPERABLE UNIT

1,2,3-Trichloropropane Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 11

P:\GIS\BOU Q2_2017_GWM\1_4_Dioxane_Shallow.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

1,4-Dioxane Isoconcentration
(concentrations range from <0.28 µg/L to 3.7 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 1.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

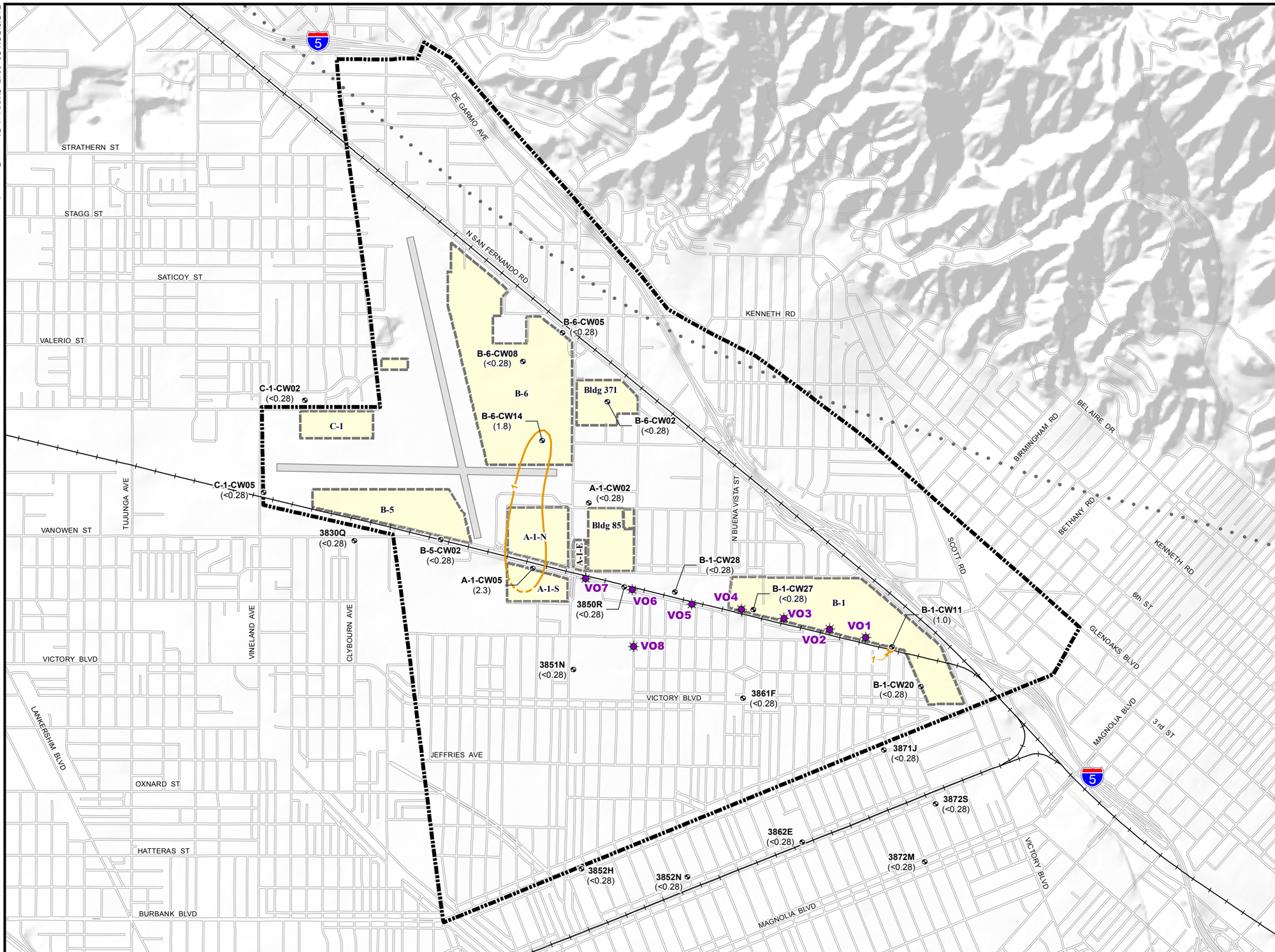
BURBANK OPERABLE UNIT

1,4-Dioxane Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 12

P:\GIS\BOU Q2_2017_GWM\1_4_Dioxane_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

1,4-Dioxane Isoconcentration
(concentrations range from <0.28 µg/L to 2.3 µg/L — dashed where inferred)

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 1.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

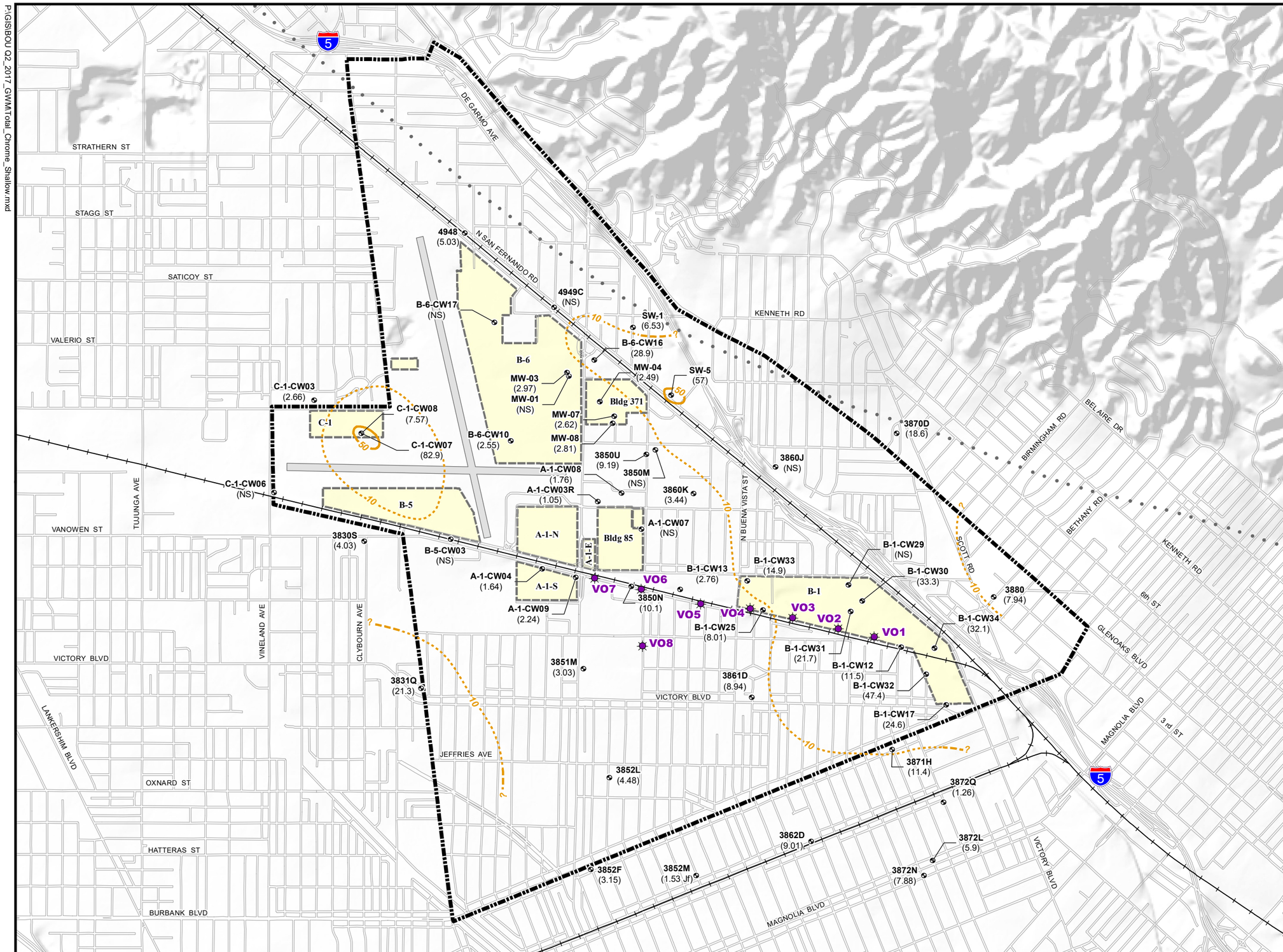
BURBANK OPERABLE UNIT

1,4-Dioxane Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 13

P:\GIS\BOU Q2_2017_GWM\Total_Chrome_Shallow.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Total Chromium Isoconcentration
(concentrations range from 1.05 µg/L to 82.9 µg/L — dashed where inferred)

Intermediate Isoconcentration Contour

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 50.0 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

f - The duplicate samples Relative Percent Difference (RPD) was outside the control limit.

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

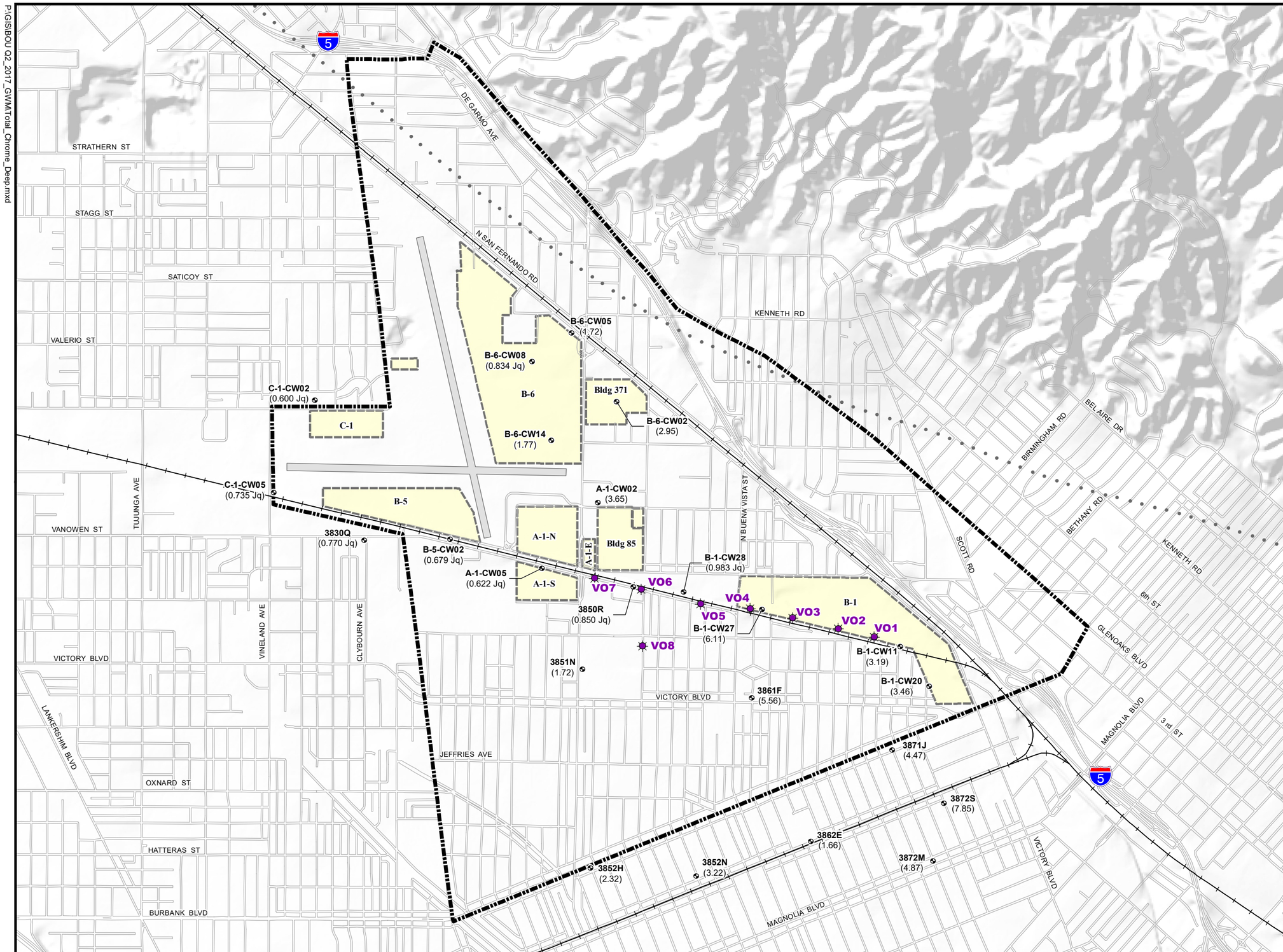
BURBANK OPERABLE UNIT

Total Chromium Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 14

P:\GIS\BOU Q2_2017_GWMTotal_Chrome_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 50.0 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

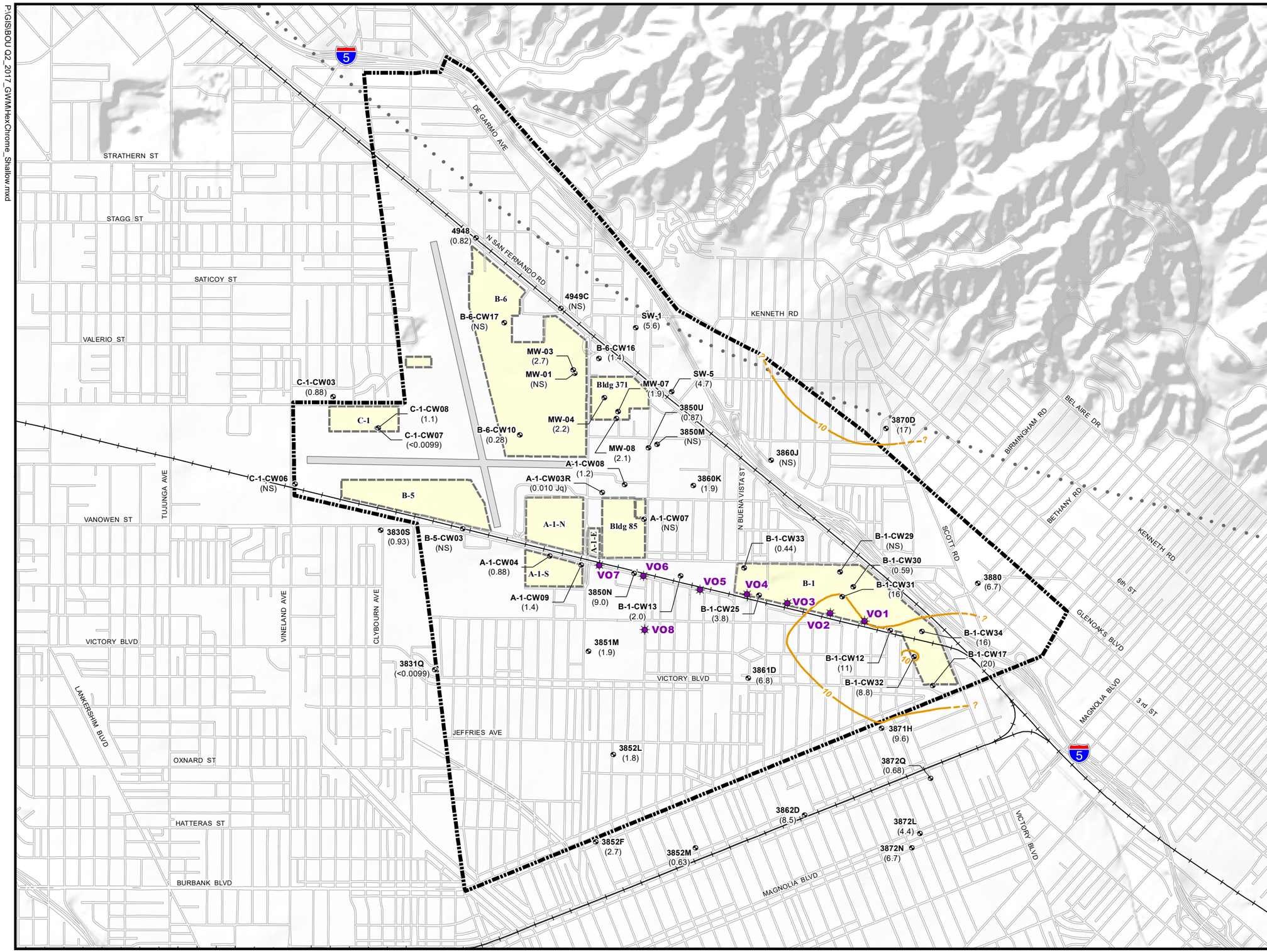
BURBANK OPERABLE UNIT

Total Chromium Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 15

P:\GIS\BOU Q2_2017_GWMHexChrome_Shallow.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Hexavalent Chromium Isoconcentration
(concentrations range from <0.0099 µg/L to 20 µg/L — dashed where inferred)

Intermediate Isoconcentration Contour

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 10.0 µg/L

µg/L - Micrograms per liter

J - The analyte was positively identified, but the analyte concentration is an estimated value.

q - The analyte detection was below the Practical Quantitation Limit (PQL).

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

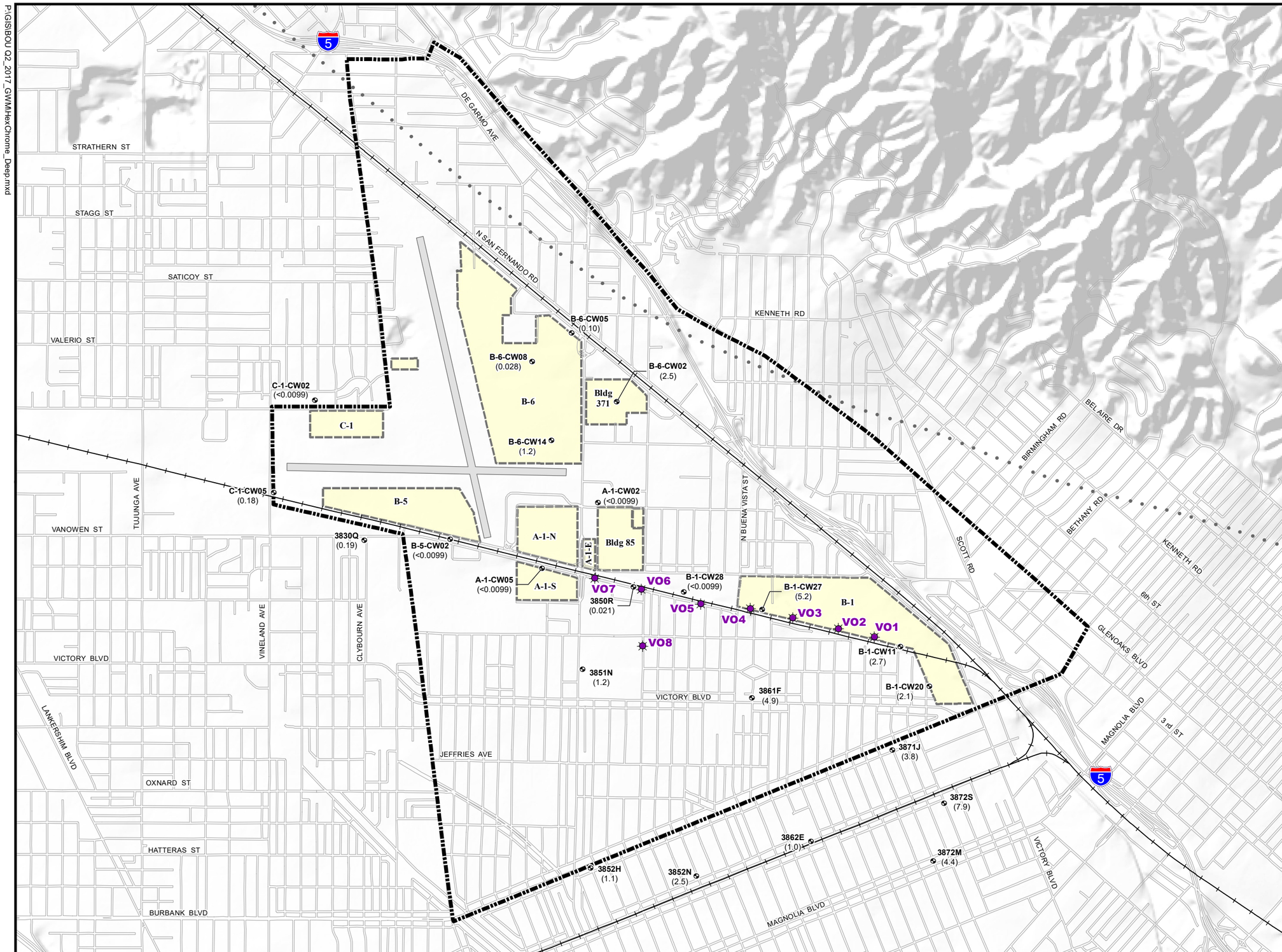
BURBANK OPERABLE UNIT

Hexavalent Chromium Concentrations in WT-HSU Wells Second Quarter 2017

TETRA TECH

Figure 16

P:\GIS\BOU Q2_2017_GWM\HexChrome_Deep.mxd



0 1,000 2,000 Feet

Monitoring Well
(test results posted below the well ID, unit of measure is µg/L)

Extraction Well

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 10.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

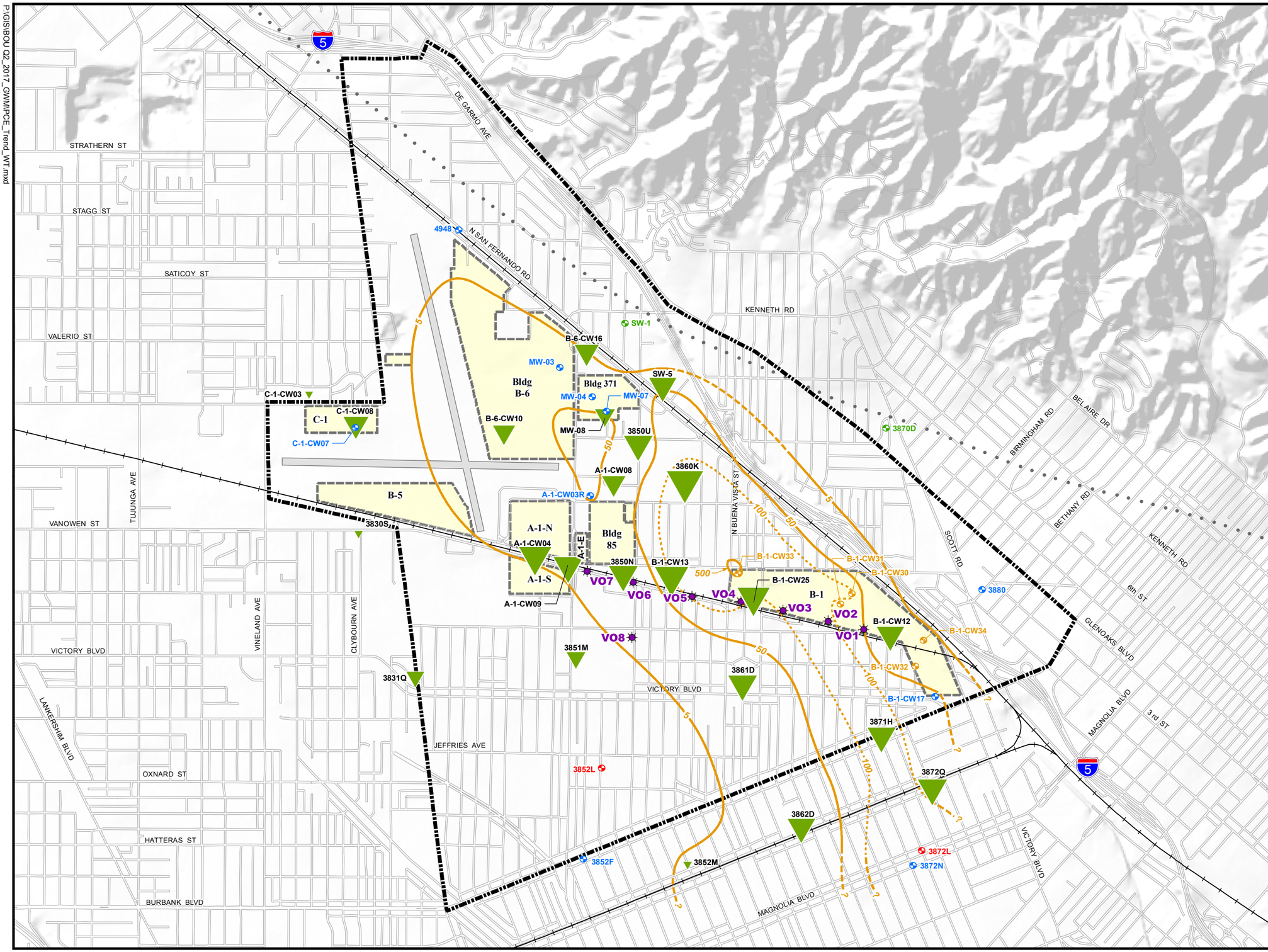
BURBANK OPERABLE UNIT

Hexavalent Chromium Concentrations in B-HSU Wells Second Quarter 2017

TETRA TECH

Figure 17

P:\GIS\BOU Q2_2017_GWM\PCE_Trend_WT.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000, 100, 10, 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Tetrachloroethene Isoconcentration (µg/L)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

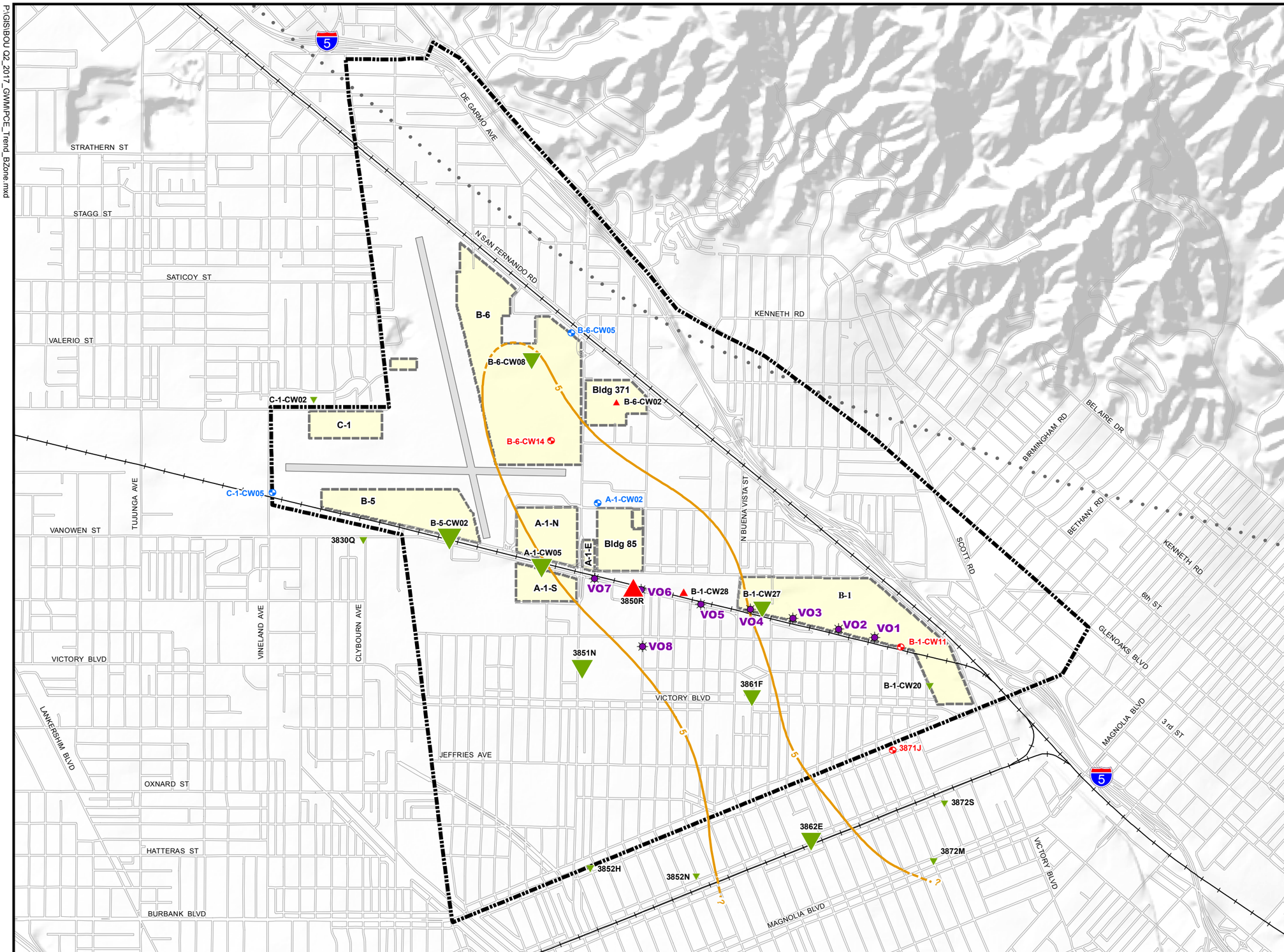
BURBANK OPERABLE UNIT

Tetrachloroethene Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 18

P:\GIS\BOU Q2_2017_GWM\PCE_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000, 100, 10, 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Tetrachloroethene Isoconcentration (µg/L) (dashed where inferred)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

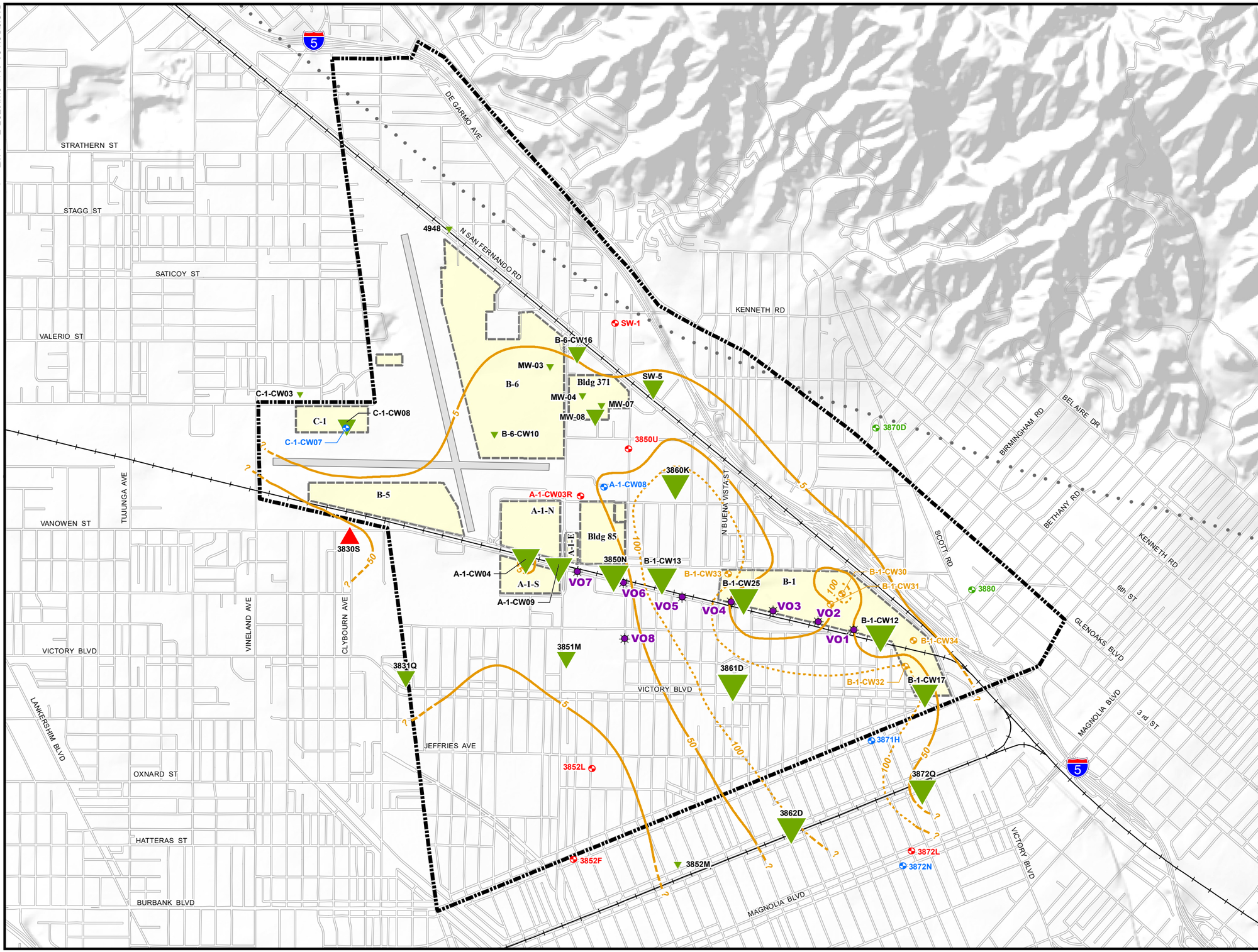
BURBANK OPERABLE UNIT

Tetrachloroethene Concentration Trends in B-HSU Wells 1996 - 2017

TETRA TECH

Figure 19

P:\GIS\BOU Q2_2017_GWMcTCE_Trend_WT.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000, 100, 10, 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Trichloroethene Isoconcentration (µg/L) (dashed where inferred)
- Intermediate Isoconcentration Contour
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

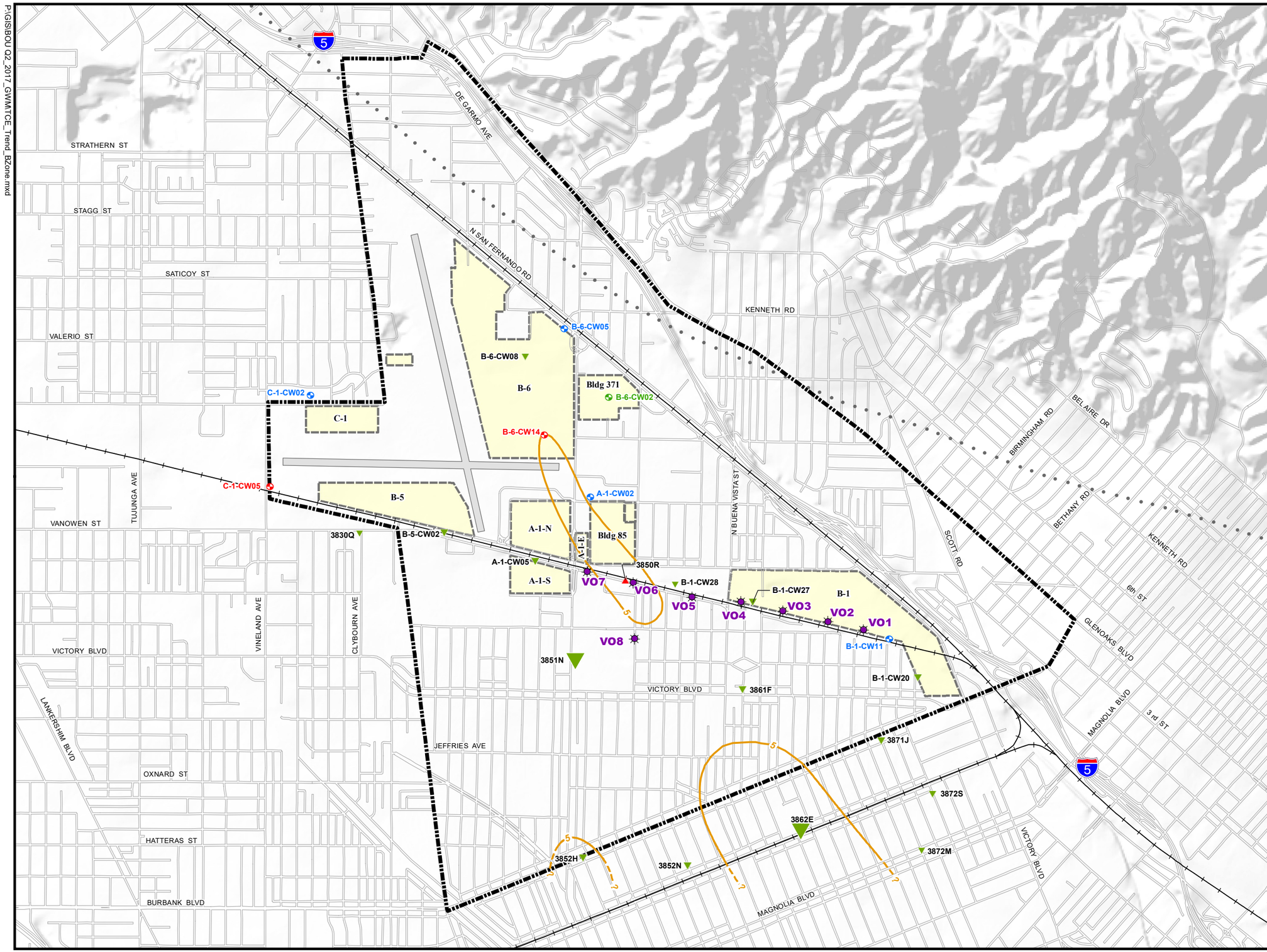
BURBANK OPERABLE UNIT

Trichloroethene Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 20

P:\GIS\BOU Q2_2017_GWM\TCE_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000; 100; 10; 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Trichloroethene Isoconcentration (µg/L) (dashed where inferred)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 5.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

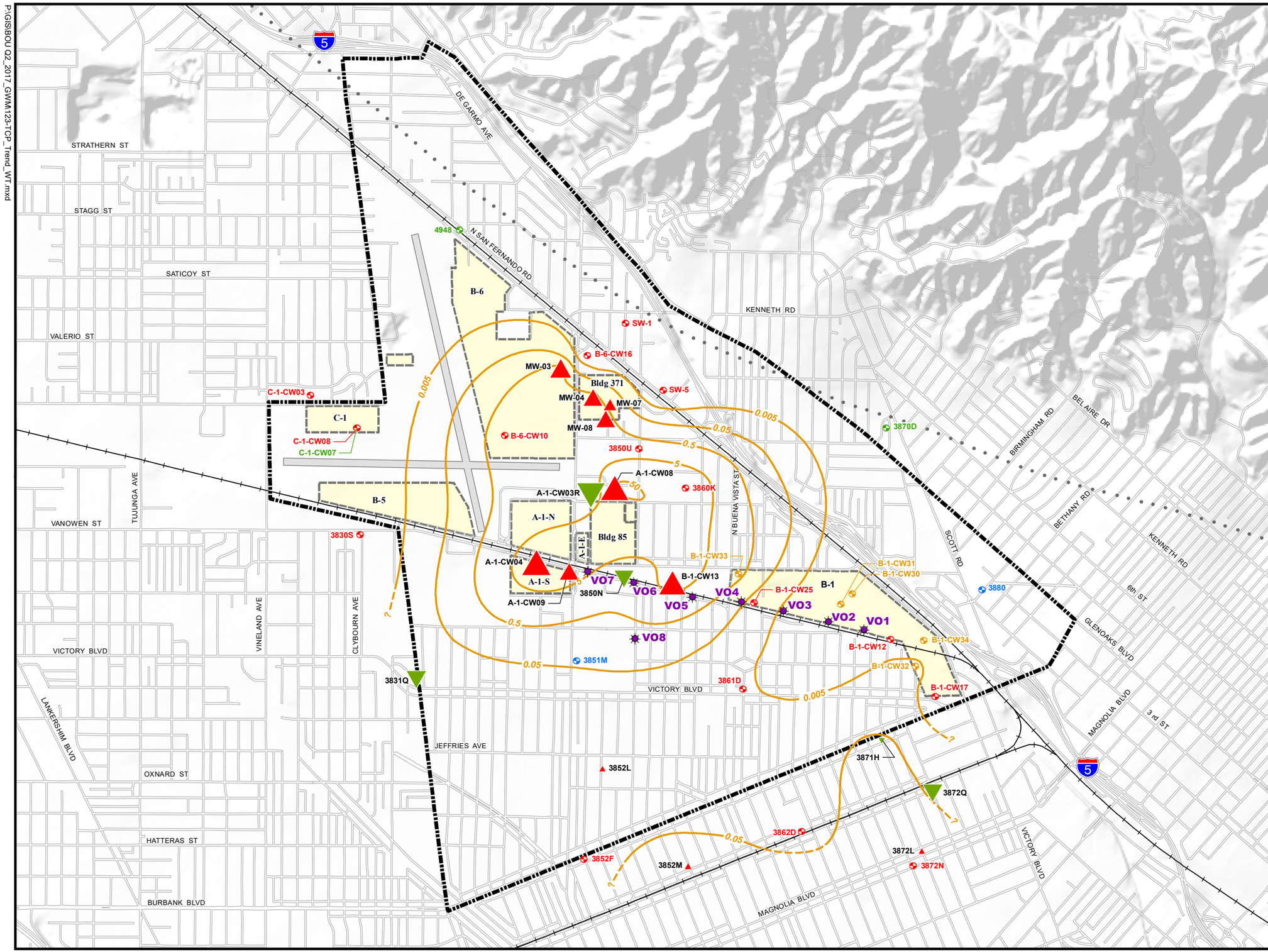
BURBANK OPERABLE UNIT

Trichloroethene Concentration Trends in B-HSU Wells 1996 - 2017

TETRA TECH

Figure 21

P:\GIS\BOU Q2_2017_GWM\123-TCP_Trend_WT.mxd



Notes:
Water Quality Objective - 0.005 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

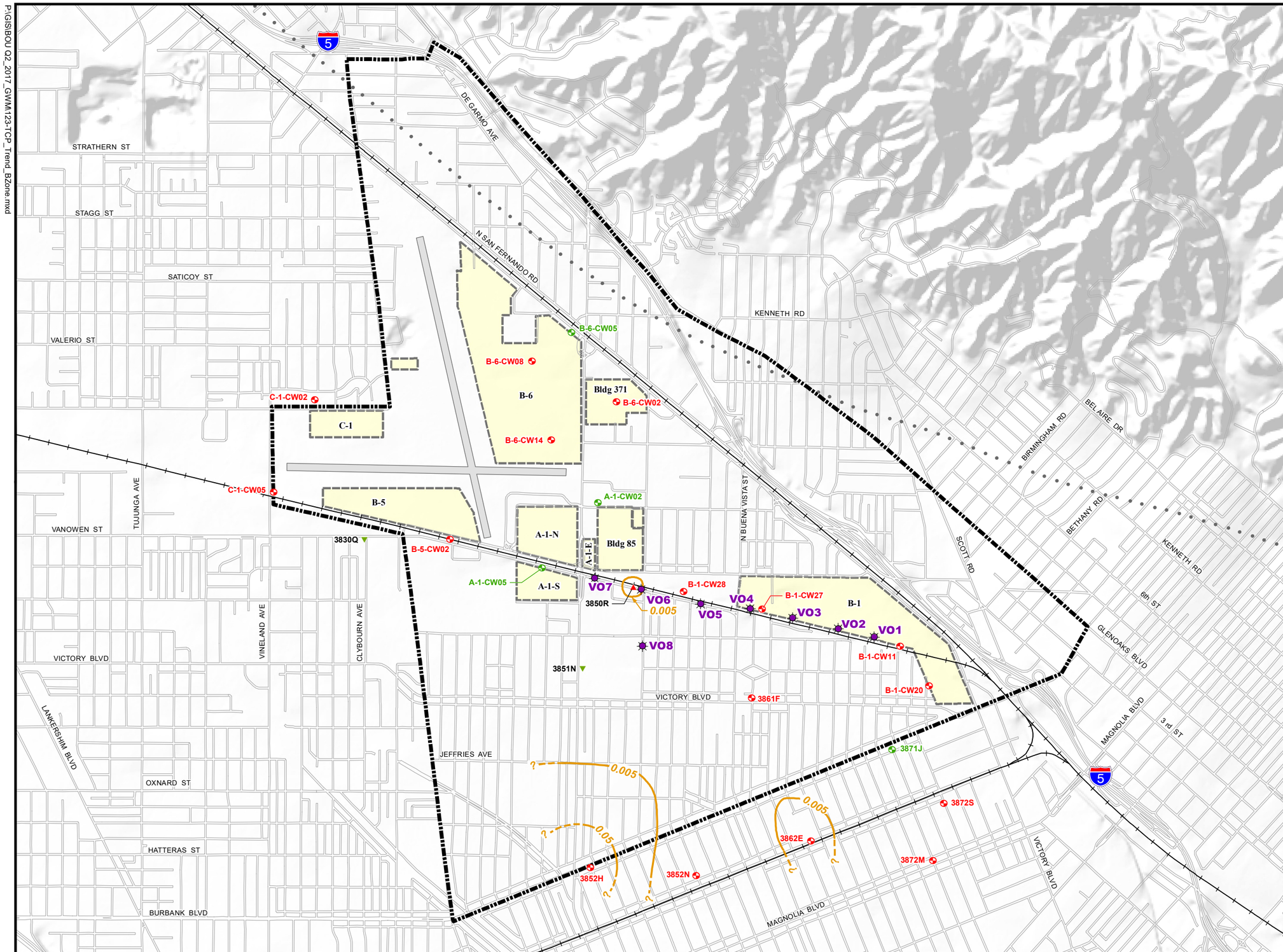
BURBANK OPERABLE UNIT

1,2,3-Trichloropropane Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 22

P:\GIS\BOU Q2_2017_GWM\23-TCP_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 100, 10, 1, 0.1 — Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- 1,2,3-Trichloropropane Isoconcentration (µg/L) (dashed where inferred)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 0.005 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

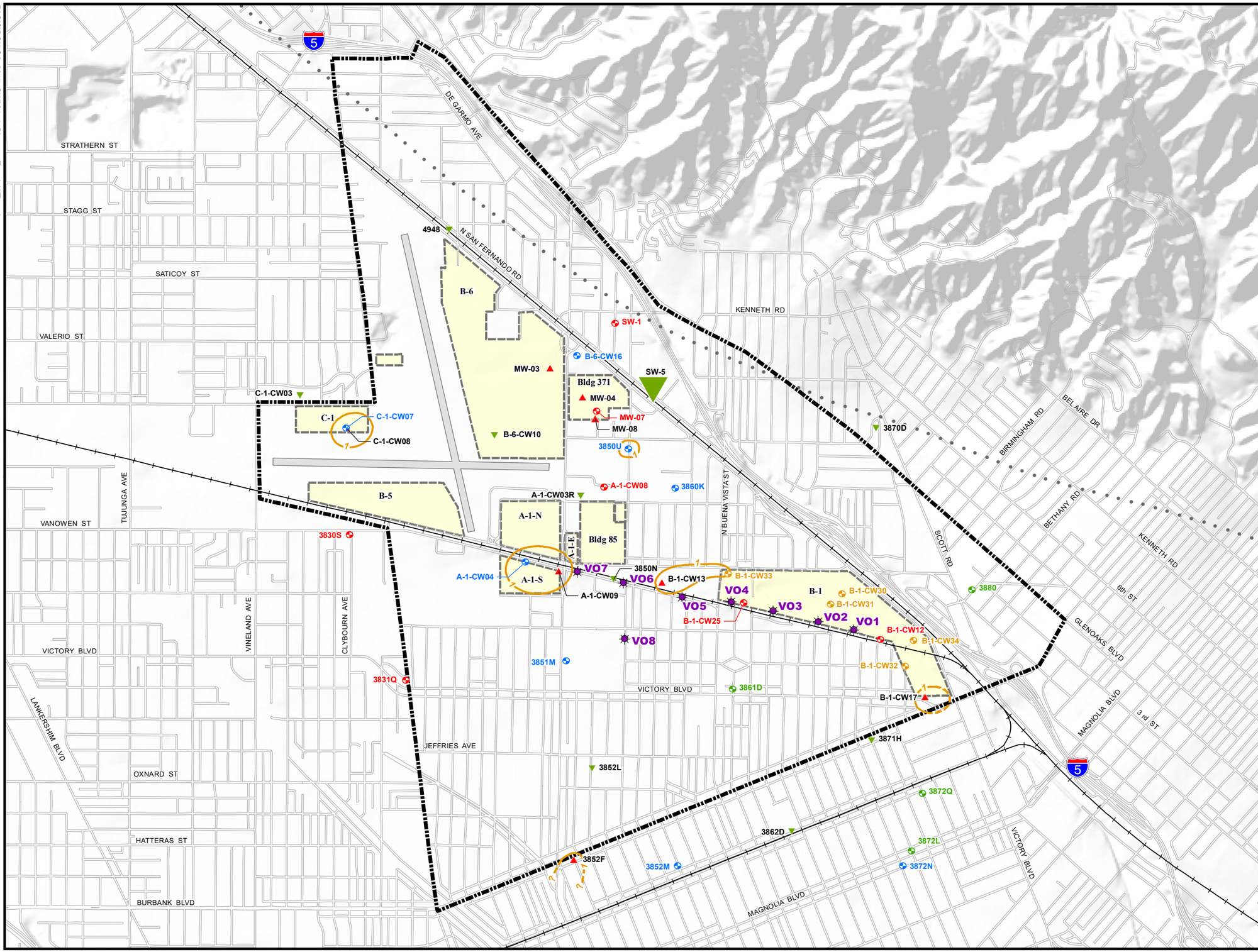
BURBANK OPERABLE UNIT

1,2,3-Trichloropropane Concentration Trends in B-HSU Wells 1996 - 2017

TETRA TECH

Figure 23

P:\GIS\BOU Q2_2017_GWM1_4_Dioxane_Trend_WT.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing | Decreasing

1,000

100

10

1

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- 1,4-Dioxane Isoconcentration (µg/L) (dashed where inferred)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 1.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

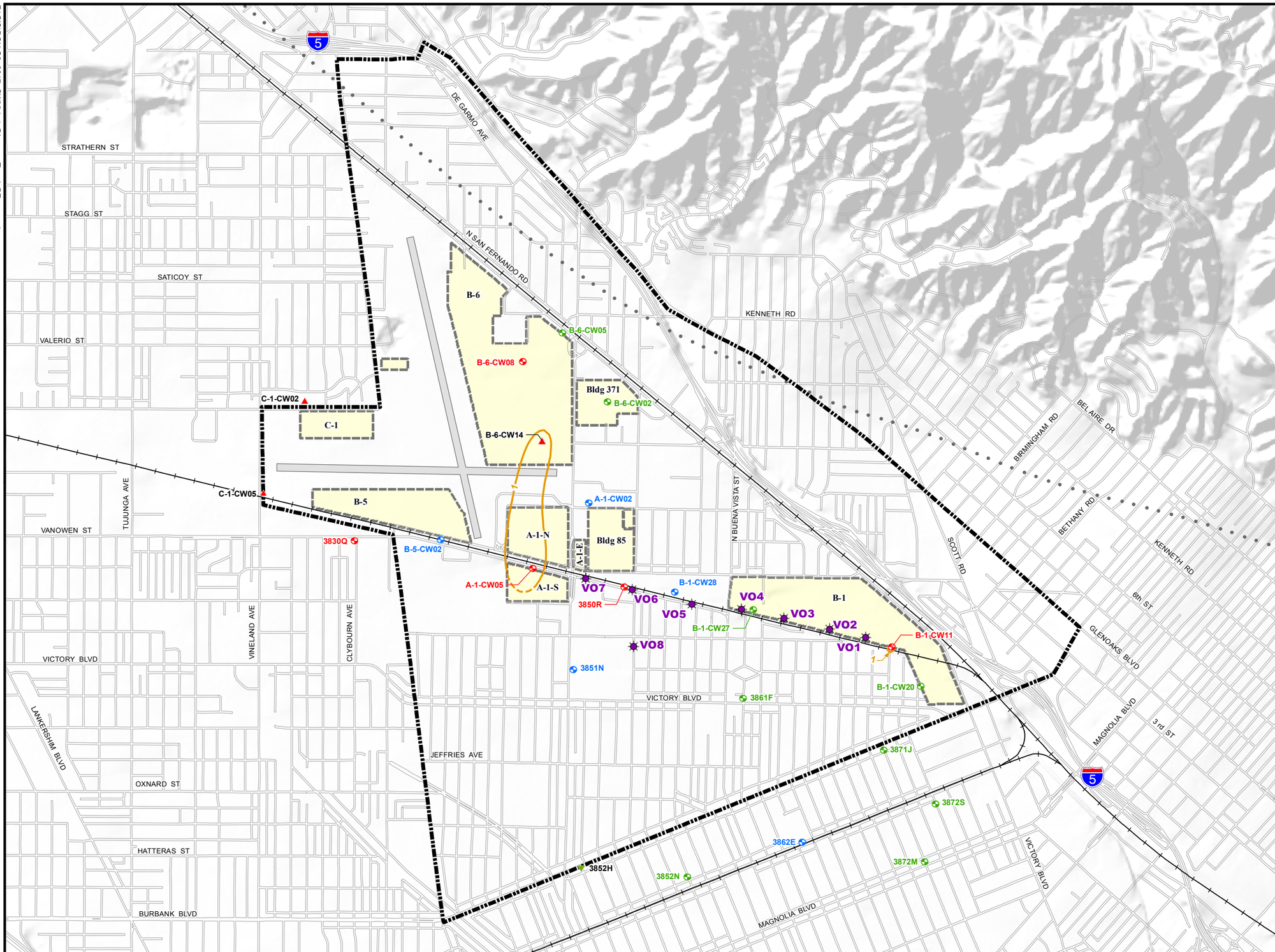
BURBANK OPERABLE UNIT

1,4-Dioxane Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 24

P:\GIS\BOU Q2_2017_GWM\1_4_Dioxane_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing — Decreasing

1,000
100
10
1

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- 1,4-Dioxane Isoconcentration (µg/L) (dashed where inferred)
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 1.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane California V, FIPS0405 FT US

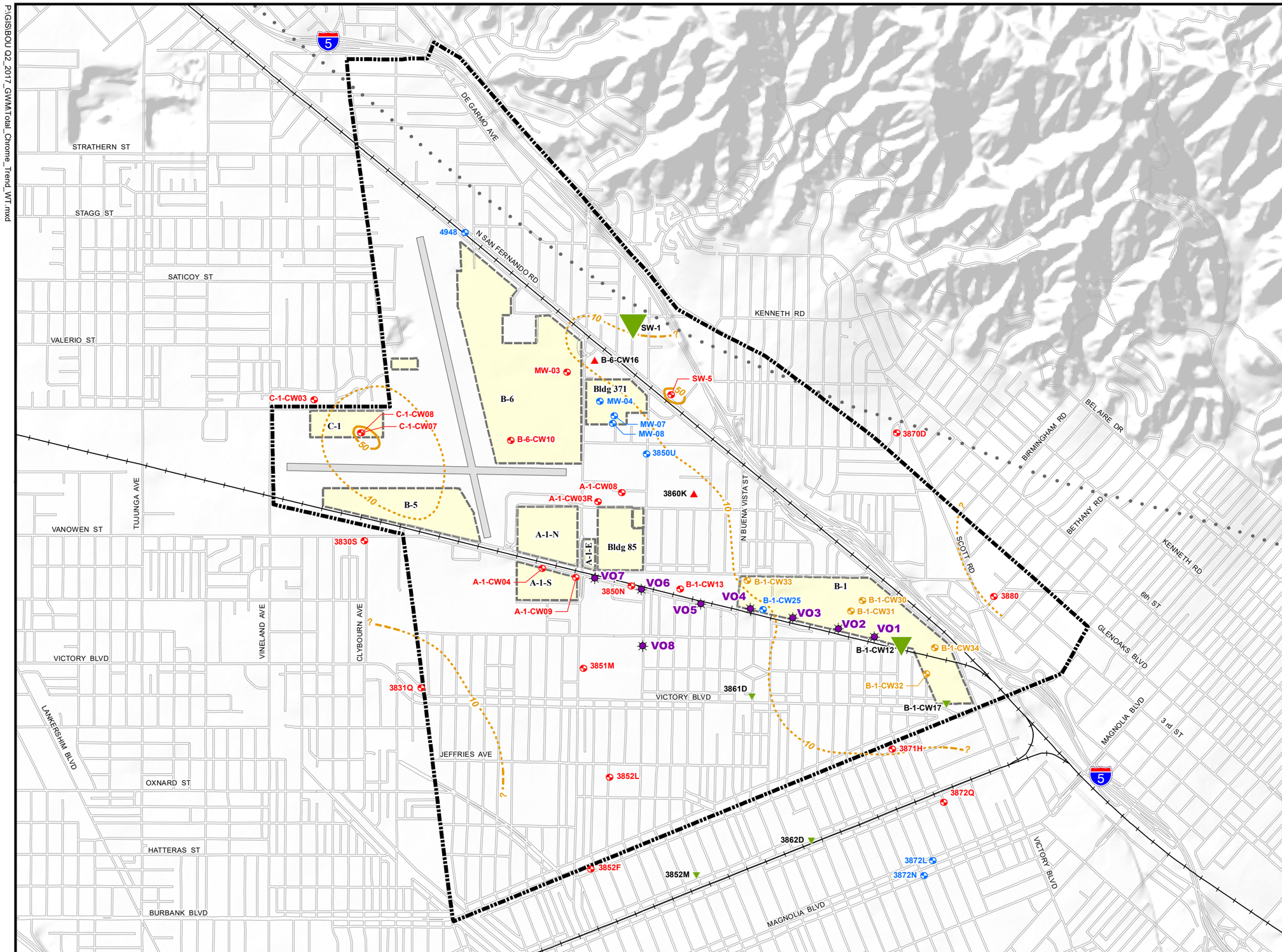
BURBANK OPERABLE UNIT

1,4-Dioxane Concentration Trends in B-HSU Wells 1996 - 2017

TETRA TECH

Figure 25

P:\GIS\BOU Q2_2017_GWM\Total_Chrome_Trend_WT.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000, 100, 10, 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Total Chromium Isoconcentration (µg/L) (dashed where inferred)
- Intermediate Isoconcentration Contour
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Qualtiy Objective - 50.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

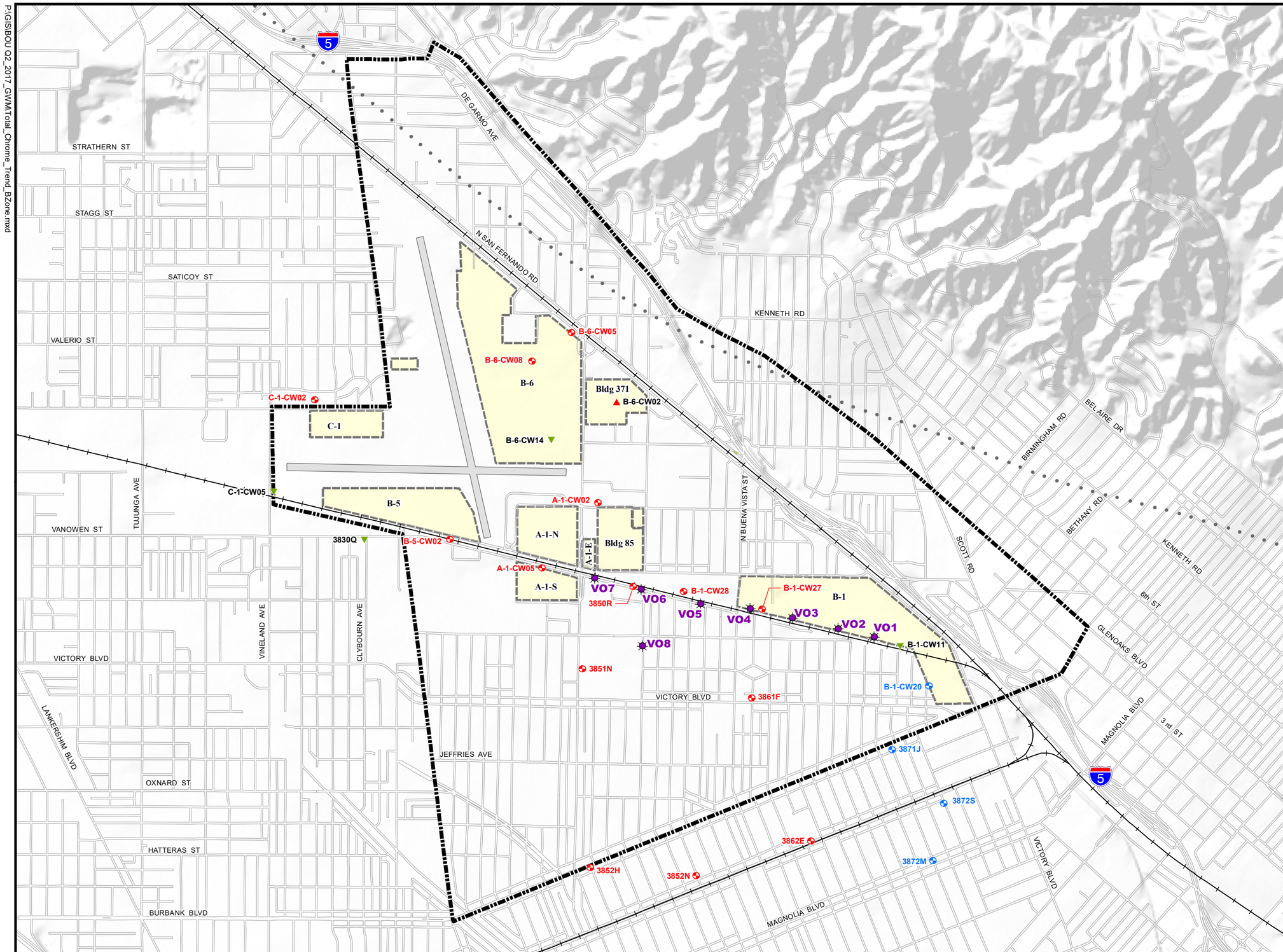
BURBANK OPERABLE UNIT

Total Chromium Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 26

P:\GIS\BOU Q2_2017_GWM\Total_Chrome_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000, 100, 10, 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 50.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

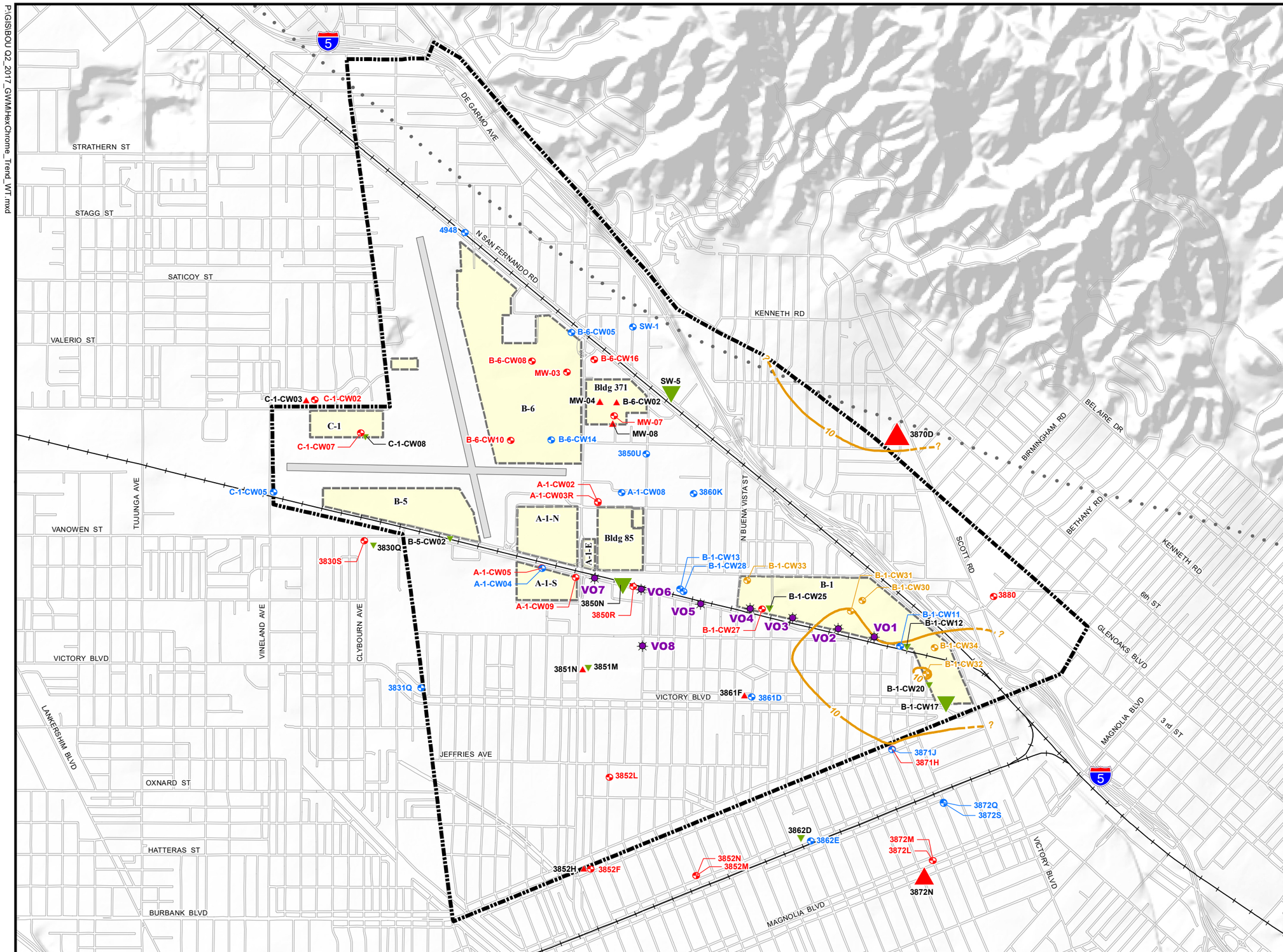
BURBANK OPERABLE UNIT

Total Chromium Concentration Trends in B-HSU Wells 1996 - 2017

TETRA TECH

Figure 27

P:\GIS\BOU Q2_2017_GWMHexChrome_Trend_WT.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing: 1,000; 100; 10; 1

Decreasing

- Increasing or Probably Increasing
- Decreasing or Probably Decreasing
- Stable
- No Trend
- All Sample Results Below Detection Limit
- Insufficient Data for Statistical Analysis
- Extraction Well
- Hexavalent Chromium Isoconcentration (µg/L) (dashed where inferred)
- Intermediate Isoconcentration Contour
- Approximate Concealed Trace of the Verdugo Fault*
- Railroad
- Burbank Operable Unit Boundary
- Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 10.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

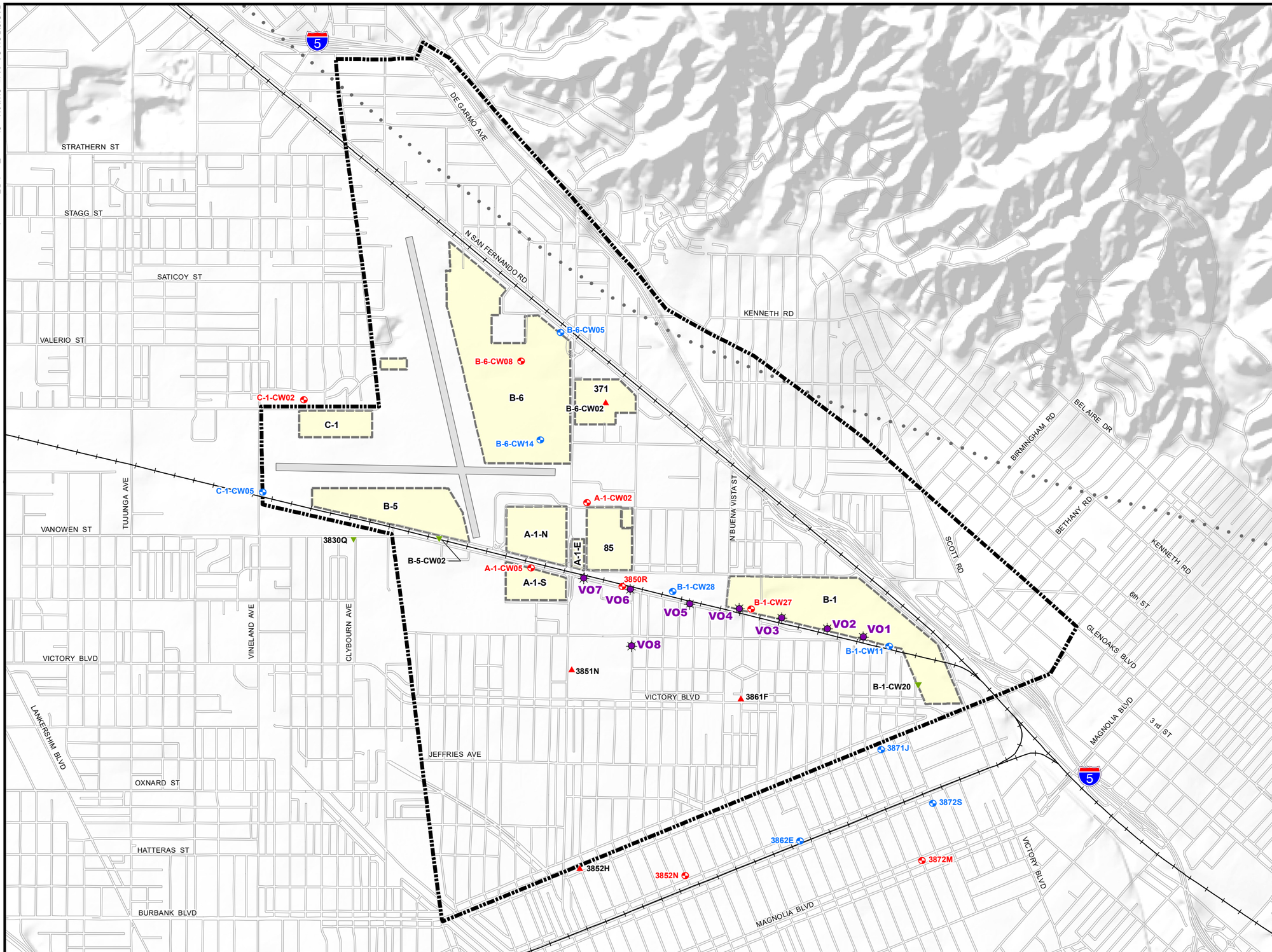
BURBANK OPERABLE UNIT

Hexavalent Chromium Concentration Trends in WT-HSU Wells 1996 - 2017

TETRA TECH

Figure 28

P:\GIS\BOU Q2_2017_GWMHexChrome_Trend_BZone.mxd



0 1,000 2,000 Feet

Change in µg/L/yr

Increasing — Decreasing

1,000

100

10

1

Increasing or Probably Increasing

Decreasing or Probably Decreasing

Stable

No Trend

All Sample Results Below Detection Limit

Insufficient Data for Statistical Analysis

Extraction Well

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

Notes:
Water Quality Objective - 10.0 µg/L

µg/L - Micrograms per liter

* Bedrossian, T.L. and Roffers, P.D., 2012 *"Geologic Compilation of Quaternary Surficial Deposits in Southern California, Los Angeles 30' x 60' Quadrangle (Revised)"*. California Geological Survey Special Report 217, Plate 9. July.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

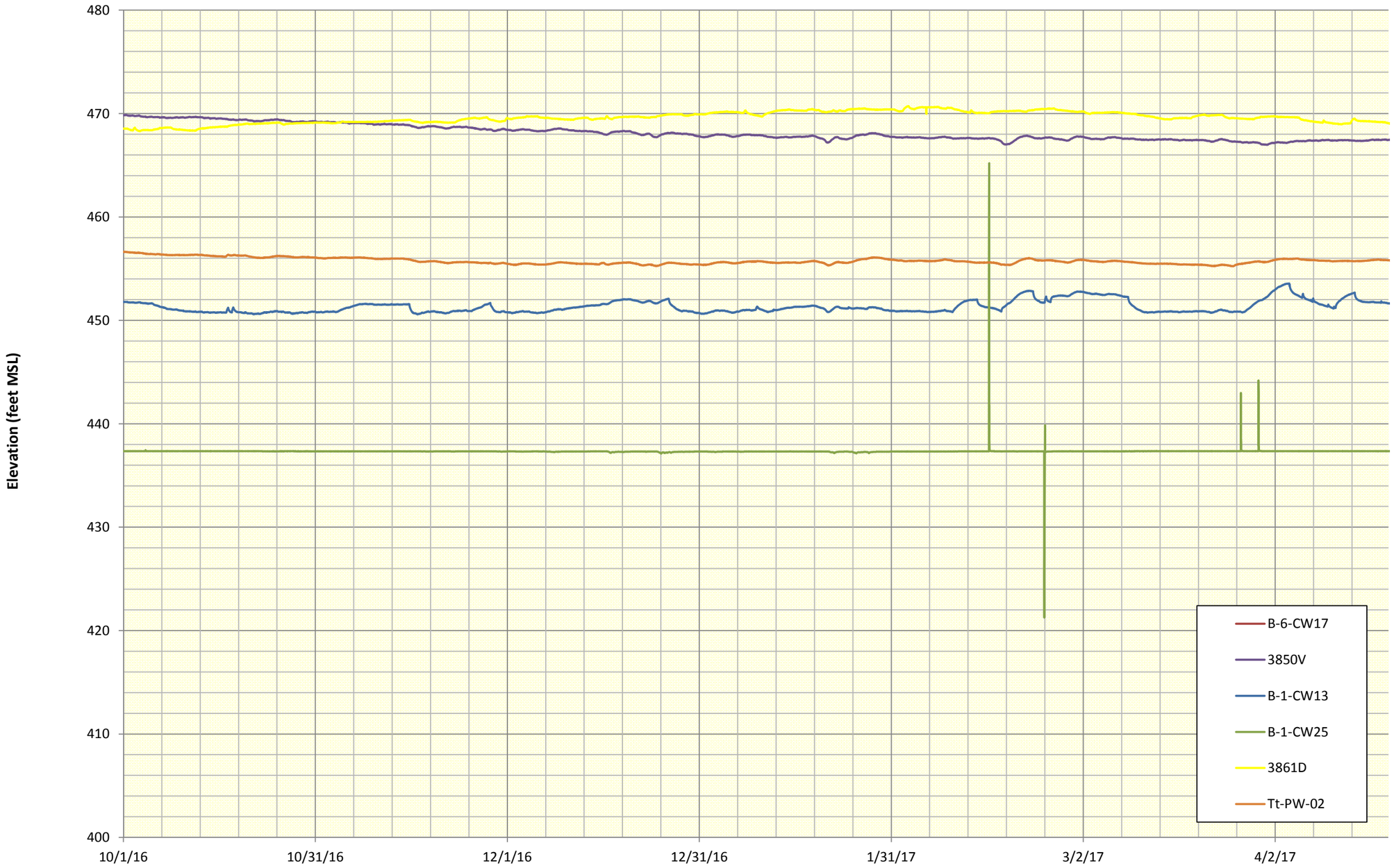
BURBANK OPERABLE UNIT

Hexavalent Chromium Concentration Trends in B-HSU Wells 1996 - 2017

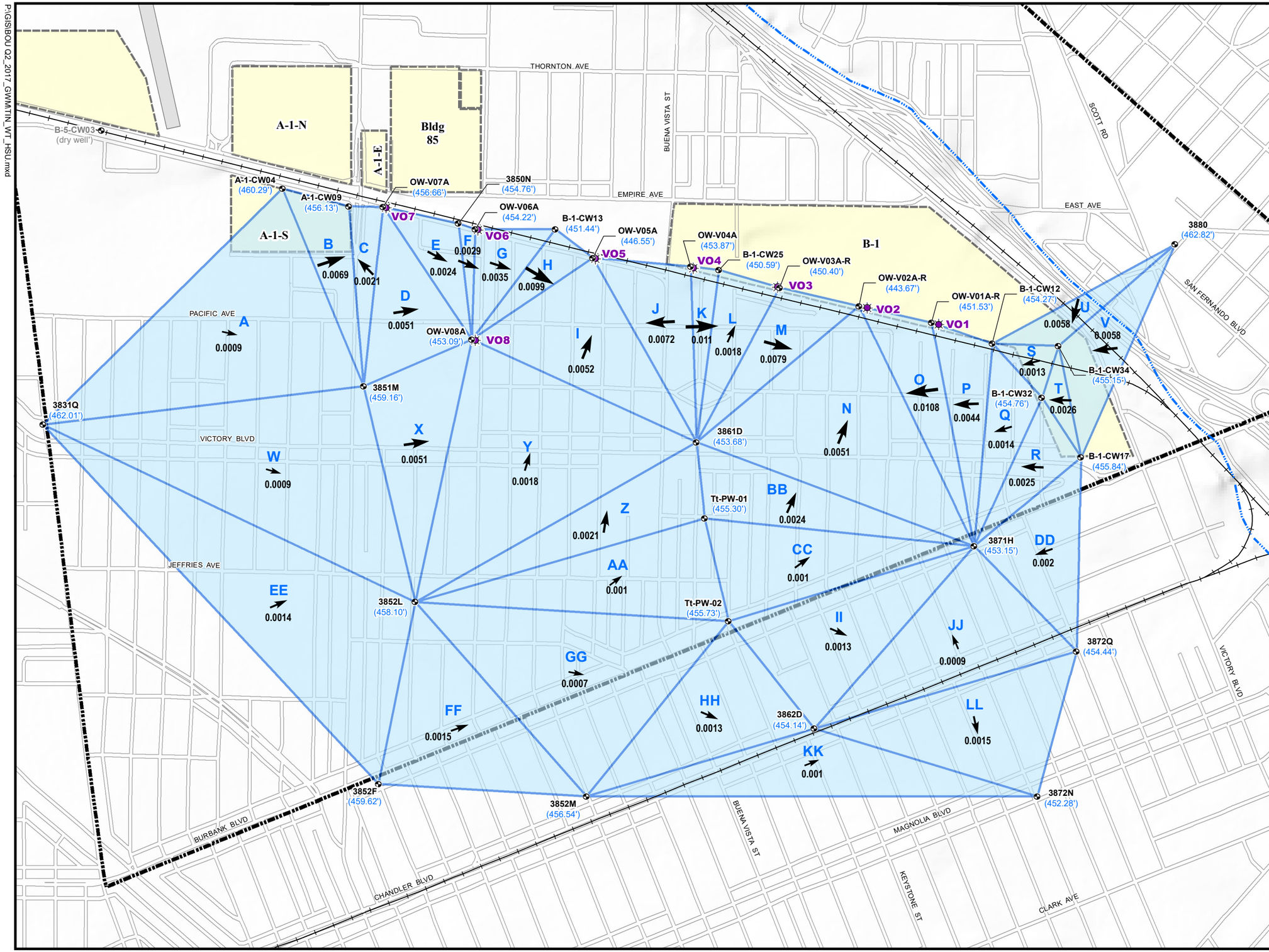
TETRA TECH

Figure 29

Figure 30
BOU Groundwater Production
and Transducer Data from Select Monitoring Wells



P:\GIS\BOU Q2_2017_GWM\TIN_WT_HSU.mxd



0 500 1,000 Feet

Monitoring Well (WT-HSU) with Groundwater Elevation (ft amsl)

Extraction Well

Burbank Channel

Approximate Concealed Trace of the Verdugo Fault*

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

A TIN Segment

0.0021 Hydraulic Gradient Magnitude Result (ft/ft)

Hydraulic Gradient Direction (with feet/feet change)

- 0.0007 - 0.001
- 0.001 - 0.002
- 0.002 - 0.004
- 0.004 - 0.006
- 0.006 - 0.008
- 0.008 - 0.011

Notes:

WT - Water Table

HSU - Hydrostratigraphic Unit

ft amsl - feet above mean sea level.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

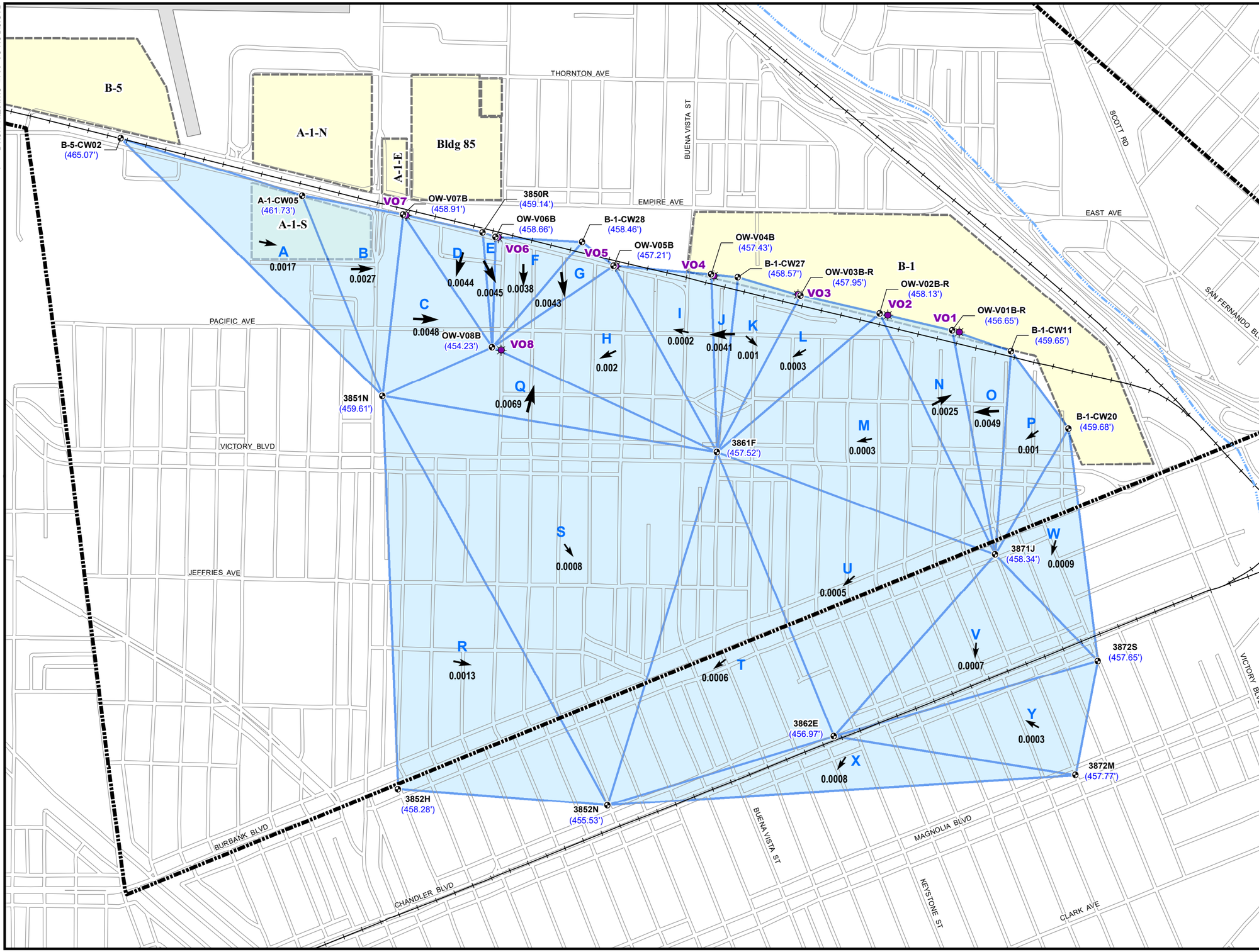
BURBANK OPERABLE UNIT

Second Quarter 2017 Hydraulic Gradients in the Water Table Hydrostratigraphic Unit

TETRA TECH

Figure 31

P:\GIS\BOU Q2_2017_GWMTIN_HSU-B.mxd



0 500 1,000 Feet

Monitoring Well (B-HSU) with Groundwater Elevation (ft amsl)

Extraction Well

Burbank Channel

Railroad

Burbank Operable Unit Boundary

Former Lockheed Martin Burbank Properties

A TIN Segment

0.0021 Hydraulic Gradient Magnitude Result (ft/ft)

Hydraulic Gradient Direction (with feet/feet change)

- 0.000212 - 0.001000
- 0.001001 - 0.002000
- 0.002001 - 0.004000
- 0.004001 - 0.006000
- 0.006001 - 0.006921

Notes:

B - B-Zone

HSU - Hydrostratigraphic Unit

ft amsl - feet above mean sea level.

Well Survey: KDM Meridian, Inc. 2012.
Projection: NAD83 NSRS2007 State Plane Califonia V, FIPS0405 FT US

BURBANK OPERABLE UNIT

Second Quarter 2017 Hydraulic Gradients in the B-Zone Hydrostratigraphic Unit

TETRA TECH

Figure 32

APPENDICES

Appendix A
Conceptual Site Model

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

APPENDIX A
SITE BACKGROUND AND CONCEPTUAL SITE MODEL

This appendix summarizes the site background and conceptual site model (CSM) for the Burbank Operable Unit (BOU) based on the current and previous investigations. The discussion is divided into five main subsections: site background, physical setting, geology, hydrogeology, and groundwater quality.

1.1 SITE BACKGROUND

1.1.1 Site History

From the 1920s to the early 1990s, Lockheed Martin and several aircraft manufacturing/maintenance facilities operated within and around the vicinity of the Burbank Airport (currently the Bob Hope Airport). Lockheed Martin owned and operated a total of nine facilities within the current BOU area. The primary operations at the facilities included the manufacturing and assembly of aircraft and associated components. Other operations performed at the plants included research and development activities, and production of aviation devices. Supporting activities included manufacturing, machining, and assembling of various parts; parts cleaning and painting; and tooling and welding. Primary and support activities required the use and storage of fuel oils, gasoline, paints, primers, and chemicals. Types of oils used included hydraulic, cutting, and lubricating oils. Types of chemicals used included solvents, acids, caustics, and descalers.

Operations at the various plants were discontinued in the early 1990s, and structures associated with the facilities have been demolished. Most of the facilities have been redeveloped into commercial property.

1.1.2 Regulatory Framework

In 1980, the California Department of Health (DOH, currently called the California Department of Health Services (DHS)) requested that all major water providers sample and analyze groundwater

for contamination. Based on analyses of groundwater samples collected within the southeastern portion of the San Fernando Valley(SFV), trichloroethylene (TCE) and tetrachloroethylene (PCE) were detected consistently in a large number of production wells within the North Hollywood and Burbank area at concentrations greater than the maximum contaminant level (MCL) for drinking water. As a result, the United States Environmental Protection Agency (EPA) provided federal funding for the Los Angeles Department of Water and Power to conduct a two-year study to define the extent of contamination. The results of the study, published in 1983, revealed widespread VOC-contaminated groundwater in the SFV.

In 1986, North Hollywood and Burbank were added to the National Priorities List and designated as the North Hollywood and Burbank Operable Units (NHOU and BOU) of Area 1 of the SFV Superfund Site. In October 1988, a Feasibility Study was completed within the BOU.

In June of 1989, a Record of Decision (ROD) for an interim groundwater remedy at the BOU was signed. In March 1992, EPA entered into a Consent Decree (CD) with Lockheed Martin, the City of Burbank, and Weber Aircraft, Inc. Two Explanation of Significant Differences (ESDs) were also signed and incorporated to the 1989 ROD between 1990 and 1997. The CD, ROD, and ESDs stipulated that Lockheed Martin was to design and construct a 9,000-gallon per minute (gpm) groundwater extraction and treatment system that must meet MCLs and SALs, with the exception of nitrate. Furthermore, Lockheed Martin would operate the system for 2 years.

In June 1998, a second Consent Decree was entered. This provided for continued operations and maintenance of the BOU treatment system by the City of Burbank at 9,000 gpm. Funding was to be provided by a trust fund established and funded by parties to the CD.

Since 1996, the BOU treatment system has been fully operational, with downtime attributed to unexpected maintenance/design issues, new chemicals of concern (primarily 1,2,3-trichloropropane (1,2,3-TCP)), and well pump and controls problems. The concentration of PCE and TCE in groundwater effluent from the treatment system has been less than MCLs. Treated groundwater from the blendpoint, which is served to consumers, has met all DHS contaminant goals set forth in the operating permit, as well as the drinking water MCL cleanup goals.

1.1.3 Groundwater Monitoring Program

The groundwater-monitoring program (GMP) for the BOU is conducted in accordance an Operational Sampling Plan (OSP), which describes the objectives, schedule, rationale, analytical methods, and procedures for sampling the groundwater monitoring-well network. The OSP has evolved since its inception in 1997 with the *Draft Phase 2 OSP (HIS Geotrans, 1997)* to incorporate additional requests by the EPA and the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB).

In April 2012, Lockheed Martin submitted the Revised Phase 2 OSP to the EPA that proposed modifications to the BOU GMP (Strategic Engineering & Science, 2012). The 2012 Revised OSP included a groundwater monitoring optimization plan that presented the rationale for selection of COCs for the BOU GMP and elimination of other analytes (e.g., semivolatile organic compounds, pesticides, polychlorinated biphenyls, and radionuclides). During a meeting between Lockheed Martin and the EPA on August 22, 2012, EPA requested implementation of a comprehensive sampling event in order to refine the OSP. A Comprehensive Sampling Event Work Plan was subsequently prepared and submitted to the EPA on February 11, 2013. In April 2013, the EPA approved the revised OSP and Comprehensive Sampling Event Work Plan.

In 2014, Lockheed Martin submitted another Revised OSP (Arcadis, 2014) to the EPA that proposed modifications to optimize the long-term GMP and implement a monitoring schedule that coincides with the EPA's revised Basinwide Groundwater Monitoring Program schedule: every second and fourth quarter for groundwater level monitoring and every second quarter for groundwater sampling for chemical analyses.

In 2017, Lockheed Martin submitted a Revised OSP Addendum (Tetra Tech, 2017) that referenced changes to the groundwater monitoring well network, and included procedures for sampling BOU wells using a low-flow sampling protocol and modifications to the Quality Assurance Project Plan reflecting the current BOU groundwater monitoring project team and data validation procedures.

1.2 PHYSICAL SETTING

The BOU is located in the southeastern portion of the San Fernando Valley (SFV) in the City of Burbank, California. The SFV is a 260-square-mile physiographic basin located in the Transverse Ranges province in southern California. The SFV is bounded to the south by the Santa Monica Mountains, to the west by the Simi Hills, to the north by the Santa Susana and San Gabriel Mountains, and to the east-northeast by the Verdugo and San Gabriel Mountains.

1.3 GEOLOGY

Geologic units underlying the SFV generally consist of the following (from oldest to youngest):

- Mesozoic and older plutonic and metamorphic rocks (crystalline basement)
- Tertiary-age marine sandstone, mudstone, and shale (sedimentary bedrock)
- Unconsolidated Plio-Pleistocene marine and non-marine sediments
- Unconsolidated Quaternary alluvial deposits

The basement and bedrock units crop out in the surrounding hills and mountains that form the valley boundaries. The eastern margin of the valley is bounded by the plutonic and metamorphic rocks of the Verdugo Mountains. The northern margin of the valley is bounded by the sedimentary rocks of the Santa Susana Mountains and the plutonic and metamorphic rocks of the San Gabriel Mountains. The western edge of the valley is defined by the Simi Hills where sedimentary rock is exposed. The southern margin is defined by the Santa Monica Mountains where sedimentary and igneous rocks are exposed.

The Quaternary alluvium beneath the BOU consists of Holocene younger alluvium and Pleistocene older alluvium. The younger alluvium extends from the ground surface to a depth of up to 410 feet below ground surface (bgs). The older alluvium extends from the base of the younger alluvium to depths of up to 1,200 feet bgs or more. The contact between the younger and older alluvium has been reported to be marked by a distinct basal cobble layer (HSI Geotrans, 1997).

The younger alluvium consists of coarse-grained sand, gravel, and cobbles interbedded with finer-grained units of sand, silty sand, sandy silt, silt, and clay. Individual units within the younger alluvium vary in elevation and thickness; the contacts between the units have a northeast-trending

strike and dip towards the southeast. The lithology of the upper portion of the older alluvium varies from sand, gravel, and boulders in the northwestern portion of the BOU to interbedded silt and sand in the eastern and southern portions. The deeper portion of the older alluvium consists of silt and sand with interbedded gravel (HSI Geotrans, 1997.)

The northwest-trending Verdugo fault zone runs along the northeastern boundary of the BOU. The fault zone has been interpreted to be a low-permeability zone that can both impede and direct the flow of groundwater.

1.4 HYDROGEOLOGY

The BOU is located in the San Fernando Basin, which is characterized as water-bearing alluvium that overlies a non-water-bearing bedrock complex of older sedimentary rock formations and crystalline and metamorphic basement complex rock. Groundwater enters the basin by infiltration of surface-water runoff from the highlands, by deep penetration of rain on the valley floor, and by artificial means such as irrigation return or induced recharge. Outflow of groundwater from the basin is through groundwater extraction and a small amount of flow (surface and groundwater) through the Los Angeles Narrows, located southeast of the BOU. Groundwater in the vicinity of the BOU flows mainly through two sedimentary units: the Pleistocene older alluvium and the Holocene younger alluvium. The aquifer in the older alluvium has been observed to be locally semi-confined to confined by clay and silt units, whereas the aquifer in the younger alluvium is generally unconfined to semi-confined depending upon the location and thickness of the fine-grained units (HSI Geotrans, 1997).

The aquifer in the younger alluvium within the BOU has been divided into five hydrostratigraphic units (HSUs) based on electrical resistivity responses in geophysical logs (Hargis & Associates, 1991; Simon Hydro Search, 1993). The five HSUs of the younger alluvium are identified from upper to lower as A′, X, A, Y, and B (HSI Geotrans, 1997). The A′, A, and B HSUs are generally comprised of coarser-grained material (coarse-grained sand, gravel, and cobbles). The X and Y HSUs separate the three HSUs listed above (A′, A, B), and consist of relatively finer-grained material (sand, silty sand, and silt). Based on the stratigraphic position of the units and the groundwater gradient, the A′ HSU, the X HSU, or the A HSU may locally represent water table

conditions depending on geographic location within the project area, and are collectively referred to as water table (WT) HSUs.

The five HSUs of the younger alluvium are encountered throughout much of the southeastern San Fernando Basin. During the 1991 installation of groundwater monitoring wells 3860J, 3870D, 3870E, and 3880 northeast of the BOU, however, boring data and geophysical logs confirmed the absence of the five HSUs and identified the presence of finer-grained silty sands and sandy silts (Hargis and Associates, 1991). Based on the data, a separate HSU with distinct lithology was identified as the K HSU (also considered a WT HSU).

1.5 GROUNDWATER QUALITY

Lockheed Martin has monitored groundwater quality at the BOU since 1986. Based on analysis of the historical data, the following analytes have been selected as primary chemicals of concern for the BOU site: tetrachloroethene (PCE), trichloroethene (TCE), 1,2,3-trichloropropane (1,2,3-TCP), 1,4-dioxane, total chromium, and hexavalent chromium (Tetra Tech, 2004). Overall, TCE and PCE concentrations in shallow groundwater have decreased since data was first collected in 1993. Additionally, analytical results from well clusters have shown that TCE and PCE concentrations in wells screened in the lower HSUs are generally one to two orders of magnitude less than in the WT wells (Earth Tech, 2000; Tetra Tech, 2011).

1.6 REFERENCES

1. Earth Tech, 2000. *Analysis of Groundwater Level Changes at the Burbank Operable Unit Extraction and Treatment Facility, Lockheed Martin Corporation, Burbank, California*.

2. Hargis & Associates, 1991. *Installation of Groundwater Monitoring Wells Along Vanowen Street, Lockheed Engineering and Science Company, Burbank, California*.

3. HSI Geotrans, 1997. *Draft Phase 2 Operational Sampling Plan, Burbank Operable Unit, Burbank, California*. July 11.

4. Simon Hydro Search. 1993. *Phase I Final Remedial Design Report, Burbank Operable Unit, Volumes V & VI prepared for LESAT*. September 30.

5. Tetra Tech, 2004. *Draft Lockheed Martin Corporation Revised Phase 2 Operational Sampling Plan, Burbank Operable Unit, Burbank, California*. February 3.

6. Tetra Tech, 2011. *Semiannual Groundwater Monitoring Report, Third Quarter and Fourth Quarter 2011, Burbank Operable Unit, Burbank, California*. March

Appendix B
Field Data Sheets

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/04/17 SITE NAME / NUMBER BOU
PROGRAM NAME LMC-BOU
MONITORING WELL IDENTIFICATION 3830Q
SAMPLE I.D. 3830Q-N-17Q2 DUPLICATE I.D. —
STATIC WATER LEVEL (ft btoc) 237.00 WELL DEPTH (ft btoc) 359.50
WATER COLUMN (feet) 122.5 CASING/TUBE DIAMETER (ft/in) 3/8"
WELL /PUMP VOLUME (V) (gal/ml) 4720 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump
SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other
OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____
IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____
FINAL PUMP DEPTH (ft btoc) 344.5
SAMPLER'S SIGNATURE
WELL SAMPLE TIME 1229 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1140	start purge	237.00	344.5										140
1214		237.03		22.87	0.665	7.47	4.80	0.40	18.4	clearless	4760	1.01	
1217		237.04		22.91	0.665	7.47	8.01	0.39	14.9		5180	1.10	
1220		237.04		22.93	0.665	7.47	3.33	0.38	14.5		5600	1.19	
1223		237.03		22.65	0.665	7.47	4.28	0.36	18.2		6020	1.28	
1226		237.03		22.62	0.663	7.47	3.03	0.37	17.2		6440	1.36	
1229	sample	237.03		22.65	0.663	7.46	3.08	0.36	17.3		6860	1.45	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 0.34
Water level at time of sampling (ft btoc): 237.03 Turbidity at time of sampling: 308
Pump Settings: CPM: 2 PSI: 127 Recharge: 20 Discharge: 10
Comments: *Use high pressure bot

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/04/2017 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 38308

SAMPLE I.D. 38308-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 237.12 WELL DEPTH (ft btoc) 262.50

WATER COLUMN (feet) 25.38 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2839 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 250.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1413 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1339	Start purge	237.12	250.5				~~6.85~~						1.50
1358		237.12		22.36	0.914	7.28	6.85	5.13	127.2	Colorless	2850	1.00	
1401		237.12		22.32	0.912	7.28	7.60	5.16	125.5		3300	1.16	
1404		237.12		22.32	0.911	7.28	8.23	5.24	122.2		3750	1.32	
1407		237.12		22.31	0.909	7.28	6.87	5.36	119.2		4200	1.48	
1410		237.12		22.40	0.909	7.28	6.42	5.36	116.6		4650	1.64	
1413	Sample	237.12		22.41	0.909	7.28	6.71	5.47	114.8		5100	1.80	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.47

Water level at time of sampling (ft btoc): 237.12 Turbidity at time of sampling: 6.71

Pump Settings: CPM: 2 PSI: 130 Recharge: 22 Discharge: 8

Comments: *Use a high pressure control box

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/04/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC- BOU

MONITORING WELL IDENTIFICATION 3831Q

SAMPLE I.D. 3831Q-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 198.51 WELL DEPTH (ft btoc) 254.50

WATER COLUMN (feet) 55.99 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 3005 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0.0 (vented to) 0.0

IN BREATHING ZONE (ppm) (initial) 0.0 (vented to) 0.0

FINAL PUMP DEPTH (ft btoc) 239.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1012 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0904	Start purge		239.5										110
0932		198.51		19.88	1.117	7.29	64.8	1.69	-39.3	lightorange	3080	1.02	
0935		198.51		19.86	1.122	7.29	58.3	1.65	-38.4		3410	1.13	
0938		198.51		19.89	1.123	7.29	49.6	1.61	-37.2		3740	1.24	
0941		198.51		19.90	1.124	7.28	49.4	1.61	-37.1		4070	1.35	
0944		198.51		19.94	1.125	7.28	[illegible]	1.61	-36.3		4400	1.46	
0947		198.50		20.04	1.124	7.28	42.9	1.56	-35.2		4730	1.57	
0950		198.51		20.15	1.123	7.28	36.9	1.54	-33.6		5060	1.68	
0953		198.51		20.15	1.125	7.28	28.6	1.53	-32.5		5390	1.79	
0956		198.50		20.29	1.124	7.28	29.7	1.58	-30.6		5720	1.90	
0959		198.51		20.45	1.131	7.27	22.5	1.51	-29.5	colorless	6050	2.01	
1002		198.51		20.51	1.131	7.28	14.8	1.56	-28.9		6380	2.12	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 1.46

Water level at time of sampling (ft btoc): Turbidity at time of sampling: 12.2

Pump Settings: CPM: 2 PSI: 110 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/04/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC - BOU

MONITORING WELL IDENTIFICATION 3831Q

SAMPLE I.D. 3831Q-N-1702 DUPLICATE I.D.

STATIC WATER LEVEL (ft btoc) 198.51 WELL DEPTH (ft btoc) 254.50

WATER COLUMN (feet) 55.99 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 3005 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) (vented to)

IN BREATHING ZONE (ppm) (initial) (vented to)

FINAL PUMP DEPTH (ft btoc) 239.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1014 DUPLICATE SAMPLE TIME

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1005		198.51	239.5	20.57	1.132	7.28	13.9	1.51	-26.3	Colorless	6710	2.23	110
1008		198.51	↓	20.68	1.132	7.28	12.3	1.47	-26.10	↓	7040	2.34	↓
1011		198.51	↓	20.70	1.131	7.28	12.78	1.47	-25.9	↓	7370	2.45	↓
1014	Sample	198.51	↓	20.74	1.131	7.27	12.2	1.46	-25.8	↓	7700	2.56	↓

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 1.46

Water level at time of sampling (ft btoc): Turbidity at time of sampling: 12.2

Pump Settings: CPM: 2 PSI: 110 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/25/17 SITE NAME / NUMBER BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME LMC-BOU SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3850 M Measured on 4/25 OVA: ☐ FID ☐ PID In Casing (ppm) (initial) ____ (vented to) ____

SAMPLE I.D. 3850M-N-17Q2 DUPLICATE I.D. — 235.60 toc IN BREATHING ZONE (ppm) 231 (initial) ____ (vented to) ____

STATIC WATER LEVEL (ft btoc) 228.31 WELL DEPTH (ft btoc) ~~236.05~~ FINAL PUMP DEPTH (ft btoc) ~~236~~ (originally thought like 231)

WATER COLUMN (feet) 7.74 CASING/TUBE DIAMETER (ft/in) 3/8" SAMPLER'S SIGNATURE ____

WELL /PUMP VOLUME (V) (gal/ml) 2537 3 v (gal/ml) ____ WELL SAMPLE TIME ____ DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): ____

Water level at time of sampling (ft btoc): ____ Turbidity at time of sampling: ____

Pump Settings: CPM: 2 PSI: ____ Recharge: ____ Discharge: ____

Comments: Insufficient water to sample. tip of pump in mud. Cannot shorten tubing bc volume booster would be above water line.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-13-2017 SITE NAME / NUMBER MCB04 PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3850N OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3850N-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 204.66 WELL DEPTH (ft btoc) 219.50 FINAL PUMP DEPTH (ft btoc) 209.5

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2350 3 v (gal/ml) — WELL SAMPLE TIME 1124 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1044	Start Purge	204.66	—										160
1059	—	204.64	—	22.24	0.904	6.36	1.93	5.78	84.7	clear	2400	1.02	
1102	—	204.64	—	22.25	0.902	6.45	1.80	5.68	79.0	clear	2880	1.23	
1105	—	204.64	—	22.26	0.900	6.61	1.87	5.55	72.0	clear	3360	1.43	
1108	—	204.64	—	22.21	0.899	6.67	1.86	5.54	69.4	clear	3840	1.63	
1110	—	204.64	—	22.09	0.898	6.76	1.72	5.57	66.5	clear	4320	1.84	
1114	—	204.64	—	22.10	0.897	6.80	1.64	5.54	64.3	clear	4800	2.04	
1117	—	204.64	—	22.07	0.897	6.87	1.73	5.50	61.6	clear	5280	2.25	
1120	—	204.64	—	22.21	0.896	6.94	1.89	5.44	58.7	clear	5760	2.45	
1123	End Purge	204.64	—	22.18	0.896	6.97	1.82	5.40	57.2	clear	6240	2.66	
1124	Sample												
						AC							

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 204.66 Turbidity at time of sampling: 1.82

Pump Settings: CPM: — PSI: — Recharge: _____ Discharge: —

Comments: _____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-13-17 SITE NAME / NUMBER LMC Bou PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3850R OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3850R DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 198.76 WELL DEPTH (ft btoc) 351.5 FINAL PUMP DEPTH (ft btoc) 341.5

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 5045 3 v (gal/ml) _____ WELL SAMPLE TIME 1316 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1234	Start Purge	198.76	341.5										200
1300	—	198.73	—	23.01	0.633	7.95	5.33	0.47	-40.8	clear	5200	1.03	
1303	—	198.73	-	22.88	0.631	7.95	2.71	0.46	-46.0	clear	5800	1.15	
1306	—	198.73	-	22.75	0.636	7.66	2.34	0.42	-42.6	clear	6400	1.27	
1309	—	198.73	—	23.00	0.637	7.98	2.17	0.37	-41.5	clear	7000	1.39	
1312	—	198.73	-	23.25	0.638	7.99	3.25	0.32	-40.0	clear	7600	1.51	
1315	End Purge	198.73	—	23.30	0.639	7.99	3.82	0.31	-38.2	clear	8200	1.63	
1316	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 198.73 Turbidity at time of sampling: 3.82

Pump Settings: CPM: _____ PSI: _____ Recharge: _____ Discharge: _____

Comments: _____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/25/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMG BOU

MONITORING WELL IDENTIFICATION 3850 U

SAMPLE I.D. 3850U-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 227.21 WELL DEPTH (ft btoc) 238.50

WATER COLUMN (feet) 11.29 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2588 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) ____ (vented to) ____

IN BREATHING ZONE (ppm) (initial) ____ (vented to) ____

FINAL PUMP DEPTH (ft btoc) 233

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1107 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1035	Start purge	227.21	233										160
1052		227.18		23.31	0.988	7.22	3.66	3.47	29.9	Colorless	2720	1.05	
1055		227.19		23.37	0.988	7.22	2.82	3.45	28.8		3200	1.24	
1058		227.18		23.52	0.988	7.23	2.95	3.47	28.5		3680	1.42	
1101		227.19		23.62	0.989	7.27	3.01	3.45	28.1		4160	1.61	
1104		227.18		23.69	0.989	7.29	3.18	3.51	28.4		4640	1.79	
1107	Sample	227.18		23.74	0.988	7.28	2.98	3.46	28.3		5120	1.98	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.46

Water level at time of sampling (ft btoc): 227.18 Turbidity at time of sampling: 2.98

Pump Settings: CPM: 2 PSI: 115 Recharge: 21 Discharge: 9

Comments: If use a high pressure control box.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/03/2017 SITE NAME / NUMBER BOU

PROGRAM NAME ~~BKG~~ LMC BOU

MONITORING WELL IDENTIFICATION 3851M

SAMPLE I.D. 3851M-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 192.36 WELL DEPTH (ft btoc) 220.12

WATER COLUMN (feet) 27.76 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2421 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0.0 (vented to) 0.0

IN BREATHING ZONE (ppm) (initial) 0.0 (vented to) 0.0

FINAL PUMP DEPTH (ft btoc) 207.2

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1529 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1501	Start purge	192.36	207.2										195
1514		192.36		20.08	0.760	7.41	3.52	5.63	137.5	Colorless	2535	1.05	
1517		192.38		19.92	0.757	7.39	2.55	5.59	143.1		3120	1.29	
1520		192.37		19.87	0.754	7.40	3.14	5.55	144.0		3705	1.53	
1523		192.37		19.79	0.754	7.40	4.45	5.52	145.1		4290	1.77	
1526		192.37		19.76	0.751	7.40	2.55	5.47	146.4		4875	2.01	
1529	Sample	192.38		19.71	0.749	7.40	2.56	5.46	147.7		5460	2.26	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.46

Water level at time of sampling (ft btoc): 192.38 Turbidity at time of sampling: 2.56

Pump Settings: CPM: 3 PSI: 105 Recharge: ~~#~~ 13.5 Discharge: 9.5

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/04/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3851 N

SAMPLE I.D. 3851N-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 191.70 WELL DEPTH (ft btoc) 329.50

WATER COLUMN (feet) 137.8 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 4573 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 314.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1637 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1553	Start purge	191.70	314.5										160
1622		191.71		21.10	0.614	7.46	7.30	3.76	154.8	Colorless	4640	1.01	
1625		191.72		21.04	0.612	7.46	6.30	3.70	153.5		5120	1.12	
1628		191.72		21.05	0.611	7.46	6.82	3.67	152.8		5600	1.22	
1631		191.72		21.02	0.610	7.46	5.17	3.75	151.1		6080	1.33	
1634		191.72		21.01	0.609	7.46	6.44	3.73	149.8		6560	1.43	
1637	Sample	191.72		21.00	0.607	7.46	4.97	3.69	149.0		7040	1.54	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.69

Water level at time of sampling (ft btoc): 191.72 Turbidity at time of sampling: 4.97

Pump Settings: CPM: 2 PSI: 130 Recharge: 21 Discharge: 9

Comments: & Use a high pressure control box

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/12/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3852F

SAMPLE I.D. 3852F-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 147.98 WELL DEPTH (ft btoc) ~~166.10~~ 184.50

WATER COLUMN (feet) 36.52 CASING/TUBE DIAMETER (ft/in) 5/8"

WELL /PUMP VOLUME (V) (gal/ml) 0053 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 166.6

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1529 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1503	Start pump	147.98	166.6	—									190
1514		147.98		21.01	0.772	6.50	2.28	6.71	159.3	Colorless	2090	1.02	
1517		147.98		20.95	0.771	6.60	2.04	6.61	156.1		2660	1.30	
1520		147.99		20.90	0.770	6.71	2.16	6.71	152.9		3230	1.57	
1523		147.99		20.89	0.770	6.84	2.10	6.61	147.4		3800	1.85	
1526		147.98		20.86	0.770	6.88	2.12	6.61	145.2		4370	2.13	
1529	Sample	147.98		20.86	0.770	6.94	2.08	6.58	142.6		4940	2.41	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 6.58

Water level at time of sampling (ft btoc): 147.98 Turbidity at time of sampling: 2.08

Pump Settings: CPM: 2 PSI: 83 Recharge: 22 Discharge: 8

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/12/17 SITE NAME / NUMBER BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME LMC-BOU SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3852H OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

SAMPLE I.D. 3852H-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

STATIC WATER LEVEL (ft btoc) 149.59 WELL DEPTH (ft btoc) 303.50 FINAL PUMP DEPTH (ft btoc) 291.00

WATER COLUMN (feet) 154.01 CASING/TUBE DIAMETER (ft/in) 3/8" SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 1524 3 v (gal/ml) _____ WELL SAMPLE TIME 1635 DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1358	Start purge	149.59	291.00										210
1620		149.65		20.39	0.500	7.49	4.06	3.27	123.5	Colorless	4620	1.02	
1623		149.64		20.39	0.500	7.51	4.21	3.14	122.6		5250	1.16	
1626		149.64		20.39	0.499	7.52	4.06	3.07	121.5		5880	1.30	
1629		149.64		20.38	0.497	7.54	3.69	2.96	120.4		6510	1.44	
1632		149.64		20.39	0.497	7.54	4.16	2.97	118.5		7140	1.58	
1635	Sample	149.64		20.39	0.496	7.55	3.85	2.92	117.9		7770	1.72	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): _____

Water level at time of sampling (ft btoc): 149.64 Turbidity at time of sampling: _____

Pump Settings: CPM: 2 PSI: 100 Recharge: 21 Discharge: 9

Comments: _____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/05/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3852L

SAMPLE I.D. 3852L-N-17Q2 DUPLICATE I.D.

STATIC WATER LEVEL (ft btoc) 164.87 WELL DEPTH (ft btoc) 183.50

WATER COLUMN (feet) 18.63 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2014 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) (vented to)

IN BREATHING ZONE (ppm) (initial) (vented to)

FINAL PUMP DEPTH (ft btoc) 173.1

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1503 DUPLICATE SAMPLE TIME

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1436	Start purg	164.87	173.1										170
1448		164.95		21.27	0.991	7.44	2.65	7.67	82.2	Colorless	2040	1.01	150
1451		164.91		21.21	0.988	7.43	2.56	7.43	79.9		2490	1.24	
1454		164.91		21.11	0.986	7.42	2.61	7.17	78.4		2940	1.46	
1457		164.91		21.02	0.988	7.42	2.62	6.98	76.0		3390	1.68	
1500		164.91		20.89	0.987	7.41	3.14	6.80	74.1		3840	1.91	
1503	Sample	164.90		20.84	0.985	7.41	2.37	6.70	72.6		4290	2.13	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 6.70

Water level at time of sampling (ft btoc): 164.90 Turbidity at time of sampling: 2.37

Pump Settings: CPM: 2 PSI: 85 Recharge: 22 Discharge: 8

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/03/17 SITE NAME / NUMBER BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME LMC-BOU SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION ~~3872M~~ 3852M OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0.0 (vented to) 0.0

SAMPLE I.D. 3852M-N-1702 DUPLICATE I.D. 3852M-FD-1702 IN BREATHING ZONE (ppm) (initial) 0.0 (vented to) 0.0

STATIC WATER LEVEL (ft btoc) 136.82 WELL DEPTH (ft btoc) 230.60 FINAL PUMP DEPTH (ft btoc) 217.5

WATER COLUMN (feet) 93.78 CASING/TUBE DIAMETER (ft/in) 3/8" SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3182 3 v (gal/ml) — WELL SAMPLE TIME 1329 DUPLICATE SAMPLE TIME 1329

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1259	Start purge	136.82	217.5										225
1314	↓	136.85	↓	19.86	0.527	7.97	6.20	3.28	31.1	Colorless	3375	1.06	↓
1317		136.84		20.08	0.536	7.93	6.33	1.67	41.6	↓	4050	1.27	
1320		136.85		19.98	0.535	7.93	6.68	0.99	39.3		4725	1.49	
1323		136.83		19.91	0.535	7.91	5.19	0.79	35.1		5400	1.70	
1326	↓	136.83	↓	19.85	0.533	7.83	5.73	0.70	35.8		6075	1.91	↓
1329	Sample	136.83	↓	19.78	0.532	7.87	5.59	0.66	30.5	↓	6750	2.12	↓

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 0.66

Water level at time of sampling (ft btoc): 136.83 Turbidity at time of sampling: 5.59

Pump Settings: CPM: 3 PSI: 85 Recharge: 11 Discharge: #9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/03/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3852 N

SAMPLE I.D. 3852 N-N 1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 136.89 WELL DEPTH (ft btoc) 308.68

WATER COLUMN (feet) 171.79 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4681.10 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) / (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 292.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1158 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1050	Arrive	at well	292.5										195
1118	Start purge												
1142		136.89		20.24	0.465	7.75	5.05	4.18	138.4	Colorless	4875	1.04	
1146		136.88		20.23	0.470	7.74	3.08	4.37	132.2		5460	1.17	
1149		136.89		20.23	0.473	7.73	2.54	4.42	129.7		6045	1.29	
1152		136.88		20.24	0.476	7.73	3.31	4.44	127.6		6630	1.42	
1155		136.89		20.30	0.476	7.73	2.27	4.46	126.4		7215	1.54	
1158	Sample	136.89		20.31	0.476	7.73	3.53	4.51	125.2		7800	1.67	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 4.51

Water level at time of sampling (ft btoc): 136.89 Turbidity at time of sampling: 3.53

Pump Settings: CPM: 3 PSI: 87 Recharge: 11 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/07/17 SITE NAME / NUMBER BOU

PROGRAM NAME UMC-BOU

MONITORING WELL IDENTIFICATION 38605

SAMPLE I.D. 38605-N-1702 DUPLICATE I.D.

STATIC WATER LEVEL (ft btoc) 205.62 WELL DEPTH (ft btoc) 204.5

WATER COLUMN (feet) 8.88 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 3 v (gal/ml) —

PURGING DEVICE: ☐ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) (vented to)

IN BREATHING ZONE (ppm) (initial) (vented to)

FINAL PUMP DEPTH (ft btoc) 214.50

SAMPLER'S SIGNATURE

WELL SAMPLE TIME — DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

Colorimetric test (taken prior to sampling) Sulfide (mg/L): Fe^{+2} (mg/L): D.O. (ppm):

Water level at time of sampling (ft btoc): Turbidity at time of sampling:

Pump Settings: CPM: PSI: Recharge: Discharge:

Comments: Unable to sample pump above water.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/24/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3860J

SAMPLE I.D. 3860J-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 205.78 WELL DEPTH (ft btoc) ~~214.50~~ 209.90

WATER COLUMN (feet) 8.72 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2323 3 v (gal/ml)

PURGING DEVICE: ☐ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 209.00

SAMPLER'S SIGNATURE

WELL SAMPLE TIME _____ DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
			209										

Colorimetric test (taken prior to sampling) Sulfide (mg/L): Fe^{+2} (mg/L): D.O. (ppm):

Water level at time of sampling (ft btoc): Turbidity at time of sampling:

Pump Settings: CPM: PSI: Recharge: Discharge:

Comments: Retagged well, TD=209.90, pump intake in mud, pump pulled, filter on tip covered in fine-grained sediment, cannot shorten tubing, insufficient water to sample.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:

If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.

All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-4-2017 SITE NAME / NUMBER LMC BOM PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3860K OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3860K-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 212.35 WELL DEPTH (ft btoc) 234.50 FINAL PUMP DEPTH (ft btoc) 224.50

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2570 3 v (gal/ml) — WELL SAMPLE TIME 1136 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1058	Start Purge	212.35	224.50										120
1120	—	212.35	—	23.87	0.971	7.23	2.21	6.02	-10.6	clear	2640	1.03	
1123	—	212.35	—	23.78	0.972	7.25	1.69	6.04	-10.8	clear	3000	1.17	
1126	—	212.35	—	23.78	0.972	7.25	1.83	6.00	-10.2	clear	3360	1.31	
1129	—	212.35	—	23.79	0.971	7.24	2.17	5.97	-7.8	clear	3720	1.45	
1132	—	212.35	—	23.76	0.970	7.23	1.92	5.84	-6.2	clear	4080	1.59	
1135	End Purge	212.35	—	23.65	0.972	7.22	1.78	5.85	-7.2	clear	4440	1.73	
1136	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 212.35 Turbidity at time of sampling: 1.78

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/07/17 SITE NAME / NUMBER BOU

PROGRAM NAME UMC-BOU

MONITORING WELL IDENTIFICATION 3861D

SAMPLE I.D. 3861D-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 164.11 WELL DEPTH (ft btoc) 184.50

WATER COLUMN (feet) 20.39 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 3690 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 174.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1350 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1300	Purging	164.11	174.5	—									140
1335		165.26		21.92	0.877	7.44	8.74	6.50	141.8	Colorless	3780	1.02	
1338		165.27		21.89	0.877	7.43	9.34	6.35	135.2		4200	1.14	
1341		165.26		21.82	0.878	7.43	9.33	6.17	123.0		4620	1.25	
1344		165.25		21.77	0.878	7.43	8.51	6.10	116.8		5040	1.37	
1347		165.24		21.74	0.877	7.43	8.32	6.04	114.2		5460	1.48	
1350	Sample	165.26		21.70	0.878	7.43	8.15	6.12	111.2		5880	1.59	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 6.12

Water level at time of sampling (ft btoc): 165.26 Turbidity at time of sampling: 8.15

Pump Settings: CPM: 2 PSI: 85 Recharge: 22 Discharge: 8

Comments: MS/MSD

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/07/17 SITE NAME / NUMBER B02 PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME LMG-B02 SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3861F OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

SAMPLE I.D. 3861F-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

STATIC WATER LEVEL (ft btoc) 160.06 WELL DEPTH (ft btoc) 328.0 FINAL PUMP DEPTH (ft btoc) 313.0

WATER COLUMN (feet) 167.94 CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3580 3 v (gal/ml) — WELL SAMPLE TIME 1219 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1146	Start purge	160.94	313.0									6	200
1204		160.08		22.01	0.617	7.69	2.52	2.38	84.8	Colorless	3600	1.00	
1207		160.09		21.99	0.628	7.60	2.93	3.15	77.8		4200	1.17	
1210		160.09		22.02	0.636	7.56	2.60	3.88	72.7		4800	1.34	
1213		160.08		22.02	0.644	7.52	2.27	4.73	67.1		5400	1.51	
1216		160.08		22.02	0.652	7.52	3.73	4.98	66.3		6000	1.68	
1219	Sample	160.09		21.98	0.657	7.51	2.95	5.00	66.3		6600	1.84	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.00

Water level at time of sampling (ft btoc): 160.09 Turbidity at time of sampling: 2.95

Pump Settings: CPM: 2 PSI: 95 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/05/17 SITE NAME / NUMBER BDU

PROGRAM NAME LMC-BDU

MONITORING WELL IDENTIFICATION 3862D

SAMPLE I.D. 3862D-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 133.20 WELL DEPTH (ft btoc) ~~185.3~~ 188.50

WATER COLUMN (feet) 65.30 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2574 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 185.3

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1625 DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1554	Start purge	133.20	185.3										180
1610		133.22		21.48	0.816	7.29	2.58	6.31	146.7	Colorless	2660	1.03	
1613		133.22		21.48	0.816	7.22	5.01	6.39	149.2		3200	1.24	
1616		133.22		21.48	0.818	7.30	2.40	6.40	140.0		3740	1.45	
1619		133.22		21.49	0.819	7.37	3.61	6.50	138.8		4280	1.66	
1622		133.22		21.46	0.826	7.42	2.86	6.49	129.1		4820	1.87	
1625	Sample	133.22		21.42	0.826	7.43	2.34	6.45	127.3		5360	2.08	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 6.45

Water level at time of sampling (ft btoc): 133.22 Turbidity at time of sampling: 2.34

Pump Settings: CPM: 2 PSI: 95 Recharge: 25 Discharge: 5

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/10/17 SITE NAME / NUMBER BUU

PROGRAM NAME LMC-BUU

MONITORING WELL IDENTIFICATION 3862E

SAMPLE I.D. 3862E-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 130.57 WELL DEPTH (ft btoc) 280.50

WATER COLUMN (feet) 149.93 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4305 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 270.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1522 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
~~1435~~	~~Start purg~~	~~130.57~~	~~270.5~~	~~21.44~~	~~0.561~~	~~7.04~~	~~5.88~~	~~2.32~~	~~118.9~~				800
1507		130.61		21.14	0.561	7.04	5.88	2.32	118.9	Colorless	6400	1.49	
1510		130.59		21.01	0.559	7.04	4.47	2.19	108.0		7000		
1513		130.60		20.80	0.558	7.10	3.42	2.20	100.8		7600		
1516		130.60		20.75	0.558	7.22	3.36	2.37	90.0		8200		
1519		130.59		20.71	0.557	7.27	3.09	2.24	87.3		8800		
1522	Sample	130.59		20.68	0.556	7.28	3.02	2.22	86.0		9400		

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 2.22

Water level at time of sampling (ft btoc): 130.59 Turbidity at time of sampling: 3.02

Pump Settings: CPM: 2 PSI: 95 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-5-2017 SITE NAME / NUMBER LMC BOW PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3870D OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3870D-N-170-2 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 169.18 WELL DEPTH (ft btoc) 145 FINAL PUMP DEPTH (ft btoc) 180

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/00 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2300 3 v (gal/ml) — WELL SAMPLE TIME 1128 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1059	Start Purge	169.18	180										180
1112	—	169.28	—	25.77	1.252	7.52	4.33	5.36	-2.4	clear	2440	1.02	
1115	—	169.31	—	25.78	1.249	7.50	3.49	5.65	13.0	clear	2880	1.25	
1118	—	169.33	—	25.80	1.245	7.48	4.12	5.68	7.2	clear	3420	1.49	
1121	—	169.34	—	25.79	1.249	7.47	4.09	5.67	11.5	clear	3960	1.72	
1124	—	169.35	—	25.77	1.244	7.47	3.61	5.81	8.3	clear	4500	1.96	
1127	End Purge	169.35	—	25.63	1.243	7.46	3.80	5.91	14.8	clear	5040	2.19	
1128	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 169.35 Turbidity at time of sampling: 3.80

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/07/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3871H

SAMPLE I.D. 3871H-N-170Q DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 138.06 WELL DEPTH (ft btoc) 245.50

WATER COLUMN (feet) 107.44 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 3220 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 220

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 0945 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0909	Start pump	138.06	220.0										160
0930		138.07		20.67	0.802	7.42	1.80	4.66	199.6	Colorless	3360	1.04	
0933		138.07		20.73	0.811	7.42	3.18	4.99	190.2		3840	1.19	
0936		138.07		20.74	0.813	7.43	3.29	5.11	187.5		4320	1.34	
0939		138.07		20.79	0.816	7.44	1.67	5.13	178.0		4800	1.49	
0942		138.07		20.90	0.816	7.44	1.23	5.20	173.9		5280	1.64	
0945	Sample	138.07		20.99	0.815	7.44	2.79	5.12	172.3		5760	1.79	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.12

Water level at time of sampling (ft btoc): 138.07 Turbidity at time of sampling: 2.79

Pump Settings: CPM: 2 PSI: 80 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/07/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3871J

SAMPLE I.D. 3871J-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 139.85 WELL DEPTH (ft btoc) 288.5

WATER COLUMN (feet) 155.65 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4442 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 278.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1102 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1022	Start pump	155.65	278.5										100
1047		155.85		21.21	0.745	7.70	4.87	3.43	105.6	Colorless	4500	1.01	
1050		155.85		21.23	0.747	7.70	3.45	3.41	98.6		5040	1.13	
1053		155.85		21.20	0.748	7.70	4.45	3.42	93.2		5580	1.26	
1056		155.85		21.22	0.748	7.70	3.06	3.48	86.8		6120	1.38	
1059		155.85		21.27	0.749	7.70	2.83	3.51	84.6		6660	1.50	
1102	Sample	155.85		21.30	0.755	7.69	2.77	3.60	81.2		7200	1.62	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.60

Water level at time of sampling (ft btoc): 155.85 Turbidity at time of sampling: 277

Pump Settings: CPM: 2 PSI: 85 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-3-2017 SITE NAME / NUMBER BOA PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3872V OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to)

SAMPLE I.D. 3872L-1-1702 DUPLICATE I.D. IN BREATHING ZONE (ppm) (initial) 0 (vented to)

STATIC WATER LEVEL (ft btoc) 110.12 WELL DEPTH (ft btoc) 194.5 FINAL PUMP DEPTH (ft btoc) 174.5

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE Jason Cain

WELL /PUMP VOLUME (V) (gal/ml) 2590 3 v (gal/ml) — WELL SAMPLE TIME 1348 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1310	Start Purge	110.12	174.5										165
1326	—	110.12	—	21.50	0.643	6.47	10.02	4.16	35.3	clear	2640	1.02	
1329	—	110.12	—	21.49	0.646	6.71	9.72	4.02	22.1	clear	3135	1.21	
1332	—	110.12	—	21.38	0.649	6.84	10.09	4.04	14.3	Clear	3630	1.40	
1335	—	110.12	—	21.28	0.651	6.88	9.32	4.12	11.4	clear	4125	1.59	
1338	—	110.12	—	21.32	0.652	6.94	9.27	4.15	6.0	clear	4620	1.78	
1341	—	110.12	—	21.35	0.653	7.10	8.92	4.06	0.0	clear	5115	1.97	
1344	—	110.12	—	21.36	0.653	7.09	8.76	4.09	-2.1	clear	5610	2.17	
1347	End Purge	110.12	—	21.36	0.654	7.13	8.99	4.14	-4.9	clear	6105	2.36	
1348	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 110.12 Turbidity at time of sampling: 8.99

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-3-2017 SITE NAME / NUMBER LMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3872 M OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to)

SAMPLE I.D. 3872M-N-170 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to)

STATIC WATER LEVEL (ft btoc) 105.89 WELL DEPTH (ft btoc) 308.50 FINAL PUMP DEPTH (ft btoc) 296.0

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 5060 3 v (gal/ml) WELL SAMPLE TIME 1522 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1430	Start Purge	105.89	296.0										110
1516	—	105.89	—	21.03	0.552	7.17	3.64	3.78	60.8	clear	5060	1.00	
1519	—	105.89	—	20.83	0.554	6.90	3.14	3.92	52.5	clear	5390	1.07	
1522	—	105.89	—	20.72	0.555	6.95	3.33	3.95	51.0	clear	5720	1.13	
1525	—	105.89	—	20.65	0.555	6.93	2.94	4.03	51.6	clear	6050	1.20	
1528	—	105.89	—	20.52	0.555	6.88	3.50	3.96	56.7	clear	6380	1.26	
1531	End Purge	105.89	—	20.48	0.556	6.90	3.44	4.00	51.9	clear	6710	1.33	
1532	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 105.89 Turbidity at time of sampling: 3.44

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-3-2017 SITE NAME / NUMBER B04 PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3872N OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3872N-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 108.02 WELL DEPTH (ft btoc) 148.5 FINAL PUMP DEPTH (ft btoc) 133.5

WATER COLUMN (feet) 40.48 CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 1790 3 v (gal/ml) — WELL SAMPLE TIME 1151 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1125	Start Purge	108.02	133.5										195
1135	—	108.05	—	22.04	1.228	7.24	6.20	4.41	44.3	clear	1950	1.09	
1138	—	108.06	—	22.09	1.231	7.25	3.19	4.37	42.2	clear	2535	1.42	
1141	—	108.06	—	22.09	1.238	7.25	3.36	4.60	41.2	clear	3170	1.74	
1144	—	108.07	—	22.14	1.241	7.24	3.54	4.52	39.5	clear	3705	2.07	
1147	—	108.07	—	22.16	1.245	7.24	2.25	4.60	38.8	clear	4290	2.40	
1150	End Purge	108.07	—	22.12	1.247	7.25	2.40	4.60	39.6	clear	4875	2.72	
1151	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 108.07 Turbidity at time of sampling: 2.40

Pump Settings: CPM: 3 PSI: 80 Recharge: 13 Discharge: 7

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/05/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION 3872Q

SAMPLE I.D. 3872Q-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 120.64 WELL DEPTH (ft btoc) 137.50

WATER COLUMN (feet) 16.86 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 1544 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 127.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1326 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1258	Start purge	120.64	127.5										170
1308		120.63		21.34	1.690	7.32	2.23	1.20	89.3	Colorless	1700	1.10	
1311		120.63		21.41	1.690	7.32	2.20	1.09	74.8		2210	1.43	
1314		120.63		21.44	1.694	7.32	2.11	1.08	70.3		2720	1.76	
1317		120.63		21.54	1.691	7.36	2.19	1.10	56.5		3230	2.09	
1320		120.63		21.72	1.692	7.36	2.18	2.30	50.9		3740	2.42	
1323		120.63		21.64	1.693	7.34	2.12	2.21	49.0		4250	2.75	
1326	Sample	120.63		21.62	1.691	7.34	2.16	2.04	46.0		4760	3.08	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 2.04

Water level at time of sampling (ft btoc): 120.63 Turbidity at time of sampling: 2.16

Pump Settings: CPM: 2 PSI: 65 Recharge: 22 Discharge: 8

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/05/17 SITE NAME / NUMBER BW

PROGRAM NAME LMC-BO

MONITORING WELL IDENTIFICATION 38723

SAMPLE I.D. 38723-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 117.06 WELL DEPTH (ft btoc) 299.50

WATER COLUMN (feet) 182.44 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 4720 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 284.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1210 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1125	Start purge	117.06	284.5										160
1155		117.08		20.62	0.661	7.55	2.30	5.00	162.5	Colorless	4800	1.02	
1158		117.08		20.53	0.659	7.54	2.95	5.05	160.9		5280	1.12	
1201		117.08		20.49	0.661	7.53	4.62	5.25	159.4		5760	1.21	
1204		117.08		20.34	0.658	7.46	2.44	5.16	158.4		6240	1.32	
1207		117.08		20.23	0.658	7.50	2.52	5.19	149.8		6720	1.42	
1210	Sample	117.08		20.31	0.658	7.51	2.48	5.14	149.1		7200	1.53	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.14

Water level at time of sampling (ft btoc): 117.08 Turbidity at time of sampling: 2.48

Pump Settings: CPM: 2 PSI: 80 Recharge: 21 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-5-2017 SITE NAME / NUMBER LMC Bon PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 3880 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. 3880-N-1707 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 157.16 WELL DEPTH (ft btoc) 174.5 FINAL PUMP DEPTH (ft btoc) 164.5

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE Jason Cook

WELL /PUMP VOLUME (V) (gal/ml) 1440 3 v (gal/ml) — WELL SAMPLE TIME 0950 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0917	Start Purge	157.16	164.5										120
0934	—	157.40	—	21.84	0.637	8.06	1.82	0.46	-21.0	clear	2040	1.05	
0937	—	157.43	—	21.86	0.636	8.08	1.73	0.90	-38.6	clear	4000	1.24	
0940	—	157.44	—	21.83	0.636	8.05	1.92	0.93	-66.0	clear	2760	1.42	
0943	—	157.46	—	21.89	0.635	8.06	1.87	0.84	-111.1	clear	3120	1.61	
0946	—	157.48	—	21.46	0.633	8.10	2.03	0.71	-115.8	clear	3480	1.79	
0949	End Purge	157.49	—	21.49	0.632	8.10	1.94	0.66	-109.7	clear	3840	1.98	
0950	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 157.49 Turbidity at time of sampling: 1.94

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/14/17 SITE NAME / NUMBER BDU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME LMC-BDU SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 4948 OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

SAMPLE I.D. 4948-N-17Q2 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

STATIC WATER LEVEL (ft btoc) 291.44 WELL DEPTH (ft btoc) 302 FINAL PUMP DEPTH (ft btoc) 292.0

WATER COLUMN (feet) 10.56 CASING/TUBE DIAMETER (ft/in) 3/8" SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3370 3 v (gal/ml) _____ WELL SAMPLE TIME 0913 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0833	Start purge		292.0							Colorless			135
0858		291.44		20.43	0.964	6.83	2.62	4.28	165.2		3375	1.00	
0901		291.44		20.47	0.966	6.84	2.80	3.89	158.6		3780	1.12	
0904		291.44		20.54	0.967	6.85	2.71	3.64	151.8		4185	1.24	
0907		291.44		20.56	0.968	6.85	2.54	3.63	148.3		4590	1.36	
0910		291.44		20.63	0.968	6.86	2.82	3.56	143.9		4995	1.48	
0913	Sample	291.44		20.69	0.969	6.86	2.85	3.49	140.9		5400	1.60	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.49

Water level at time of sampling (ft btoc): 291.44 Turbidity at time of sampling: 2.85

Pump Settings: CPM: Manual PSI: 145 Recharge: 30 Discharge: 10

Comments: In Manual Mode, 90 ml/sqint every 40 seconds, averages to 135 ml/min & equals 270 ml every 2 minutes. Sampling in manual mode because of very little head, extra recharge time allows bladder to fill

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ~~± 3 %~~
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-25-2017 SITE NAME / NUMBER MC BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION 4949C OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. No Sample DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 266.22 WELL DEPTH (ft btoc) _____ FINAL PUMP DEPTH (ft btoc) 271

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [illegible]

WELL /PUMP VOLUME (V) (gal/ml) 7960 3 v (gal/ml) _____ WELL SAMPLE TIME _____ DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1040	Start Purge	266.22	—										120
1045		266.30		21.54	0.819	7.41	64.8	3.49	41.3	Brown			60
1048		266.30		21.47	0.819	7.40	56.1	3.69	41.4	Brown			100
1051		266.30		21.37	0.816	7.39	51.4	3.32	39.5	Brown			70
1054		266.30		21.49	0.817	7.39	50.5	3.34	39.5	Brown			30
1057		266.30		21.51	0.819	7.39	52.7	3.48	39.1	Brown			+300
1100													
				No Sample									

Colorimetric test (taken prior to sampling) Sulfide (mg/L): _____ Fe^{+2} (mg/L): _____ D.O. (ppm): _____

Water level at time of sampling (ft btoc): _____ Turbidity at time of sampling: _____

Pump Settings: CPM: _____ PSI: _____ Recharge: _____ Discharge: _____

Comments: Pump Ran Dry due to insufficient water. Flow rate could not be maintained Ie 10mL/cycle → 120+ ML/cycle with same settings. Air purged out of sample line at ~1058

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/11/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION A-1-CW02

SAMPLE I.D. A-1-CW02-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 223.19 WELL DEPTH (ft btoc) 359.50

WATER COLUMN (feet) 136.32 CASING/TUBE DIAMETER (ft/in)

WELL /PUMP VOLUME (V) (gal/ml) 5059 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 354.50

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1021 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0939	Start pumping	223.19	354.50										200
1005		223.19		22.60	0.782	7.37	22.6	3.00	-6.7	Cloudy/colorless	5200	1.03	
1008		223.14		22.61	0.784	7.37	21.7	2.99	-6.1		5800	1.15	
1011		223.15		22.65	0.784	7.37	20.8	3.05	-4.3		6400	1.27	
1014		223.15		22.71	0.786	7.37	18.5	3.05	-2.9		7000	1.38	
1017		223.15		22.74	0.786	7.36	18.3	3.04	-2.2		7600	1.50	
1020	Sample	223.15		22.78	0.785	7.36	19.6	3.04	-2.7		8200	1.66	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.04

Water level at time of sampling (ft btoc): 223.15 Turbidity at time of sampling: 19.6

Pump Settings: CPM: 2 PSI: 140 Recharge: 20 Discharge: 10

Comments: Use a high pressure control box

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/13/2017 SITE NAME / NUMBER BDV

PROGRAM NAME LMC-BDV

MONITORING WELL IDENTIFICATION ~~[illegible]~~ A-1-(20)03R

SAMPLE I.D. A-1-(20)03R-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 228.25 WELL DEPTH (ft btoc) 284.50

WATER COLUMN (feet) 56.25 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 3208 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 264.50

SAMPLER'S SIGNATURE _____

WELL SAMPLE TIME 0919 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0897	Start purge		264.50										200
0904		228.25		22.88	0.845	6.48	16.5	3.08	3.8	Colorless	3400	1.06	
0907		228.26		22.94	0.836	6.68	13.1	3.01	-8.8		4000	1.25	
0910		228.26		22.90	0.832	6.79	11.80	2.90	-12.6		4600	1.43	
0913		228.26		22.90	0.830	6.84	10.38	2.86	-12.0		5200	1.62	
0916		228.26		22.93	0.828	6.87	9.79	2.86	-11.1		5800	1.81	
0919	Sample	228.26		22.95	0.828	6.89	9.48	2.81	-7.4		6400	2.00	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm):

Water level at time of sampling (ft btoc): Turbidity at time of sampling:

Pump Settings: CPM: 2 PSI: 125 Recharge: 20 Discharge: 10

Comments: * Use a high pressure control valve.
* MS/MSD

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/10/17 SITE NAME / NUMBER BOU

PROGRAM NAME LHC-BOU

MONITORING WELL IDENTIFICATION A-1-GW04

SAMPLE I.D. A-1-GW04-N-17G2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 218.51 WELL DEPTH (ft btoc) 244.50

WATER COLUMN (feet) 25.99 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2643 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 232.4

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1326 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1253	Start purge	218.51	232.4										150
1311		218.53		22.87	0.867	7.33	7.68	5.97	96.6	Clearless	2700	1.11	
1314		218.53		22.96	0.865	7.33	8.04	5.71	90.1		3150	1.18	
1317		218.53		22.92	0.864	7.39	7.28	5.78	81.2		3600	1.35	
1320		218.53		22.95	0.864	7.39	7.04	5.62	73.9		4050	1.52	
1323		218.53		22.85	0.864	7.39	8.22	5.63	70.7		4500	1.69	
1326	Sample	218.53		22.78	0.864	7.39	8.04	5.54	68.1		4950	1.84	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.54

Water level at time of sampling (ft btoc): 218.53 Turbidity at time of sampling: 8.04

Pump Settings: CPM: 2 PSI: 115 Recharge: 22.0 Discharge: 8.00

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/10/17 SITE NAME / NUMBER BIW

PROGRAM NAME LMC-BIW

MONITORING WELL IDENTIFICATION A-1-GW05

SAMPLE I.D. A-1-GW05-N-1702 DUPLICATE I.D. A-1-GW05-FD-1702

STATIC WATER LEVEL (ft btoc) 217.50 WELL DEPTH (ft btoc) 380.50

WATER COLUMN (feet) 163.00 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 5335 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 365.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1134 DUPLICATE SAMPLE TIME 1136

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1053	Start purge	217.50	365.50										195
1121		217.52		22.49	0.703	7.46	6.01	0.79	-66.3	Colorless	5460	1.02	
1124		217.52		22.52	0.705	7.46	5.56	0.77	-70.4		6045	1.13	
1127		217.53		22.53	0.707	7.46	4.94	0.76	-73.0		6630	1.24	
1130		217.53		22.53	0.709	7.45	4.66	0.76	-75.0		7215	1.35	
1133		217.53		22.52	0.713	7.45	4.20	0.75	-75.3		7800	1.46	
1136	Sample	217.53		22.59	0.713	7.45	3.63	0.76	-72.9		8385	1.57	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 0.76

Water level at time of sampling (ft btoc): 217.53 Turbidity at time of sampling: 3.63

Pump Settings: CPM: 2 PSI: 150 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/06/17 SITE NAME / NUMBER BUV

PROGRAM NAME

MONITORING WELL IDENTIFICATION A-1-GW08

SAMPLE I.D. A-1-GW08-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 226.58 WELL DEPTH (ft btoc) 239.50

WATER COLUMN (feet) 12.92 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 2525 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 229.50

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1444 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1413	Start purge	226.58	229.5										~~140~~ 160
1429		226.55		23.90	0.856	7.23	3.19	4.42	114.4	Colorless	2660	1.05	
1432		226.57		23.92	0.853	7.23	2.81	4.10	111.3		3140	1.24	
1435		226.55		23.90	0.852	7.23	2.31	3.87	106.1		3620	1.43	
1438		226.55		23.89	0.851	7.23	2.82	3.81	101.8		4100	1.62	
1441		226.55		23.89	0.850	7.24	2.34	3.71	97.9		4580	1.81	
1444	Sample	226.55		23.93	0.848	7.23	2.51	3.59	93.7		5060	2.00	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.59

Water level at time of sampling (ft btoc): 226.55 Turbidity at time of sampling: 2.51

Pump Settings: CPM: 2 PSI: 111 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-11-2017 SITE NAME / NUMBER LMC BOA PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION A-1-CW09 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. A-1-CW09-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 215.50 WELL DEPTH (ft btoc) 231.50 FINAL PUMP DEPTH (ft btoc) 221.5

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [illegible]

WELL /PUMP VOLUME (V) (gal/ml) 2475 3 v (gal/ml) — WELL SAMPLE TIME 1613 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1536	Start Purge	215.50	221.5										120
1557	—	215.51	—	23.64	0.983	6.96	2.29	5.04	30.8	clear	2520	1.02	
1600	—	215.51	—	23.61	0.986	6.98	2.10	4.95	30.2	clear	2880	1.16	
1603	—	215.51	—	23.51	0.985	7.04	2.19	5.07	29.4	clear	3240	1.31	
1606	—	215.51	—	23.46	0.985	7.07	2.34	4.97	29.2	clear	3600	1.45	
1609	—	215.51	—	23.40	0.985	7.10	2.04	5.05	28.3	clear	3960	1.60	
1612	End Purge	215.51	—	23.38	0.985	7.10	1.97	4.91	28.0	clear	4320	1.75	
1613	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 215.51 Turbidity at time of sampling: 1.97

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments: Lower Poppet spring on pump was removed prior to purging

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/05/17 SITE NAME / NUMBER BDU

PROGRAM NAME

MONITORING WELL IDENTIFICATION B-1-CW11

SAMPLE I.D. B-1-CW11-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 151.05 WELL DEPTH (ft btoc) 334.50

WATER COLUMN (feet) 183.45 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 5130 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 322.0

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 0925 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0835	Start purge	151.05	322.0										150
0910		151.06		20.74	0.914	7.60	2.58	0.84	181.8	Colorless	5250	1.02	
0913		151.07		20.77	0.915	7.60	2.18	0.84	178.5		5700	1.11	
0916		151.07		20.97	0.930	7.60	2.44	0.78	161.8		6150	1.20	
0919		151.07		20.98	0.931	7.60	2.39	0.77	159.6		6600	1.29	
0922		151.07		20.97	0.932	7.60	2.94	0.77	157.4		7050	1.37	
0925	Sample	151.06		20.97	0.931	7.60	2.22	0.73	151.3		7500	1.46	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 0.73

Water level at time of sampling (ft btoc): 151.06 Turbidity at time of sampling: 2.22

Pump Settings: CPM: 2 PSI: 1 Recharge: 21.0 Discharge: 9.0

Comments: MS/MSD

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-4-16 SITE NAME / NUMBER CMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME — SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW12 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) ____

SAMPLE I.D. B-1-CW12-N-1707 DUPLICATE I.D. ____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) ____

STATIC WATER LEVEL (ft btoc) 156.06 WELL DEPTH (ft btoc) 174.5 FINAL PUMP DEPTH (ft btoc) 164.5

WATER COLUMN (feet) ____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 1930 3 v (gal/ml) ✓ WELL SAMPLE TIME 1500 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1431	Start Pump	156.06	164.5										195
1444	—	156.06	—	22.88	1.129	7.53	2.82	3.24	16.4	clear	1950	1.01	
1447	—	156.06	—	22.64	1.128	7.56	1.08	3.44	11.6	clear	2535	1.31	
1450	—	156.06	—	22.53	1.128	7.57	2.14	3.56	11.3	clear	3120	1.62	
1453	—	156.06	—	22.42	1.128	7.58	1.78	3.54	13.0	clear	3705	1.92	
1456	—	156.06	—	22.43	1.128	7.57	1.37	3.49	11.8	clear	4290	2.22	
1459	End Purge	156.06	—	22.39	1.128	7.58	1.13	3.33	13.6	clear	4875	2.53	
1500	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): ____ Fe^{+2} (mg/L): ____ D.O. (ppm): ____

Water level at time of sampling (ft btoc): ____ Turbidity at time of sampling: ____

Pump Settings: CPM: ____ PSI: ____ Recharge: ____ Discharge: ____

Comments: ____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/12/17 SITE NAME / NUMBER BDV

PROGRAM NAME LMC-BDV

MONITORING WELL IDENTIFICATION B-1-GW13

SAMPLE I.D. B-1-GW13-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 199.81 WELL DEPTH (ft btoc) 215

WATER COLUMN (feet) 15.19 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2500 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 205

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1018 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0948	Start purge	199.81	205										200
1003		199.81		21.41	0.929	7.26	2.32	5.24	80.1	Colorless	2800	1.12	
1006		199.81		21.37	0.919	7.24	2.49	5.24	80.7		3400	1.36	
1009		199.80		21.39	0.917	7.24	2.05	5.25	81.4		4000	1.60	
1012		199.81		21.37	0.914	7.23	2.37	5.19	82.7		4600	1.84	
1015		199.81		21.35	0.911	7.23	2.04	5.10	84.0		5200	2.08	
1018	Sample	199.81		21.39	0.909	7.23	2.21	5.14	85.6		5800	2.32	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.14

Water level at time of sampling (ft btoc): 199.81 Turbidity at time of sampling: 2.21

Pump Settings: CPM: 2 PSI: 105 Recharge: 21 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-[illegible]-2017 SITE NAME / NUMBER BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW17 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW17-N-1702 DUPLICATE I.D. ✓ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 140.73 WELL DEPTH (ft btoc) 169.5 FINAL PUMP DEPTH (ft btoc) 157.3

WATER COLUMN (feet) 28.77 CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [illegible]

WELL /PUMP VOLUME (V) (gal/ml) 1940 3 v (gal/ml) — WELL SAMPLE TIME 0831 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0758	Start Purge	140.73	1573										150
0812	—	140.73	—	21.27	1.140	7.64	1.76	3.78	102.5	clear	2100	1.08	
0815	—	140.73	—	21.30	1.140	7.64	1.71	4.09	155.1	clear	2550	1.3	
0818	—	140.73	—	21.32	1.141	7.62	1.90	3.92	115.1	clear	3000	1.55	
0821	—	140.73	—	21.30	1.142	7.62	2.13	3.92	75.5	clear	3450	1.78	
0824	—	140.73	—	21.32	1.143	7.62	2.41	3.95	59.5	clear	3900	2.01	
0827	—	140.73	—	21.36	1.144	7.62	1.60	3.92	60.9	clear	4350	2.24	
0830	End Purge	140.73	—	21.37	1.144	7.61	1.70	3.79	59.3	clear	4800	2.47	
0831	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 140.73 Turbidity at time of sampling: 1.70

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/13/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION B-1-GW20

SAMPLE I.D. B-1-GW20-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 141.92 WELL DEPTH (ft btoc) 309.50

WATER COLUMN (feet) 167.58 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 4671 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 294.50

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1305 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1225	Start purge	141.92	294.50										190
1250		141.95		22.27	0.864	7.11	3.87	5.67	38.0	Colorless	4750	1.02	
1253		141.95		22.29	0.865	7.08	2.87	5.48	38.6		5320	1.14	
1256		141.95		22.16	0.865	7.05	4.17	5.63	40.1		5890	1.26	
1259		141.95		22.14	0.865	7.04	2.72	5.35	39.4		6460	1.38	
1302		141.95		22.19	0.865	7.04	2.62	5.46	39.1		7030	1.51	
1305	Sample	141.95		22.20	0.866	7.05	2.77	5.64	35.9		7600	1.63	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 5.64

Water level at time of sampling (ft btoc): 141.95 Turbidity at time of sampling: 2.77

Pump Settings: CPM: 2 PSI: 95 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/10/17 SITE NAME / NUMBER _____ PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-GW25 OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

SAMPLE I.D. B-1-GW25-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

STATIC WATER LEVEL (ft btoc) 186.90 WELL DEPTH (ft btoc) 190.50 FINAL PUMP DEPTH (ft btoc) 184.50

WATER COLUMN (feet) 7.60 CASING/TUBE DIAMETER (ft/in) 3/8" SAMPLER'S SIGNATURE _____

WELL /PUMP VOLUME (V) (gal/ml) _____ 3 v (gal/ml) _____ WELL SAMPLE TIME _____ DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

Colorimetric test (taken prior to sampling) Sulfide (mg/L): _____ Fe^{+2} (mg/L): _____ D.O. (ppm): _____

Water level at time of sampling (ft btoc): _____ Turbidity at time of sampling: _____

Pump Settings: CPM: _____ PSI: _____ Recharge: _____ Discharge: _____

Comments: Cannot sample well because pump is above water level

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/24/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION B-1-GW25

SAMPLE I.D. B-1-GW25-N-1702 DUPLICATE I.D. B-1-GW25-FD-1702

STATIC WATER LEVEL (ft btoc) 187.57 WELL DEPTH (ft btoc) 195.10

WATER COLUMN (feet) 7.53 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 2.05 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 189

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1129 DUPLICATE SAMPLE TIME 1129

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1102	Start purge	187.57	189.00										190
1114		187.55		23.17	0.631	7.69	3.01	4.71	50.7	Colorless	2280	1.08	
1117		187.55		23.13	0.633	7.68	2.82	4.71	46.8		2850	1.35	
1120		187.55		23.13	0.632	7.70	3.06	4.71	45.1		3420	1.62	
1123		187.55		23.09	0.632	7.65	2.78	4.67	44.6		3990	1.90	
1126		187.56		23.10	0.631	7.73	2.84	4.54	44.1		4560	2.17	
1129	Sample	187.56		23.11	0.631	7.69	2.85	4.66	43.9		5130	2.44	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 4.66

Water level at time of sampling (ft btoc): 187.56 Turbidity at time of sampling: 2.85

Pump Settings: CPM: 2 PSI: 95 Recharge: 21 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/10/17 SITE NAME / NUMBER BDU

PROGRAM NAME LMC-BDU

MONITORING WELL IDENTIFICATION B-1-GW27

SAMPLE I.D. B-1-GW27-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 179.87 WELL DEPTH (ft btoc) 338.50

WATER COLUMN (feet) 158.63 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 4872 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 323.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 0911 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0830	Start purge	179.87	323.5										190
0856		179.87		22.13	0.650	7.64	3.19	3.85	141.2	Colorless	4940	1.01	
0859		179.88		22.09	0.650	7.64	2.86	3.75	133.5		5510	1.13	
0902		179.87		22.21	0.647	7.63	2.58	3.70	121.3		6080	1.25	
0905		179.88		22.22	0.649	7.64	2.40	3.72	111.4		6650	1.36	
0908		179.87		22.13	0.651	7.64	2.20	3.80	107.9		7220	1.48	
0911	Sample	179.87		22.17	0.651	7.64	2.57	3.81	104.3		7790	1.60	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.81

Water level at time of sampling (ft btoc): 179.87 Turbidity at time of sampling: 2.57

Pump Settings: CPM: 2 PSI: 105 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/12/17 SITE NAME / NUMBER BOW

PROGRAM NAME LMC-BOW

MONITORING WELL IDENTIFICATION B-1CW28

SAMPLE I.D. B-1-CW28-N-17Q2 DUPLICATE I.D. B-1-CW28-FD-17Q2

STATIC WATER LEVEL (ft btoc) 148.24 WELL DEPTH (ft btoc) 350.50

WATER COLUMN (feet) 202.26 CASING/TUBE DIAMETER (ft/in) 318"

WELL /PUMP VOLUME (V) (gal/ml) 5428 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 335.50

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 0900 DUPLICATE SAMPLE TIME 0900

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0816	Start purge	148.24	335.50										190
0845		148.22		19.97	0.775	7.47	6.32	2.29	-13.5	Colorless	5510	1.02	
0848		148.21		19.99	0.775	7.47	6.21	2.24	-16.8		6080	1.12	
0851		148.21		20.06	0.775	7.47	5.62	2.20	-19.1		6650	1.23	
0854		148.20		20.14	0.776	7.47	6.29	2.18	-20.3		7220	1.33	
0857		148.22		20.21	0.775	7.48	5.50	2.16	-22.1		7790	1.44	
0900	Sample	148.22		20.24	0.775	7.47	4.70	2.15	-20.0		8360	1.54	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 2.15

Water level at time of sampling (ft btoc): 148.22 Turbidity at time of sampling: 4.70

Pump Settings: CPM: 2 PSI: 125 Recharge: 21 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-6-2017 SITE NAME / NUMBER LMCBOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW30 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW30-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 169.80 WELL DEPTH (ft btoc) 200 FINAL PUMP DEPTH (ft btoc) ~190

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2310 3 v (gal/ml) _____ WELL SAMPLE TIME 1444 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1408	Start Purge												120
1428	—	169.85	—	24.03	1.046	7.28	4.81	4.05	27.2	clear	2400	1.04	
1431	—	169.85	—	23.82	1.047	7.28	4.97	3.92	23.8	clear	2760	1.19	
1434	—	169.85	—	23.75	1.049	7.25	5.17	3.75	27.0	clear	3120	1.35	
1437	—	169.85	—	23.85	1.047	7.23	3.88	3.84	29.2	clear	3480	1.51	
1440	—	169.85	—	23.83	1.049	7.28	3.92	4.04	31.3	clear	3840	1.66	
1443	End Purge	169.85	—	23.60	1.051	7.30	3.87	3.88	35.1	clear	4200	1.82	
1444	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 169.85 Turbidity at time of sampling: 3.87

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-6-2017 SITE NAME / NUMBER IMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW31 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW31-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 169.75 WELL DEPTH (ft btoc) 200 FINAL PUMP DEPTH (ft btoc) ~190

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2310 3 v (gal/ml) — WELL SAMPLE TIME 1305 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1231	Start Purge	169.75	190										130
1249	—	169.80	—	25.00	0.985	7.32	6.54	5.29	35.0	clear	2310	1.0	
1252	—	169.80	—	24.91	0.987	7.32	7.65	5.71	38.1	clear	2730	1.18	
1255	—	169.80	—	24.73	0.991	7.32	5.29	5.85	47.4	clear	3170	1.35	
1258	—	169.80	—	24.54	0.995	7.33	6.82	6.02	45.7	clear	3510	1.52	
1301	—	169.80	—	24.68	0.996	7.34	7.31	6.10	47.9	clear	3900	1.69	
1304	End Purge	169.80	—	24.63	0.997	7.34	7.21	6.09	48.9	clear	4290	1.86	
1305	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 169.80 Turbidity at time of sampling: 7.21

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-5-2017 SITE NAME / NUMBER LMC BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW32 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW32-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 148.15 WELL DEPTH (ft btoc) _____ FINAL PUMP DEPTH (ft btoc) ~170

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2200 3 v (gal/ml) _____ WELL SAMPLE TIME 1252 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1222	Start Purge	148.15	~170										160
1236	—	148.15	—	24.09	0.801	7.01	7.29	5.87	54.1	Clear	2240	1.02	
1239	—	148.15	—	24.05	0.803	7.07	7.40	6.03	61.3	Clear	2720	1.24	
1242	—	148.15	—	24.02	0.805	7.02	7.22	5.91	87.2	clear	3200	1.45	
1245	—	148.15	—	23.79	0.807	6.74	8.41	5.53	109.0	Clear	3680	1.67	
1248	—	148.15	—	23.80	0.805	6.71	6.30	5.41	108.5	Clear	4160	1.89	
1251	End Purge	148.15	—	23.74	0.806	6.75	6.94	5.42	104.2	clear	4640	2.11	
1252	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 148.15 Turbidity at time of sampling: 6.94

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-6 2017 SITE NAME / NUMBER LMC Tom PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW33 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW33-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 188.76 WELL DEPTH (ft btoc) ~220 FINAL PUMP DEPTH (ft btoc) ~210

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 5/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2520 3 v (gal/ml) — WELL SAMPLE TIME 0904 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0827	Start Purge	188.76	~210										120
0848	—	188.70	—	22.17	0.974	7.18	3.93	6.76	48.2	clear	2520	1.00	
0851	—	188.70	—	21.89	0.981	7.18	3.44	6.77	47.1	clear	2880	1.14	
0854	—	188.70	—	21.68	0.984	7.18	3.70	6.78	46.8	clear	3240	1.29	
0857	—	188.70	—	21.63	0.986	7.20	3.85	7.38	49.5	clear	3600	1.43	
0900	—	188.70	—	21.64	0.986	7.21	3.54	7.47	52.6	clear	3960	1.57	
0903	End Purge	188.70	—	21.77	0.988	7.22	3.68	7.54	57.4	clear	4320	1.71	
0904	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 188.70 Turbidity at time of sampling: 3.68

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-5-2017 SITE NAME / NUMBER LMC B04 PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-1-CW34 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. B-1-CW34-N-1702 DUPLICATE I.D. B-1-CW34-FD-1702 IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 154.46 WELL DEPTH (ft btoc) ~185 FINAL PUMP DEPTH (ft btoc) ~175

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE _____

WELL /PUMP VOLUME (V) (gal/ml) 2160 3 v (gal/ml) _____ WELL SAMPLE TIME _____ DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1404	Start Purge												120
1422	—	154.50	—	26.14	1.176	7.32	9.97	4.42	119.0	clear	2160	1.00	
1425	—	154.50	—	25.91	1.170	7.38	8.87	4.88	111.2	clear	2520	1.17	
1428	—	154.50	—	25.86	1.118	7.34	7.71	5.70	115.7	clear	2880	1.33	
1431	—	154.50	—	25.48	1.114	6.58	8.45	6.09	154.8	clear	3240	1.50	
1434	—	154.50	—	25.48	1.113	6.57	6.56	5.98	147.7	clear	3600	1.67	
1437	End Purge	154.50	—	25.46	1.112	6.55	6.36	6.09	157.6	clear	3960	1.83	
1438	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 154.50 Turbidity at time of sampling: 6.36

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-10-2017 SITE NAME / NUMBER LMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME — SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION B-5-CW02 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) ____

SAMPLE I.D. B-5-CW02-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) ____

STATIC WATER LEVEL (ft btoc) 232.81 WELL DEPTH (ft btoc) 349.50 FINAL PUMP DEPTH (ft btoc) ~~345~~ 344.5

WATER COLUMN (feet) ____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE Jason Cook

WELL /PUMP VOLUME (V) (gal/ml) 5070 3 v (gal/ml) ____ WELL SAMPLE TIME 1556 DUPLICATE SAMPLE TIME ____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1525	start Purge	232.81	—										350
1540	—	232.82	—	22.60	0.725	6.95	3.74	0.80	-54.3	clear	5250	1.04	
1543	—	232.82	—	22.31	0.705	6.93	9.21	0.75	-49.0	clear	6300	1.24	
1546	—	232.82	—	22.21	0.701	6.96	2.87	0.82	-51.5	clear	7350	1.45	
1549	—	232.82	—	22.11	0.711	7.03	3.09	0.76	-54.1	clear	8400	1.66	
1552	—	232.82	—	22.11	0.714	7.08	3.24	0.69	-59.8	clear	9450	1.86	
1555	End Purge	232.82	—	22.10	0.716	7.09	3.42	0.65	-60.7	clear	10500	2.07	
1556	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 232.82 Turbidity at time of sampling: 3.42

Pump Settings: CPM: ____ PSI: ____ Recharge: ____ Discharge: ____

Comments: ____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 8/10/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION B-6-CW02

SAMPLE I.D. B-6-CW02-N-17Q2 DUPLICATE I.D. B-6-CW02-FD-17Q2

STATIC WATER LEVEL (ft btoc) 235.44 WELL DEPTH (ft btoc) 339.50

WATER COLUMN (feet) 104.06 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4636 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 339.50

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1621 DUPLICATE SAMPLE TIME 1621

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1540	Start purge		339.50										180
1606		235.45		23.75	0.865	7.79	2.32	3.30	23.2	Colorless	4680	1.01	
1609		235.45		23.68	0.873	7.78	2.26	2.67	30.2		5220	1.13	
1612		235.45		23.58	0.873	7.77	2.27	2.43	39.9		5760	1.24	
1615		235.45		23.56	0.872	7.74	2.76	2.16	48.4		6300	1.36	
1618		235.45		23.56	0.871	7.72	2.28	2.12	50.5		6840	1.48	
1621	Sample	235.45		23.53	0.871	7.70	2.19	2.09	53.0		7380	1.59	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 2.09

Water level at time of sampling (ft btoc): 235.45 Turbidity at time of sampling: 2.19

Pump Settings: CPM: 2 PSI: 135 Recharge: 20 Discharge: 10

Comments: Use a high pressure Control box

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/11/17 SITE NAME / NUMBER RDU

PROGRAM NAME LMGBDU

MONITORING WELL IDENTIFICATION B-6-GW05

SAMPLE I.D. B-6-GW05-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 259.30 WELL DEPTH (ft btoc) 355.0

WATER COLUMN (feet) CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 3950 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 350.0

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1520 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1438	Start purge	259.30	350.0										190
1459		259.31		23.29	0.837	7.40	4.21	1.28	-164.6	Colorless	3990	1.01	
1502		259.31		23.24	0.851	7.37	3.92	1.69	-155.7		4560	1.15	
1505		259.31		23.25	0.864	7.36	3.69	2.10	-140.0		5130	1.30	
1508		259.31		23.27	0.886	7.33	2.50	2.55	-95.4		5700	1.44	
1511		259.31		23.21	0.891	7.33	2.48	2.63	-84.0		6270	1.59	
1514		259.31		23.28	0.892	7.33	3.06	2.74	-66.4		6840	1.73	
1517		259.31		23.26	0.895	7.32	2.84	2.85	-61.7		7410	1.88	
1520	Sample	259.31		23.24	0.896	7.32	2.43	2.88	-58.9		7980	2.02	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 2.88

Water level at time of sampling (ft btoc): 259.31 Turbidity at time of sampling:

Pump Settings: CPM: 2 PSI: 150 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/11/17 SITE NAME / NUMBER BUD

PROGRAM NAME LMC-BUD

MONITORING WELL IDENTIFICATION B-16-CW08

SAMPLE I.D. B-16-CW08-N-17Q2 DUPLICATE I.D.

STATIC WATER LEVEL (ft btoc) 260.01 WELL DEPTH (ft btoc) 371

WATER COLUMN (feet) 110.99 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4110 3 v (gal/ml)

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) (vented to)

IN BREATHING ZONE (ppm) (initial) (vented to)

FINAL PUMP DEPTH (ft btoc) 366

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1357 DUPLICATE SAMPLE TIME

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1317	Start purge	261.09	366										170
1342		261.15		23.64	0.879	7.31	9.93	1.80	-155.4	Colorless	4250	1.03	
1345		261.15		23.88	0.925	7.25	11.97	2.63	-123.7		4760	1.16	
1348		261.15		23.96	0.955	7.22	12.40	3.00	-91.7		5270	1.28	
1351		261.15		23.99	0.962	7.20	12.63	3.28	-66.0		5780	1.41	
1354		261.15		23.98	0.963	7.20	12.96	3.36	-63.1		6290	1.53	
1357	Sample	261.15		24.02	0.963	7.20	13.6	3.44	-59.6		6800	1.65	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.44

Water level at time of sampling (ft btoc): 261.15 Turbidity at time of sampling: 13.6

Pump Settings: CPM: 2 PSI: 162 Recharge: 20 Discharge: 10

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/06/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION B-6-CW10

SAMPLE I.D. B-6-CW10-N-1702 DUPLICATE I.D. ___

STATIC WATER LEVEL (ft btoc) 246.95 WELL DEPTH (ft btoc) 258

WATER COLUMN (feet) ___ CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) ___ 3 v (gal/ml) ___

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) ___ (vented to) ___

IN BREATHING ZONE (ppm) (initial) ___ (vented to) ___

FINAL PUMP DEPTH (ft btoc) 228

SAMPLER'S SIGNATURE ___

WELL SAMPLE TIME ___ DUPLICATE SAMPLE TIME ___

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

Colorimetric test (taken prior to sampling) Sulfide (mg/L): ___ Fe^{+2} (mg/L): ___ D.O. (ppm): ___

Water level at time of sampling (ft btoc): ___ Turbidity at time of sampling: ___

Pump Settings: CPM: ___ PSI: ___ Recharge: ___ Discharge: ___

Comments: Pump pulled, no air coming out of water line on purge

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/13/17 SITE NAME / NUMBER BOU

PROGRAM NAME LHC-BOU

MONITORING WELL IDENTIFICATION B-6-CW10

SAMPLE I.D. B-6-CW10-N-1702 DUPLICATE I.D. _____

STATIC WATER LEVEL (ft btoc) 246.94 WELL DEPTH (ft btoc) ~~248.0~~ 253.0

WATER COLUMN (feet) 6.06 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) _____ 3 v (gal/ml) _____

PURGING DEVICE: ☐ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) ~248.0

SAMPLER'S SIGNATURE _____

WELL SAMPLE TIME _____ DUPLICATE SAMPLE TIME _____

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

Colorimetric test (taken prior to sampling) Sulfide (mg/L): _____ Fe^{+2} (mg/L): _____ D.O. (ppm): _____

Water level at time of sampling (ft btoc): _____ Turbidity at time of sampling: _____

Pump Settings: CPM: _____ PSI: _____ Recharge: _____ Discharge: _____

Comments: Unable to sample well, ~ top one foot of pump (QED pump) is above water line.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/24/17 SITE NAME / NUMBER BDU
PROGRAM NAME GMC-BDU
MONITORING WELL IDENTIFICATION B-6-CW10
SAMPLE I.D. B-6-CW10-N-1702 DUPLICATE I.D. —
STATIC WATER LEVEL (ft btoc) 247.14 WELL DEPTH (ft btoc) 258
WATER COLUMN (feet) 10.86 CASING/TUBE DIAMETER (ft/in) 3/8"
WELL /PUMP VOLUME (V) (gal/ml) 3030 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump
SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other
OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____
IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____
FINAL PUMP DEPTH (ft btoc) 253
SAMPLER'S SIGNATURE [signature]
WELL SAMPLE TIME 1546 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1507	Start purge	247.15	253								3150	—	150
1528		247.16		24.45	0.700	7.46	32.5	1.80	48.6	Colorless	~~4200~~	1.04	
1531		247.14		24.33	0.700	7.46	32.2	1.56	47.7		3600	1.89	
1534		247.15		24.37	0.700	7.45	30.3	1.29	46.7		4050	1.34	
1537		247.14		24.26	0.701	7.45	28.6	1.06	45.3		4500	1.49	
1540		247.15		24.16	0.702	7.44	25.7	1.00	44.8		4950	1.63	
1543		247.15		23.95	0.702	7.42	24.6	0.94	43.9		5400	1.78	
1546	Sample	247.15		23.90	0.702	7.40	24.3	0.94	43.2				

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 0.94
Water level at time of sampling (ft btoc): 247.15 Turbidity at time of sampling: 24.3
Pump Settings: CPM: 2 PSI: 120 Recharge: 19 Discharge: 11
Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/06/17 SITE NAME / NUMBER BOU

PROGRAM NAME LMC-BOU

MONITORING WELL IDENTIFICATION B-6-CW14

SAMPLE I.D. B-6-CW14-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 240.85 WELL DEPTH (ft btoc) 369.50

WATER COLUMN (feet) 128.65 CASING/TUBE DIAMETER (ft/in) 3/8

WELL /PUMP VOLUME (V) (gal/ml) 4882 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 354.5

SAMPLER'S SIGNATURE

WELL SAMPLE TIME 1147 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1103	Start purge	240.85	354.5										170
1132		240.86		23.57	0.756	7.34	2.67	3.19	94.3	Colorless	4930	1.01	
1135		240.86		23.64	0.755	7.34	2.74	3.19	81.3		5440	1.11	
1138		240.86		23.59	0.754	7.34	2.20	3.17	73.4		5950	1.22	
1141		240.86		23.64	0.754	7.34	2.10	3.17	63.2		6460	1.32	
1144		240.86		23.79	0.754	7.35	2.22	3.17	59.3		6970	1.43	
1147	Sample	240.86		23.78	0.753	7.35	2.11	3.16	55.3		7480	1.53	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): 3.16

Water level at time of sampling (ft btoc): 240.86 Turbidity at time of sampling: 2.11

Pump Settings: CPM: 2 PSI: 140 Recharge: 21 Discharge: 9

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/14/17 SITE NAME / NUMBER BDU

PROGRAM NAME LMC-BDU

MONITORING WELL IDENTIFICATION B-6-CW16

SAMPLE I.D. — DUPLICATE I.D.

STATIC WATER LEVEL (ft btoc) 252.04 WELL DEPTH (ft btoc) 265

WATER COLUMN (feet) 12.96 CASING/TUBE DIAMETER (ft/in)

WELL /PUMP VOLUME (V) (gal/ml) 29.65 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 251.50

SAMPLER'S SIGNATURE

WELL SAMPLE TIME — DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)

B-6-CW16
P1101M
P5000
251.5
custom

Colorimetric test (taken prior to sampling) Sulfide (mg/L): Fe^{+2} (mg/L): D.O. (ppm):

Water level at time of sampling (ft btoc): Turbidity at time of sampling:

Pump Settings: CPM: PSI: Recharge: Discharge:

Comments: Unable to sample well, either top of pump or pump intake is out of water.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/25/17 SITE NAME / NUMBER BDU

PROGRAM NAME LMC-BDU

MONITORING WELL IDENTIFICATION B-6-CW16

SAMPLE I.D. B-6-CW16-N-1702 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 250.92 WELL DEPTH (ft btoc) 262.00

WATER COLUMN (feet) 11.08 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 3050 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 260

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 1441 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1412	Start purge	250.92	260.0										220
1426		250.92		22.23	1.012	6.22	33.4	6.54	49.0	Cloudy	3080	1.01	
1429		250.92		22.27	1.012	6.33	30.2	6.45	47.7		3740	1.23	
1432		250.92		22.14	1.013	6.42	31.1	6.50	46.7		4400	1.44	
1435		250.92		21.95	1.012	6.44	29.4	6.49	47.8		5060	1.66	
1438		250.92		21.80	1.012	6.44	27.8	6.47	48.5		5720	1.88	
1441	Sample	250.92		21.73	1.011	6.45	27.2	6.49	48.6		6380	2.09	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm):

Water level at time of sampling (ft btoc): 250.92 Turbidity at time of sampling:

Pump Settings: CPM: 2 PSI: 130 Recharge: 20 Discharge: 10

Comments: Flex a high pressure control box.

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-11-2017 SITE NAME / NUMBER LMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME ___ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION C-1-CW02 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) ___

SAMPLE I.D. C-1-CW02-N-17022 DUPLICATE I.D. ___ IN BREATHING ZONE (ppm) (initial) 0 (vented to) ___

STATIC WATER LEVEL (ft btoc) 270.85 WELL DEPTH (ft btoc) 391.50 FINAL PUMP DEPTH (ft btoc) 386.5

WATER COLUMN (feet) ___ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 5225 3 v (gal/ml) — WELL SAMPLE TIME 1243 DUPLICATE SAMPLE TIME ___

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1202	Start Purge	270.85	386.5										210
1227	—	270.85	—	22.01	0.817	7.42	4.44	0.55	-93.3	clear	5250	1.00	
1230	—	270.85	—	21.97	0.817	7.42	4.21	0.55	-95.7	clear	5880	1.13	
1233	—	270.85	—	21.83	0.818	7.40	3.93	0.50	-95.2	clear	6510	1.25	
1236	—	270.85	—	22.00	0.820	7.39	4.59	0.47	-94.1	clear	7140	1.37	
1239	—	270.85	—	22.20	0.822	7.40	3.28	0.45	-94.7	clear	7770	1.49	
1242	End Purge	270.85	—	22.42	0.826	7.41	3.79	0.44	-98.7	clear	8400	1.61	
1243	Sample.												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 270.85 Turbidity at time of sampling: 3.79

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments: ___

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-25-2017 SITE NAME / NUMBER LMC B04 PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION C-1-CW03 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. C-1-CW03-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 271.07 WELL DEPTH (ft btoc) – FINAL PUMP DEPTH (ft btoc) 277.5

WATER COLUMN (feet) – CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3040 3 v (gal/ml) _____ WELL SAMPLE TIME 1418 DUPLICATE SAMPLE TIME –

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1334	Start Purge	271.07	277.5										110
1402		271.07	–	21.24	0.772	7.33	2.48	4.34	45.9	clear	3080	1.01	
1405		271.07	–	21.30	0.772	7.34	3.13	4.30	45.4	clear	3410	1.12	
1408		271.07	–	21.38	0.772	7.34	2.49	4.23	46.7	clear	3740	1.23	
1411		271.07	–	21.46	0.773	7.35	2.30	4.14	47.9	clear	4070	1.34	
1414		271.07	–	21.67	0.774	7.35	1.99	4.06	50.0	clear	4400	1.45	
1417	End Purge	271.07	–	21.67	0.775	7.35	1.84	4.08	51.5	clear	4730	1.56	
1418	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): – Fe^{+2} (mg/L): – D.O. (ppm): –

Water level at time of sampling (ft btoc): 271.07 Turbidity at time of sampling: 1.84

Pump Settings: CPM: – PSI: – Recharge: – Discharge: –

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 04/06/17 SITE NAME / NUMBER BDU

PROGRAM NAME LMC-BDU

MONITORING WELL IDENTIFICATION C-1-CW05

SAMPLE I.D. ~~EW~~-C1-CW05-N-17Q2 DUPLICATE I.D. —

STATIC WATER LEVEL (ft btoc) 252.47 WELL DEPTH (ft btoc) 384.90

WATER COLUMN (feet) 132.43 CASING/TUBE DIAMETER (ft/in) 3/8"

WELL /PUMP VOLUME (V) (gal/ml) 5286 3 v (gal/ml) —

PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

OVA: ☐ FID ☐ PID In Casing (ppm) (initial) _____ (vented to) _____

IN BREATHING ZONE (ppm) (initial) _____ (vented to) _____

FINAL PUMP DEPTH (ft btoc) 380.5

SAMPLER'S SIGNATURE [signature]

WELL SAMPLE TIME 0952 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0910	Start purge		380.5										200
0937		252.52		21.84	0.705	7.52	3.74	0.87	163.4		5400	1.02	
0940		252.49		21.90	0.701	7.52	4.08	0.81	148.6		6000	1.14	
0943		252.50		21.94	0.702	7.52	3.79	0.80	131.9		6600	1.25	
0946		252.51		21.92	0.704	7.51	2.99	0.79	124.7		7200	1.36	
0949		252.50		21.98	0.704	7.52	2.82	0.78	122.3		7800	1.48	
0952	Sample	252.49		21.99	0.704	7.52	4.20	0.78	118.4		8400	1.59	

Colorimetric test (taken prior to sampling) Sulfide (mg/L): ____ Fe^{+2} (mg/L): ____ D.O. (ppm): ____

Water level at time of sampling (ft btoc): 252.49 Turbidity at time of sampling: ____

Pump Settings: CPM: 2 PSI: 150 Recharge: 20 Discharge: 10

Comments: Use a high pressure control box

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 6-12-2017 SITE NAME / NUMBER LMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION C-1-GW07 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to)

SAMPLE I.D. C-1-GW07-N-1762 DUPLICATE I.D. IN BREATHING ZONE (ppm) (initial) 0 (vented to)

STATIC WATER LEVEL (ft btoc) 263.62 WELL DEPTH (ft btoc) 321.50 FINAL PUMP DEPTH (ft btoc) 312.0

WATER COLUMN (feet) CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [illegible]

WELL /PUMP VOLUME (V) (gal/ml) 3805 3 v (gal/ml) — WELL SAMPLE TIME 1500 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1414	Start Purge	263.62	312										130
1444	—	263.62	—	24.46	0.749	6.15	18.1	1.76	-3.6	Cloudy	3400	1.02	
1447	—	263.62	—	24.38	0.748	6.24	18.6	1.59	-8.9	Cloudy	4290	1.13	
1450	—	263.62	—	24.19	0.745	6.52	18.2	1.47	-19.1	Cloudy	4680	1.23	
1453	—	263.62	—	24.21	0.745	6.58	18.4	1.45	-15.3	Cloudy	5070	1.33	
1456	—	263.62	—	24.16	0.745	6.63	17.2	1.43	-21.7	Cloudy	5460	1.43	
1459	End Purge	263.62	—	24.11	0.745	6.67	17.4	1.43	-21.3	Cloudy	5850	1.54	
1500	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 263.62 Turbidity at time of sampling: 17.4

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-12-2017 SITE NAME / NUMBER LMC BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION C-1-CW08 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. C-1-CW08-N-17022 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 263.33 WELL DEPTH (ft btoc) 292 FINAL PUMP DEPTH (ft btoc) ~285

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3350 3 v (gal/ml) — WELL SAMPLE TIME 1605 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1532	Start Purge	263.33	285										250
1546	—	263.34	—	23.45	0.966	6.98	4.71	7.43	47.8	clear	3500	1.04	
1549	—	263.34	—	23.03	0.972	6.50	4.79	6.23	53.8	clear	4250	1.27	
1552	—	263.34	—	23.89	0.970	6.36	3.97	5.82	57.6	clear	5000	1.49	
1555	—	263.34	—	23.81	0.965	6.36	3.82	5.43	55.6	clear	5750	1.72	
1558	—	263.34	—	23.70	0.963	6.45	3.89	5.40	53.4	clear	6500	1.94	
1601	—	263.34	—	23.60	0.963	6.47	3.49	5.39	53.1	clear	7250	2.16	
1604	End Purge	263.34	—	23.64	0.962	6.48	3.82	5.38	53.4	clear	8000	2.39	
1605	sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 263.34 Turbidity at time of sampling: 3.82

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-7-2017 SITE NAME / NUMBER LMC Box PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION MW-03 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. MW-03-N-1707 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 257.06 WELL DEPTH (ft btoc) 283 FINAL PUMP DEPTH (ft btoc) ~280

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3200 3 v (gal/ml) _____ WELL SAMPLE TIME 1258 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1226	Start Purge	257.06	270										200
1242	—	257.07	—	23.46	0.956	7.27	2.42	5.87	50.3	clear	3200	1.00	
1245	—	257.07	—	23.40	0.951	7.24	2.49	5.82	50.4	clear	3800	1.19	
1248	—	257.07	—	23.13	0.942	7.16	2.39	5.82	53.0	clear	4400	1.38	
1251	—	257.07	—	23.09	0.938	7.15	1.87	5.71	53.3	clear	5000	1.56	
1254	—	257.07	—	23.05	0.936	7.14	1.79	5.77	54.1	clear	5600	1.75	
1257	End Purge	257.07	—	22.98	0.935	7.12	1.64	5.84	55.5	clear	6200	1.94	
1258	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): ~~257.07~~ 257.07 Turbidity at time of sampling: 1.64

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-10-2017 SITE NAME / NUMBER LMC Bou PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☐ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION MW-04 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. MW-04-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 240.80 WELL DEPTH (ft btoc) 289.51 FINAL PUMP DEPTH (ft btoc) ~260

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE Joseph Lowe

WELL /PUMP VOLUME (V) (gal/ml) 3100 3 v (gal/ml) — WELL SAMPLE TIME 0858 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0822	Start Purge	240.80	~260										160
0842	—	240.86	—	21.15	0.945	7.23	1.82	5.72	66.7	clear	3700	1.03	
0845	—	240.86	—	21.19	0.948	7.22	1.89	5.78	59.2	clear	3880	1.19	
0848	—	240.86	—	21.30	0.953	7.21	1.95	5.85	49.4	clear	4160	1.34	
0851	—	240.86	—	21.34	0.954	7.20	1.78	5.70	45.7	clear	4640	1.50	
0854	—	240.86	—	21.39	0.956	7.20	2.15	5.74	41.9	clear	5120	1.65	
0857	End Purge	240.86	—	21.58	0.955	7.20	1.90	5.60	39.2	clear	5600	1.81	
0858	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 240.80 Turbidity at time of sampling: 1.90

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
Every attempt should be made to limit water level drawdown to less than 0.33 feet and purge rate to less than 0.5 L/min.

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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-7-2017 SITE NAME / NUMBER LMC BOM PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION MW-07 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. MW-07-N-1702 DUPLICATE I.D. _____ IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 237.87 WELL DEPTH (ft btoc) 281.3 FINAL PUMP DEPTH (ft btoc) ~255

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 3050 3 v (gal/ml) — WELL SAMPLE TIME 0926 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0839	Start Purge	237.87	~255										100
0910	—	237.87	—	20.65	0.927	7.20	1.32	5.63	114.3	clear	3100	1.02	
0913	—	237.87	—	20.70	0.930	7.19	2.14	5.75	102.1	clear	3400	1.11	
0916	—	237.87	—	20.70	0.931	7.18	1.35	5.53	95.8	clear	3700	1.21	
0919	—	237.87	—	20.72	0.932	7.18	1.30	5.81	85.3	clear	4000	1.31	
0922	—	237.87	—	20.72	0.934	7.18	2.88	5.84	79.2	clear	4300	1.41	
0925	End Purge	237.87	—	20.71	0.934	7.18	1.36	5.59	78.8	clear	4600	1.51	
0926	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 237.87 Turbidity at time of sampling: 1.36

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-7-2011 SITE NAME / NUMBER LMC BOU PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION MW-08 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to)

SAMPLE I.D. MW08-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) (vented to)

STATIC WATER LEVEL (ft btoc) 243.32 WELL DEPTH (ft btoc) — FINAL PUMP DEPTH (ft btoc) 255

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/00 SAMPLER'S SIGNATURE Jason Cue

WELL /PUMP VOLUME (V) (gal/ml) 3050 3 v (gal/ml) — WELL SAMPLE TIME 1101 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1024	Start Purge	243.33	255										150
1045	—	243.33	—	23.42	0.934	7.25	2.22	4.61	48.5	Yellow	3150	1.03	
1048	—	243.37	—	23.19	0.937	7.23	2.64	5.9	58.0	Light Yellow	3600	1.18	
1051	—	243.33	—	23.21	0.936	7.23	2.09	6.03	58.3	Light Yellow	4050	1.33	
1054		243.33	—	23.35	0.935	7.22	1.88	6.00	58.3	Light Yellow	4450	1.49	
1057	—	243.33	—	23.13	0.934	7.22	1.93	5.74	60.0	clear	5400	1.62	
1100	End Purge	243.33	—	23.03	0.932	7.22	1.72	5.82	59.8	clear	5950	1.77	
1101	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): D.O. (ppm): —

Water level at time of sampling (ft btoc): 243.33 Turbidity at time of sampling: 1.72

Pump Settings: CPM: — PSI: — Recharge: Discharge:

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-25-2017 SITE NAME / NUMBER LMC 1304 PURGING DEVICE: ☐ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION SW-1 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. SW-1-N-1702 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 244.87 WELL DEPTH (ft btoc) — FINAL PUMP DEPTH (ft btoc) 260

WATER COLUMN (feet) — CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2960 3 v (gal/ml) — WELL SAMPLE TIME 0822 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
0747	Start Purge	244.87	260										160
0806	—	244.87	—	20.36	0.908	7.74	1.01	5.24	150.5	Clear	3040	1.03	
0809	—	244.87	—	20.36	0.907	7.75	1.76	5.24	141.0	clear	3520	1.19	
0812	—	244.87	—	20.34	0.906	7.75	1.82	5.38	127.1	clear	4000	1.35	
0815	—	244.87	—	20.37	0.905	7.75	1.48	5.24	119.6	clear	4480	1.51	
0818	—	244.87	—	20.39	0.901	7.75	1.69	5.40	114.7	clear	4960	1.68	
0821	End Purge	244.87	—	20.41	0.903	7.75	1.57	5.20	110.3	clear	5440	1.84	
0822	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 244.87 Turbidity at time of sampling: 1.57

Pump Settings: CPM: _____ PSI: _____ Recharge: _____ Discharge: _____

Comments: _____

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET - SAMPLING

DATE 4-10-2017 SITE NAME / NUMBER LMC Bow PURGING DEVICE: ☑ Dedicated Pump ☐ Peristaltic Pump ☐ Bladder Pump

PROGRAM NAME _____ SAMPLING DEVICE: ☑ Purging Pump ☐ Disposable Bailer ☐ Other

MONITORING WELL IDENTIFICATION SW-5 OVA: ☐ FID ☑ PID In Casing (ppm) (initial) 0 (vented to) _____

SAMPLE I.D. SW-5-N-170-2 DUPLICATE I.D. — IN BREATHING ZONE (ppm) (initial) 0 (vented to) _____

STATIC WATER LEVEL (ft btoc) 235.34 WELL DEPTH (ft btoc) ~249.5 FINAL PUMP DEPTH (ft btoc) 244.0

WATER COLUMN (feet) _____ CASING/TUBE DIAMETER (ft/in) 3/8 SAMPLER'S SIGNATURE [signature]

WELL /PUMP VOLUME (V) (gal/ml) 2730 3 v (gal/ml) — WELL SAMPLE TIME 1320 DUPLICATE SAMPLE TIME —

Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (°C)	EC (mS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals/ml)	Well/Pump Volumes Purged	Flow Rate (gal/min ml/min)
1241	Start Purge	235.341	244.0										120
1304	—	235.341	—	25.00	1.072	7.31	11.01	4.74	18.3	clear	2760	1.01	
1307	—	235.34	—	24.95	1.071	7.32	10.82	4.67	18.3	clear	3120	1.14	
1310	—	235.341	—	24.80	1.071	7.33	9.29	4.51	18.3	clear	3480	1.27	
1313	—	235.34	—	24.55	1.069	7.29	9.78	4.59	20.6	clear	3840	1.41	
1316	—	235.341	—	24.50	1.069	7.29	9.05	4.46	20.9	clear	4200	1.54	
1319	End Purg	235.34	—	24.52	1.069	7.31	8.62	4.45	20.1	clear	4560	1.67	
1320	Sample												

Colorimetric test (taken prior to sampling) Sulfide (mg/L): — Fe^{+2} (mg/L): — D.O. (ppm): —

Water level at time of sampling (ft btoc): 235.34 Turbidity at time of sampling: 8.62

Pump Settings: CPM: — PSI: — Recharge: — Discharge: —

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION	
Temperature collect readings	Conductivity ± 3 %
pH ± 0.1	DO ± 0.3 mg/L
Turbidity < 10 NTUs (if > 10 NTUs ± 10 %)	
WL ± 0.1 foot	ORP ± 10 mV

Note:
If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities.
All water levels and pump depths are measured from the reference point (notch) in the top of the well casing.
If no reference point is observed then the casing high point should be notched and measurements should be collected from this point.
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Monitoring Well Inspection Form

Well ID: 3880	**Date:** 4.26.2017
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?			
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?			
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)		✓	
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?			
Well cap is present and is watertight?			
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Replace Gasket, Tap threads
Replace Bolts, Replace tag

Monitoring Well Inspection Form

Well ID: 3830Q	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?		✓	
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?	—		
Well cap is present and is watertight?			
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

REPLACED GASKET, TAP BOLT HOLES

ADD TAG

Monitoring Well Inspection Form

Well ID: 3830S	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

REPLACED GASKET, BOLT HOLES RETAPPED

TAG ADDED

Monitoring Well Inspection Form

Well ID: 3831Q	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

GASKET ADDED, REPLACED BOLTS

ADD TAG

Monitoring Well Inspection Form

Well ID: 3850m	**Date:** 4/24/17
Inspection Conducted By: C.CHOU	

As-built depth of well?	Measured depth of well?			Difference?		
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

ADDED GASKET, TAP BOLT HOLES, NEW BOLTS, ADDED TAG

Monitoring Well Inspection Form

Well ID: 385ON	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

ADDED GASKET & TAG, RETAPPED HOLES

Monitoring Well Inspection Form

Well ID: 3850A	**Date:** 4/24/17
Inspection Conducted By: R SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes ✓	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

ADDED GASKET, RETAPPED, TAGGED

Monitoring Well Inspection Form

Well ID: 3850P	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3850Q	**Date:** 4/24/17
Inspection Conducted By: R. SABATER	

As-built depth of well?	Measured depth of well?			Difference?		
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3850R	**Date:** 4/24/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No —	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

ADDED GASKET & TAG, NEW BOLTS

Monitoring Well Inspection Form

Well ID: 3850 S	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No —	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3850T	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 385U	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Gasket, well tag, tap & replace bolts

Monitoring Well Inspection Form

Well ID: 3850U	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No —	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 38BOW	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No —	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3851 M	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?		✓	
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?	~~Yes~~	~~No~~	
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?		✓	
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Relabel well, Replace well tag. Tap & Replace Bolts, Replace gasket

Monitoring Well Inspection Form

Well ID: 3851N	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?		✓	
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?			
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?			
Well cap is present and is watertight?		✓	
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Relabel well, Replace well tag, Tap & Replace bolts
Replace gasket.

Monitoring Well Inspection Form

Well ID: 3851P	**Date:** 1/26/17
Inspection Conducted By: R. SATBATZER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes ✓	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852aF	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes ✓	No	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? Added
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	Added
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 38528	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: ~~3852-H~~ 3852H	**Date:** 4/24/17
Inspection Conducted By: C. Chou	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes ✓	No	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? Added
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	Added
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852J	**Date:** 4/20/17
Inspection Conducted By: R. SABATER	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No —	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	
Locks are present and in good condition (i.e., no rust)?	Yes —	No —	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852K	**Date:** 4/20/17
Inspection Conducted By: R. SABACER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes ✓	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852L	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	FLOODED. STANDING WATER REMOVED. REPAIRED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	RUSTED
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852M	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	STANDING WATER REMOVED. BOLTS TIGHTENED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? REPLACED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3852N	**Date:** 8/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No ✓	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	STANDING WATER REMOVED. RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? REPLACED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3860J	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes —	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes —	No	PENTA BOLTS
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No —	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3860K	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED/REPLACED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No	PENTA BOLTS
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3861 D	**Date:** 4/26/17
Inspection Conducted By: R. SABATOR	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3861E	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3861F	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: ~~3862 D~~ 3862D	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?		✓	
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓	✓	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket? Added
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	✓		Added
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?	✓		
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: ~~3862E~~ 3862E	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	STANDING WATER. RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? REPLACED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 38700	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?			Difference?		
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?	~~Yes~~	~~No~~	
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)		✓	Some water
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket? 1.98' Diamond Plate Vault
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?	✓		
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Replaced well tag. added bolt
Missing 1 bolt (Small size ~3/8"/7/16")

Monitoring Well Inspection Form

Well ID: 3871 H	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3871J	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3872K	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	PENTA BOLTS
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3872L	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3872M	**Date:** 4/24/17
Inspection Conducted By: C. Chou	

As-built depth of well?	Measured depth of well?			Difference?		
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket? REPLACED 4/24
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3872N	**Date:** 4/24/17
Inspection Conducted By: CHARLIE CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 3872Q	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	RETHREADED 4/24/17
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No	
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: 38725	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	BOLT HOLES RETHREADED 4/24/17
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? added 4/24/17
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED ON 4/24/17
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: A-1-CW02	**Date:** 4/26/17
Inspection Conducted By: R. SPRATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes ✓	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? ADDED
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	PENTA BOLTS
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: A-1-CW103R	**Date:** 4/20/17
Inspection Conducted By: P. GARBACER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes	No ✓	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket? APPROP
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	PENTA BOLTS
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

Monitoring Well Inspection Form

Well ID: A-1-CW09	**Date:** 4-26-2017
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes	No ✓	Cracked Pad
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Relabel well; Replace well tag. Tap & Replace bolts
Replace gasket.

Monitoring Well Inspection Form

Well ID: B-1-Cwll	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Relabel well, add well tag
well vault lid does not have bolt holes

Monitoring Well Inspection Form

Well ID: B-1-GW12	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Re-label well, add well tag.

Vault lid has no bolt holes

Monitoring Well Inspection Form

Well ID: B-1-cw16	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?	✓		
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket? larger than purchased gaskets
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?	✓		
Well cap is present and is watertight?	✓		
Top-of-casing survey mark exists and is legible?	✓		

Additional comments:

Add well tag. Re-Tap and add bolts.

Monitoring Well Inspection Form

Well ID: B-1-Cw17	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	~~NA~~ WELL TAG ADDED 4/24/17
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

BOLT HOLES RETHREADED & PENTA BOLTS IN PLACE

Monitoring Well Inspection Form

Well ID: B-1-CW20	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	No ✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes	No ✓	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

Relabel well. Replace tag. Tap & Replace Bolts gasket is too small.

Monitoring Well Inspection Form

Well ID: B-1-CW25	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes ✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED 4/24/17
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

BOLT HOLES RETHREADED. NEED TO REPLACE LID. CURRENT LID DOES NOT HAVE BOLT HOLES.

Monitoring Well Inspection Form

Well ID: B-1-cwl27	**Date:** 4/24/17
Inspection Conducted By: C. CHOU	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes ✓	No	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No ✓	STANDING WATER. REMOVED
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket? NEW GASKET ADDED 4/24/17
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED 4/24/17
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes	No	
Top-of-casing survey mark exists and is legible?	Yes	No ✓	

Additional comments:

BOLT HOLES RETHREADED & PENTA BOLTS IN PLACE

Monitoring Well Inspection Form

Well ID: B-1-CW29	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?		✓	
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?			
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?	✓	✓	
Top-of-casing survey mark exists and is legible?	✓		

Additional comments:

well cap Needs to be Replaced. Vault lid is large. No gasket, No bolts. added well tag

Monitoring Well Inspection Form

Well ID: BFCW02	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?			Guard wall OK
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?		✓	
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Replace gasket. Tap & Replace Bolts

Replace well Tag

Monitoring Well Inspection Form

Well ID: B-5-CW03	**Date:** 4-7-17
Inspection Conducted By: J. Cook	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓		
Surrounding area is free of vegetation, waste, and debris	✓		
Well name is present and legible on exterior of well?	✓		
Protective casing is not damaged or corroded?	✓		
Guard posts (if present) are in good condition?	—		Guard wall ok
Is the area round the well flooded?		✓	
Surface pad exists and is not cracked or deteriorated?	✓		
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓		
Does vault gasket need to be replaced?	✓		Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)		✓	
Locks are present and in good condition (i.e., no rust)?		✓	
Well cap is present and is watertight?		✓	
Top-of-casing survey mark exists and is legible?		✓	

Additional comments:

Replace gasket, Tap & Replace Bolts
Replace well tag

Monitoring Well Inspection Form

Well ID: TZ-PW01	**Date:**
Inspection Conducted By:	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes ✓	No	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

EMCO WELL BOX

Monitoring Well Inspection Form

Well ID: Tt-PW02	**Date:** 4/26/17
Inspection Conducted By: R. SABATER	

As-built depth of well?		Measured depth of well?			Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	**Yes**	**No**	**Comment:**
Well is visible and accessible?	Yes ✓	No	
Surrounding area is free of vegetation, waste, and debris	Yes ✓	No	
Well name is present and legible on exterior of well?	Yes	No ✓	
Protective casing is not damaged or corroded?	Yes ✓	No	
Guard posts (if present) are in good condition?	Yes	No ✓	
Is the area round the well flooded?	Yes	No ✓	
Surface pad exists and is not cracked or deteriorated?	Yes ✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	Yes ✓	No	
Does vault gasket need to be replaced?	Yes	No ✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes ✓	No	ADDED
Locks are present and in good condition (i.e., no rust)?	Yes	No ✓	
Well cap is present and is watertight?	Yes ✓	No	
Top-of-casing survey mark exists and is legible?	Yes ✓	No	

Additional comments:

EMCO WELL BOX

Monitoring Well Inspection Form

Well ID: SW-01	**Date:** 4.26.17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?			Difference?		
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓	No	
Surrounding area is free of vegetation, waste, and debris	✓	No	
Well name is present and legible on exterior of well?	Yes	✓	
Protective casing is not damaged or corroded?	✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	✓	
Surface pad exists and is not cracked or deteriorated?	✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓	No	
Does vault gasket need to be replaced?	✓	No	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	✓	
Locks are present and in good condition (i.e., no rust)?	Yes	No	
Well cap is present and is watertight?	Yes	✓	well cap will not fit. Need to Modify top of casing.
Top-of-casing survey mark exists and is legible?	Yes	✓	

Additional comments:

Re-label well. Add well tag, Replace all Bolts & re-tap hole, Replace gasket

Monitoring Well Inspection Form

Well ID: SW-05	**Date:** 4-26-17
Inspection Conducted By: J. Cook	

As-built depth of well?	Measured depth of well?				Difference?	
Condition of bottom of well?	Soft tag?	Yes	No	Firm tag?	Yes	No

Maintenance Item:	Yes	No	Comment:
Well is visible and accessible?	✓	No	
Surrounding area is free of vegetation, waste, and debris	✓	No	
Well name is present and legible on exterior of well?	✓	No	
Protective casing is not damaged or corroded?	✓	No	
Guard posts (if present) are in good condition?	Yes	No	
Is the area round the well flooded?	Yes	✓	
Surface pad exists and is not cracked or deteriorated?	✓	No	
Well vault (if present) is in good condition? (i.e., no standing water and bolts are tight)	✓	No	
Does vault gasket need to be replaced?	Yes	✓	Outside diameter of vault gasket?
Well tag is present within well monument and is legible? (well name/number, top-of-casing elevation (in msl), total as-built depth)	Yes	✓	
Locks are present and in good condition (i.e., no rust)?	Yes	✓	
Well cap is present and is watertight?	✓	No	
Top-of-casing survey mark exists and is legible?	✓	■	

Additional comments:

Replace well tag.

EMCO vault.

Second Quarter 2017 Groundwater Elevation Data

Field Personnel: R. SABATER

Field Personnel:

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
3880			151.50		
4948			282.25		
3830Q			229.72		
3830S			229.32		
3831Q	4/18/17	1022	191.05	198.30	
3850M	4/20/17	1002	218.95	228.15	
3850N			197.12		
3850Q			191.50		
3850R			191.19		
3850S			Blocked		
3850T	4/19/17	1428	215.52	224.58	
3850U	4/19/17	1414	218.94	228.25	
3850V			225.70		
3850W			225.41		
3851M			185.21		
3851N			184.37		
3852F	4/18/17	1001	142.77	148.03	
3852G	4/18/17		143.46		BOLT ON LID STUCK. RETURN LATER
3852H	4/18/17	1010	146.25	149.65	
3852L	4/18/17	0945	156.93	164.95	
3852M	4/18/17	0915	132.62	136.91	
3852N	4/18/17	0921	137.32	137.94	
3860J			197.06		
3860K			204.45		
3861D			157.67		
3861E			156.82		
3861F			153.70		
3862D	4/18/17	0831	127.27	133.36	

Second Quarter 2017 Groundwater Elevation Data

Field Personnel: R. SABATER

Field Personnel:

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
3862E	4/18/17	0835	124.68	130.38	
3870D			162.47		
3871H	4/18/17	0846	131.22	138.19	
3871J	4/18/17	0852	127.26	132.80	
3872L	4/18/17	0808	105.09	110.68	
3872M	4/18/17	0812	100.88	106.58	
3872N	4/18/17	~~0820~~ 0820	102.68	108.49	
3872Q	4/18/17	0749	114.70	120.81	
3872R	4/18/17	0754	114.93	120.87	
3872S	4/18/17	0757	111.32	117.30	
4949C			258.59		
SW-1			237.94		
SW-5			227.00		
A-1-CW02			216.20		
A-1-CW03R			219.75		
A-1-CW04			211.19		
A-1-CW05			209.70		
A-1-CW07	4/19/17	1445	211.63	DRY	TD = 210.54
A-1-CW08	4/19/17	1435	217.86	226.60	
A-1-CW09			209.92		
B-1-CW11			144.80		
B-1-CW12			151.22		
B-1-CW13			192.03		
B-1-CW16			179.70		
B-1-CW17			135.64		
B-1-CW20			134.75		
B-1-CW25			178.16		
B-1-CW27			172.68		

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
B-1-CW28			185.40		
B-1-CW29			165.43		
B-5-CW02			226.37		
B-5-CW03			226.07		
B-6-CW02			227.02		
B-6-CW05			250.73		
B-6-CW08			252.66		
B-6-CW09			253.39		
B-6-CW10	4/19/17	1506	238.34	247.00	
B-6-CW14	4/19/17	1458	232.58	240.76	
B-6-CW16			242.94		
B-6-CW17			266.63		
C-1-CW02			264.23		
C-1-CW03			264.43		
C-1-CW05			246.39		
C-1-CW06			Dry		
C-1-CW07	4/19/17	0939	256.78	264.71	
C-1-CW08	4/19/17	0930	256.61	264.40	
MW-01			Dry		
MW-02			Dry		
MW-03			249.09		
MW-04			222.90		
MW-05			235.25		
MW-06			208.95		
MW-07			229.81		
MW-08			235.16		
Tt-PW-01			150.00		
Tt-PW-02			141.49		

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
OW-VO1A-R			158.68		
OW-VO1B-R			157.55		
OW-VO2A-R			164.15		
OW-VO2B-R			164.15		
OW-VO3A-R			168.45		
OW-VO3B-R			167.69		
OW-VO4A			179.48		
OW-VO4B			173.89		
OW-VO5A			185.92		
OW-VO5B			180.12		
OW-VO6A			194.22		
OW-VO6B			193.80		
OW-VO7A			205.32		
OW-VO7B			201.40		
OW-VO8A					
OW-VO8B					

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
3880	4/18/17	0735	151.50	157.24	TOC
4948			282.25		
3830Q	4.18.17	1501	229.72	235.16	BTOC
3830S	4.18.17	1510	229.32	235.31	BTOC
3831Q	RS		191.05		
3850M	RS		218.95		
3850N	4-20.17	1111	197.12	203.31	BTOC
3850Q	4-20.17	1113	191.50	198.88	Top of sounding tube
3850R	4.20.17	1114	191.19	198.35	BTOC
3850S	~~4.18.17~~		Blocked	~~235.31~~	~~BTOC~~
3850T	RS		215.52		
3850U	RS		218.94		
3850V	4-18-2017	0955	225.70	233.75	TOP of sounding tube
3850W	4-18-2017	1343	225.41	233.45	Top of sounding tube
3851M	4.14.17	1012	185.21	191.19	TOC
3851N	4.14.17	1009	184.37	190.49	TOC
3852F	RS		142.77		
3852G	RS		143.46		
3852H	RS		146.25		
3852L	RS		156.93		
3852M	RS		132.62		
3852N	RS		137.32		
3860J	~~4/18/17~~ ~~0801~~	0801	197.06	203.34	TOC
3860K	4-18-17	1028	204.45	212.21	TOC
3861D	4-19-17	0940	157.67	164.20	TOC
3861E	4.19.17	0944	156.82	163.60	TOC
3861F	4.19.17	0937	153.70	159.94	BTOC
3862D	RS		127.27		

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
3862E	RS	[illegible]	124.68		TOC
3870D	4-18-2017	0747	162.47	169.28	TOC
3871H	RS		131.22		
3871J	RS		127.26		
3872L	RS		105.09		
3872M	RS		100.88		
3872N	RS		102.68		
3872Q	RS		114.70		
3872R	RS		114.93		
3872S	RS		111.32		
4949C			258.59		
SW-1	4/18/17	0815	237.94	244.75	TOC
SW-5	4/18/17	0827	227.00	235.37	TOC
A-1-CW02	4.19.17	1045	216.20	222.80	TOC
A-1-CW03R	4.19.17	1042	219.75	226.96	TOC
A-1-CW04	4.19.17	1403	211.19	217.52	TOC
A-1-CW05	4.19.17	1414	209.70	216.18	TOC
A-1-CW07	RS		211.63		
A-1-CW08	RS		217.86		
A-1-CW09	4-18-2017	1217	209.92	217.67	TOC
B-1-CW11	4.19.17	0737	144.80	150.40	TOC
B-1-CW12	4.19.17	0735	151.22	155.58	TOC
B-1-CW13	4.20.17	0817	192.03	200.65	TOC
B-1-CW16	4.19.17	1029	179.70	186.94	TOC
B-1-CW17	4.19.17	0909	135.64	140.51	TOC
B-1-CW20	4.19.17	0921	134.75	140.55	TOC
B-1-CW25	4.19.17	0820	178.16	185.95	TOC
B-1-CW27	4.19.17	0816	172.68	179.36	TOC

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
B-1-CW28	4/20/17	08 30	185.40	191.69	TOC
B-1-CW29	4.19.2017	0757	165.43	171.26	TOC TD 171.65'
B-5-CW02	4.18.2017	1432	226.37	232.60	BTOC
B-5-CW03	4/18/17	1440	226.07	228.35	DRY TD
B-6-CW02	4-18-2017	1006	227.02	234.04	BTOC
B-6-CW05	4/18/17	1323	250.73	258.07	TOC
B-6-CW08	4.19.2017	1256	252.66	259.40	BTOC
B-6-CW09	4.19.2017	1259	253.39	257.95	top of sounding tube, DRY
B-6-CW10	RS		238.34		
B-6-CW14	RS		232.58		
B-6-CW16	4.18.2017	1400	242.94	250.78	TOC
B-6-CW17	4.19.2017	1331	266.63	271.93	BTOC
C-1-CW02	4-18-17	1257	264.23	270.59	TOC
C-1-CW03	4.18.17	1300	264.43	271.01	TOC
C-1-CW05	4-18-17	1231	246.39	251.71	TOC
C-1-CW06	4.18.17	1240	Dry	247.12	DRY TD
C-1-CW07	RS		256.78		
C-1-CW08	RS		256.61		
MW-01	4-18-2017	0901	Dry	240.25	DRY TD
MW-02	4-18-2017	0855	Dry	238.71	DRY TD
MW-03	~~0844~~ 4/18/17	0845	249.09	257.09	TOC
MW-04	4-18-2017	0927	222.90	240.90	TOC
MW-05	4/18/17	0909	235.25	243.04	TOC
MW-06	4/18/17	0915	208.95	241.04	DRY TD
MW-07	4.18.17	0944	229.81	243.26	243.26 TOC
MW-08	4/18/17	0934	235.16	237.82	TOC
Tt-PW-01	4.20.17	1131	150.00	156.66	BTOC
Tt-PW-02	4/20/17	1148	141.49	147.45	BTOC

Second Quarter 2017 Groundwater Elevation Data

Field Personnel:_____

Field Personnel:_____

Well ID	Date Measured	Time Measured	2016 Depth to groundwater (feet btoc)	2017 Depth to groundwater (feet btoc)	Comments
OW-VO1A-R	4.19.17	0853	158.68	167.62	BTOC
OW-VO1B-R	4.19.17	0857	157.55	162.48	BTOC
OW-VO2A-R	4.19.17	0843	164.15	179.15	BTOC
OW-VO2B-R	4.19.17	0847	164.15	164.71	BTOC
OW-VO3A-R	4.19.17	0827	168.45	176.72	BTOC
OW-VO3B-R	4.19.17	0830	167.69	169.19	BTOC
OW-VO4A	4.20.17	0852	179.48	185.85	Top of sounding tube
OW-VO4B	4.20.17	0855	173.89	182.23	Top of sounding tube
OW-VO5A	4.20.17	1103	185.92	199.13	Top of sounding tube
OW-VO5B	4.20.17	1104	180.12	188.40	Top of sounding tube
OW-VO6A	4.20.17	1110	194.22	202.23	Top of sounding tube
OW-VO6B	4.20.17	1109	193.80	197.72	Top of sounding tube
OW-VO7A	4.20.17	1119	205.32	211.99	Top of Sounding tube
OW-VO7B	4.20.17	1125	201.40	209.95	Top of well cap
OW-VO8A	4.19.17	0955	~~[illegible]~~	192.61	BTOC
OW-VO8B	4.19.17	0958	—	191.44	BTOC

Light Board

B-1-CW30	4.19.17	0751	169.80	TOC
B-1-CW31	4.19.17	0744	170.59	TOC
B-1-CW32	4.19.17	0914	148.16	TOC
B-1-CW33	4.19.17	0807	189.80	TOC
B-1-CW34	4.19.17	0730	154.32	TOC

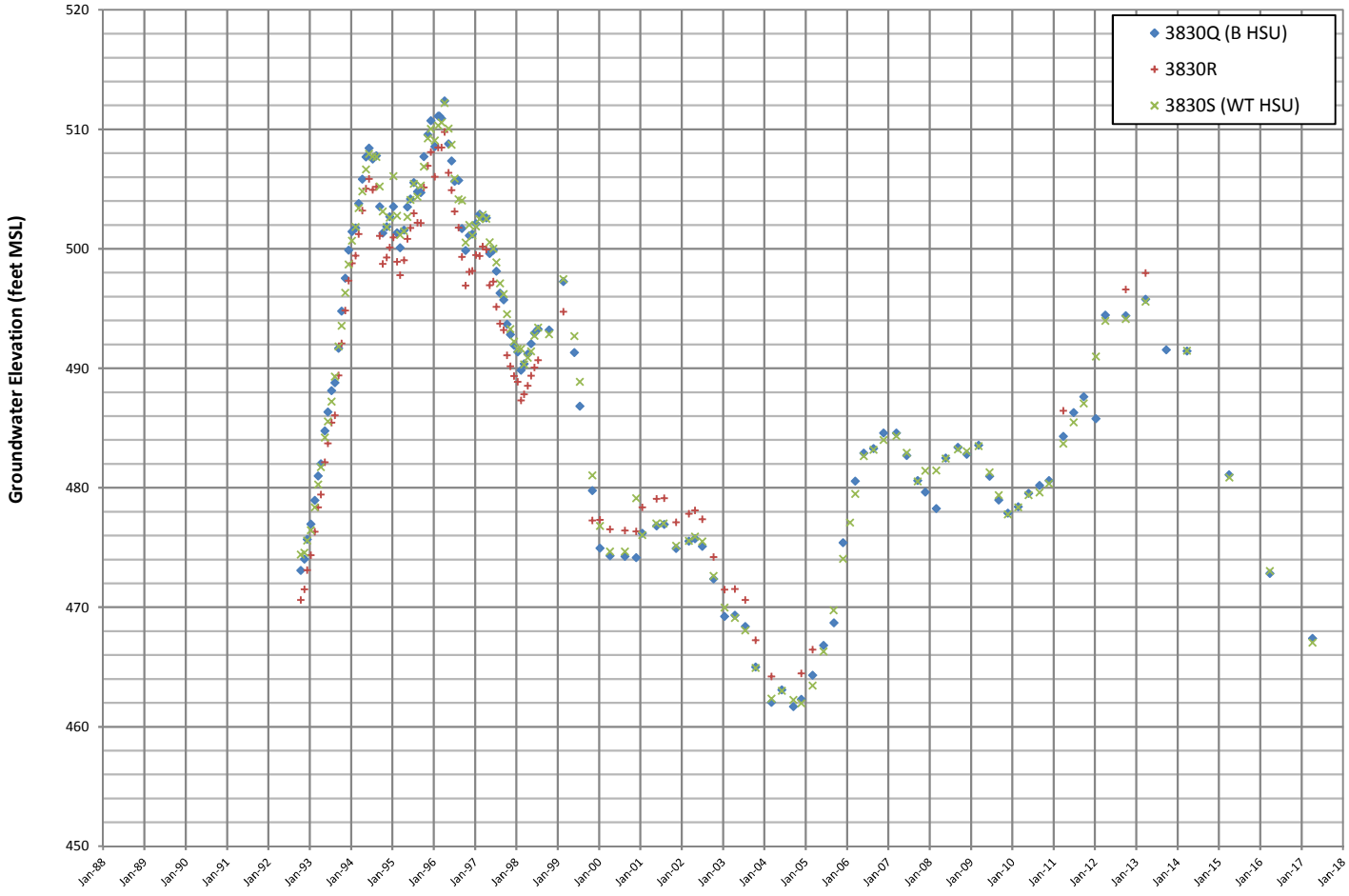
Appendix C
Hydrographs for Select Monitoring Wells

Annual Groundwater Monitoring Report, Second Quarter 2017

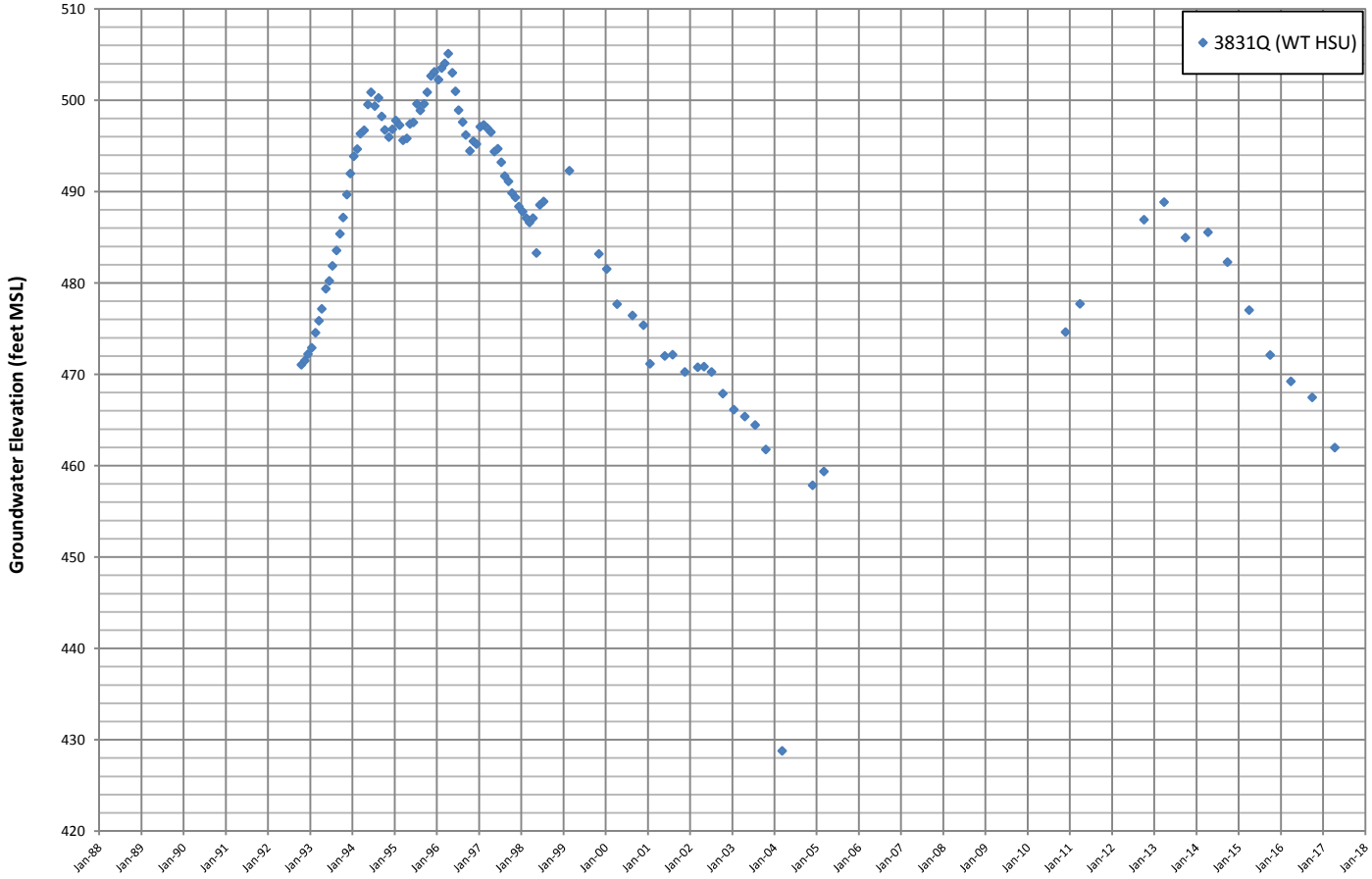
Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

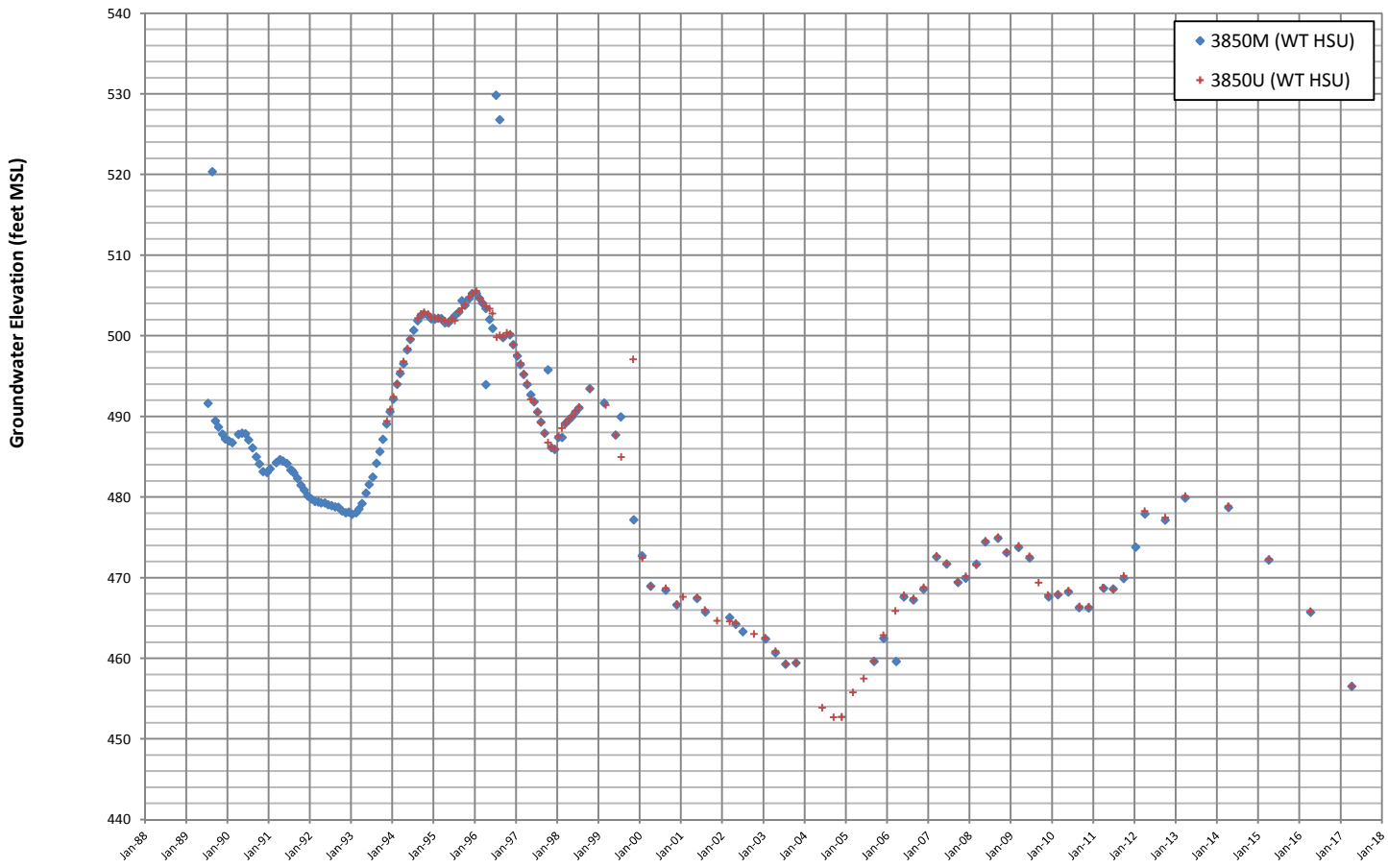
Appendix C
Graph C-1
Time Series Hydrograph - 3830Q, 3830R, and 3830S



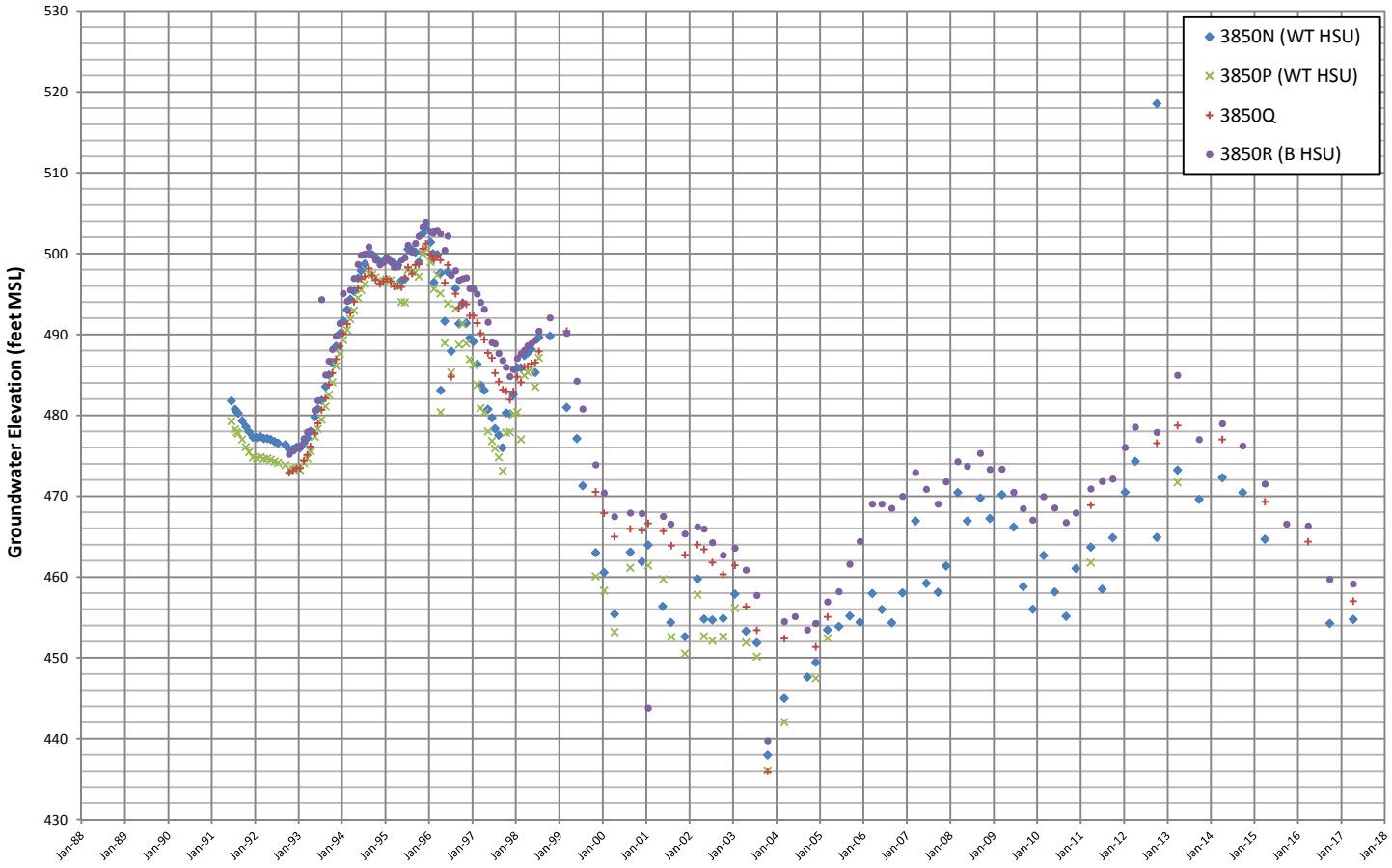
Appendix C
Graph C-2
Time Series Hydrograph - 3831Q



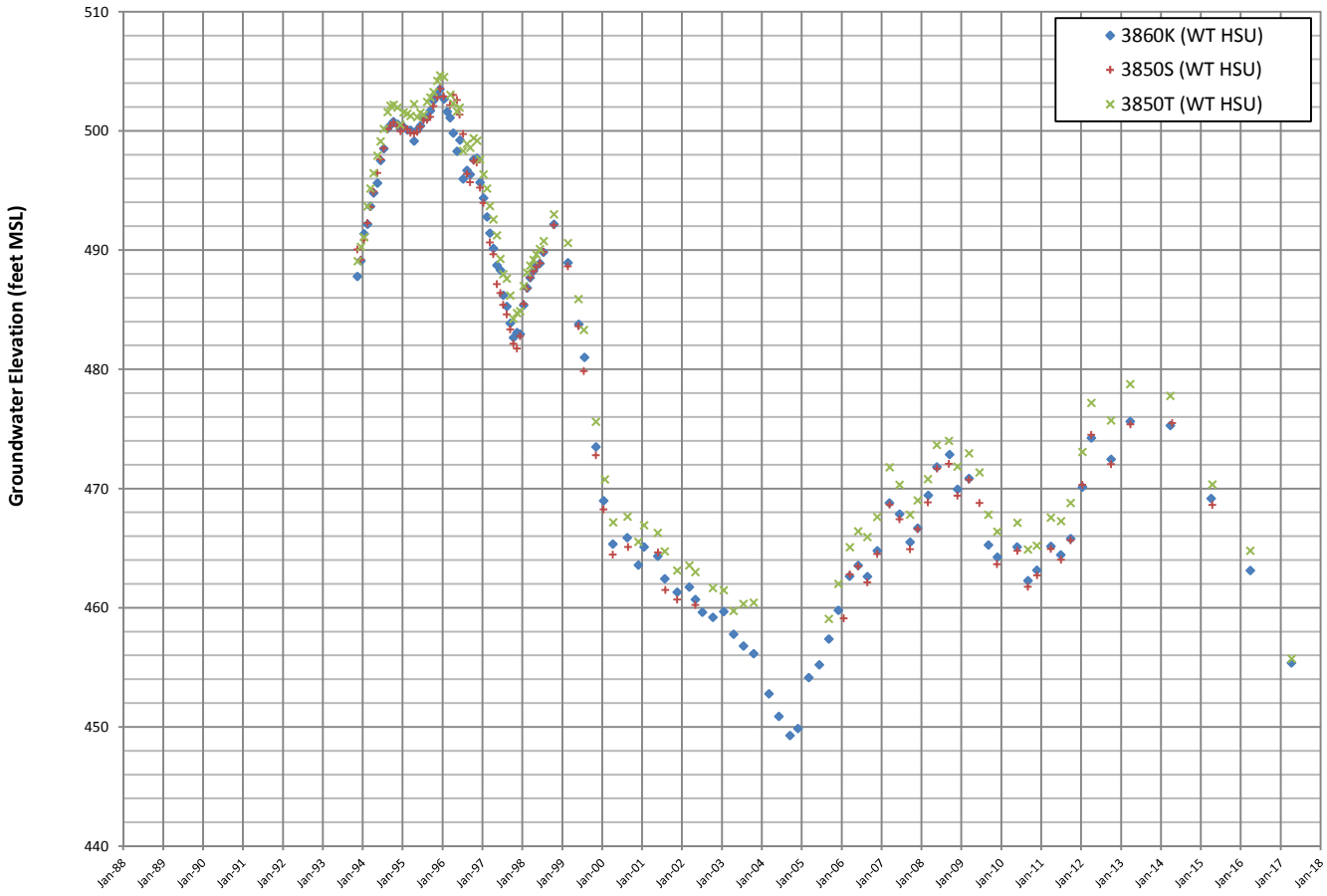
Appendix C
Graph C-3
Time Series Hydrograph - 3850M and 3850U



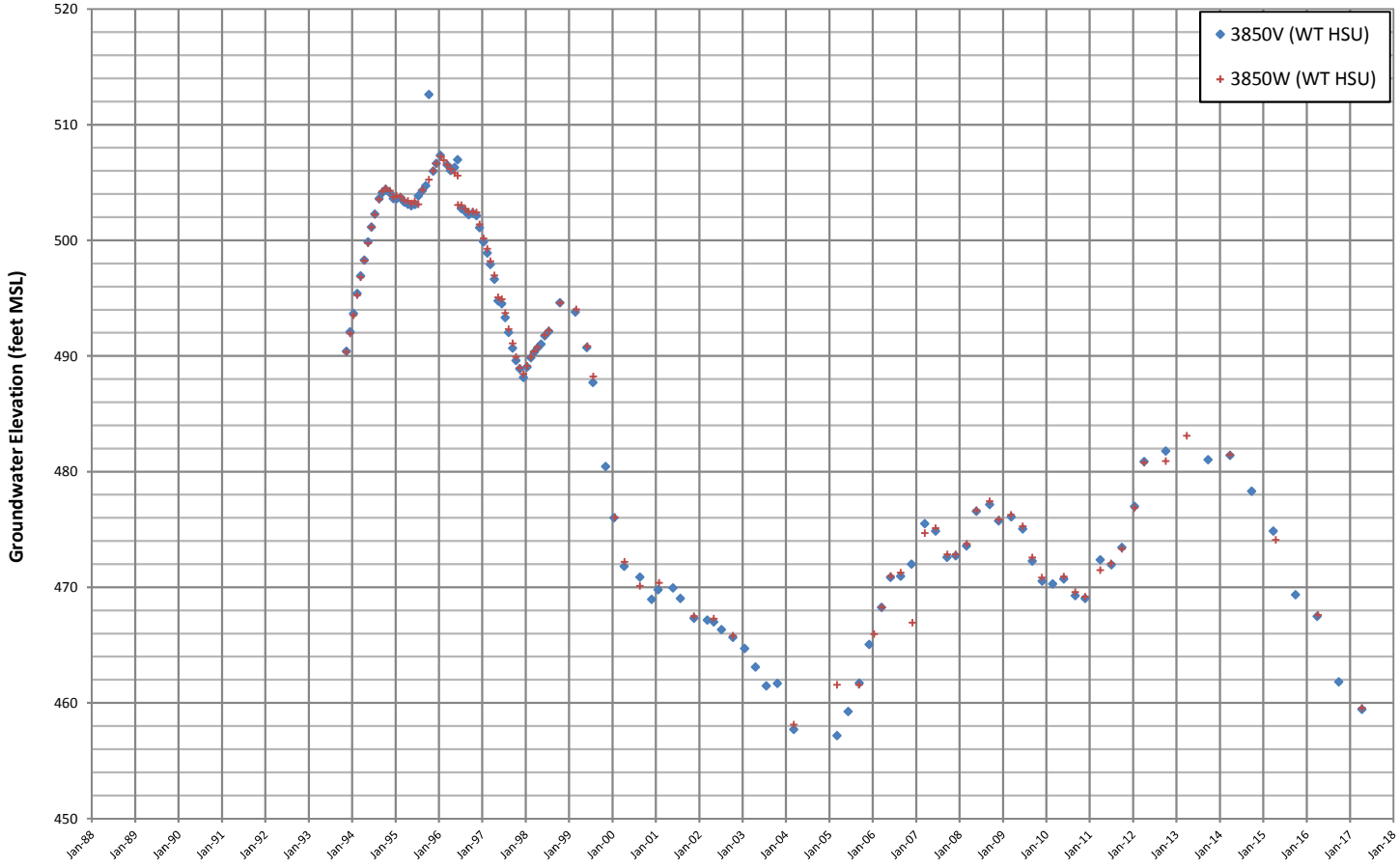
Appendix C
Graph C-4
Time Series Hydrograph - 3050N, 3850Q, 3850P, and 3850R



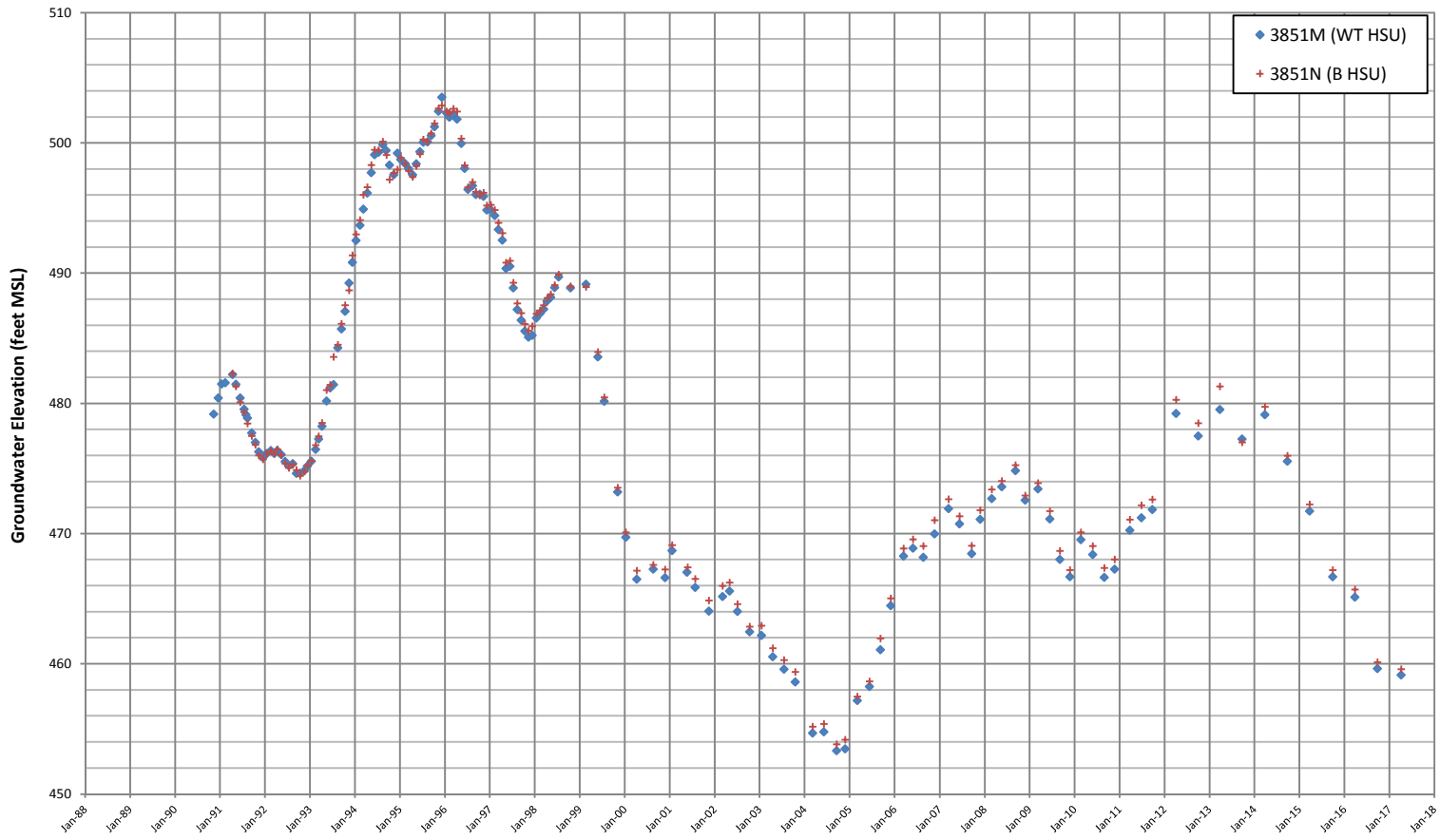
Appendix C
Graph C-5
Time Series Hydrograph - 3860K, 3850S, and 3850T



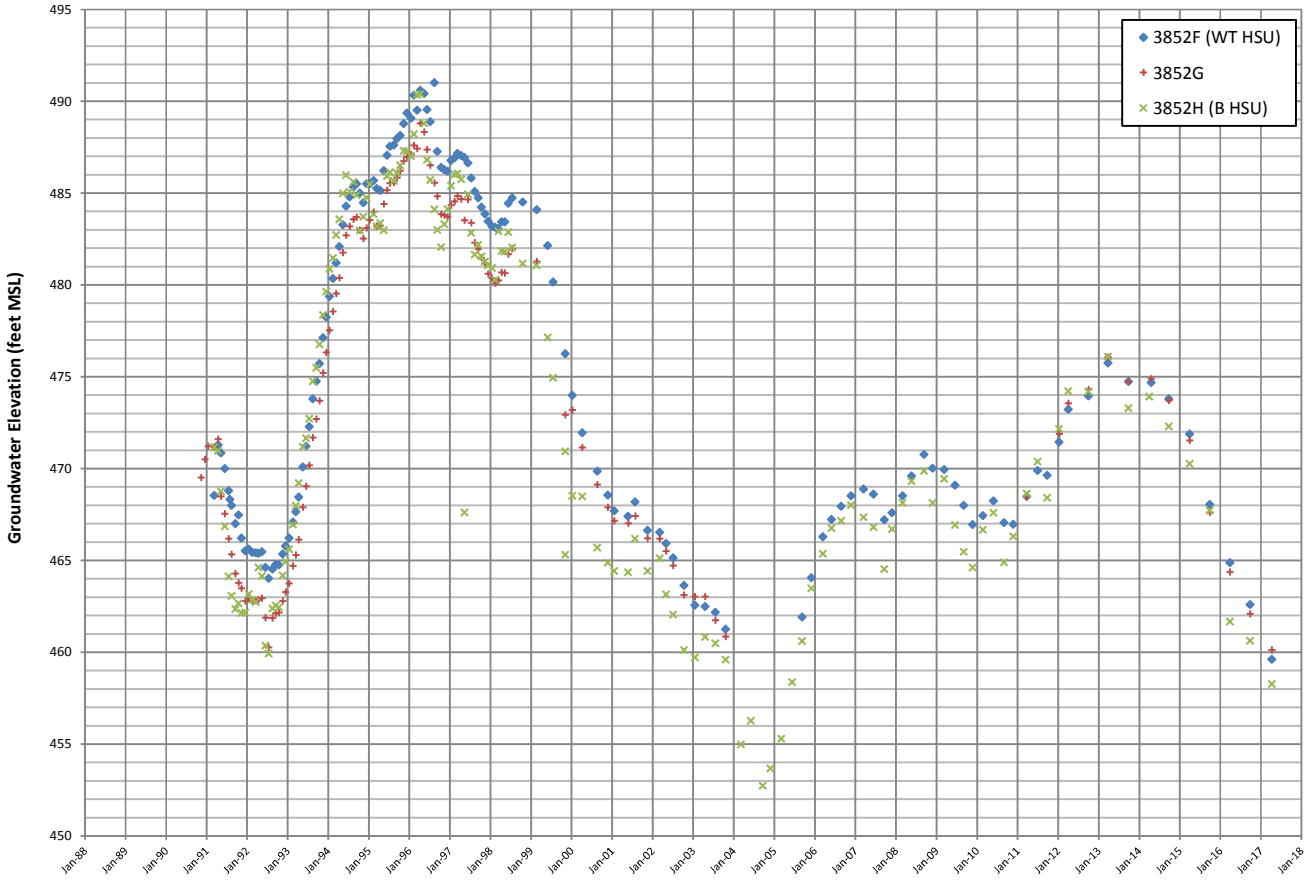
Appendix C
Graph C-6
Time Series Hydrograph - 3850V and 3850W



Appendix C
Graph C-7
Time Series Hydrograph - 3851M and 3851N

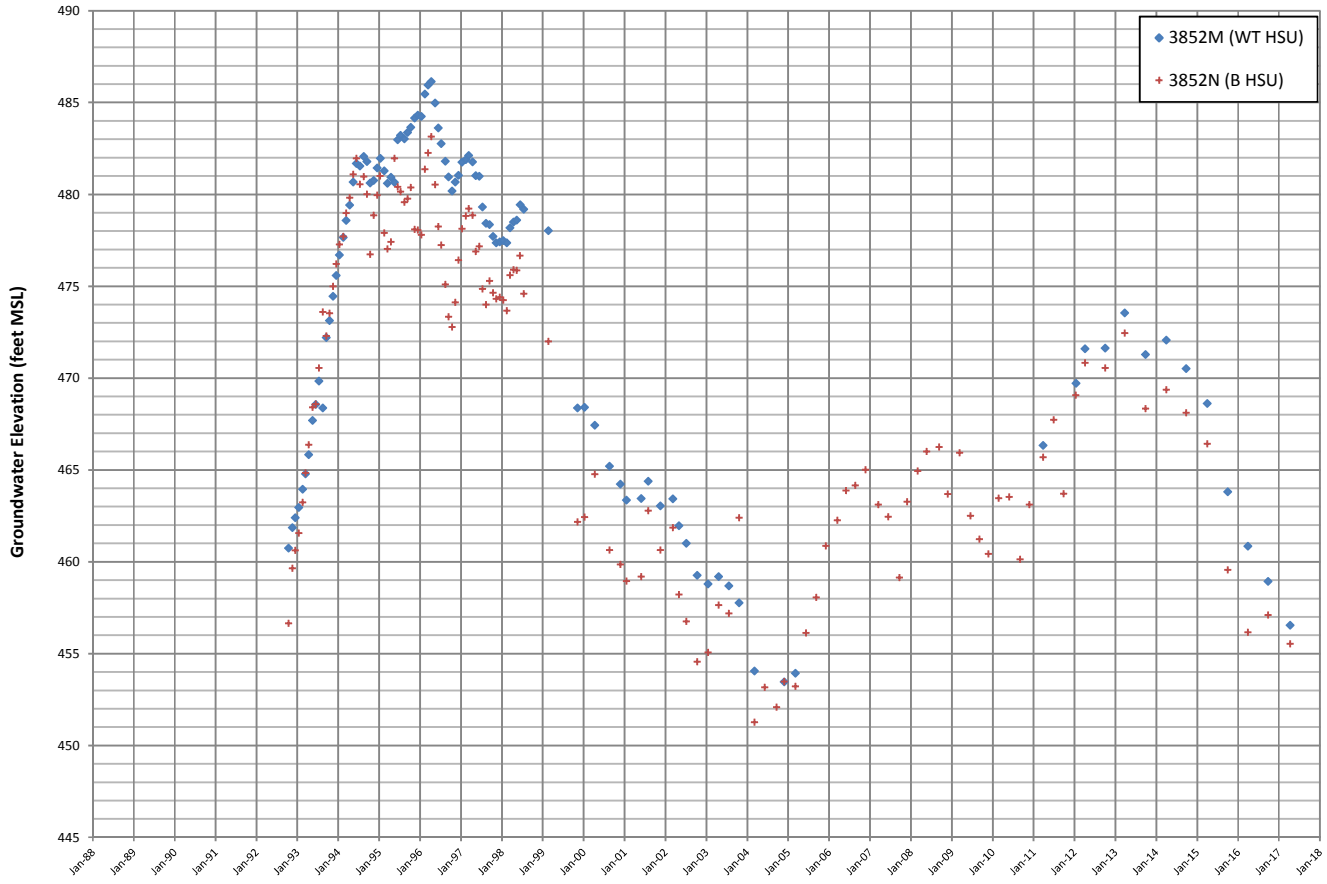


Appendix C
Graph C-8
Time Series Hydrograph - 3852F, 3852G, and 3852H

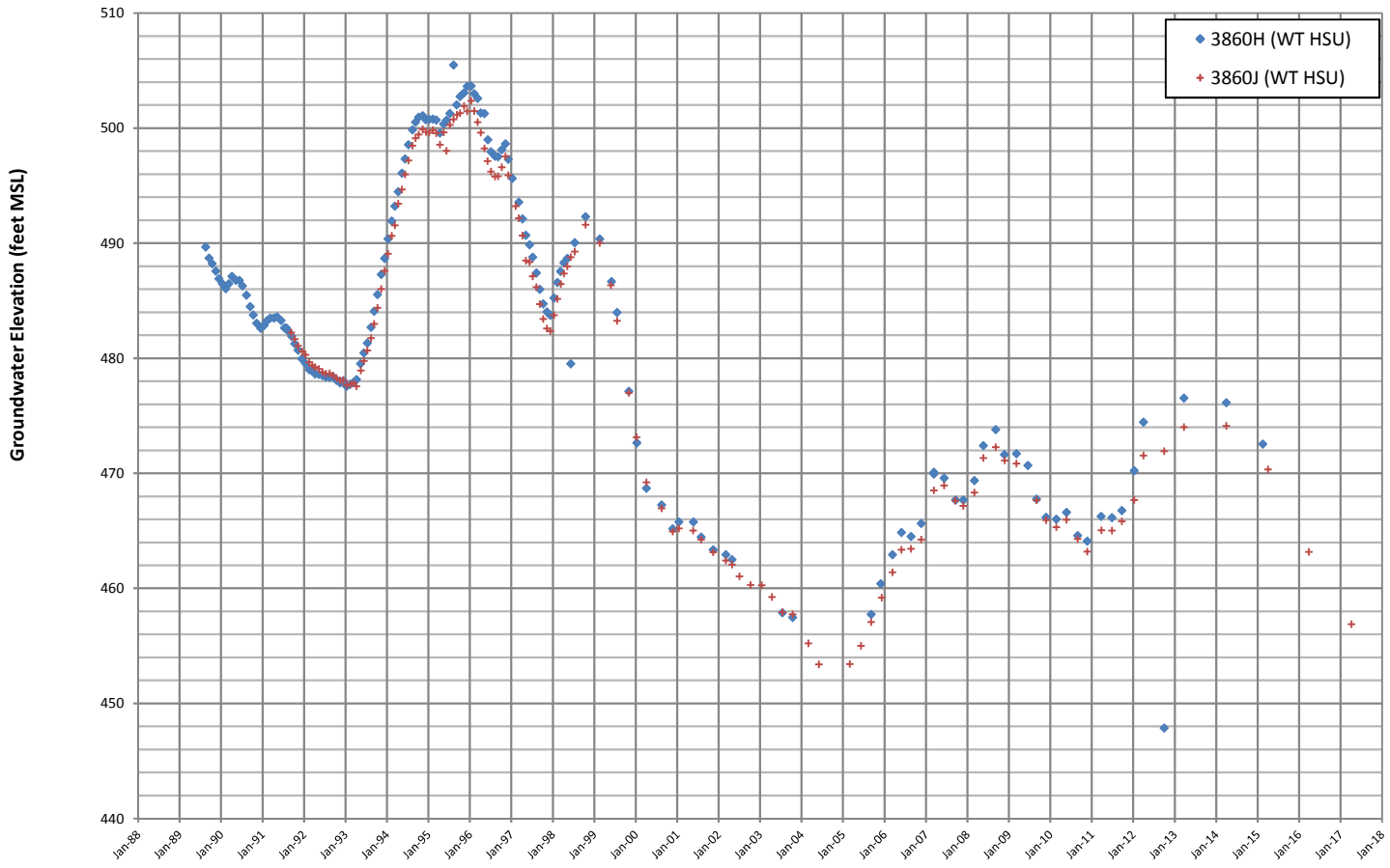


Appendix C
Graph C-9
Time Series Hydrograph - 3852J, 3852K, and 3852L

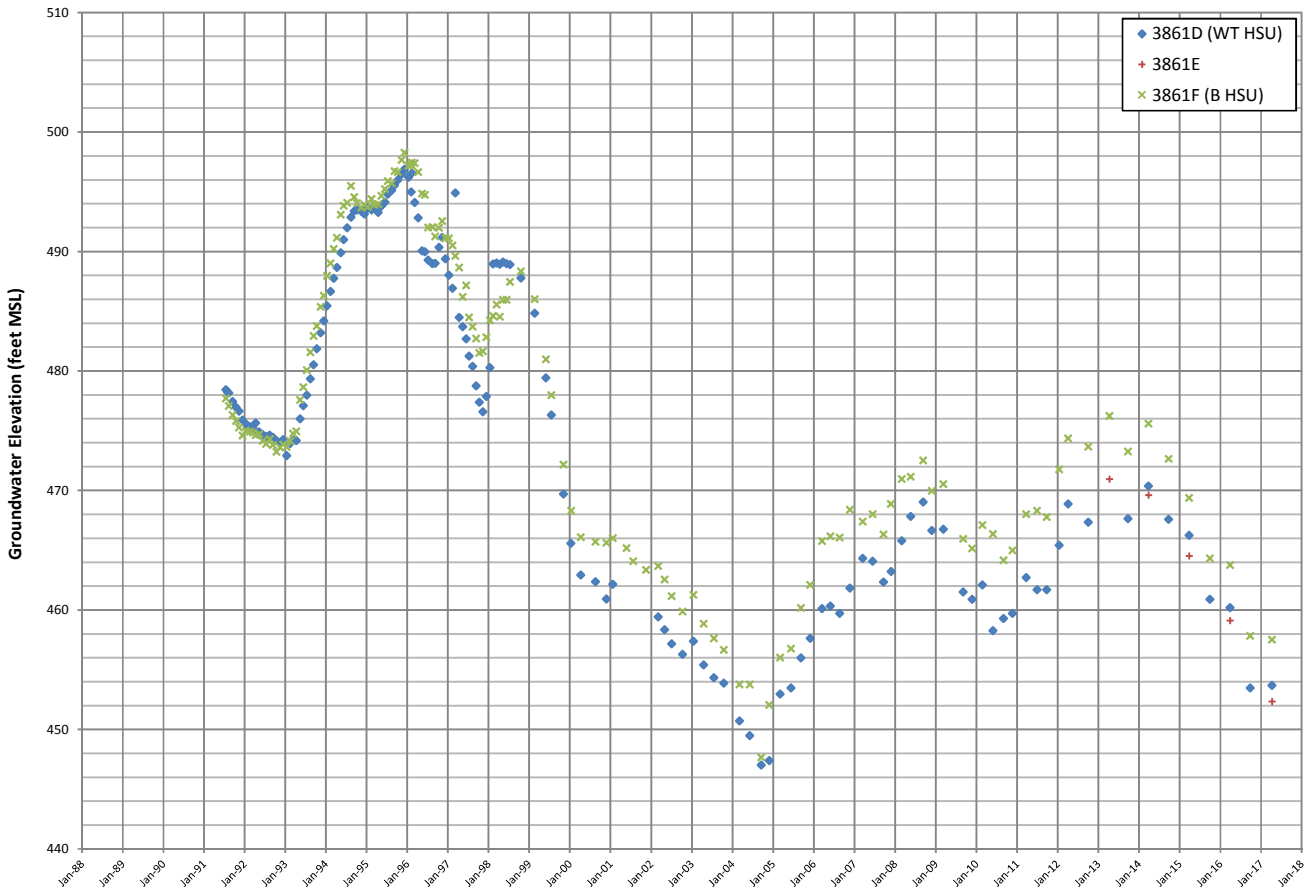
Appendix C
Graph C-10
Time Series Hydrograph - 3852M and 3852N



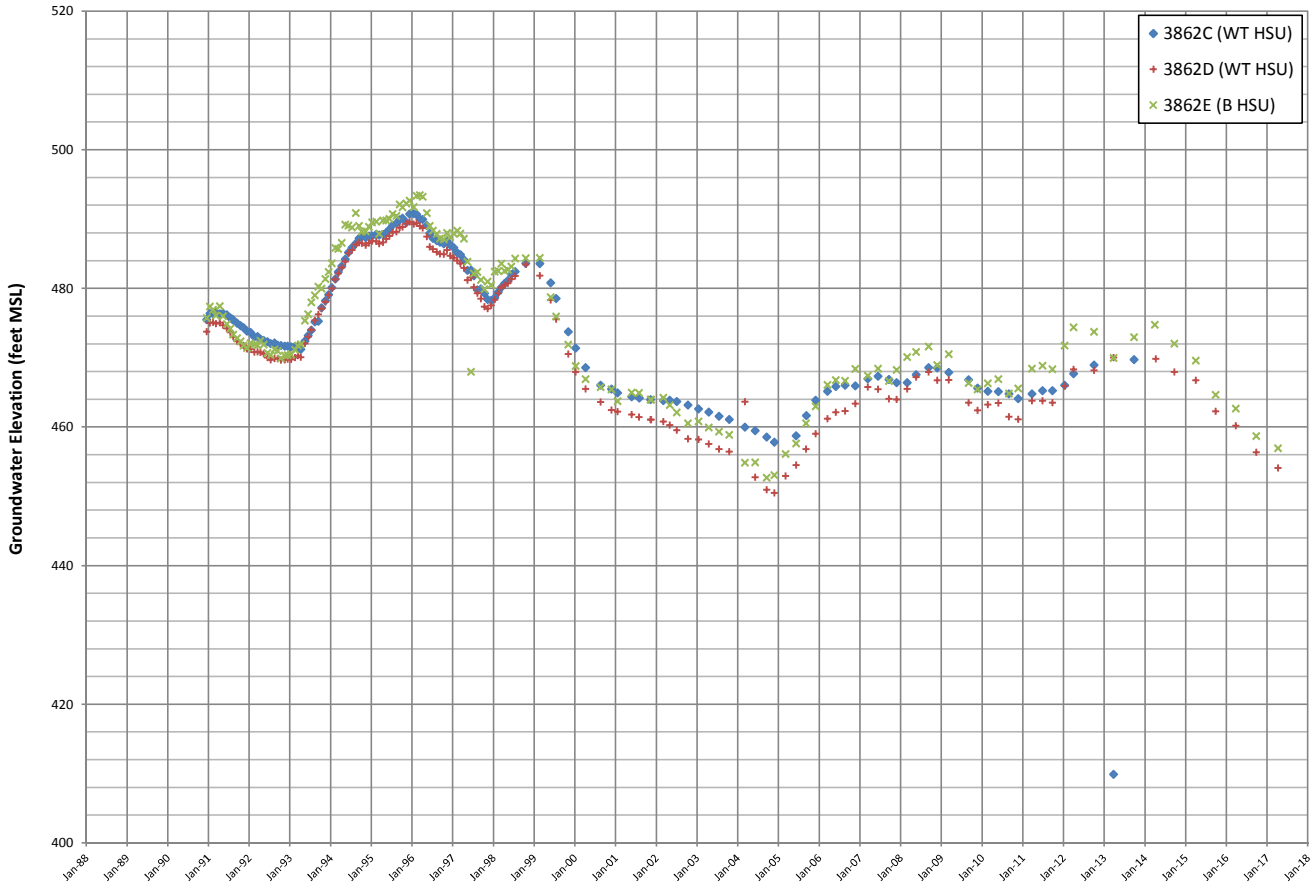
Appendix C
Graph C-11
Time Series Hydrograph - 3860H and 3860J



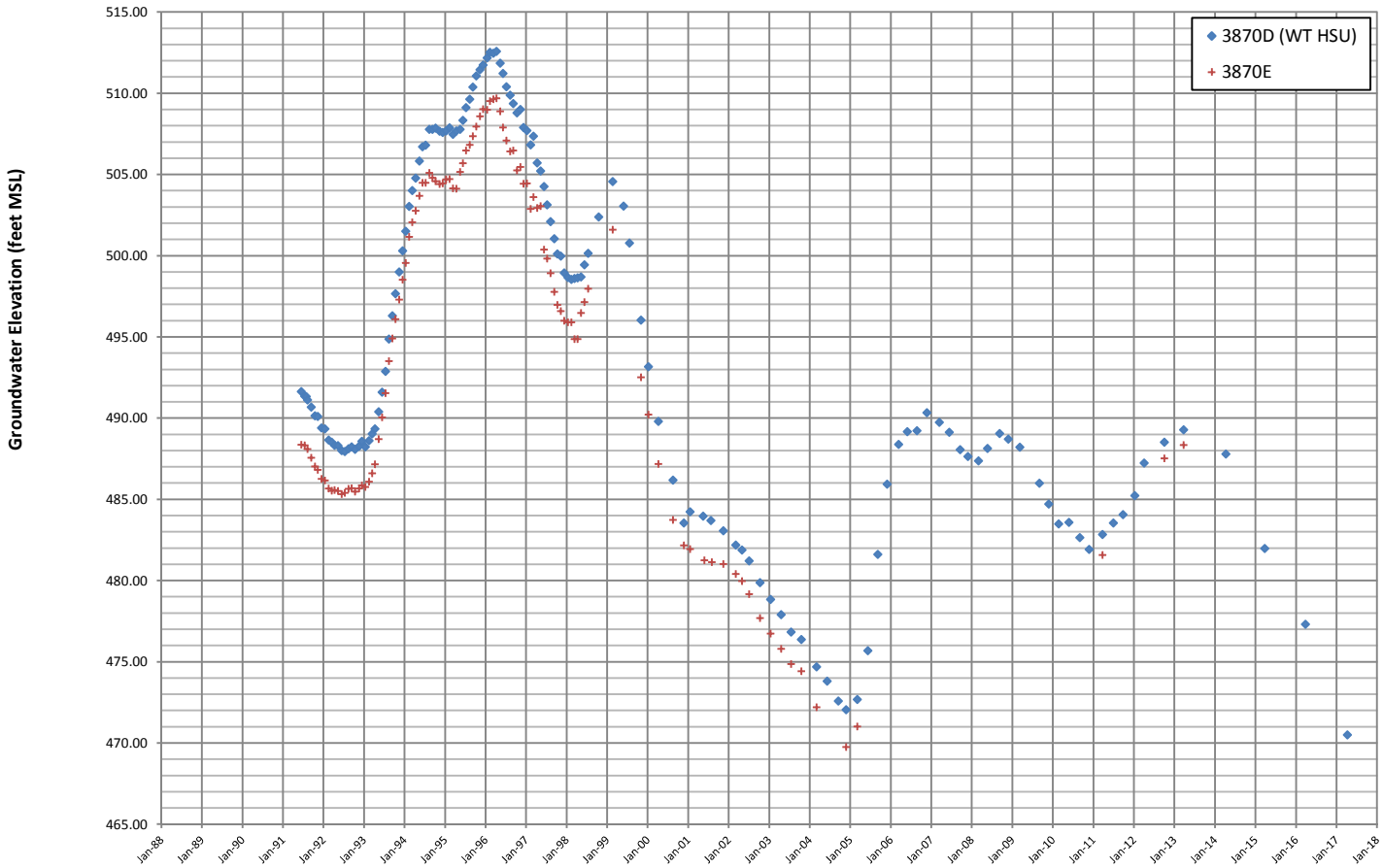
Appendix C
Graph C-12
Time Series Hydrograph - 3861D, 3861E, and 3861F



Appendix C
Graph C-13
Time Series Hydrograph - 3862C, 3862D, and 3862E

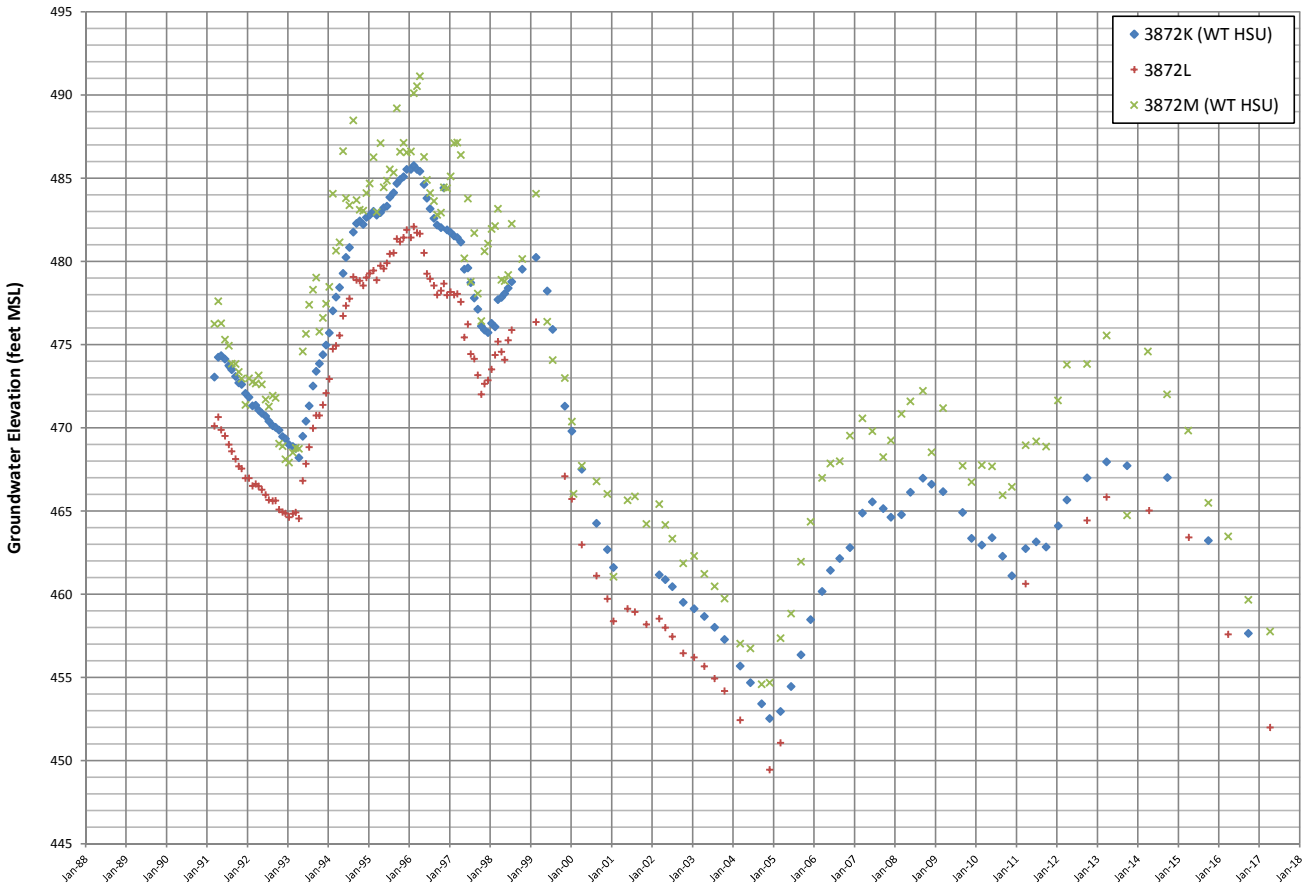


Appendix C
Graph C-14
Time Series Hydrograph - 3870D and 3870C

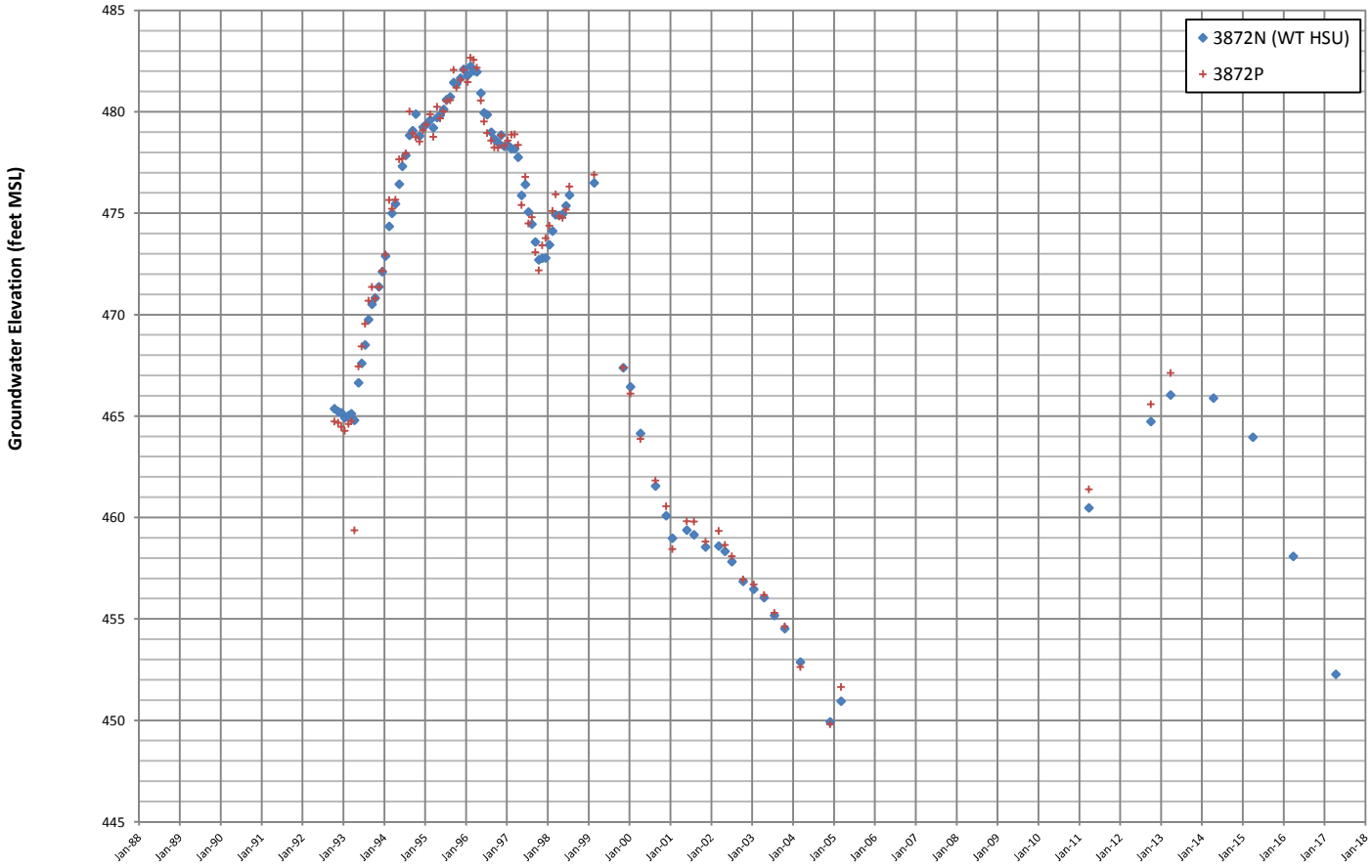


Appendix C
Graph C-15
Time Series Hydrograph - 3871G, 3871H, and 3871J

Appendix C
Graph C-16
Time Series Hydrograph - 3872K, 3872L, and 3872M

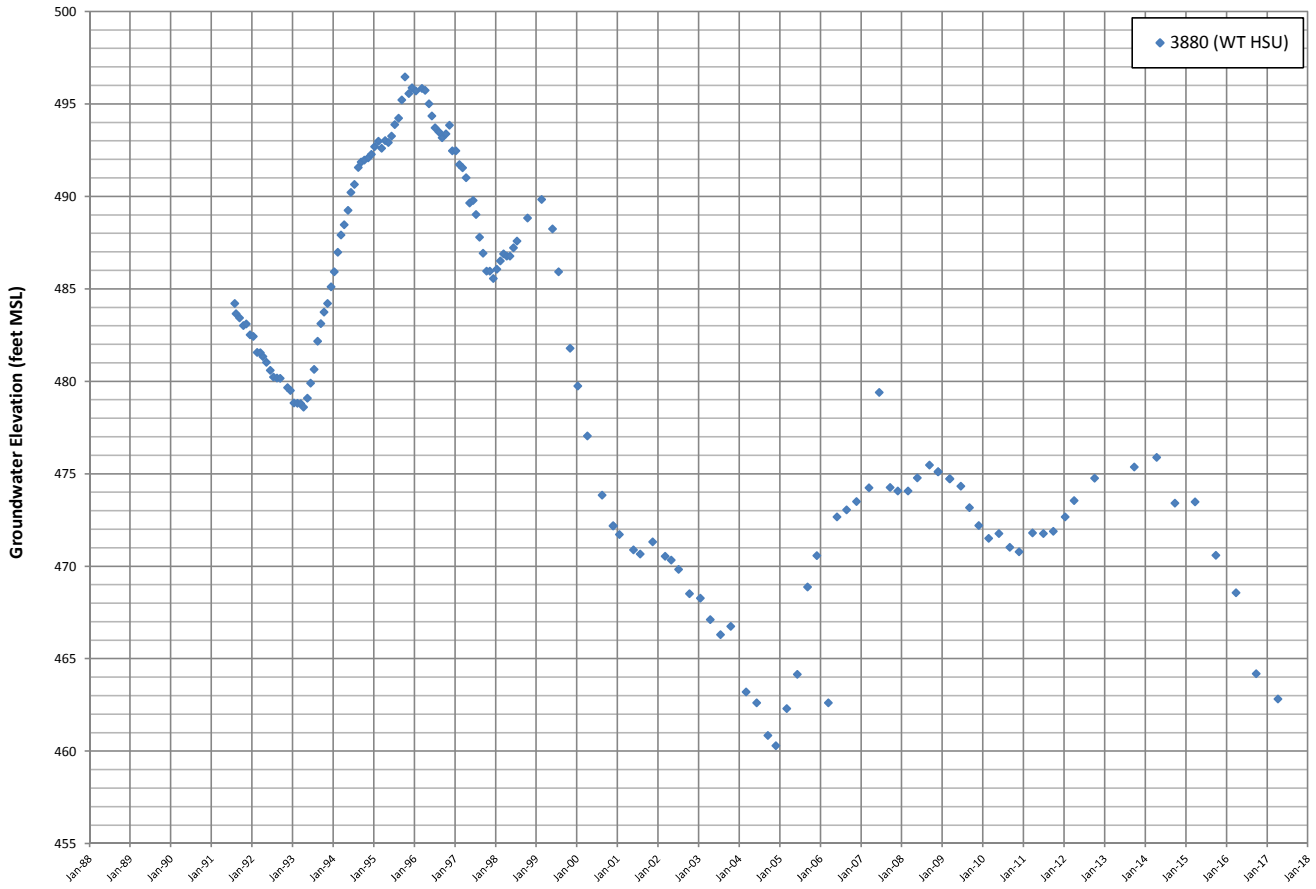


Appendix C
Graph C-17
Time Series Hydrograph - 3872N and 3872P

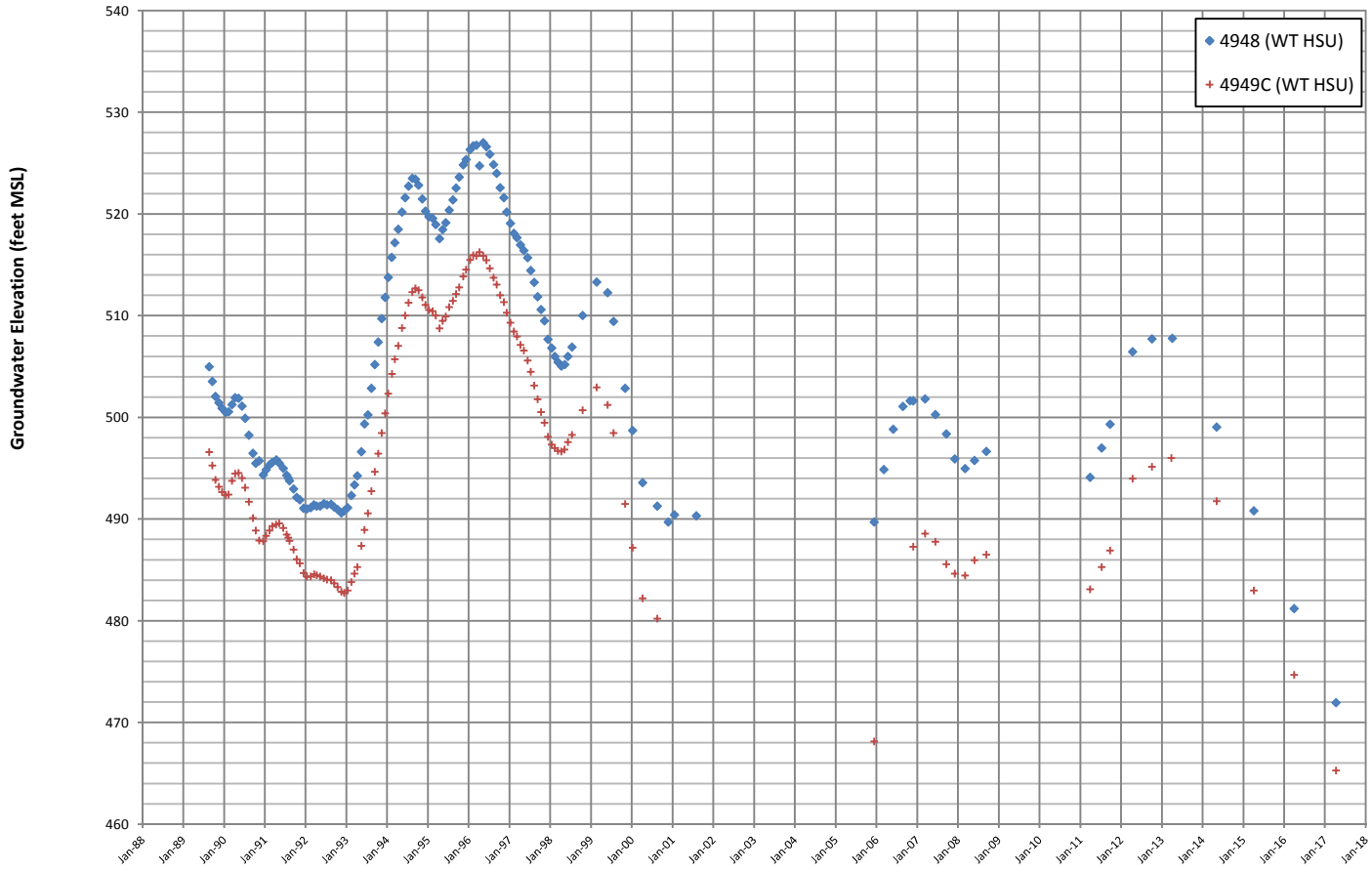


Appendix C
Graph C-18
Time Series Hydrograph - 3872Q, 3872R, and 3872S

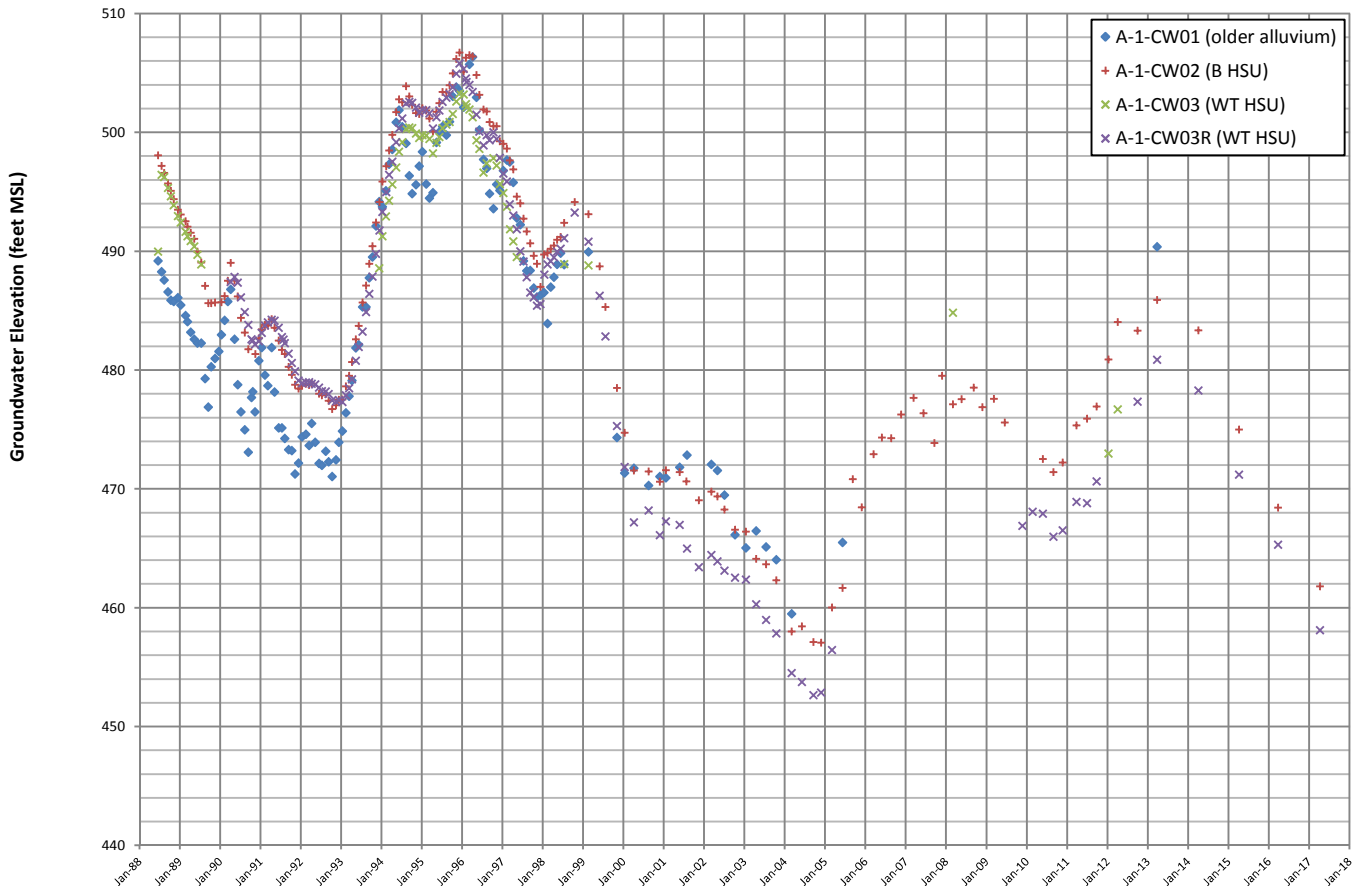
Appendix C
Graph C-19
Time Series Hydrograph - 3880



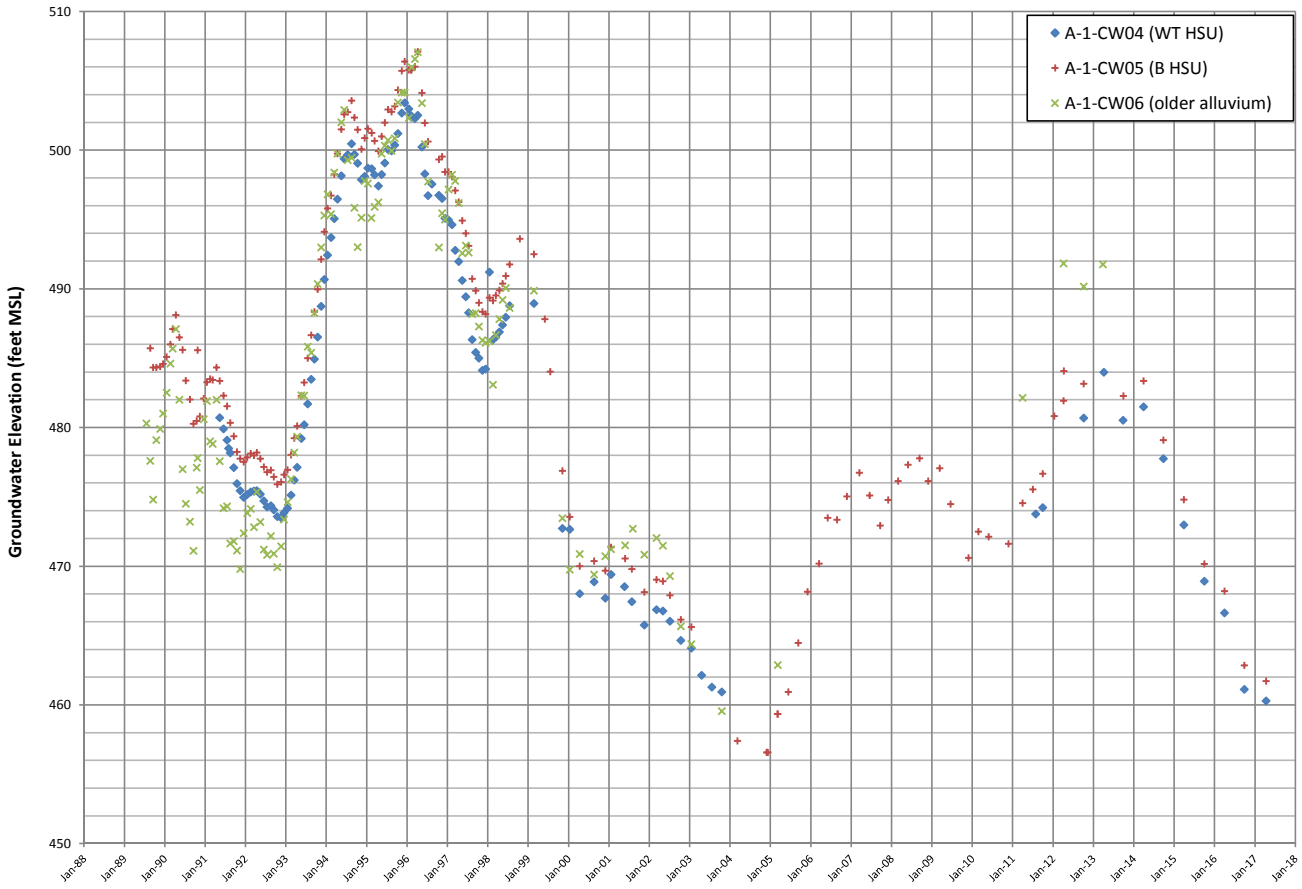
Appendix C
Graph C-20
Time Series Hydrograph - 4948 and 4949C



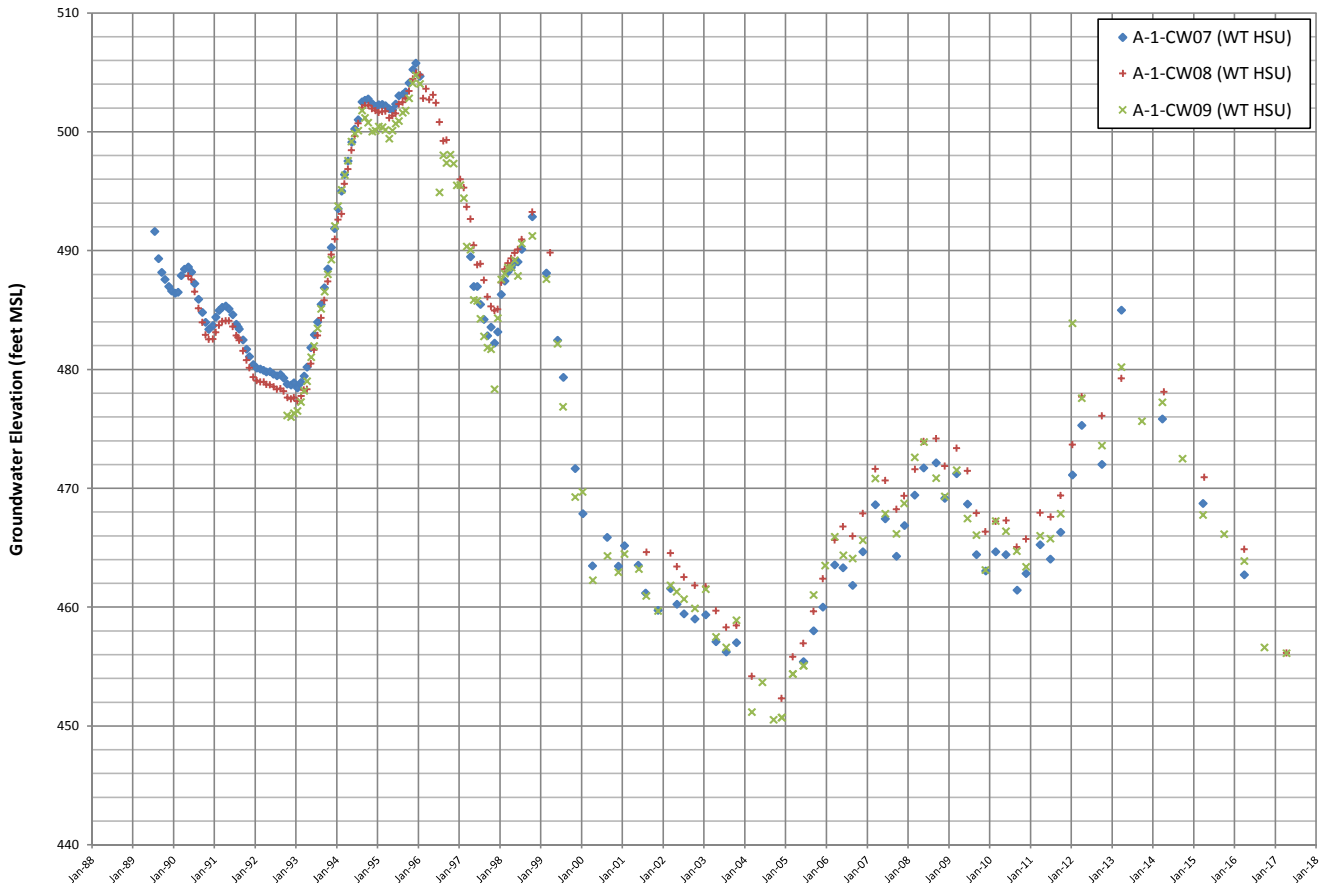
Appendix C
Graph C-21
Time Series Hydrograph - A-1-CW01, A-1-CW02, A-1-CW03, and A-1-CW03R



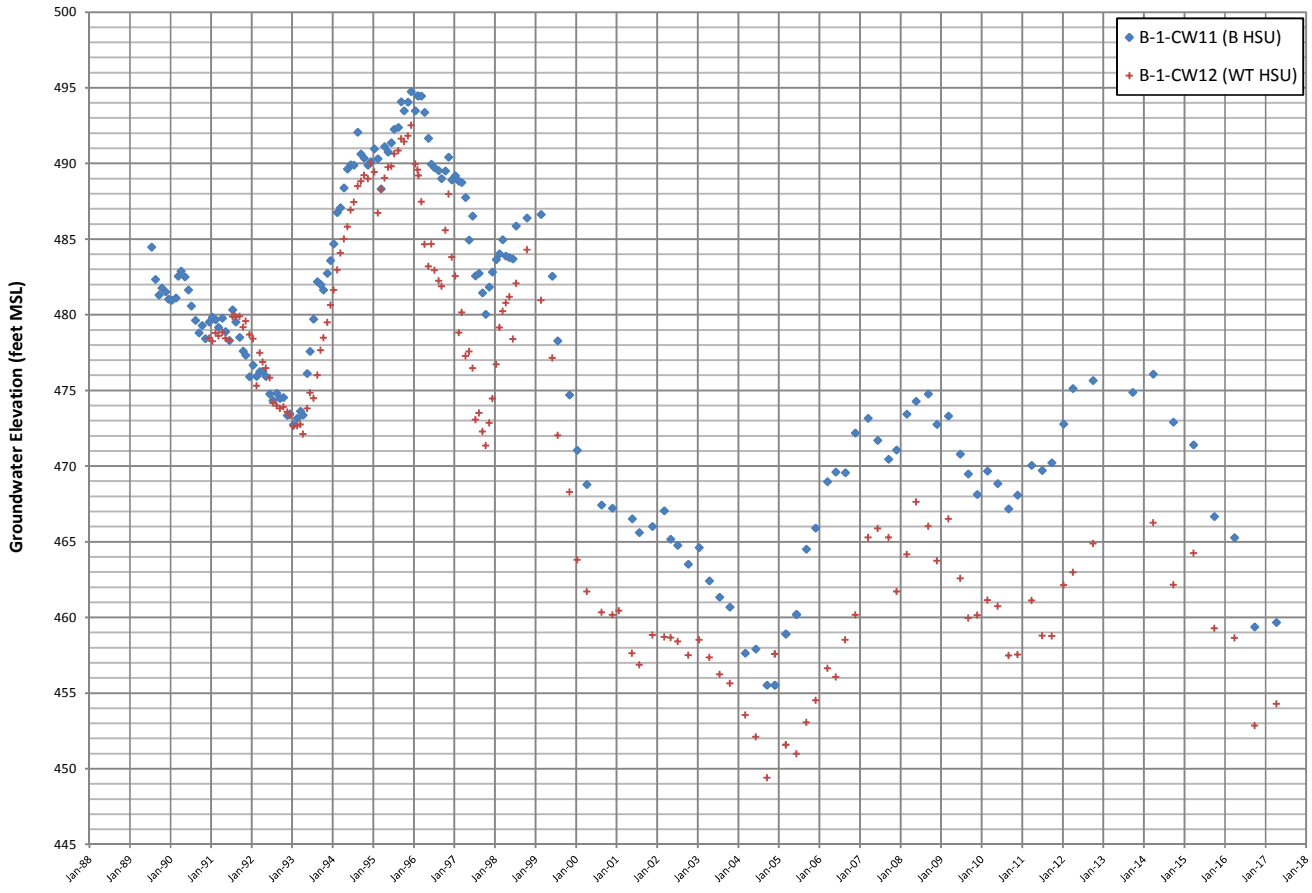
Appendix C
Graph C-22
Time Series Hydrograph - A-1-CW04, A-1-CW05, and A-1-CW06



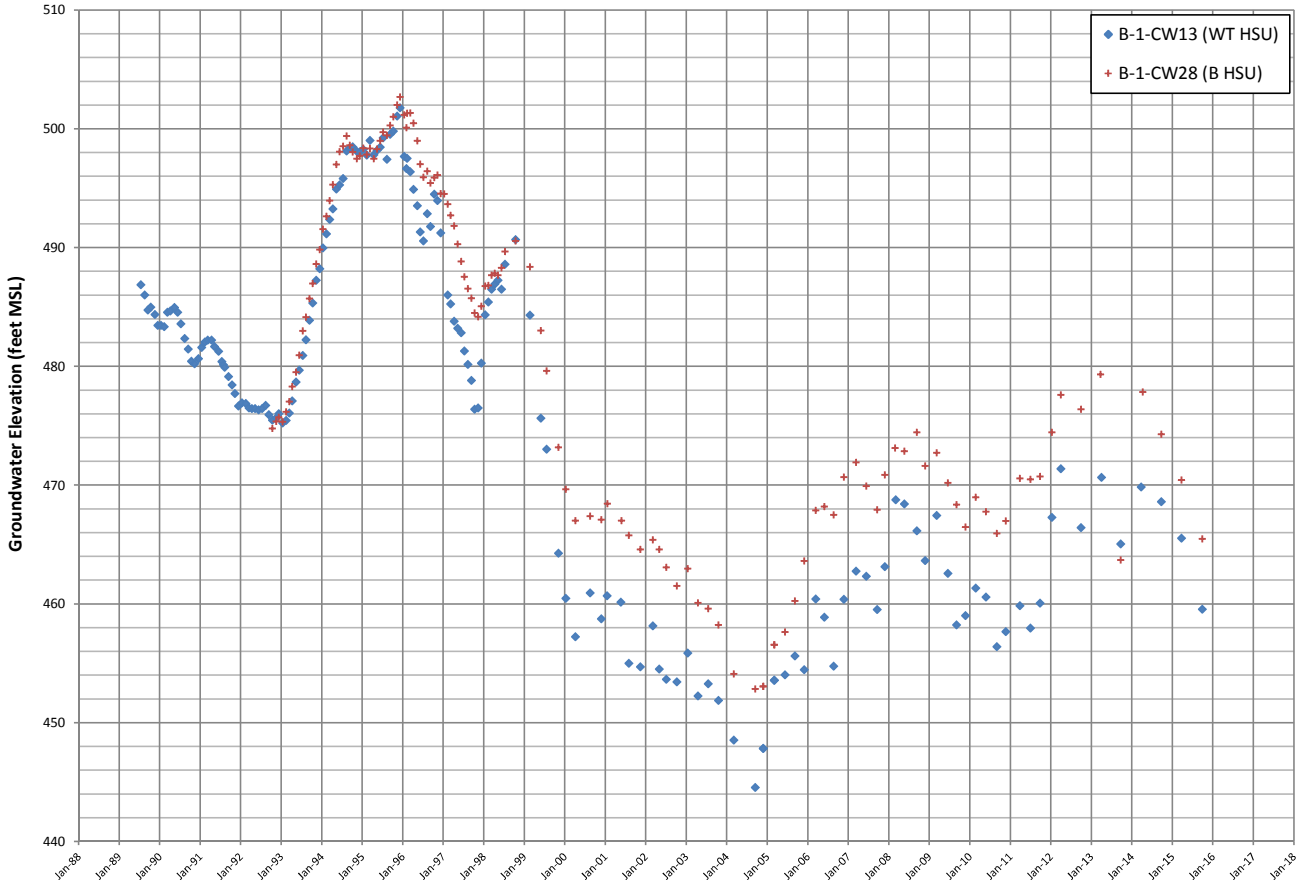
Appendix C
Graph C-23
Time Series Hydrograph - A-1-CW07, A-1-CW08, and A-1-CW09



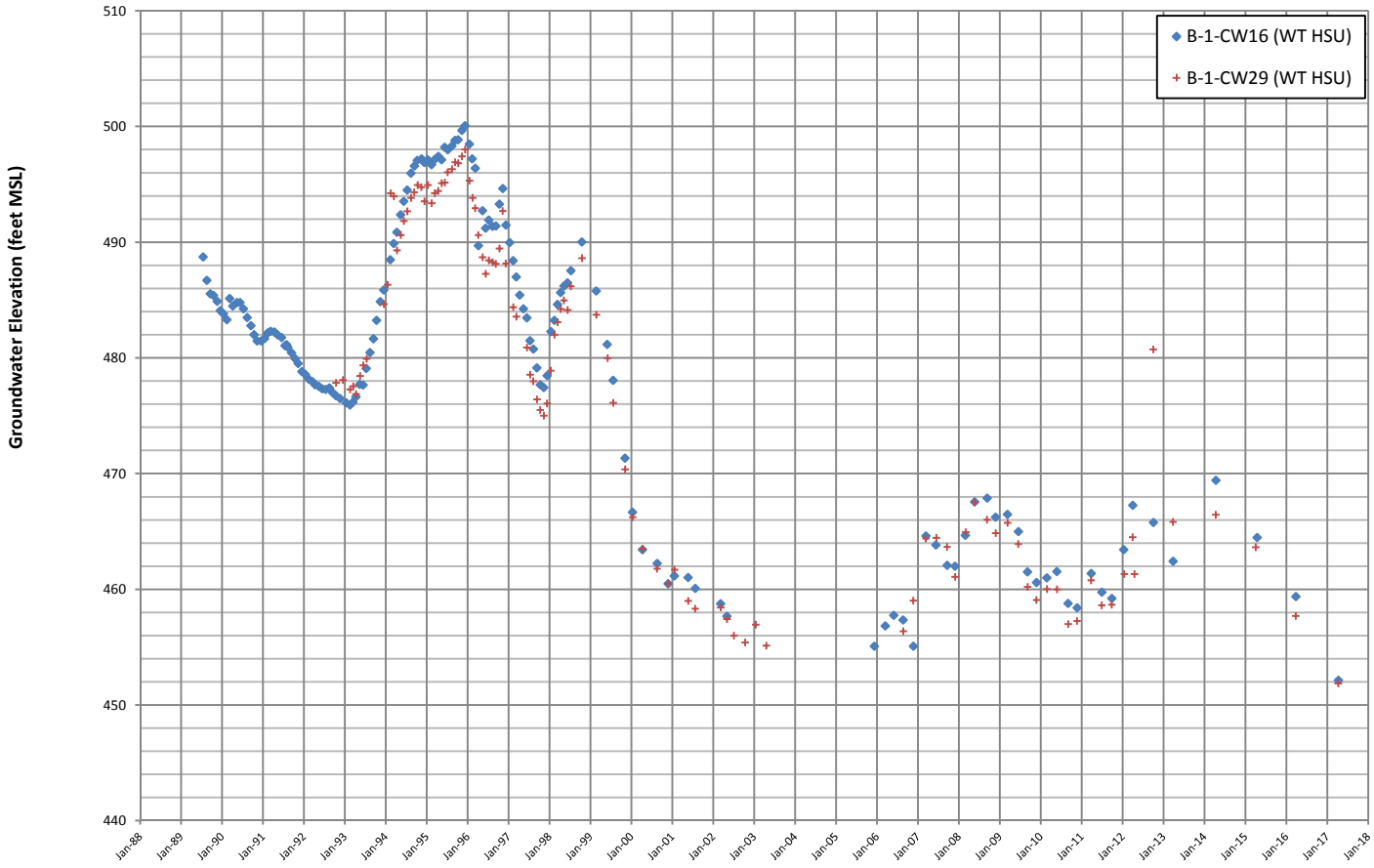
Appendix C
Graph C-24
Time Series Hydrograph - B-1-CW11 and B-1-CW12



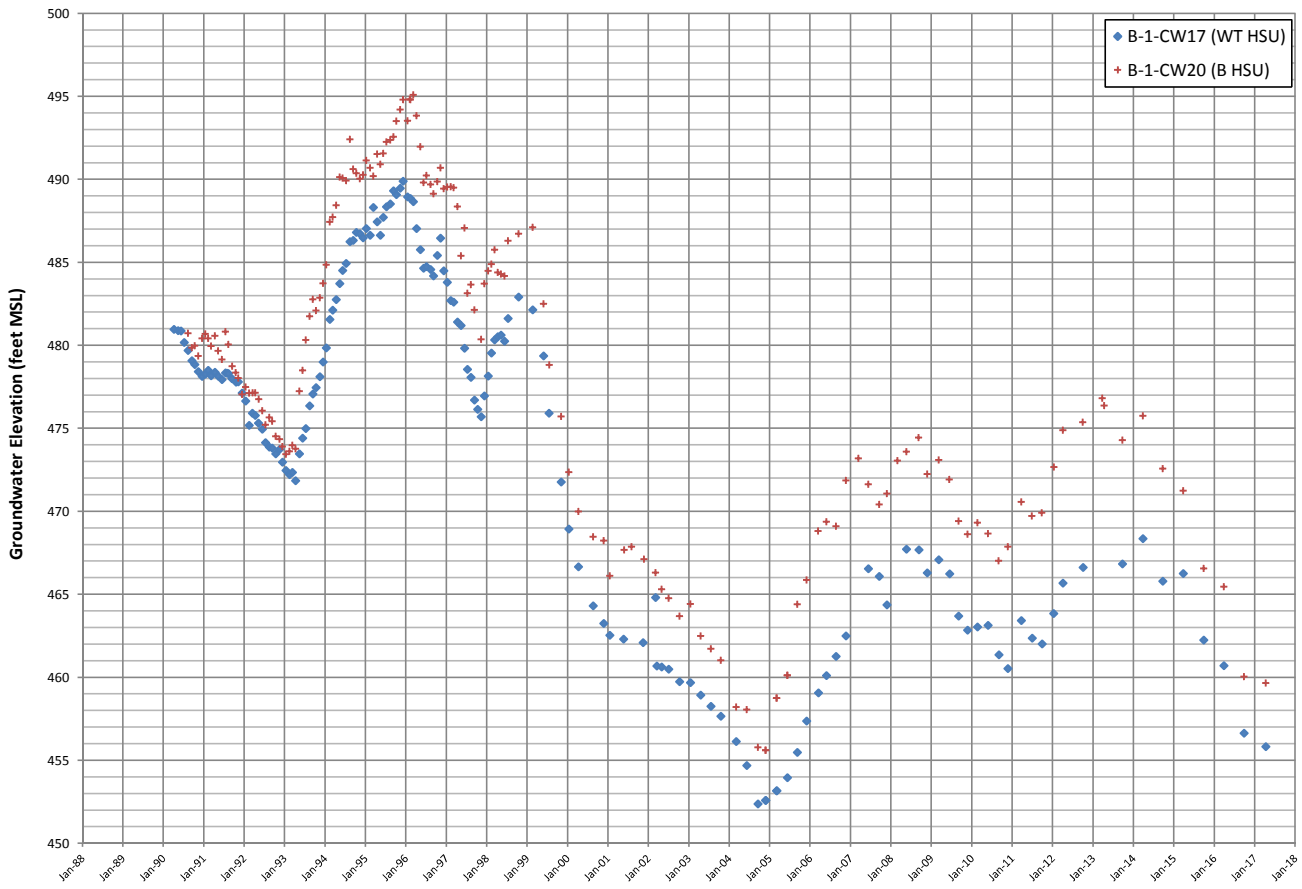
Appendix C
Graph C-25
Time Series Hydrograph - B-1-CW13 and B-1-CW28



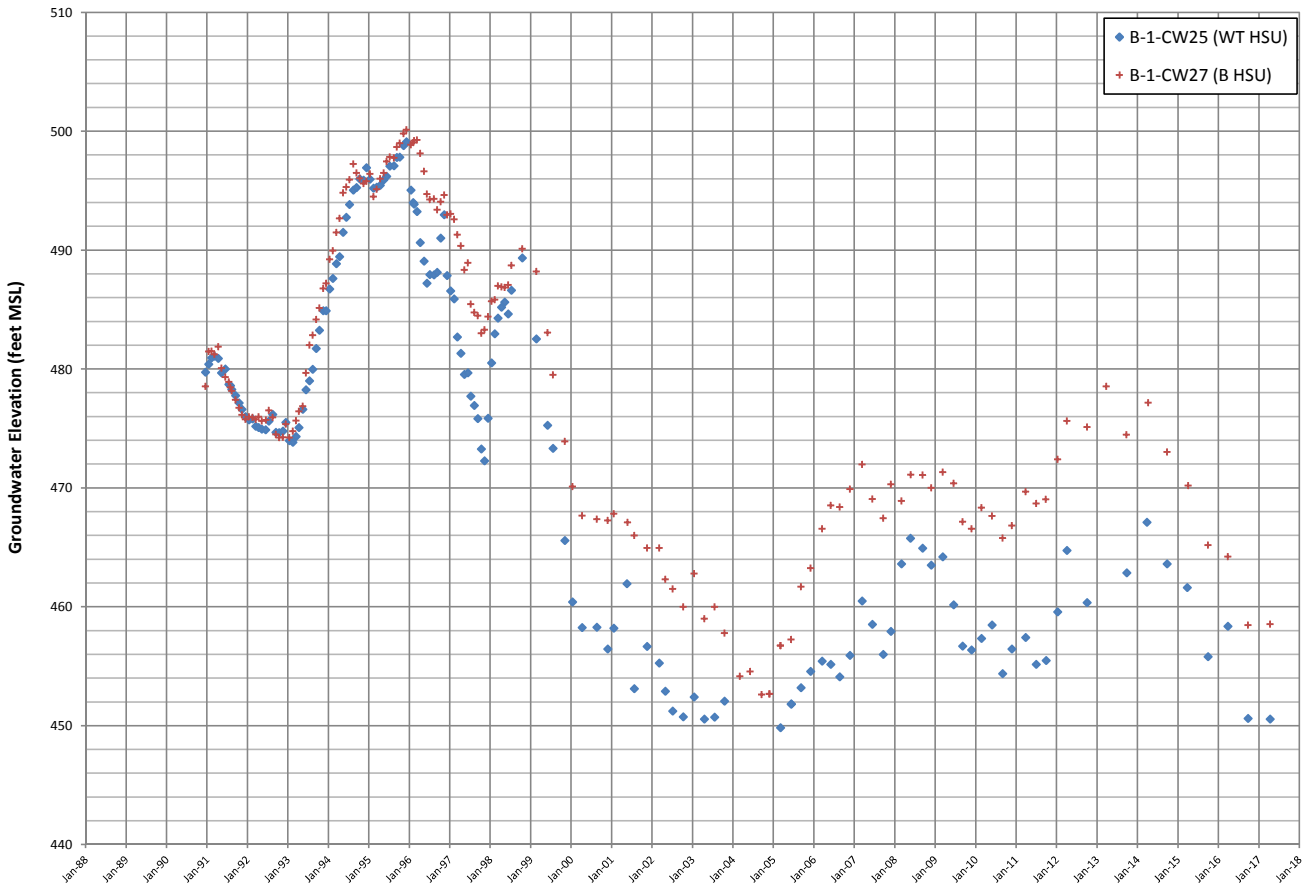
Appendix C
Graph C-26
Time Series Hydrograph - B-1-CW16 and B-1-CW29



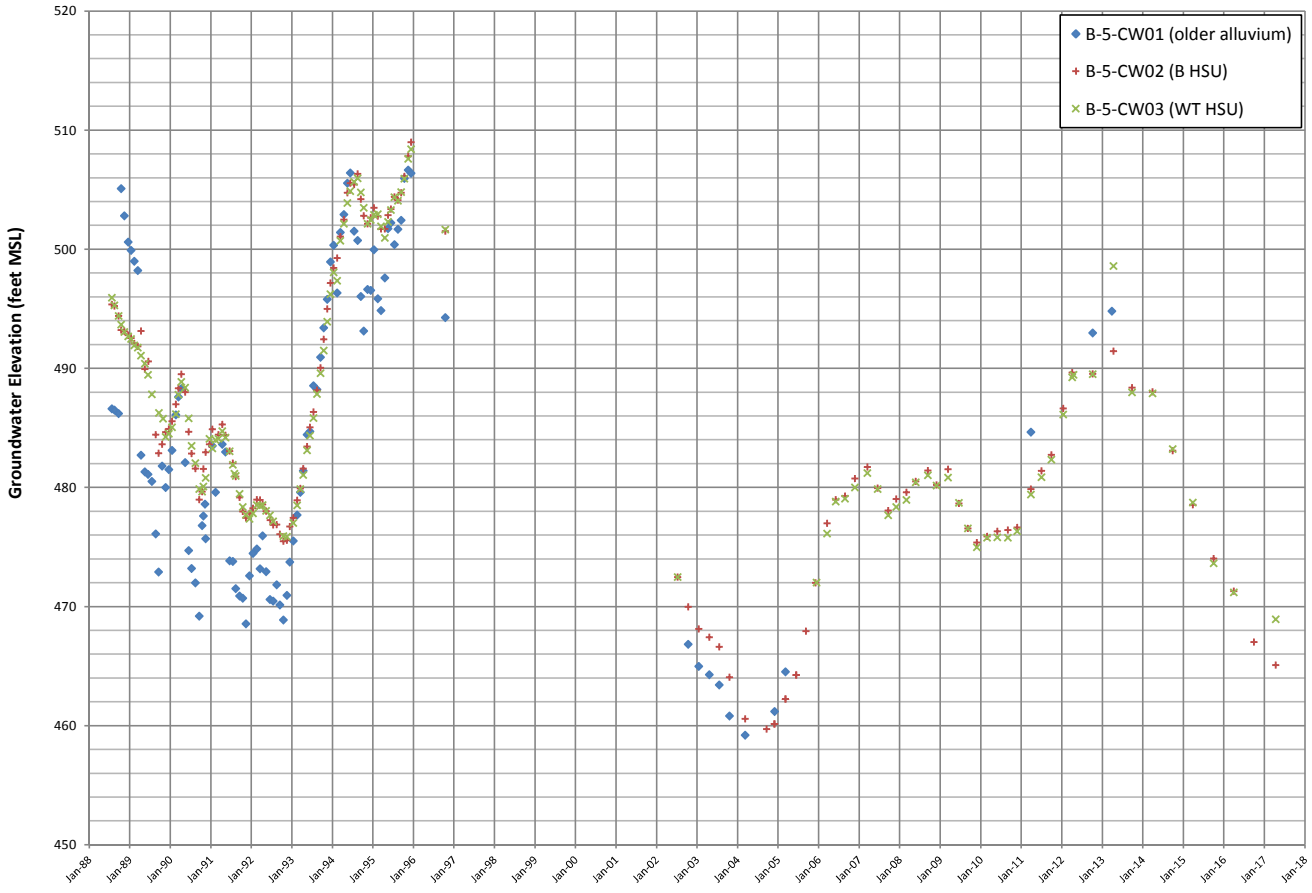
Appendix C
Graph C-27
Time Series Hydrograph - B-1-CW17 and B-1-CW20



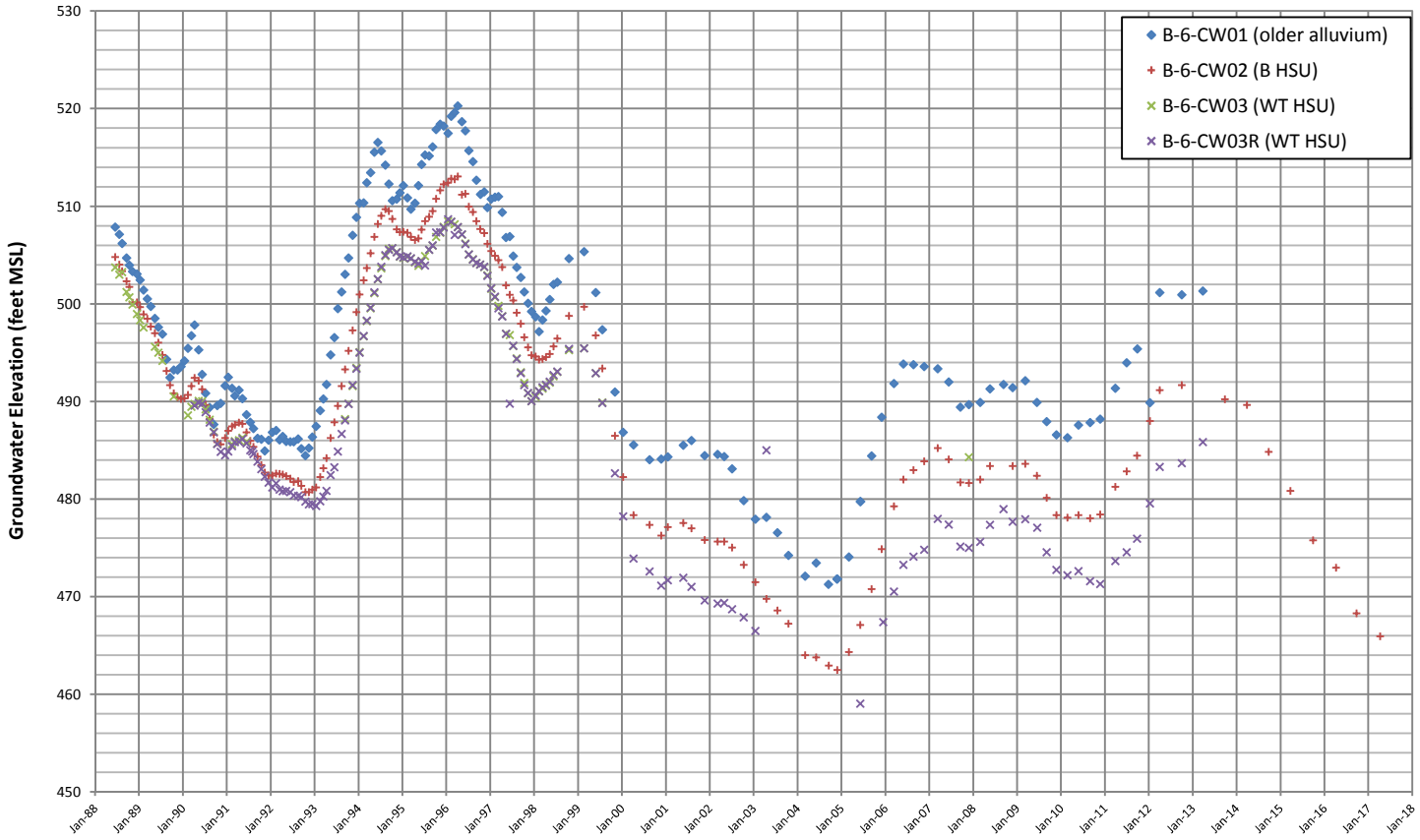
Appendix C
Graph C-28
Time Series Hydrograph - B-1-CW25 and B-1-CW27



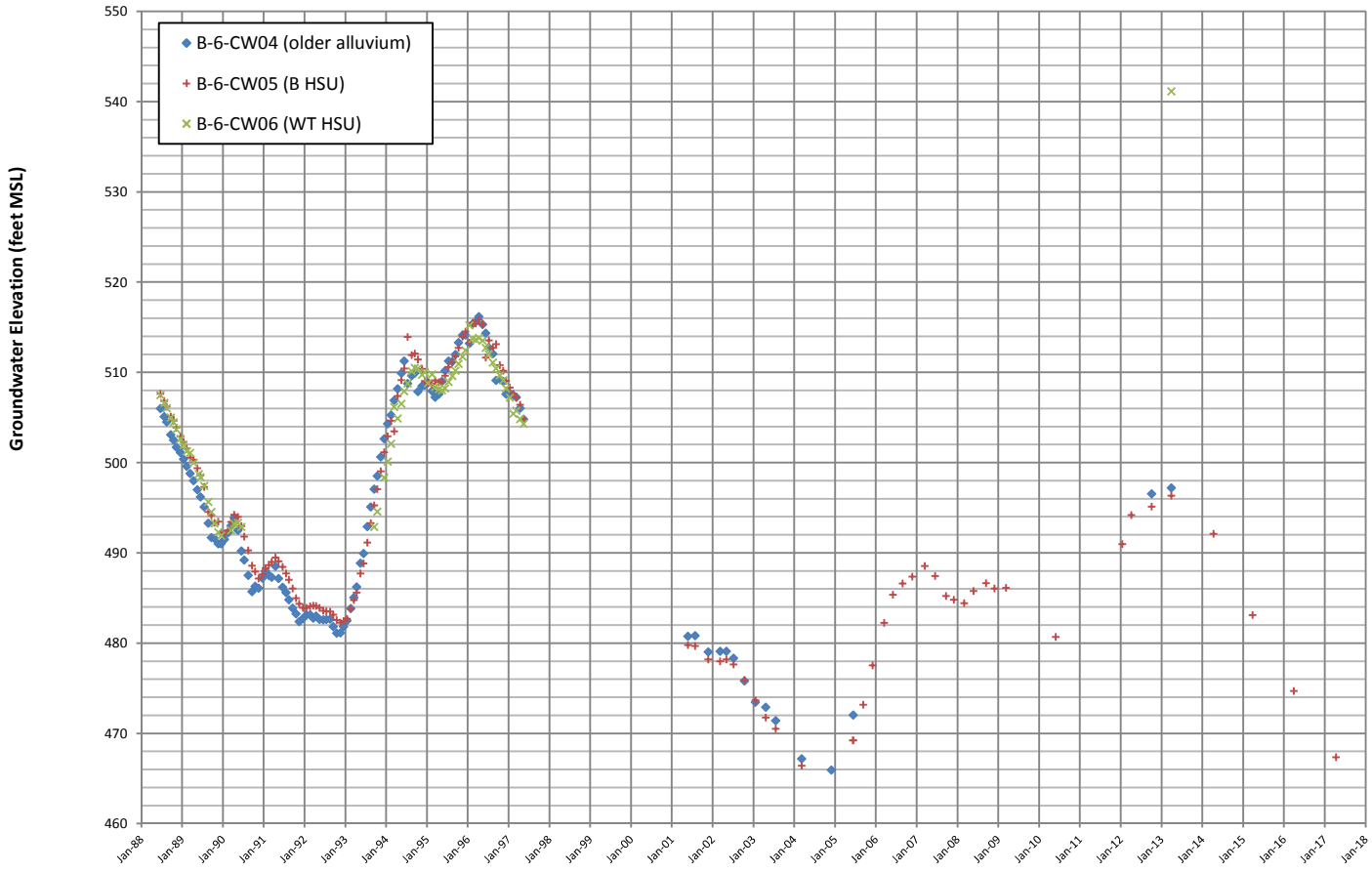
Appendix C
Graph C-29
Time Series Hydrograph - B-5-CW01, B-5-CW02, and B-5-CW03



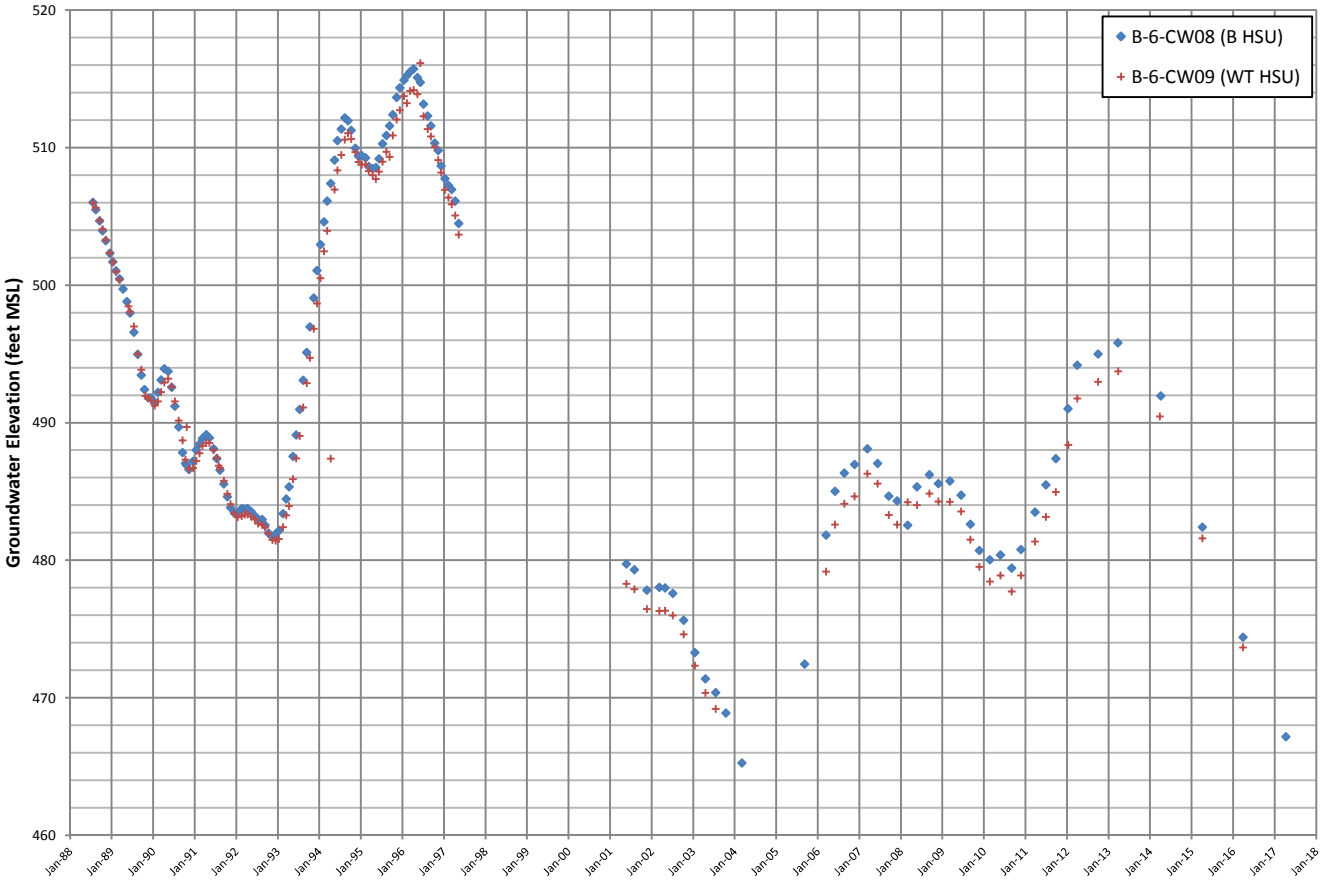
Appendix C
Graph C-30
Time Series Hydrograph - B-6-CW01, B-6-CW02, B-6-CW03, and B-6-CW03R



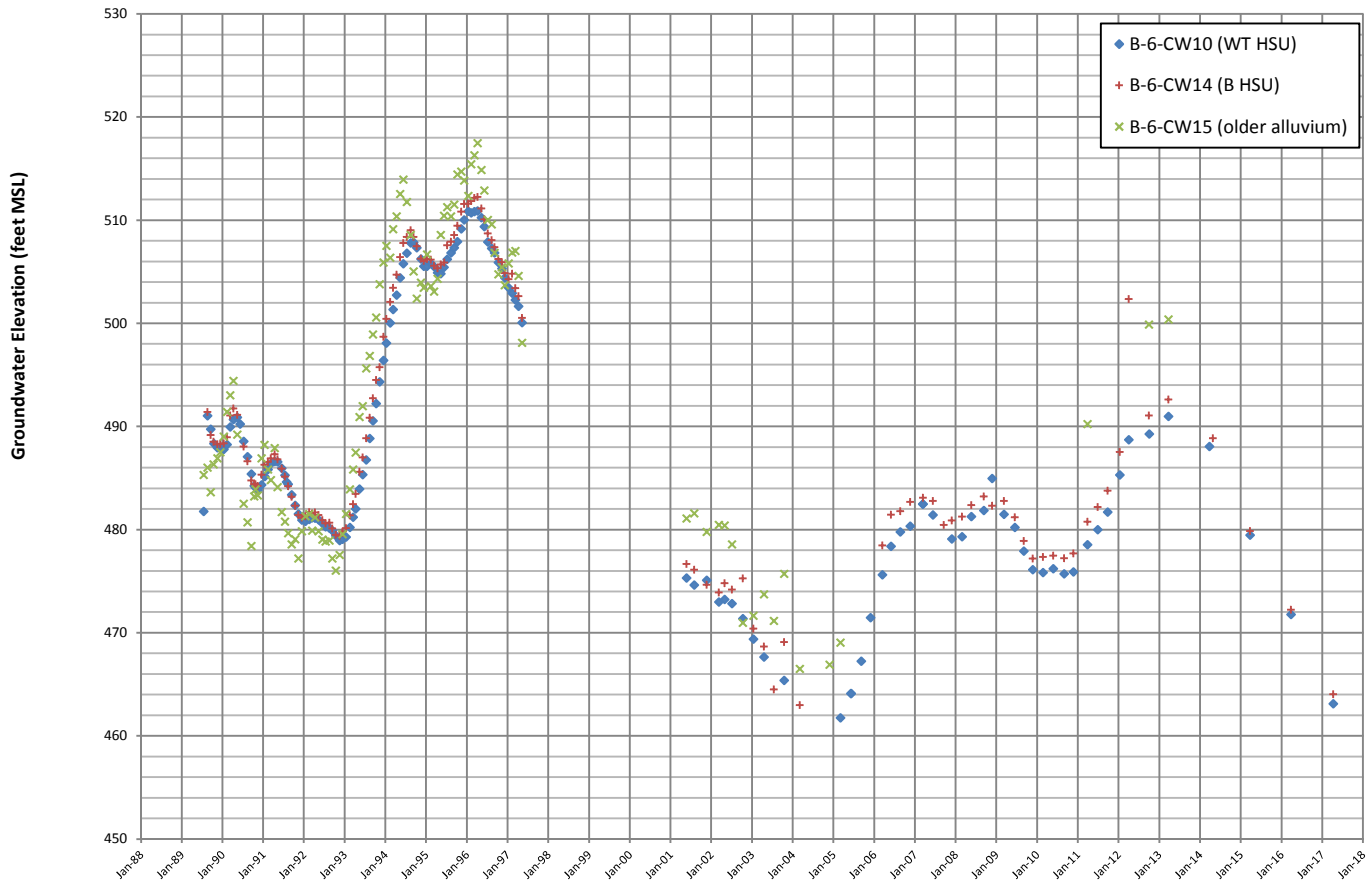
Appendix C
Graph C-31
Time Series Hydrograph - B-6-CW04, B-6-CW05, and B-6-CW06



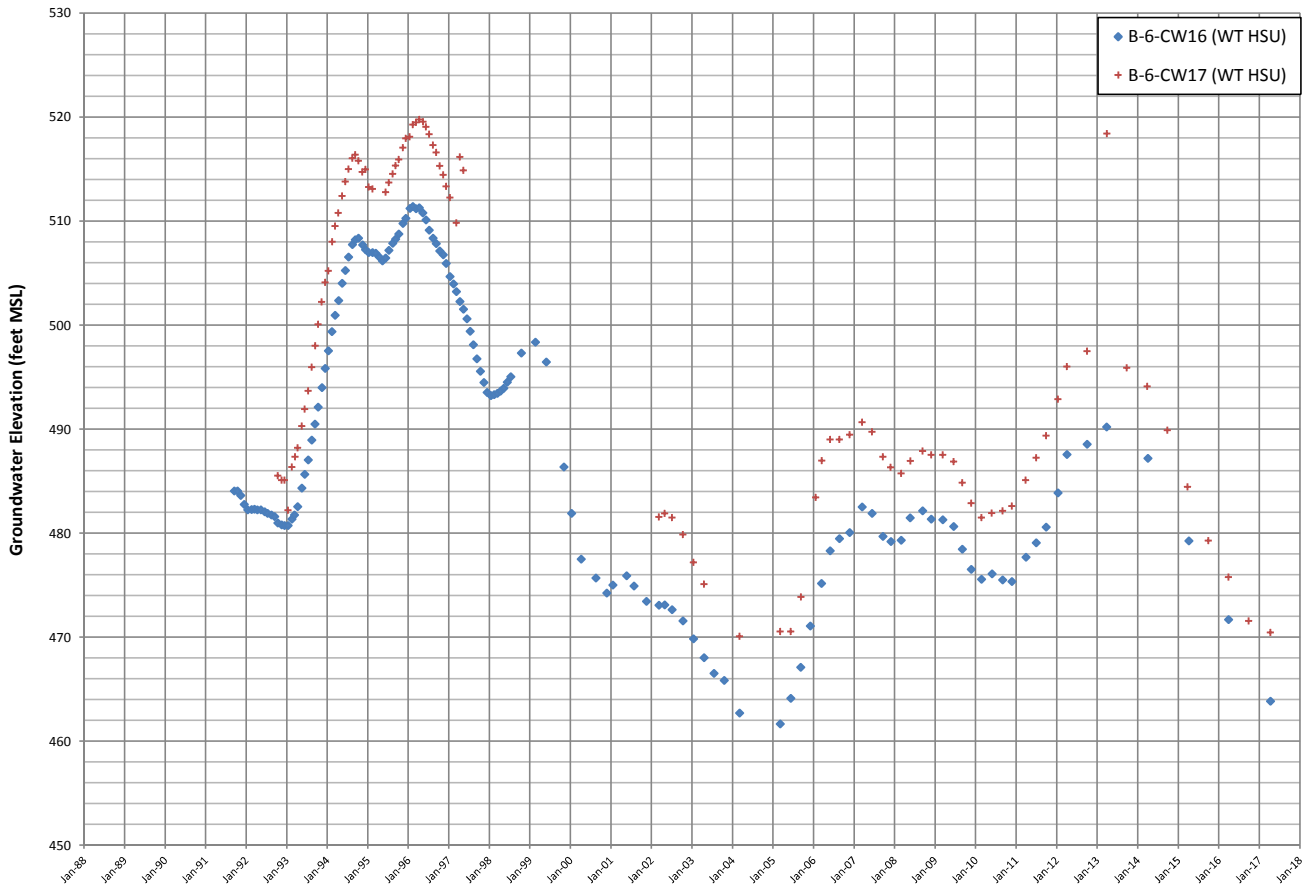
Appendix C
Graph C-32
Time Series Hydrograph - B-6-CW08 and B-6-CW09



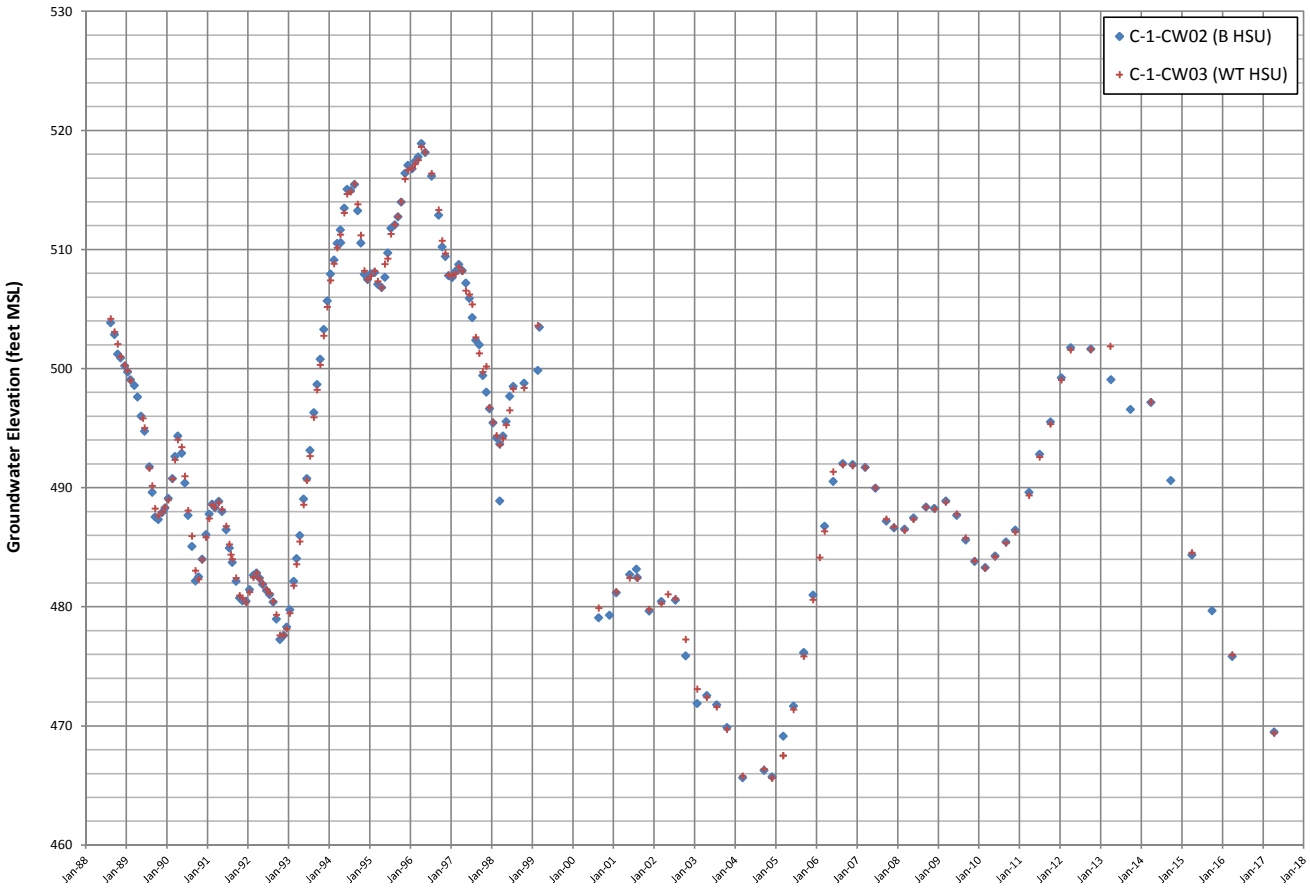
Appendix C
Graph C-33
Time Series Hydrograph - B-6-CW10, B-6-CW14, and B-6-CW15



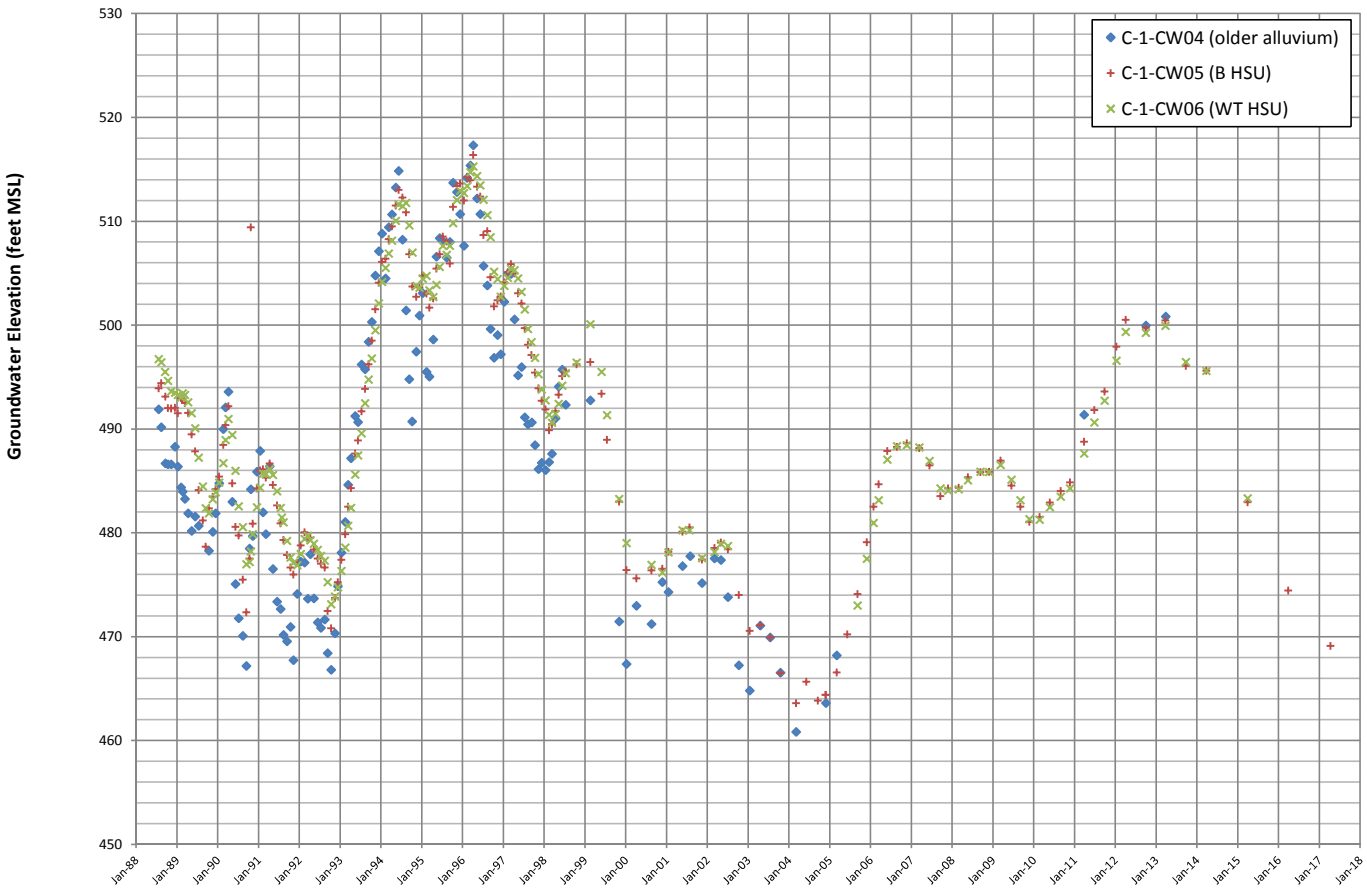
Appendix C
Graph C-34
Time Series Hydrograph - B-6-CW16 and B-6-CW17



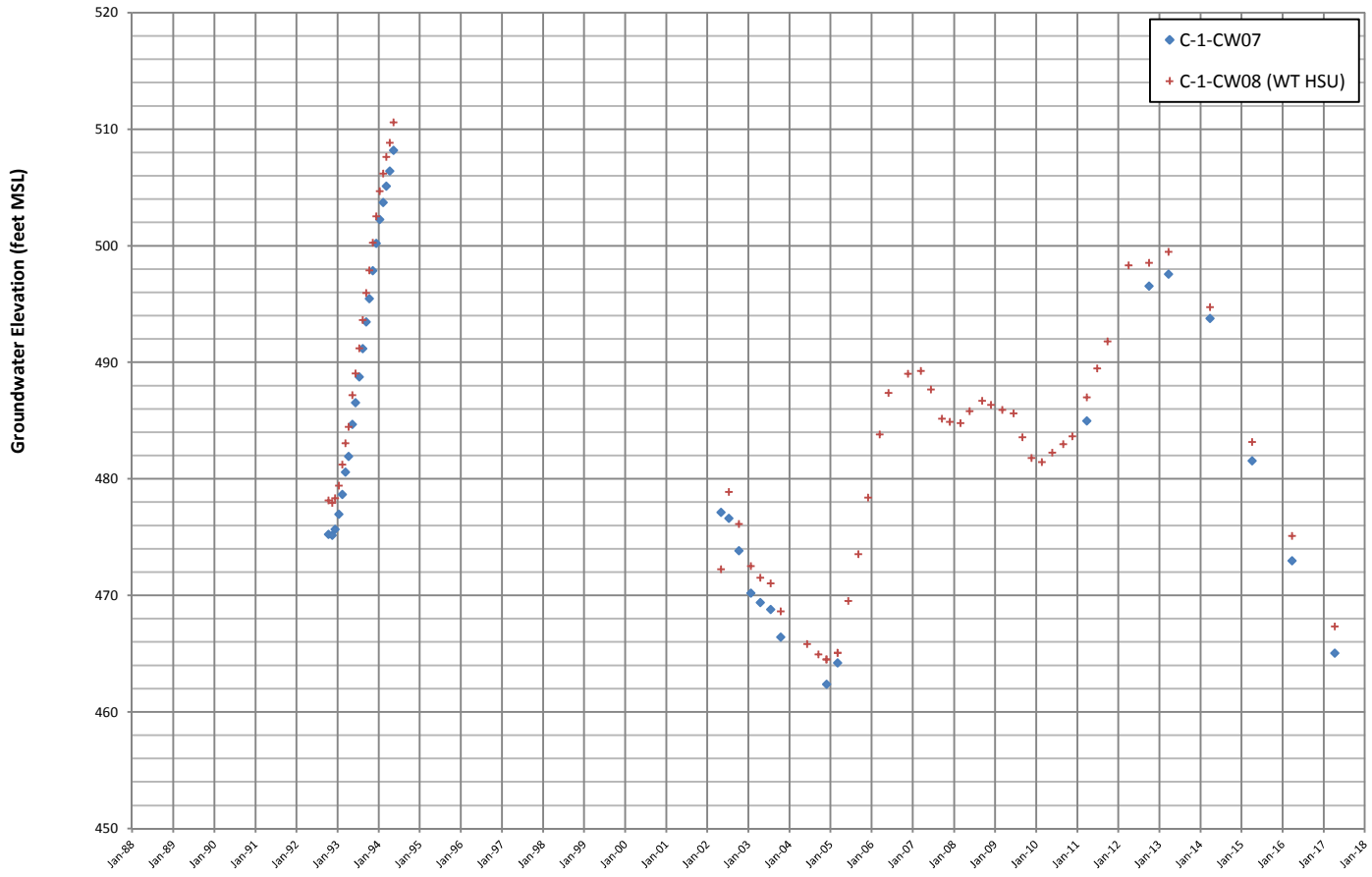
Appendix C
Graph C-35
Time Series Hydrograph - C-1-CW02 and C-1-CW03



Appendix C
Graph C-36
Time Series Hydrograph - C-1-CW04, C-1-CW05, and C-1-CW06



Appendix C
Graph C-37
Time Series Hydrograph - C-1-CW07 and C-1-CW08



Appendix D
Data Validation Summary

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

TETRA TECH, INC.
DATA VALIDATION SUMMARY REPORT

TO: **Thomas Villeneuve, Project Manager; Robert Sabater, Deputy Project Manager**

FROM: **Michael Wilson, Senior Chemist**

DATE: **May 31, 2017**

SUBJECT: **One Hundred Percent Data Validation Review for the Burbank Operational Unit (BOU) Groundwater Sample Analyses Data Results from Eurofins Calscience Laboratory in Garden Grove, CA**

Introduction

This report summarizes the findings from data validation efforts conducted on one hundred percent of the sample data results for Lockheed Martin Corporation's (LMC) BOU soil project. The validation guidance used in evaluating the data is presented in the current versions of *USEPA National Functional Guidelines for Inorganic Data Review* and *USEPA National Functional Guidelines for Organic Data Review*. The data were audited at a Level II effort. The Level II effort requires review of all applicable Quality Control (QC) sample results as it relates to the field data under review. Level II effort also determines the usability of the data based on the Data Quality Objectives (DQOs) for the project.

Executive Summary

The Eurofins Calscience data for the project were contained in one Sample Delivery Groups (SDGs) designated as 17-01-0944.

The total data set consisted of 5460 individual (per analyte) results from environmental samples analyses. The number of samples per analytical method (or method group) is given below.

1. Sixty five samples for Hexavalent Chromium by Method E218.6
2. Sixty five samples for Total Chromium by Method SW6020
3. Sixty five samples for VOCs by Method SW8260B
4. Sixty five samples for 12,3-Trichloropropane by Method SW8270C M Isotope Dilution
5. Sixty five samples for 1,4-Dioxane by Method SW8270M

The samples were logged into the lab under compliant Chain of Custody documentation with no exceptions noted. The samples were analyzed in one or two preparation batch per analytical method per SDG. All QC samples were reviewed and if the QC result caused the data to be qualified the reason for the qualification was identified.

The data showed the laboratory analyzed all samples in accordance with method guidelines. The instances where qualification was required are listed below and explained under individual method sections. All other data is of known precision and accuracy and did not require any qualification and can be used as stated.

All data for this BOU sampling event were usable for their intended purpose.

Evaluation Criteria

The data were evaluated by results from the following Quality Control (QC) entities.

- Method/Field Blanks
- Laboratory Control Samples
- Holding Times
- Surrogate Recovery (Organic Methods)
- Spiked and Field Duplicate Compliance
- Calibration Compliance
- Compound Identification
- Analytical Method Compliance

Chain-of-Custody (COC) forms were reviewed and no unresolved discrepancies were noted.

Evaluation of Accuracy, Precision, Representativeness, Comparability, and Completeness

1. Accuracy is established by reviewing spiked sample analysis. A blank spike (LCS) measures the accuracy of the instrument and the LCS results for this data set were all found to be within control limits. Therefore, accuracy for the BOU project meets the Data Quality Objectives (DQO).

2. Precision is established by calculating the RPD values for MS/MSD pairs and field duplicates. The RPD values calculated for the BOU project show that >95% of the RPD calculated were within control limits. Therefore, the precision for the BOU projects meets the DQO.

3. Representativeness is established by using standard field sampling techniques. Because the field sampling was conducted under approved work plans and by following an established SOP, the sampling is judge to have adequate representativeness. The DQO was met.

4. Comparability of the data is preserved if the analytical analyses are conducted under approved and vetted EPA analytical methods. Because the EPA methods are constructed with comparability built into the methods. By using approved analytical methods for the BOU project, the BOU data is comparable. The DQO was met.

5. Completeness is measured by determine the amount of valid data produced by the laboratory as compared to the total possible data from the chain. This data set had no rejected data and all samples were analyzed as per the chains. Therefore, the data completeness is 100% which is above the 90% criterion. The DQO was met.

Validation Qualifiers and Comment Descriptors Definitions

<u>Qualifier Definitions</u>

The upper case letters are used to denote NFG allowed qualifiers.

J- Estimated. The associated numerical value is an estimated quantity with a negative bias. The analyte was detected but the reported value may not be accurate or precise. The data are usable as estimated values.

J+ Estimated. The associated numerical value is an estimated quantity with a positive bias. The analyte was detected but the reported value may not be accurate or precise. The data are usable as estimated values.

J Estimated. The associated numerical value is an estimated quantity. It is not possible to assess the direction of the potential bias. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data. The data the data are usable as estimated values.

R Rejected. The data is unusable (the compound or analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte.

U Not detected. Analyses were performed for the compound or analyte, but it was not detected. The "U" designation is also applied to suspected blank contamination. The "U" flag is used to qualify any result that is detected in an environmental sample and associated blank at less than the PQL. For example, when any blank has a detection of the analyte that is below the PQL, and any associated field samples to that blank that also has detections of analytes below the PQL, then the samples are qualified as not detected at the PQL level. However, the data result is not censored by using the default PQL level and instead have the blank level reported in the sample qualified as not detected.

UJ Estimated/Not detected. Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, or other spike recovery.

Qualifier Descriptor Comments

a: The analyte was found in the method blank.

b: The surrogate spike recovery was outside control limits.

c: The Matrix Spike and/or Matrix Spike Duplicate recoveries were outside control limits.

d: The Laboratory Control Sample (LCS) recovery was outside control limits.

e: A holding time violation occurred.

f: The duplicate samples Relative Percent Difference (RPD) was outside the control limit.

g: The datum met prescribed method criteria.

h: The method requires a confirmation result, but none was performed.

k: The analyte was found in a field blank.

l: The second column confirmation result indicates the analyte was not confirmed.

p: The result was qualified based on professional judgment.

q: The analyte detection was below the Practical Quantitation Limit (PQL).

r: The result is above the instrument's calibration range.

t: The sample temperature was outside acceptance criteria.

n: The laboratory case narrative indicated a QC problem.

1.0 Hexavalent Chromium by Method E218.6

1.1 Method/Field Blanks

The method blanks and field blanks reported no detections of target analytes above the detection limit. One method blank was extracted for each preparation batch. The method blanks were compliant with the analytical method.

1.2 Laboratory Control Samples

The laboratory control sample (LCS) analysis showed the method required spiked analytes were recovered within control limits. One LCS was extracted for each preparation batch. The LCSs were compliant with the analytical method.

1.3 Holding Times

All extraction and analysis holding times were in compliance.

1.4 Surrogate Recovery

Surrogates do not apply to method E218.6

1.5 Spiked and Field Duplicate Compliance

The matrix spike/matrix spike duplicate analyses and field duplicates were performed and found to be in compliance with the control limits.

1.6 Calibration Compliance

The calibration of the analytical instrument met criteria.

1.7 Compound Identification

All reported compound detections were identified by the correct retention time.

1.8 Analytical Method Compliance

The Level II data review showed the data to be method compliant.

1.9 Conclusions

Based on the results of this Level II Data Validation effort, it is concluded that the data for method E218.6 are usable as reported. The target analyte identifications are considered correct and reliable. The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose. The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose.

2.0 Total Chromium by Method SW6020

2.1 Method/Field Blanks

The method and field blanks showed no Chromium detections.

2.2 Laboratory Control Samples

The laboratory control sample (LCS) analysis showed the method required spiked analytes were recovered within control limits. One LCS was extracted for each preparation batch. The LCSs were compliant with the analytical method.

2.3 Holding Times

All extraction and analysis holding times were met.

2.4 Surrogate Recovery

This method does not use surrogates.

2.5 Spiked and Field Duplicate Compliance

The matrix spike/matrix spike duplicate analyses were performed and found they were in compliance with control limits.

Field duplicate results that exceeded the RPD requirement cause o.18% of the data to be qualified as estimated and assigned a “J” qualifier. The estimated data is usable as estimated values

2.6 Calibration Compliance

The calibration of the analytical instrument met criteria.

2.7 Compound Identification

Compound identification meet method guidelines.

2.8 Analytical Method Compliance

The Level II data review showed the data to be method compliant.

2.9 Conclusions

Based on the results of this Level II Data Validation effort, it is concluded that the data for method SW6010B are usable as reported and qualified. The target analyte identifications are considered correct and reliable The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose.

3.0 Volatile Organic Compounds (VOCs) by Method SW8260B

3.1 Method/Field Blanks

The method blanks reported no detection of a target analyte. One method blank was extracted for each preparation batch.

Field blank contamination caused 0.12% of the data to be qualified as not detected and assigned a "U" qualifier. The data is usable as not detected values.

3.2 Laboratory Control Samples

The laboratory control sample (LCS) analysis showed the method required spiked analytes were recovered within control limits. One LCS was extracted for each preparation batch. The LCSs were compliant with the analytical method.

3.3 Holding Times

All extraction and analysis holding times were met.

3.4 Surrogate Recovery

All surrogates were within limits.

3.5 Spiked and Field Duplicate Compliance

The matrix spike/matrix spike duplicate analyses and field duplicates were performed and found there were in compliance except as listed below.

MS/MSD recovery outside control limits caused 0.025% of the data to be qualified as estimated and assigned a "J" qualifier. The estimated data is usable for the intended purpose.

3.6 Calibration Compliance

The calibration of the analytical instrument met criteria.

3.7 Compound Identification

All compounds were correctly identified.

3.8 Analytical Method Compliance

The Level II data review showed the data to be method compliant.

3.9 Conclusions

Based on the results of this Level II Data Validation effort, it is concluded that the data for method SW8260B are usable as reported and qualified. The target analyte identifications are considered correct and reliable The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose.

4.0 Low Level 1,2,3-Trichloropropane by Method SW8260B SIM

4.1 Method/Field Blanks

The method blanks and field blanks reported no detection of a target analyte. One method blank was extracted for each preparation batch.

4.2 Laboratory Control Samples

The laboratory control sample (LCS) analysis showed the method required spiked analytes were recovered within control limits. One LCS was extracted for each preparation batch. The LCSs were compliant with the analytical method.

4.3 Holding Times

All extraction and analysis holding times were met.

4.4 Surrogate Recovery

All surrogates were within limits.

4.5 Spiked and Field Duplicate Compliance

The matrix spike/matrix spike duplicate analyses and field duplicates were performed and found they were in compliance with the control limits except as listed below.

MS/MSD recovery outside control limits caused 9.2% of the data to be qualified as estimated and assigned a “J” qualifier. The estimated data is usable for the intended purpose.

4.6 Calibration Compliance

The calibration of the analytical instrument met criteria.

4.7 Compound Identification

All compounds were correctly identified.

4.8 Analytical Method Compliance

The Level II data review showed the data to be method compliant.

4.9 Conclusions

Based on the results of this Level II Data Validation effort, it is concluded that the data for method SW8260B SIM are usable as reported and qualified. The target analyte identifications are considered correct and reliable The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose.

5.0 Low level 1,4-Dioxane by Method SW8270C ID

5.1 Method/Field Blanks

The method blanks and field blanks reported no detection of a target analyte. One method blank was extracted for each preparation batch.

5.2 Laboratory Control Samples

The laboratory control sample (LCS) analysis showed the method required spiked analytes were recovered within control limits. One LCS was extracted for each preparation batch. The LCSs were compliant with the analytical method.

5.3 Holding Times

All extraction and analysis holding times were met.

5.4 Surrogate Recovery

All surrogates were within limits.

5.5 Spiked and Field Duplicate Compliance

The matrix spike/matrix spike duplicate analyses and field duplicates were performed and found there were no results outside control limits

5.6 Calibration Compliance

The calibration of the analytical instrument met criteria.

5.7 Compound Identification

All compounds were correctly identified.

5.8 Analytical Method Compliance

The Level II data review showed the data to be method compliant.

5.9 Conclusions

Based on the results of this Level II Data Validation effort, it is concluded that the data for method SW8270C ID are usable as reported and qualified. The target analyte identifications are considered correct and reliable The DQOs were satisfied as per the Work Plan and the data is usable for its intended purpose.

Appendix E
Trend Analysis

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

Appendix E

Trend Analysis (Period Q1-1996 to Q2-2017)
2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

	1,2,3-Trichloropropane									1,4-Dioxane									Tetrachlorothylene (PCE)							
Well	Number of Samples	Number of Decections	Mean (µg/L)	LR Slope	All Samples ND	LR Trend	M-K Trend	Magnitude of Trend (%/yr)	Magnitude of Trend (µg/L/yr)	Number of Samples	Number of Decections	Mean (µg/L)	LR Slope	All Samples ND	LR Trend	M-K Trend	Magnitude of Trend (%/yr)	Magnitude of Trend (µg/L/yr)	Number of Samples	Number of Decections	Mean (µg/L)	LR Slope	All Samples ND	LR Trend	M-K Trend	Magnitude (%/yr)
3830Q	19	5	0.075	-4.5E-04	No	NT	PD	-8.21	-0.006	19	2	0.28	-1.2E-05	No	S	NT			20	20	3.40	-4.0E-04	No	D	D	-7.30
3830S	20	5	0.079	-2.4E-04	No	NT	NT			20	11	1.30	7.4E-05	No	NT	NT			26	26	16.0	-2.1E-04	No	D	D	-3.83
3831Q	8	8	0.15	-8.0E-04	No	D	D	-14.6	-0.022	7	6	1.40	-3.4E-05	No	S	NT			9	9	18.0	-4.1E-04	No	D	D	-7.48
3850M	7	4	0.025	4.6E-04	No	I	I	8.40	0.0021	4	3	0.74	-8.6E-04	No	S	S			17	17	4,500	-4.5E-04	No	D	D	-8.21
3850N	24	24	1.40	-7.2E-04	No	D	D	-13.1	-0.18	19	12	1.70	-2.7E-04	No	PD	D	-4.93	-0.08	35	34	460	-3.1E-04	No	D	D	-5.66
3850R	14	5	0.0081	4.2E-04	No	I	PI	7.67	0.00062	7	4	1.10	1.9E-04	No	NT	NT			33	33	130	1.6E-04	No	I	I	2.92
3850U	7	6	1.70	1.2E-03	No	I	NT			6	6	1.70	6.6E-05	No	NT	S			9	9	440	-3.5E-04	No	D	D	-6.39
3851M	11	9	0.096	8.8E-05	No	NT	S			8	2	0.47	-9.5E-05	No	S	S			19	19	41	-3.9E-04	No	D	D	-7.12
3851N	9	2	0.012	-5.9E-04	No	D	PD	-10.8	-0.0013	7	1	0.40	-1.6E-04	No	S	S			19	19	29	-7.9E-04	No	D	D	-14.4
3852F	8	5	0.057	5.0E-04	No	PI	NT			6	2	0.59	5.8E-04	No	NT	PI	10.6	0.06	16	14	1.30	-3.8E-05	No	S	S	
3852H	11	10	0.38	1.8E-05	No	NT	NT			7	1	0.34	-1.7E-04	No	PD	PD	-3.10	-0.01	20	20	18.0	-1.6E-04	No	D	D	-2.92
3852L	9	7	0.090	4.9E-04	No	I	PI	8.94	0.0080	6	1	0.34	-2.2E-04	No	D	D	-4.02	-0.01	20	11	0.64	-3.6E-05	No	NT	NT	
3852M	6	6	0.13	6.8E-04	No	I	I	12.4	0.016	6	1	0.30	-8.2E-05	No	S	S			8	8	32	-1.6E-04	No	D	D	-2.92
3852N	6	2	0.0029	-4.9E-04	No	PD	NT			6	0	0.31	-2.1E-04	Yes	ND	ND			7	7	8.80	-1.1E-04	No	D	D	-2.01
3860J	7	0	0.0062	-1.4E-04	Yes	ND	ND			4	0	0.29	2.9E-04	Yes	ND	ND			18	18	33	-3.1E-05	No	S	S	
3860K	15	15	25	3.5E-04	No	I	NT			6	3	0.62	-7.7E-05	No	S	S			21	21	3,700	-2.7E-04	No	D	D	-4.93
3861D	8	4	0.015	5.4E-05	No	NT	NT			6	0	0.31	-2.1E-04	Yes	ND	ND			17	17	320	-4.7E-04	No	D	D	-8.58
3861F	8	5	0.015	-3.5E-04	No	NT	NT			5	0	0.32	-2.2E-04	Yes	ND	ND			16	16	31	-2.5E-04	No	D	D	-4.56
3862D	9	7	0.020	1.8E-04	No	PI	NT			7	2	0.42	-1.6E-04	No	PD	D	-2.92	-0.01	18	18	250	-3.0E-04	No	D	D	-5.48
3862E	9	7	0.018	1.2E-04	No	NT	NT			7	3	0.47	-1.1E-04	No	S	S			20	20	88	-2.2E-04	No	D	D	-4.02
3870D	5	0	0.00080	1.4E-07	Yes	ND	ND			5	2	0.39	-9.5E-04	No	D	D	-17.3	-0.07	5	0	0.21	-3.7E-04	Yes	ND	ND	
3871H	6	6	0.17	-2.8E-04	No	D	D	-5.11	-0.0087	5	3	0.56	-1.3E-03	No	D	D	-24	-0.13	8	8	590	-1.7E-04	No	S	D	-3.10
3871J	6	0	0.00073	1.3E-04	Yes	ND	ND			6	0	0.31	-2.1E-04	Yes	ND	ND			7	3	5.00	-6.1E-04	No	D	NT	
3872L	5	5	0.054	6.4E-04	No	I	I	11.7	0.006	5	0	0.26	-1.9E-04	Yes	ND	ND			7	7	770	-3.6E-04	No	D	NT	
3872M	9	1	0.0056	-2.2E-04	No	NT	NT			7	0	0.34	-2.2E-04	Yes	ND	ND			20	20	13.0	-1.2E-04	No	D	D	-2.19
3872N	5	5	0.34	9.8E-05	No	NT	NT			5	2	0.36	-8.0E-04	No	D	S			7	7	790	-8.0E-06	No	D	S	
3872Q	14	13	0.26	-4.9E-04	No	D	D	-8.94	-0.023	14	0	0.28	-1.7E-04	Yes	ND	ND			8	8	710	-2.6E-04	No	D	D	-4.75
3872S	6	2	0.0025	-6.6E-04	No	D	NT			6	0	0.26	-5.5E-05	Yes	ND	ND			8	3	1.30	-3.8E-04	No	D	PD	-6.94
3880	6	1	0.0014	-1.9E-04	No	S	S			5	0	0.26	-1.9E-04	Yes	ND	ND			6	1	0.29	-3.9E-04	No	D	S	
4948	5	0	0.00080	1.4E-07	Yes	ND	ND			5	1	0.31	-7.9E-04	No	D	PD	-14.4	-0.04	8	8	34	-5.6E-05	No	S	S	
4949C	5	0	0.0079	-1.6E-04	Yes	ND	ND			4	0	0.27	1.3E-04	Yes	ND	ND			12	10	12.0	6.9E-06	No	I	NT	
A-1-CW02	5	0	0.00080	1.4E-07	Yes	ND	ND			5	4	0.63	-9.3E-04	No	PD	S			5	5	78	-7.5E-04	No	S	S	
A-1-CW03R	7	7	7.40	-7.5E-04	No	D	D	-13.7	-1.01	6	5	1.70	-3.5E-04	No	S	PD	-6.39	-0.11	11	11	160	7.3E-05	No	NT	S	
A-1-CW04	6	5	6.10	1.6E-03	No	I	I	29	1.78	5	5	1.80	6.4E-05	No	NT	S			14	14	600	-5.8E-04	No	D	D	-10.6
A-1-CW05	6	0	0.0073	-3.5E-04	Yes	ND	ND			4	4	2.20	1.1E-04	No	NT	NT			16	16	79	-3.4E-04	No	D	D	-6.21
A-1-CW07	18	18	70	-4.9E-04	No	D	D	-8.94	-6.26	14	6	29	4.2E-04	No	NT	PI	7.67	2.22	27	27	660	-1.4E-04	No	D	D	-2.56
A-1-CW08	13	13	55	1.4E-04	No	PI	PI	2.56	1.41	12	7	1.10	2.4E-04	No	NT	NT			19	19	180	-1.9E-04	No	D	D	-3.47
A-1-CW09	21	20	4.40	3.7E-04	No	I	I	6.75	0.30	7	5	1.70	5.2E-04	No	I	I	9.49	0.16	33	33	310	-5.7E-04	No	D	D	-10.4
B-1-CW11	6	1	0.0015	1.8E-04	No	NT	NT			6	5	1.70	2.3E-04	No	PI	NT			7	7	4.40	2.0E-04	No	I	NT	
B-1-CW12	25	8	0.023	-3.0E-04	No	PD	NT			14	2	0.72	-2.5E-04	No	PD	NT			36	36	180	-3.9E-04	No	D	D	-7.12
B-1-CW13	24	24	16.0	3.0E-04	No	I	I	5.48	0.88	15	8	0.80	3.1E-04	No	I	I	5.66	0.05	33	33	1,200	-3.7E-04	No	D	D	-6.75
B-1-CW17	24	13	0.28	-2.9E-04	No	NT	NT			12	5	0.96	4.9E-04	No	I	I	8.94	0.09	32	32	130	-1.1E-04	No	D	S	
B-1-CW20	15	1	0.027	2.0E-04	No	NT	NT			9	0	0.35	-1.8E-04	Yes	ND	ND			34	29	7.30	-3.4E-04	No	D	D	-6.21
B-1-CW25	12	9	0.093	-5.7E-05	No	NT	NT			6	4	1.10	1.4E-04	No	NT	NT			35	35	1,000	-3.8E-04	No	D	D	-6.94
B-1-CW27	23	5	0.015	-3.1E-04	No	PD	NT			18	0	0.28	-1.7E-04	Yes	ND	ND			34	34	34	-1.8E-04	No	D	D	-3.29
B-1-CW28	14	1	0.030	5.9E-06	No	I	NT			7	2	0.39	-5.2E-05	No	S	S			37	36	25	2.0E-04	No	I	I	3.65
B-1-CW29	6	0	0.013	-3.1E-03	Yes	ND	ND			4	0	0.29	2.9E-04	Yes	ND	ND			25	25	1,100	-3.3E-04	No	D	D	-6.02
B-1-CW30	2	0	0.0013	0.0E+00	Yes	N/A	N/A			2	0	0.14	0.0E+00	Yes	N/A	N/A			2	2	82	0.0E+00	No	N/A	N/A	
B-1-CW31	2	0	0.0013	0.0E+00	Yes	N/A	N/A			2	0	0.1	0.0E+00	Yes	N/A	N/A			2	2	35	0.0E+00	No	N/A	N/A	
B-1-CW32	2	2	0.0098	0.0E+00	No	N/A	N/A			2	0	0.14	0.0E+00	Yes	N/A	N/A			2	2	11.0	0.0E+00	No	N/A	N/A	
B-1-CW33	2	2	1.0	0.0E+00	No	N/A	N/A			2	2	1.80	0.0E+00	No	N/A	N/A			2	2	510	0.0E+00	No	N/A	N/A	
B-1-CW34	2	0	0.0013	0.0E+00	Yes	N/A	N/A			2	0	0.14	0.0E+00	Yes	N/A	N/A			2	2	11.0	0.0E+00	No	N/A	N/A	
B-5-CW02	23	2	0.0042	3.1E-05	No	NT	NT			20	10	0.90	8.5E-05	No	NT	S			24	24	36	-1.0E-03	No	D	D	-18.3

Appendix E

Trend Analysis (Period Q1-1996 to Q2-2017)
2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

	1,2,3-Trichloropropane									1,4-Dioxane									Tetrachlorothylene (PCE)							
	Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude
Well	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)
B-5-CW03	16	16	29	1.1E-04	No	NT	PI	2.01	0.58	15	8	9.00	4.7E-04	No	NT	NT			17	17	36	-5.4E-04	No	D	D	-9.86
B-6-CW02	15	3	0.071	-1.9E-05	No	NT	NT			13	0	0.27	-1.7E-04	Yes	ND	ND			19	6	0.61	1.8E-04	No	PI	I	3.29
B-6-CW05	5	0	0.0008	1.4E-07	Yes	ND	ND			5	0	0.26	-1.9E-04	Yes	ND	ND			6	5	2.60	-8.3E-05	No	S	S	
B-6-CW08	9	1	0.14	-7.4E-04	No	NT	NT			9	2	0.34	-5.2E-05	No	S	NT			7	7	46	-1.8E-04	No	D	PD	-3.29
B-6-CW10	7	7	0.72	1.4E-04	No	PI	NT			6	5	1.10	-4.6E-04	No	PD	D	-8.40	-0.09	8	8	160	-2.0E-04	No	D	D	-3.65
B-6-CW14	13	3	0.23	-5.6E-04	No	NT	NT			12	7	0.88	6.3E-04	No	I	I	11.5	0.10	8	8	97	6.1E-05	No	NT	NT	
B-6-CW16	16	2	0.039	-3.9E-04	No	PD	NT			10	1	0.27	-2.0E-04	No	S	S			15	15	110	-3.7E-04	No	D	D	-6.75
B-6-CW17	13	4	0.062	-4.0E-04	No	NT	D	-7.30	-0.005	12	5	0.45	3.8E-04	No	I	I	6.94	0.03	8	8	190	-2.7E-04	No	D	D	-4.93
C-1-CW02	22	3	0.044	1.7E-05	No	NT	NT			19	6	0.50	2.6E-04	No	I	PI	4.75	0.02	28	27	2.40	-1.6E-04	No	D	D	-2.92
C-1-CW03	21	3	0.027	-7.7E-05	No	NT	NT			17	9	1.2	-2.1E-04	No	NT	D	-3.83	-0.05	25	25	8.90	-1.8E-04	No	D	D	-3.29
C-1-CW05	21	3	0.0052	-1.4E-04	No	NT	NT			19	3	0.31	5.9E-05	No	NT	PI	1.08	0.00	23	22	1.10	5.9E-05	No	NT	S	
C-1-CW06	16	1	0.0040	4.7E-05	No	NT	NT			15	4	0.41	4.6E-04	No	I	I	8.40	0.03	22	22	50	-1.5E-04	No	PD	D	-2.74
C-1-CW07	4	0	0.00088	-1.4E-04	Yes	ND	ND			5	5	2.80	-2.0E-04	No	S	S			5	5	17.0	-6.0E-04	No	S	S	
C-1-CW08	22	3	0.0060	-1.7E-05	No	NT	NT			19	8	1.00	2.4E-04	No	NT	PI	4.4	0.04	20	20	61	-7.2E-04	No	D	D	-13.1
MW-01	4	4	12.0	3.0E-03	No	I	I	55	6.57	4	4	18.0	5.1E-03	No	I	I	93	16.8	4	4	130	1.0E-03	No	PI	NT	
MW-03	18	18	3.20	7.4E-04	No	I	I	13.5	0.43	18	8	1.00	3.9E-04	No	I	I	7.12	0.07	18	18	71	-7.3E-05	No	S	S	
MW-04	16	16	1.10	1.1E-03	No	I	I	20	0.22	16	4	0.76	4.2E-04	No	I	PI	7.67	0.06	16	16	53	-9.0E-05	No	S	S	
MW-07	16	16	0.36	9.9E-04	No	I	I	18.1	0.07	17	3	0.26	1.5E-04	No	NT	NT			17	17	41	-1.4E-06	No	D	S	
MW-08	16	16	1.30	8.6E-04	No	I	I	15.7	0.20	17	8	4.80	6.0E-04	No	I	I	11.0	0.53	17	17	100	-1.9E-04	No	D	D	-3.47
SW-1	10	1	0.0020	-1.0E-05	No	NT	NT			12	2	0.63	-2.2E-04	No	NT	NT			21	0	0.60	-3.1E-04	Yes	ND	ND	
SW-5	10	3	0.0042	-2.2E-04	No	NT	NT			11	10	100	-1.3E-03	No	D	D	-24	-24	19	19	260	-2.6E-04	No	D	D	-4.75

Notes:

Trend Categories and Definitions	**1,2,3-Trichloropropane (# wells)**	**% Total**	**1,4-Dioxane (# wells)**	**% Total**	**Tetrachlorothylene (PCE) (# wells)**
"N/A"-Insufficient Data(< 4 sampling events)	5		5		5
Blank-No data	0		0		0
"ND" - Non Detect	10	14	16	23.19	2
"NT" - No Trend	33	48	13	18.84	7
"S" - Stable	2	3	14	20.29	14
"I" - Increasing	11	16	9	13.04	3
"PI" -Probably Increasing	4	6	6	8.70	0
"D" - Decreasing	7	10	8	11.59	41
"PD" -Probably Decreasing	2	3	3	4.35	2
	69	100	69	100.00	69

Appendix E

Trend Analysis (Period Q1-1996 to Q2-2017)
2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

	Trichloroethylene (TCE)									Hexavalent Chromium									Total Chromium								
e of Trend	Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend	
(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)
-0.25	20	4	0.51	-3.6E-04	No	D	D	-6.57	-0.03	19	7	0.11	-3.2E-04	No	PD	D	-5.84	-0.01	20	13	3.50	-1.5E-04	No	S	PD	-2.74	-0.10
-0.61	26	26	62	2.1E-04	No	PI	PI	3.83	2.38	21	20	3.20	-2.9E-04	No	PD	NT			24	14	5.50	2.2E-04	No	NT	NT		
-1.35	9	9	66	-1.6E-04	No	PD	D	-2.92	-1.93	8	7	2.80	-6.7E-04	No	S	S			8	7	10.0	3.0E-05	No	NT	NT		
-370	17	17	720	-1.8E-04	No	D	D	-3.29	-24	7	7	3.00	-2.4E-04	No	NT	NT			11	6	4.30	1.5E-04	No	NT	NT		
-26	35	35	460	-4.7E-04	No	D	D	-8.58	-39	22	22	22	-3.0E-04	No	D	PD	-5.48	-1.20	26	26	34	-1.2E-04	No	PD	NT		
3.80	33	33	10.0	7.7E-05	No	I	I	1.41	0.14	9	4	0.13	1.2E-04	No	NT	NT			16	7	4.50	8.0E-05	No	NT	NT		
-28.11	9	9	62	-8.0E-06	No	D	NT			6	6	1.10	-1.2E-04	No	S	S			5	5	5.30	-1.3E-04	No	S	S		
-2.92	19	19	35	-3.3E-04	No	D	D	-6.02	-2.11	19	16	3.40	-1.2E-04	No	NT	PD	-2.19	-0.07	21	12	5.20	1.7E-04	No	NT	NT		
-4.18	19	15	8.90	-8.1E-04	No	D	D	-14.8	-1.32	8	8	0.59	1.2E-04	No	NT	PI	2.19	0.01	11	6	3.60	8.6E-05	No	NT	NT		
	16	12	2.20	-1.9E-04	No	PD	NT			7	7	1.80	6.1E-06	No	I	NT			10	8	7.20	-2.8E-05	No	NT	NT		
-0.53	20	20	18.0	-1.1E-04	No	D	D	-2.01	-0.36	8	8	1.20	4.5E-05	No	NT	PI	0.82	0.01	11	6	3.60	1.1E-04	No	NT	NT		
	20	18	5.60	-3.7E-05	No	NT	NT			8	8	1.60	5.9E-05	No	NT	NT			11	9	16.0	1.2E-04	No	NT	NT		
-0.93	8	8	21	-1.1E-04	No	D	D	-2.01	-0.42	6	6	0.86	2.4E-04	No	NT	NT			6	6	4.10	-1.9E-04	No	D	PD	-3.47	-0.14
-0.18	7	7	9.50	-2.7E-04	No	D	D	-4.93	-0.47	6	6	1.70	-9.0E-07	No	D	NT			7	6	3.70	1.7E-05	No	NT	NT		
	18	18	22	-1.9E-04	No	D	PD	-3.47	-0.76	6	6	3.20	-1.1E-04	No	S	D	-2.01	-0.06	9	8	13.0	1.3E-04	No	I	I	2.37	0.31
-182	21	21	690	-1.3E-04	No	D	D	-2.37	-16.4	8	8	2.10	-1.7E-04	No	S	S			12	5	4.00	3.0E-04	No	NT	PI	5.48	0.22
-27	17	17	620	-4.2E-04	No	D	PD	-7.67	-48	7	7	4.20	-4.2E-05	No	S	S			10	10	8.40	-8.5E-05	No	PD	PD	-1.55	-0.13
-1.41	16	16	13.0	-2.2E-04	No	D	D	-4.02	-0.52	7	7	2.70	7.7E-05	No	NT	PI	1.41	0.04	10	6	4.50	2.0E-04	No	NT	NT		
-13.7	17	17	640	-2.6E-04	No	D	D	-4.75	-30	8	8	13.0	-2.1E-04	No	D	D	-3.83	-0.50	11	10	14.0	-4.2E-05	No	S	PD	-0.77	-0.11
-3.5	20	20	60	-1.5E-04	No	D	D	-2.74	-1.64	8	8	1.30	-1.2E-04	No	S	S			11	5	2.60	3.4E-05	No	NT	NT		
	5	0	0.22	-1.3E-04	Yes	ND	ND			5	4	10.0	4.8E-03	No	PI	I	88	8.76	4	4	59	-1.1E-03	No	NT	NT		
-18.3	8	8	310	2.6E-05	No	NT	S			6	6	4.90	-1.3E-04	No	S	NT			6	6	21	9.9E-05	No	NT	NT		
	7	2	2.90	-5.5E-04	No	D	PD	-10.0	-0.29	6	6	4.70	-1.2E-04	No	S	S			6	6	11.0	-2.0E-05	No	S	S		
	7	7	270	-2.9E-04	No	D	NT			5	5	2.90	8.5E-04	No	NT	NT			5	5	9.7	-3.1E-05	No	S	S		
-0.28	20	20	3.90	-4.7E-05	No	PD	D	-0.86	-0.03	8	8	3.20	-5.7E-06	No	D	NT			10	6	4.30	1.8E-04	No	NT	S		
	7	7	200	-3.6E-05	No	S	S			5	4	3.10	4.4E-03	No	I	I	80	2.49	5	5	12.0	9.0E-06	No	I	S		
-34	8	8	270	-3.2E-04	No	D	D	-5.84	-15.8	15	14	2.60	2.3E-04	No	NT	S			16	11	6.40	-6.4E-05	No	NT	NT		
-0.09	8	3	1.70	-4.1E-04	No	D	D	-7.48	-0.13	6	6	5.70	-7.6E-05	No	S	S			6	6	11.0	8.7E-07	No	I	S		
	6	0	0.21	6.6E-05	Yes	ND	ND			14	14	6.00	1.7E-04	No	NT	NT			13	13	22	1.4E-04	No	NT	NT		
	8	8	5.20	-9.3E-05	No	S	PD	-1.70	-0.09	5	5	0.97	1.8E-04	No	NT	S			5	5	5.30	-1.2E-04	No	S	S		
	12	11	5.70	-3.6E-05	No	NT	PD	-0.66	-0.04	4	4	1.10	-1.4E-04	No	S	S			7	6	9.50	6.8E-05	No	NT	NT		
	5	5	6.20	-2.5E-04	No	S	S			5	3	0.27	6.4E-04	No	NT	NT			4	4	3.30	1.2E-03	No	NT	NT		
	11	11	32	9.4E-05	No	NT	NT			6	4	0.34	8.6E-05	No	NT	NT			5	5	2.30	4.5E-04	No	NT	NT		
-64	14	14	170	-5.3E-04	No	D	D	-9.67	-16.4	6	6	0.82	-1.4E-04	No	S	S			6	4	1.30	4.8E-04	No	I	NT		
-4.90	16	16	6.20	-3.4E-04	No	D	D	-6.21	-0.38	5	2	0.14	-6.0E-04	No	NT	NT			9	4	2.10	-1.2E-05	No	NT	NT		
-16.9	27	27	700	-4.7E-05	No	S	S			17	15	1.30	-4.7E-04	No	PD	D	-8.58	-0.11	22	16	6.10	2.5E-04	No	I	NT		
-6.24	19	19	230	-3.1E-05	No	S	S			6	6	1.30	-1.4E-04	No	S	S			10	5	2.70	-2.8E-05	No	NT	NT		
-32	33	33	110	-5.2E-04	No	D	D	-9.49	-10.4	9	9	9.60	-2.9E-04	No	NT	NT			15	7	6.20	1.9E-04	No	NT	NT		
	5	5	1.20	-3.0E-04	No	PD	S			7	7	2.20	-2.2E-04	No	S	S			8	8	6.20	-1.3E-04	No	D	D	-2.37	-0.15
-12.8	36	36	590	-4.6E-04	No	D	D	-8.40	-50	28	28	22	-2.2E-04	No	D	D	-4.02	-0.88	31	30	67	-3.2E-04	No	D	D	-5.84	-3.91
-81	33	33	790	-2.6E-04	No	D	D	-4.75	-37	9	9	1.80	-1.2E-04	No	S	S			19	7	2.90	1.0E-04	No	NT	NT		
	32	32	230	-2.2E-04	No	D	D	-4.02	-9.23	32	32	37	-1.9E-04	No	D	D	-3.47	-1.28	33	32	41	-1.2E-04	No	D	D	-2.19	-0.90
-0.5	34	11	5.10	-4.4E-04	No	D	D	-8.03	-0.41	10	10	3.00	-3.0E-04	No	D	D	-5.48	-0.16	18	12	4.70	1.3E-04	No	NT	S		
-69	35	35	350	-4.8E-04	No	D	D	-8.76	-31	8	8	6.90	-2.5E-04	No	PD	PD	-4.56	-0.31	17	14	9.10	4.0E-05	No	NT	S		
-1.12	34	34	17.0	-1.3E-04	No	D	D	-2.37	-0.40	8	8	3.20	-8.0E-05	No	S	NT			16	9	3.90	2.3E-04	No	PI	NT		
0.91	37	36	4.90	-2.6E-05	No	S	D	-0.47	-0.02	8	5	0.53	-5.5E-04	No	S	S			18	9	3.80	1.6E-04	No	NT	NT		
-66	25	25	42	-4.6E-04	No	D	D	-8.40	-3.53	5	5	5.70	-1.5E-04	No	S	S			11	10	22	2.1E-04	No	NT	NT		
	2	2	160	0.0E+00	No	N/A	N/A			2	2	7.80	0.0E+00	No	N/A	N/A			2	2	38	0.0E+00	No	N/A	N/A		
	2	2	26	0.0E+00	No	N/A	N/A			2	2	11.0	0.0E+00	No	N/A	N/A			2	2	26	0.0E+00	No	N/A	N/A		
	2	2	87	0.0E+00	No	N/A	N/A			2	2	10.0	0.0E+00	No	N/A	N/A			2	2	44	0.0E+00	No	N/A	N/A		
	2	2	210	0.0E+00	No	N/A	N/A			2	2	0.70	0.0E+00	No	N/A	N/A			2	2	21	0.0E+00	No	N/A	N/A		
	2	2	20	0.0E+00	No	N/A	N/A			2	2	16.0	0.0E+00	No	N/A	N/A			2	2	56	0.0E+00	No	N/A	N/A		
-6.57	24	14	3.60	-1.2E-03	No	D	D	-22	-0.79	22	8	0.12	-6.9E-04	No	D	D	-12.6	-0.02	22	10	2.90	4.5E-05	No	NT	NT		

Appendix E

Trend Analysis (Period Q1-1996 to Q2-2017)
2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

	Trichloroethylene (TCE)									Hexavalent Chromium									Total Chromium								
e of Trend	Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend		Number of	Number of	Mean	LR	All Samples	LR	M-K	Magnitude of Trend	
(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)	Samples	Decections	(µg/L)	Slope	ND	Trend	Trend	(%/yr)	(µg/L/yr)
-3.55	17	17	44	-5.1E-04	No	D	PD	-9.31	-4.10	17	16	1.60	4.0E-04	No	I	PI	7.30	0.12	17	13	4.60	1.3E-04	No	NT	NT		
0.02	19	0	0.19	-7.2E-05	Yes	ND	ND			14	14	0.79	2.2E-04	No	I	PI	4.02	0.03	14	6	2.40	2.9E-04	No	PI	I	5.29	0.13
	5	3	0.51	-1.0E-03	No	PD	S			5	3	0.09	3.3E-04	No	NT	S			4	4	12.0	5.8E-04	No	NT	NT		
-1.51	7	7	5.80	-7.7E-05	No	PD	D	-1.41	-0.08	11	2	0.06	3.2E-04	No	NT	NT			11	6	2.10	-9.1E-05	No	NT	NT		
-5.84	8	8	29	-8.1E-05	No	PD	D	-1.48	-0.43	6	5	0.53	4.4E-04	No	PI	NT			7	5	2.70	-2.1E-04	No	D	NT		
	8	8	8.80	4.5E-05	No	NT	NT			12	10	0.66	-1.5E-04	No	S	S			13	10	2.90	-1.9E-04	No	D	PD	-3.47	-0.10
-7.43	15	15	26	-3.5E-04	No	D	D	-6.39	-1.66	13	13	1.00	-8.8E-05	No	S	NT			17	9	5.40	4.3E-04	No	PI	I	7.85	0.42
-9.36	8	8	11.0	-2.3E-04	No	D	D	-4.20	-0.46	12	12	140	-4.1E-04	No	NT	PD	-7.48	-10.5	13	8	4.10	-1.7E-04	No	S	S		
-0.07	28	2	0.22	-7.8E-05	No	D	S			23	6	0.05	-2.6E-05	No	NT	NT			24	10	2.60	-3.2E-05	No	NT	NT		
-0.29	25	14	0.65	-1.4E-04	No	D	D	-2.56	-0.02	20	15	0.39	4.2E-04	No	I	I	7.67	0.03	21	15	4.10	5.6E-05	No	NT	NT		
	23	1	0.20	-3.6E-05	No	S	NT			21	6	0.07	1.7E-04	No	NT	S			22	10	2.40	-2.6E-04	No	D	D	-4.75	-0.11
-1.37	22	22	890	-2.4E-04	No	D	D	-4.38	-39	19	18	0.74	-1.7E-04	No	S	PD	-3.10	-0.02	20	13	3.70	-1.1E-04	No	S	D	-2.01	-0.07
	5	5	1.30	-1.5E-04	No	S	S			5	2	0.18	-1.5E-03	No	NT	NT			5	5	43	1.9E-04	No	NT	NT		
-8.02	20	19	10	-8.8E-04	No	D	D	-16.1	-1.59	21	11	0.32	-1.6E-04	No	NT	PD	-2.92	-0.01	21	11	21	3.3E-04	No	NT	NT		
	4	4	52	2.8E-04	No	NT	NT			4	4	1.10	-1.1E-03	No	S	S			3	2	2.70	0.0E+00	No	N/A	N/A		
	18	18	19	-1.6E-04	No	D	D	-2.92	-0.55	18	17	2.00	3.0E-04	No	PI	NT			18	13	4.60	7.1E-05	No	NT	NT		
	16	16	15	-1.6E-04	No	PD	D	-2.92	-0.44	16	15	1.40	2.0E-04	No	NT	I	3.65	0.05	15	12	3.70	6.5E-05	No	NT	S		
	17	17	10	-1.4E-04	No	D	D	-2.56	-0.25	17	16	1.30	1.2E-04	No	NT	NT			16	12	4.10	-4.5E-05	No	S	S		
-3.47	17	17	44	-2.1E-04	No	PD	PD	-3.83	-1.69	17	14	1.40	3.9E-04	No	PI	I	7.12	0.10	16	12	4.40	9.7E-06	No	I	S		
	21	10	2.40	-2.3E-04	No	D	NT			12	12	4.80	-8.1E-05	No	S	S			13	13	140	-6.0E-04	No	D	D	-11.0	-15.3
-12.3	19	19	140	-1.9E-04	No	D	D	-3.47	-4.85	11	11	27	-5.7E-04	No	D	D	-10.4	-2.81	11	11	76	-1.2E-04	No	NT	NT		

% Total	Trichloroethylene (TCE) (# wells)	% Total	Hexavalent Chromium (# wells)	% Total	Total Chromium (# wells)	% Total
	5		5		6	
	0		0		0	
2.90	3	4	0	0.00	0	0.00
10.14	9	13	23	33.33	40	58.82
20.29	9	13	21	30.43	13	19.12
4.35	1	1	5	7.25	3	4.41
0.00	1	1	5	7.25	1	1.47
59.42	39	57	9	13.04	6	8.82
2.90	7	10	6	8.70	5	7.35
100.00	69	100	69	100.00	68	100.00

Appendix F
BOU Extraction Well Performance

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

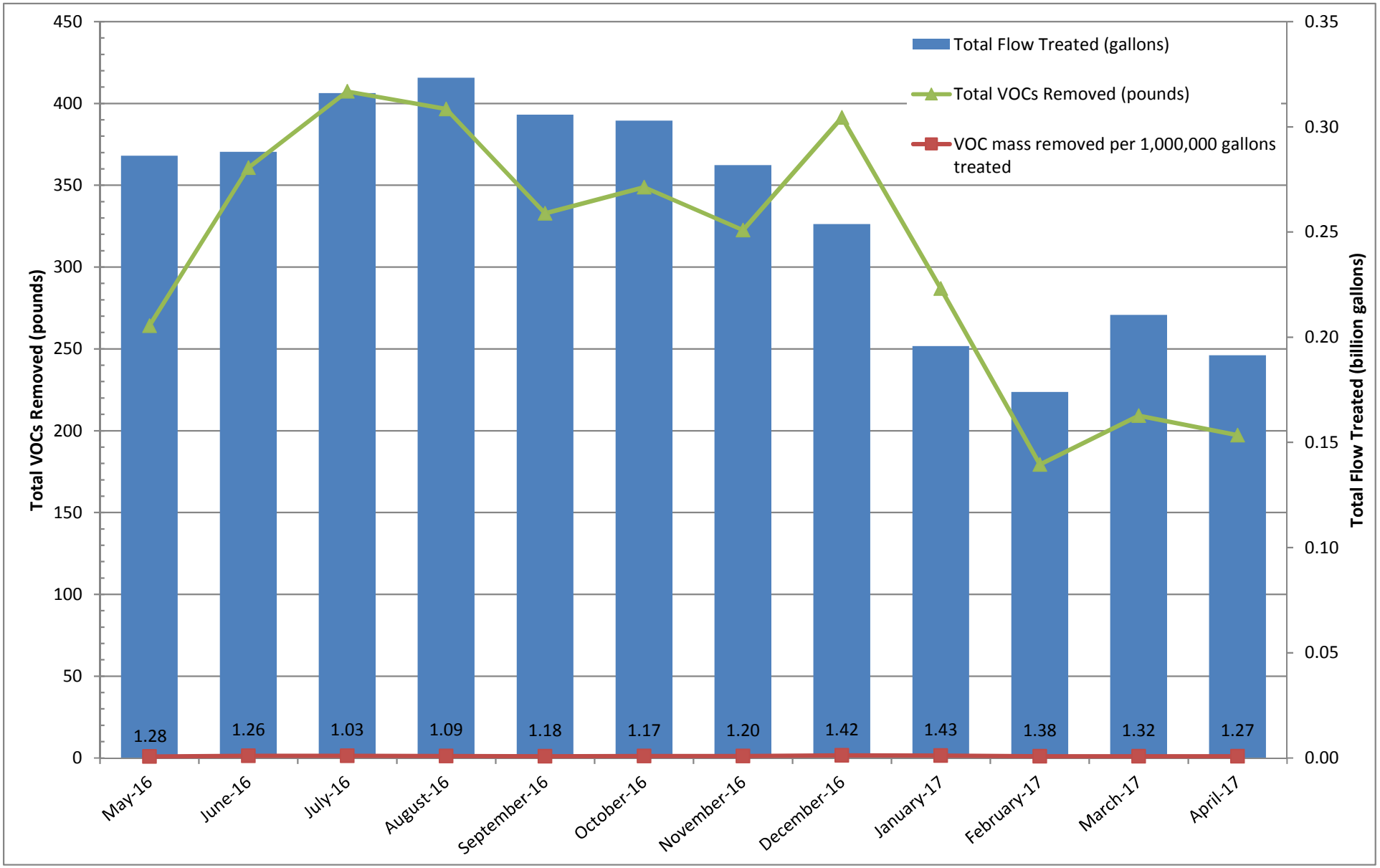
Appendix F

BOU Cummulative Mass Removal Summary (January 1996 - April 2016)
2016 Annual Groundwater Montoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA

Year	Total Flow Treated (gallons)	Cummulative Flow Treated (gallons)	Total VOC Mass Removed (pounds)	Cummulative VOC Mass Removed (pounds)
1996	2,250,086,147	2,250,086,147	27,663	27,663
1997	3,408,059,569	5,658,145,716	28,519	56,182
1998	371,154,459	6,029,300,175	3,908	60,090
1999	3,956,423,830	9,985,724,005	39,569	99,659
2000	3,194,062,916	13,179,786,921	24,036	123,695
2001	3,146,371,256	16,326,158,177	20,575	144,271
2002	3,357,074,416	19,683,232,593	17,356	161,627
2003	2,942,948,496	22,626,181,089	14,827	176,454
2004	3,204,536,159	25,830,717,248	11,547	188,000
2005	2,274,141,614	28,104,858,862	6,818	194,819
2006	3,364,467,193	31,469,326,055	10,286	205,105
2007	3,153,855,623	34,623,181,678	7,513	212,618
2008	2,280,818,078	36,903,999,756	4,784	217,402
2009	3,280,836,166	40,184,835,922	6,706	224,108
2010	3,282,379,861	43,467,215,783	6,160	230,268
2011	3,355,059,726	46,822,275,509	5,870	236,138
2012	3,543,049,805	50,365,325,314	5,384	241,522
2013	3,637,576,057	54,002,901,370	5,164	246,686
2014	3,114,113,237	57,117,014,607	3,707	250,393
2015	3,365,140,780	60,482,155,387	4,368	254,761
2016	3,133,756,552	63,615,911,939	3,789	258,550
2017 (Jan - April)	771,530,941	64,387,442,880	873	255,634

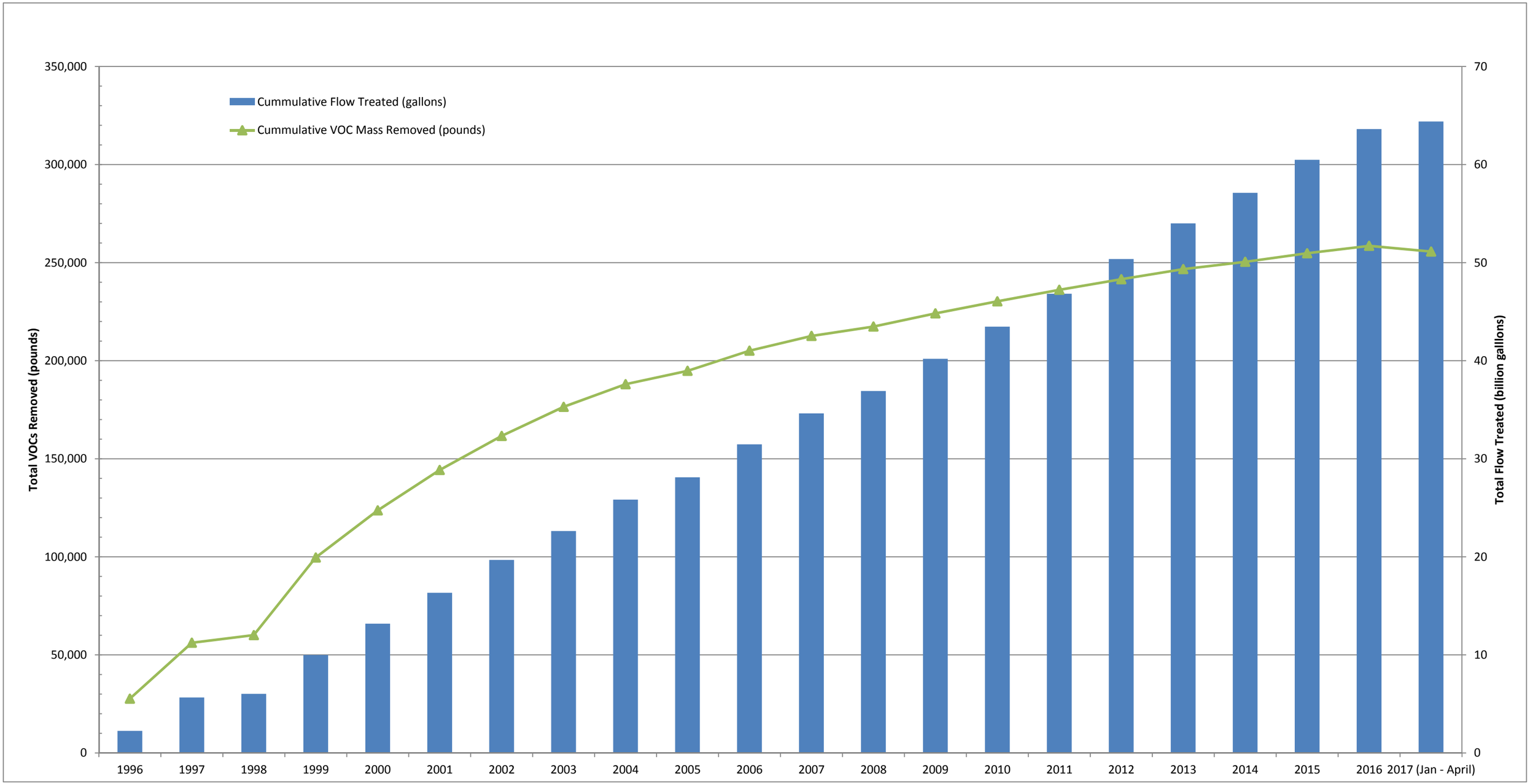
Appendix F

Monthly Mass Removed (May 2016 - April 2017)
Burbank Operable Unit Water Treatment Plant
2017 Annual Groundwater Montoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA



Appendix F

Cumulative Mass Removed (January 1996 - April 2017)
Burbank Operable Unit Water Treatment Plant
2017 Annual Groundwater Monitoring Report
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, CA



Appendix G
Laboratory Analytical Results

Annual Groundwater Monitoring Report, Second Quarter 2017

Lockheed Martin Corporation

Burbank Operable Unit, Burbank, CA

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WORK ORDER NUMBER: 17-04-1908

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 05/10/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-1908

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Work Order Narrative

Work Order: 17-04-1908 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/25/17. They were assigned to Work Order 17-04-1908.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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QC Association Summary

Work Order: 17-04-1908

Client Sample ID	Method Name	Type	Ext Name	Instrument	MS/MSD/SDP	LCS/LCSD
C-1-CW03-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170425S01	170425L01
C-1-CW03-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170502SA4	170502LA4A
C-1-CW03-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS FFF	170505S003	170505L003
C-1-CW03-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170502S030	170502L048
C-1-CW03-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170427S08	170427L08
SW-1-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170425S01	170425L01
SW-1-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170502SA4	170502LA4A
SW-1-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS FFF	170505S003	170505L003
SW-1-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170502S030	170502L048
SW-1-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170427S08	170427L08
LTB-20170425	EPA 8260B Volatile Organics		EPA 5030C	GC/MS FFF	170505S003	170505L003
LTB-20170425	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170502S030	170502L048
3850U-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170425S01	170425L01
3850U-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170502SA4	170502LA4A
3850U-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS FFF	170505S003	170505L003
3850U-N-17Q2	EPA 8260B Volatile Organics	R	EPA 5030C	GC/MS UU	170506S005	170506L015
3850U-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170504S023	170504L054
3850U-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170427S08	170427L08
B-6-CW16-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170425S01	170425L01
B-6-CW16-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170502SA4	170502LA4A
B-6-CW16-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS FFF	170505S003	170505L003
B-6-CW16-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170504S023	170504L054
B-6-CW16-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170427S08	170427L08

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-1908
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/25/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
C-1-CW03-N-17Q2 (17-04-1908-1)						
Chromium, Hexavalent	0.88		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00266		0.00100	mg/L	EPA 6020	EPA 3020A Total
Bromodichloromethane	0.34	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.74		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.38	J	0.20*	ug/L	EPA 8260B	EPA 5030C
SW-1-N-17Q2 (17-04-1908-2)						
Chromium, Hexavalent	5.6		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00653		0.00100	mg/L	EPA 6020	EPA 3020A Total
Bromodichloromethane	0.80		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	3.3		0.50	ug/L	EPA 8260B	EPA 5030C
LTB-20170425 (17-04-1908-3)						
Acetone	5.0	J	4.0*	ug/L	EPA 8260B	EPA 5030C
3850U-N-17Q2 (17-04-1908-4)						
Chromium, Hexavalent	0.87		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00919		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,1-Trichloroethane	0.23	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloro-1,2,2-Trifluoroethane	4.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	6.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	1.3		1.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.44	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	19		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	27		1.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	1.6		0.12	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	1.4		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
B-6-CW16-N-17Q2 (17-04-1908-5)						
Chromium, Hexavalent	1.4		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0289		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,1-Trichloroethane	0.42	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	8.4		0.50	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.46	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.84		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	6.9		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	3.9		0.50	ug/L	EPA 8260B	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-1908
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/25/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW03-N-17Q2	**17-04-1908-1-K**	**04/25/17 14:18**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 20:42**	**170425L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.88	0.020	0.0099	1.00	

SW-1-N-17Q2	**17-04-1908-2-K**	**04/25/17 08:22**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 20:53**	**170425L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	5.6	0.020	0.0099	1.00	

3850U-N-17Q2	**17-04-1908-4-L**	**04/25/17 11:07**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 21:04**	**170425L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.87	0.020	0.0099	1.00	

B-6-CW16-N-17Q2	**17-04-1908-5-K**	**04/25/17 14:41**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 21:15**	**170425L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.4	0.020	0.0099	1.00	

Method Blank	**099-14-567-240**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 18:58**	**170425L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW03-N-17Q2	**17-04-1908-1-L**	**04/25/17 14:18**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/08/17 15:35**	**170502LA4A**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00266	0.00100	0.000402	1.00	

SW-1-N-17Q2	**17-04-1908-2-L**	**04/25/17 08:22**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/08/17 15:38**	**170502LA4A**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00653	0.00100	0.000402	1.00	

3850U-N-17Q2	**17-04-1908-4-M**	**04/25/17 11:07**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/08/17 15:40**	**170502LA4A**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00919	0.00100	0.000402	1.00	

B-6-CW16-N-17Q2	**17-04-1908-5-L**	**04/25/17 14:41**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/08/17 15:43**	**170502LA4A**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0289	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5560**	**N/A**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/03/17 17:11**	**170502LA4A**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW03-N-17Q2	**17-04-1908-1-M**	**04/25/17 14:18**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 16:56**	**170427L08**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

SW-1-N-17Q2	**17-04-1908-2-K**	**04/25/17 08:22**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 17:12**	**170427L08**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	112	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

3850U-N-17Q2	**17-04-1908-4-M**	**04/25/17 11:07**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 17:27**	**170427L08**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.4	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	112	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

B-6-CW16-N-17Q2	**17-04-1908-5-M**	**04/25/17 14:41**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 17:43**	**170427L08**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-216-1023**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 15:37**	**170427L08**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	116	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW03-N-17Q2	**17-04-1908-1-A**	**04/25/17 14:18**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 11:01**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	0.34	0.50	0.20	1.00	J
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.74	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.38	0.50	0.20	1.00	J
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	97	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SW-1-N-17Q2	**17-04-1908-2-A**	**04/25/17 08:22**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 16:15**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	0.80	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	3.3	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	96	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170425	**17-04-1908-3-A**	**04/25/17 06:30**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 16:46**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	5.0	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850U-N-17Q2	**17-04-1908-4-A**	**04/25/17 11:07**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 17:18**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	0.23	0.50	0.20	1.00	J
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	4.9	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	6.9	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	1.3	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.44	0.50	0.20	1.00	J
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.35	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.5	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	19	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.35	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	106	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	97	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850U-N-17Q2	**17-04-1908-4-2**	**04/25/17 11:07**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 17:34**	**170506L015**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	27	1.0	0.40	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	116	80-127	
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW16-N-17Q2	**17-04-1908-5-A**	**04/25/17 14:41**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 17:49**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	0.42	0.50	0.20	1.00	J
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	8.4	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.46	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.84	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	6.9	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	3.9	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4683**	**N/A**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 09:58**	**170505L003**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	95	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4687**	**N/A**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 14:30**	**170506L015**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	ND	0.50	0.20	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	109	80-127	
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW03-N-17Q2	**17-04-1908-1-H**	**04/25/17 14:18**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 18:38**	**170502L048**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	109	80-120	

SW-1-N-17Q2	**17-04-1908-2-H**	**04/25/17 08:22**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 19:08**	**170502L048**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	105	80-120	

LTB-20170425	**17-04-1908-3-C**	**04/25/17 06:30**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 14:39**	**170502L048**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

3850U-N-17Q2	**17-04-1908-4-F**	**04/25/17 11:07**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 16:37**	**170504L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	1.6	0.12	0.062	25.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW16-N-17Q2	**17-04-1908-5-F**	**04/25/17 14:41**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 16:07**	**170504L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

Method Blank	**099-15-118-497**	**N/A**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 11:40**	**170502L048**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

Method Blank	**099-15-118-498**	**N/A**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 15:37**	**170504L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
C-1-CW03-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 20:42**	**170425S01**
C-1-CW03-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 21:26**	**170425S01**
C-1-CW03-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 21:38**	**170425S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	0.8780	10.00	11.11	102	11.23	103	85-121	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-2243-3	**Sample**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/03/17 17:26**	**170502SA4**
17-04-2243-3	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/03/17 17:16**	**170502SA4**
17-04-2243-3	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/03/17 17:19**	**170502SA4**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.01167	0.1000	0.1098	98	0.1151	103	73-133	5	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
C-1-CW03-N-17Q2	**Sample**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 16:56**	**170427S08**
C-1-CW03-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 16:08**	**170427S08**
C-1-CW03-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 16:24**	**170427S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	18.77	94	20.08	100	50-130	7	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-05-0457-2	**Sample**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 15:07**	**170506S005**
17-05-0457-2	**Matrix Spike**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 15:44**	**170506S005**
17-05-0457-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 16:21**	**170506S005**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	9.721	97	10.12	101	75-125	4	0-20	
Carbon Tetrachloride	ND	10.00	10.37	104	11.00	110	69-135	6	0-20	
Chlorobenzene	ND	10.00	9.910	99	10.42	104	75-125	5	0-20	
1,2-Dibromoethane	ND	10.00	10.07	101	10.70	107	75-126	6	0-20	
1,2-Dichlorobenzene	ND	10.00	10.08	101	10.74	107	75-125	6	0-20	
1,2-Dichloroethane	ND	10.00	9.838	98	10.28	103	75-127	4	0-20	
1,1-Dichloroethene	ND	10.00	10.01	100	10.47	105	66-126	4	0-20	
Ethylbenzene	ND	10.00	10.55	105	10.76	108	75-125	2	0-20	
Toluene	ND	10.00	9.880	99	10.33	103	75-125	4	0-20	
Trichloroethene	ND	10.00	9.697	97	10.06	101	75-125	4	0-20	
Vinyl Chloride	ND	10.00	9.919	99	10.87	109	52-142	9	0-20	
p/m-Xylene	ND	20.00	20.54	103	21.19	106	75-125	3	0-20	
o-Xylene	ND	10.00	10.37	104	10.76	108	75-127	4	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.717	97	10.19	102	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
C-1-CW03-N-17Q2	**Sample**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 11:01**	**170505S003**
C-1-CW03-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 11:32**	**170505S003**
C-1-CW03-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 12:04**	**170505S003**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	8.016	80	8.551	86	66-126	6	0-20	
1,2-Dibromoethane	ND	10.00	9.626	96	9.716	97	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	9.409	94	9.654	97	75-125	3	0-20	
1,2-Dichloroethane	ND	10.00	9.134	91	9.339	93	75-127	2	0-20	
Benzene	ND	10.00	9.102	91	9.186	92	75-125	1	0-20	
Carbon Tetrachloride	ND	10.00	9.433	94	9.832	98	69-135	4	0-20	
Chlorobenzene	ND	10.00	9.480	95	9.602	96	75-125	1	0-20	
Ethylbenzene	ND	10.00	9.358	94	9.535	95	75-125	2	0-20	
Toluene	ND	10.00	9.174	92	9.413	94	75-125	3	0-20	
Trichloroethene	ND	10.00	9.199	92	9.424	94	75-125	2	0-20	
Vinyl Chloride	ND	10.00	10.03	100	10.30	103	52-142	3	0-20	
o-Xylene	ND	10.00	9.261	93	9.646	96	75-127	4	0-20	
p/m-Xylene	ND	20.00	18.41	92	19.06	95	75-125	3	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.469	95	9.598	96	71-131	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1547-5	**Sample**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 12:10**	**170502S030**
17-04-1547-5	**Matrix Spike**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 13:09**	**170502S030**
17-04-1547-5	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 13:40**	**170502S030**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02290	114	0.02860	143	72-132	22	0-20	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3850U-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 16:37**	**170504S023**
3850U-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 19:48**	**170504S023**
3850U-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 20:18**	**170504S023**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	1.568	0.5000	2.210	128	1.928	72	72-132	14	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-2243-3	**Sample**	**Aqueous**	**ICP/MS 03**	**05/02/17 00:00**	**05/03/17 17:26**	**170502SA4**
17-04-2243-3	**PDS**	**Aqueous**	**ICP/MS 03**	**05/02/17 00:00**	**05/03/17 18:43**	**170502SA4**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.01167	0.1000	0.1065	95	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-240	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/25/17 19:10**	**170425L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.00	100	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5560	**LCS**	**Aqueous**	**ICP/MS 03**	**05/02/17**	**05/03/17 17:14**	**170502LA4A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1065	106	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1023	**LCS**	**Aqueous**	**GC/MS DDD**	**04/27/17**	**04/28/17 15:53**	**170427L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	18.96	95	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4687	**LCS**	**Aqueous**	**GC/MS UU**	**05/06/17**	**05/06/17 13:17**	**170506L015**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	9.336	93	80-120	73-127	
Carbon Tetrachloride	10.00	10.33	103	80-129	72-137	
Chlorobenzene	10.00	9.716	97	80-120	73-127	
1,2-Dibromoethane	10.00	10.07	101	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.05	101	80-120	73-127	
1,2-Dichloroethane	10.00	9.782	98	80-122	73-129	
1,1-Dichloroethene	10.00	9.275	93	77-120	70-127	
Ethylbenzene	10.00	9.964	100	80-120	73-127	
Toluene	10.00	9.478	95	80-120	73-127	
Trichloroethene	10.00	9.401	94	80-120	73-127	
Vinyl Chloride	10.00	9.328	93	63-135	51-147	
p/m-Xylene	20.00	19.64	98	80-120	73-127	
o-Xylene	10.00	9.983	100	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.464	95	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4683	**LCS**	**Aqueous**	**GC/MS FFF**	**05/05/17**	**05/05/17 09:26**	**170505L003**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	8.192	82	77-120	70-127	
1,2-Dibromoethane	10.00	9.132	91	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.539	95	80-120	73-127	
1,2-Dichloroethane	10.00	9.204	92	80-122	73-129	
Benzene	10.00	8.806	88	80-120	73-127	
Carbon Tetrachloride	10.00	8.809	88	80-129	72-137	
Chlorobenzene	10.00	9.346	93	80-120	73-127	
Ethylbenzene	10.00	9.267	93	80-120	73-127	
Toluene	10.00	9.267	93	80-120	73-127	
Trichloroethene	10.00	8.964	90	80-120	73-127	
Vinyl Chloride	10.00	9.828	98	63-135	51-147	
o-Xylene	10.00	9.522	95	80-120	73-127	
p/m-Xylene	20.00	18.80	94	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.968	90	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-497	**LCS**	**Aqueous**	**GC/MS M**	**05/02/17**	**05/02/17 10:40**	**170502L048**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01880	94	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/25/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1908
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-498	**LCS**	**Aqueous**	**GC/MS M**	**05/04/17**	**05/04/17 15:07**	**170504L054**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01720	86	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-1908

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	996	GC/MS UU	2
EPA 8260B	EPA 5030C	996	GC/MS FFF	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-1908 Page 1 of 1

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

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-25-2017

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WO NO. / LAB USE ONLY: **17-04-1908**

LABORATORY CLIENT: TetraTech INC

ADDRESS: 301E Vanderbilt Way Suite 450

CITY: San Bernardino STATE: CA ZIP: 92408

TEL: 909-381-1674 E-MAIL:

CLIENT PROJECT NAME / NO.: LMC Bou

P.O. NO.: 100-SBO-T35076 GWKC08

PROJECT CONTACT: Robert Sabater

LAB CONTACT OR QUOTE NO:

GLOBAL ID:

LOG CODE:

SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☑ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	Hex CR	TCP / Mg Metals	1,2,3 TCP
1	C-1-CW03-N-17Q2	4-25-17	1418	W	13	✓	✓							5									1	1	1	5
2	SW-1-N-17Q2	4-25-17	0822	W	13	✓	✓							5									1	1	1	5
3	LTB-20170425	4/25/17	0630	W	3		✓							2												1
4	3850U-N-17Q2	4/25/17	1107	W	13	✓	✓							5									1	1	1	5
5	B-6-CW16-N-17Q2	4/25/17	1441	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] EC1	4-25-2017	1630
[signature]	[signature] EC1	04/25/17	1830

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 1908

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: TETRA TECH

DATE: 04 / 25 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 3.2 °C (w/ CF): 3.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 804
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1017

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** (10) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1017

Reviewed by: 681

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WORK ORDER NUMBER: 17-04-1778

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 05/10/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Work Order Number: 17-04-1778

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Work Order Narrative

Work Order: 17-04-1778 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/24/17. They were assigned to Work Order 17-04-1778.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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QC Association Summary

Work Order: 17-04-1778

Client Sample ID	Method Name	Type	Ext Name	Instrument	MS/MSD/SDP	LCS/LCSD
LTB-20170424	EPA 8260B Volatile Organics		EPA 5030C	GC/MS L	170504S018	170504L022
LTB-20170424	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170501S019	170501L036
B-1-CW25-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170424S01	170424L01
B-1-CW25-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170426SA1	170426LA1
B-1-CW25-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS L	170504S018	170504L022
B-1-CW25-N-17Q2	EPA 8260B Volatile Organics	R	EPA 5030C	GC/MS L	170504S018	170504L022
B-1-CW25-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170426S017	170426L041
B-1-CW25-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170425S04	170425L04
B-1-CW25-FD-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170424S01	170424L01
B-1-CW25-FD-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170426SA1	170426LA1
B-1-CW25-FD-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS L	170504S018	170504L022
B-1-CW25-FD-17Q2	EPA 8260B Volatile Organics	R	EPA 5030C	GC/MS L	170504S018	170504L022
B-1-CW25-FD-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170426S017	170426L041
B-1-CW25-FD-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170425S04	170425L04
B-6-CW10-N-17Q2	EPA 218.6 Hexavalent Chromium Low Level		N/A	IC 16	170424S01	170424L01
B-6-CW10-N-17Q2	EPA 6020 ICP/MS Metals		EPA 3020A Total	ICP/MS 03	170426SA1	170426LA1
B-6-CW10-N-17Q2	EPA 8260B Volatile Organics		EPA 5030C	GC/MS L	170504S018	170504L022
B-6-CW10-N-17Q2	EPA 8260B SIM Emergent Volatiles		EPA 5030C	GC/MS M	170501S019	170501L036
B-6-CW10-N-17Q2	1,4-Dioxane by EPA 8270C (M) Isotope Dilution		EPA 3510C	GC/MS DDD	170425S04	170425L04

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R = Rerun

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-1778 LMC BOU 04/24/17
Attn:	Robert Sabater		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-1-CW25-N-17Q2 (17-04-1778-2)						
Chromium, Hexavalent	3.8		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00801		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.92		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.62		0.50	ug/L	EPA 8260B	EPA 5030C
Acetone	4.1	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Chloroform	2.6		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	19		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	72		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.022		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
B-1-CW25-FD-17Q2 (17-04-1778-3)						
Chromium, Hexavalent	3.8		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00793		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.82		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.51		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	2.1		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	15		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	72		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.022		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
B-6-CW10-N-17Q2 (17-04-1778-4)						
Chromium, Hexavalent	0.28		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00255		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.34	J	0.24*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.86	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.50	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.7		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	30		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	13		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	1.5		0.12	ug/L	EPA 8260B SIM	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-N-17Q2	**17-04-1778-2-G**	**04/24/17 11:29**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 22:22**	**170424L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	3.8	0.020	0.0099	1.00	

B-1-CW25-FD-17Q2	**17-04-1778-3-G**	**04/24/17 11:29**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 22:33**	**170424L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	3.8	0.020	0.0099	1.00	

B-6-CW10-N-17Q2	**17-04-1778-4-K**	**04/24/17 15:46**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 22:45**	**170424L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.28	0.020	0.0099	1.00	

Method Blank	**099-14-567-239**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 20:19**	**170424L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-N-17Q2	**17-04-1778-2-I**	**04/24/17 11:29**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:04**	**170426LA1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00801	0.00100	0.000402	1.00	

B-1-CW25-FD-17Q2	**17-04-1778-3-H**	**04/24/17 11:29**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:06**	**170426LA1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00793	0.00100	0.000402	1.00	

B-6-CW10-N-17Q2	**17-04-1778-4-L**	**04/24/17 15:46**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:09**	**170426LA1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00255	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5550**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 12:56**	**170426LA1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-N-17Q2	**17-04-1778-2-K**	**04/24/17 11:29**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 04:18**	**170425L04**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

B-1-CW25-FD-17Q2	**17-04-1778-3-I**	**04/24/17 11:29**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 04:33**	**170425L04**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	88	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

B-6-CW10-N-17Q2	**17-04-1778-4-M**	**04/24/17 15:46**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 04:49**	**170425L04**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	81	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

Method Blank	**099-16-216-1019**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 00:49**	**170425L04**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	117	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170424	**17-04-1778-1-A**	**04/24/17 07:00**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 20:44**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 15

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	68-120	
Dibromofluoromethane	107	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 15

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	109	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-N-17Q2	**17-04-1778-2-A**	**04/24/17 11:29**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 17:38**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.92	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.62	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.1	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 15

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	2.6	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	19	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-120	
Dibromofluoromethane	106	80-127	
1,2-Dichloroethane-d4	105	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 15

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	102	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-N-17Q2	**17-04-1778-2-B**	**04/24/17 11:29**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 19:43**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	72	2.0	0.80	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	68-120	
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-FD-17Q2	**17-04-1778-3-A**	**04/24/17 11:29**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 18:12**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.82	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.51	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 15

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	2.1	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	15	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-120	
Dibromofluoromethane	104	80-127	
1,2-Dichloroethane-d4	101	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 15

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	100	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW25-FD-17Q2	**17-04-1778-3-B**	**04/24/17 11:29**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 20:14**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	72	2.0	0.80	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	107	80-127	
1,2-Dichloroethane-d4	110	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW10-N-17Q2	**17-04-1778-4-A**	**04/24/17 15:46**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 17:08**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.34	0.50	0.24	1.00	J
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	0.86	1.0	0.40	1.00	J
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 15

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.50	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.7	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	30	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	13	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.35	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	105	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 15

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	95	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4680**	**N/A**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 16:26**	**170504L022**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 15

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 15

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170424	**17-04-1778-1-C**	**04/24/17 07:00**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 12:42**	**170501L036**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	99	80-120	

B-1-CW25-N-17Q2	**17-04-1778-2-D**	**04/24/17 11:29**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/27/17 03:26**	**170426L041**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.022	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	67-133	

B-1-CW25-FD-17Q2	**17-04-1778-3-D**	**04/24/17 11:29**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/27/17 03:56**	**170426L041**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.022	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	67-133	

B-6-CW10-N-17Q2	**17-04-1778-4-G**	**04/24/17 15:46**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 13:11**	**170501L036**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	1.5	0.12	0.062	25.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	119	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-495**	**N/A**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 21:59**	**170426L041**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	67-133	

Method Blank	**099-15-118-496**	**N/A**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 12:11**	**170501L036**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	91	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1764-4	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 21:04**	**170424S01**
17-04-1764-4	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 21:37**	**170424S01**
17-04-1764-4	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 21:49**	**170424S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	10.42	10.00	20.94	105	20.71	103	85-121	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1676-4	**Sample**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:34**	**170426SA1**
17-04-1676-4	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:24**	**170426SA1**
17-04-1676-4	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 13:26**	**170426SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	0.1000	0.09415	94	0.09830	98	73-133	4	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1707-7	**Sample**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 01:53**	**170425S04**
17-04-1707-7	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 01:21**	**170425S04**
17-04-1707-7	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 01:37**	**170425S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	20.54	103	19.77	99	50-130	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-6-CW10-N-17Q2	**Sample**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 17:08**	**170504S018**
B-6-CW10-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 18:42**	**170504S018**
B-6-CW10-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 19:13**	**170504S018**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	7.749	77	8.407	84	66-126	8	0-20	
1,2-Dibromoethane	ND	10.00	8.802	88	8.557	86	75-126	3	0-20	
1,2-Dichlorobenzene	ND	10.00	9.070	91	8.814	88	75-125	3	0-20	
1,2-Dichloroethane	ND	10.00	8.651	87	8.545	85	75-127	1	0-20	
Benzene	ND	10.00	8.155	82	8.298	83	75-125	2	0-20	
Carbon Tetrachloride	ND	10.00	7.690	77	8.251	83	69-135	7	0-20	
Chlorobenzene	ND	10.00	8.471	85	8.368	84	75-125	1	0-20	
Ethylbenzene	ND	10.00	8.664	87	8.700	87	75-125	0	0-20	
Toluene	ND	10.00	8.425	84	8.424	84	75-125	0	0-20	
Trichloroethene	13.48	10.00	24.56	111	24.52	110	75-125	0	0-20	
Vinyl Chloride	ND	10.00	10.93	109	11.14	111	52-142	2	0-20	
o-Xylene	ND	10.00	8.793	88	8.773	88	75-127	0	0-20	
p/m-Xylene	ND	20.00	17.19	86	17.16	86	75-125	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.639	86	8.826	88	71-131	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1918-1	**Sample**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 22:28**	**170426S017**
17-04-1918-1	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 22:58**	**170426S017**
17-04-1918-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 23:28**	**170426S017**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01900	95	0.01960	98	55-135	3	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-6-CW10-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 13:11**	**170501S019**
B-6-CW10-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 14:11**	**170501S019**
B-6-CW10-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 14:41**	**170501S019**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	1.472	0.5000	2.358	177	1.915	88	72-132	21	0-20	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-1676-4	**Sample**	**Aqueous**	**ICP/MS 03**	**04/26/17 00:00**	**04/27/17 13:34**	**170426SA1**
17-04-1676-4	**PDS**	**Aqueous**	**ICP/MS 03**	**04/26/17 00:00**	**04/27/17 13:29**	**170426SA1**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	ND	0.1000	0.09897	99	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-239	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/24/17 20:30**	**170424L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.13	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5550	**LCS**	**Aqueous**	**ICP/MS 03**	**04/26/17**	**04/27/17 12:58**	**170426LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1054	105	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1019	**LCS**	**Aqueous**	**GC/MS DDD**	**04/25/17**	**04/26/17 01:05**	**170425L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.08	95	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4680	**LCS**	**Aqueous**	**GC/MS L**	**05/04/17**	**05/04/17 15:25**	**170504L022**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.72	107	77-120	70-127	
1,2-Dibromoethane	10.00	10.12	101	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.11	101	80-120	73-127	
1,2-Dichloroethane	10.00	9.762	98	80-122	73-129	
Benzene	10.00	9.952	100	80-120	73-127	
Carbon Tetrachloride	10.00	9.516	95	80-129	72-137	
Chlorobenzene	10.00	9.862	99	80-120	73-127	
Ethylbenzene	10.00	10.56	106	80-120	73-127	
Toluene	10.00	10.06	101	80-120	73-127	
Trichloroethene	10.00	10.14	101	80-120	73-127	
Vinyl Chloride	10.00	9.284	93	63-135	51-147	
o-Xylene	10.00	10.42	104	80-120	73-127	
p/m-Xylene	20.00	21.09	105	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.11	101	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-495	**LCS**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 20:59**	**170426L041**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02030	102	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/24/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1778
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-496	**LCS**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 10:42**	**170501L036**
099-15-118-496	**LCSD**	**Aqueous**	**GC/MS M**	**05/01/17**	**05/01/17 11:12**	**170501L036**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01890	94	0.02180	109	72-132	14	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-1778

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	834	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-1778 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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

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

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 04/24/17
Page 1 of 1

WO NO. / LAB USE ONLY: **17-04-1778**

LABORATORY CLIENT: Tetra Tech Inc.
ADDRESS: 341 ~~150~~ E. Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL: 909-381-1674 E-MAIL: Robert.Sabater@tetratech.com

CLIENT PROJECT NAME / NO.: BOU
P.O. NO.: 100-SBO-T35076
PROJECT CONTACT: Robert Sabater
LAB CONTACT OR QUOTE NO.:
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☑ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) ☐ GRO	TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ___	BTEX / MTBE ☐ 8260 ☐ ___	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4-Dioxane	Total Metals	Hex Cr	1,2,3-TCP
1	LTB-20170424	04/24/17	0700	W	3		✓							2												
2	B-1-GW25-N-1702	4/24/17	1129	W	13	✓	✓							3									1	1	1	3
3	B-1-GW25-FD-1702	4/24/17	1129	W	13	✓	✓							3									1	1	1	3
4	B-6-GW10-N-1702	4/24/17	1546	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date	Time
	ECI	04/24/17	1632
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date	Time
	ECI	04/24/17	1820
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date	Time

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 1778

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: TETRA TECH

DATE: 04 / 24 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 3.0 °C (w/ CF): 3.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 804
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 689

SAMPLE CONDITION:

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na₂** ☐ 100PJ ☐ 100PJ**na₂** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s** ☐ 500PB ☐ 1AGB ☐ 1AGB**na₂** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na₂** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 689

Reviewed by: 689

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WORK ORDER NUMBER: 17-04- 1778

SAMPLE ANOMALY REPORT

DATE: 04 / 24 / 2017

SAMPLES, CONTAINERS, AND LABELS:

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

* Transferred at client's request.

Comments

(-2) Received 9 containers instead of 13
6 - VOA w/HCL
1 - 250ml poly
1 - 250ml w/HNO3
1 - 500ml amber glass bottle

(-4) Received 13 containers instead of 9
10 - VOA w/HCL
1 - 250ml poly
1 - 250ml poly w/HNO3
1 - 500ml amber glass bottle

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

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

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

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

Comments:

Reported by: 6/27

Reviewed by: 6/21

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

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WORK ORDER NUMBER: 17-04-1160

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Approved for release on 05/05/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-1160

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Work Order Narrative

Work Order: 17-04-1160 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/14/17. They were assigned to Work Order 17-04-1160.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-1160 LMC BOU 04/14/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
4948-N-17Q2 (17-04-1160-2)						
Chromium, Hexavalent	0.82		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00503		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.33	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	3.8		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	1.3		0.50	ug/L	EPA 8260B	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
4948-N-17Q2	**17-04-1160-2-L**	**04/14/17 09:13**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 20:45**	**170414L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.82	0.020	0.0099	1.00	

Method Blank	**099-14-567-238**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 17:12**	**170414L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
4948-N-17Q2	**17-04-1160-2-M**	**04/14/17 09:13**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/20/17 03:15**	**170418LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00503	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5531**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/20/17 00:05**	**170418LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
4948-N-17Q2	**17-04-1160-2-K**	**04/14/17 09:13**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/18/17 00:39**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	98	56-123	
1,4-Dioxane-d8(IDS-IS)	35	30-120	

Method Blank	**099-16-216-1013**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 22:32**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	115	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170414	**17-04-1160-1-A**	**04/14/17 06:00**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/27/17 02:27**	**170426L056**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 9

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 9

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	109	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
4948-N-17Q2	**17-04-1160-2-D**	**04/14/17 09:13**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/27/17 02:58**	**170426L056**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 9

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.33	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	3.8	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	1.3	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 9

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4657**	**N/A**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/26/17 23:24**	**170426L056**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 9

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 9

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	103	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170414	**17-04-1160-1-C**	**04/14/17 06:00**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 02:02**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	67-133	

4948-N-17Q2	**17-04-1160-2-F**	**04/14/17 09:13**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 02:31**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	117	67-133	

Method Blank	**099-15-118-493**	**N/A**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 23:32**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	101	67-133	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
4948-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 20:45**	**170414S01**
4948-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 20:56**	**170414S01**
4948-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 21:07**	**170414S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	0.8210	10.00	10.84	100	10.60	98	85-121	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0841-2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/24/17 13:21**	**170418SA3**
17-04-0841-2	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/24/17 12:57**	**170418SA3**
17-04-0841-2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/24/17 13:00**	**170418SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.001945	0.1000	0.1007	99	0.1020	100	73-133	1	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1061-4	**Sample**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/18/17 00:08**	**170417S10**
17-04-1061-4	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:04**	**170417S10**
17-04-1061-4	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:19**	**170417S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	20.47	102	20.26	101	50-130	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1200-2	**Sample**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/27/17 00:25**	**170426S026**
17-04-1200-2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/27/17 00:55**	**170426S026**
17-04-1200-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/27/17 01:26**	**170426S026**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1,1,2-Tetrachloroethane	ND	10.00	9.359	94	9.716	97	75-127	4	0-20	
1,1,1-Trichloroethane	ND	10.00	8.908	89	9.474	95	72-132	6	0-20	
1,1,2,2-Tetrachloroethane	ND	10.00	8.965	90	9.231	92	75-132	3	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10.00	8.374	84	8.329	83	70-130	1	0-20	
1,1,2-Trichloroethane	ND	10.00	9.468	95	9.712	97	75-125	3	0-20	
1,1-Dichloroethane	1.297	10.00	9.519	82	10.06	88	68-128	6	0-20	
1,1-Dichloroethene	ND	10.00	9.051	91	9.477	95	66-126	5	0-20	
1,1-Dichloropropene	ND	10.00	8.891	89	9.473	95	74-134	6	0-20	
1,2,3-Trichlorobenzene	ND	10.00	8.835	88	9.357	94	75-125	6	0-20	
1,2,3-Trichloropropane	ND	10.00	8.374	84	8.581	86	75-125	2	0-20	
1,2,4-Trichlorobenzene	ND	10.00	8.937	89	9.348	93	75-125	4	0-20	
1,2,4-Trimethylbenzene	ND	10.00	8.160	82	8.503	85	75-125	4	0-20	
1,2-Dibromo-3-Chloropropane	ND	10.00	7.688	77	7.870	79	75-127	2	0-20	
1,2-Dibromoethane	ND	10.00	9.384	94	9.506	95	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	9.244	92	9.592	96	75-125	4	0-20	
1,2-Dichloroethane	ND	10.00	10.31	103	10.67	107	75-127	3	0-20	
1,2-Dichloropropane	ND	10.00	9.233	92	9.609	96	75-125	4	0-20	
1,3,5-Trimethylbenzene	ND	10.00	9.536	95	9.831	98	75-127	3	0-20	
1,3-Dichlorobenzene	ND	10.00	9.058	91	9.471	95	75-126	4	0-20	
1,3-Dichloropropane	ND	10.00	9.464	95	9.723	97	75-125	3	0-20	
1,4-Dichlorobenzene	ND	10.00	9.001	90	9.434	94	75-125	5	0-20	
2,2-Dichloropropane	ND	10.00	6.906	69	7.363	74	52-160	6	0-20	
2-Butanone	ND	10.00	7.714	77	7.275	73	20-180	6	0-40	
2-Chlorotoluene	ND	10.00	9.652	97	10.08	101	75-128	4	0-20	
2-Hexanone	ND	10.00	7.843	78	8.046	80	74-122	3	0-20	
4-Chlorotoluene	ND	10.00	9.018	90	9.490	95	75-125	5	0-20	
4-Methyl-2-Pentanone	ND	10.00	8.402	84	8.634	86	65-137	3	0-20	
Acetone	ND	10.00	9.629	96	9.581	96	20-180	1	0-52	
Benzene	ND	10.00	9.172	92	9.748	97	75-125	6	0-20	
Bromobenzene	ND	10.00	9.717	97	10.17	102	75-125	5	0-20	
Bromochloromethane	ND	10.00	9.293	93	9.641	96	75-128	4	0-20	
Bromodichloromethane	ND	10.00	9.480	95	9.961	100	75-125	5	0-20	
Bromoform	ND	10.00	6.207	62	6.494	65	71-137	5	0-20	
Bromomethane	ND	10.00	11.77	118	11.89	119	37-181	1	0-22	
Carbon Disulfide	ND	10.00	7.886	79	9.216	92	58-136	16	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 6

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon Tetrachloride	ND	10.00	7.749	77	8.430	84	69-135	8	0-20	
Chlorobenzene	ND	10.00	9.604	96	9.915	99	75-125	3	0-20	
Chloroethane	ND	10.00	9.539	95	10.42	104	20-180	9	0-20	
Chloroform	0.9824	10.00	10.10	91	10.48	95	75-128	4	0-20	
Chloromethane	ND	10.00	6.431	64	7.072	71	41-149	9	0-20	
Dibromochloromethane	ND	10.00	8.730	87	9.084	91	75-125	4	0-20	
Dibromomethane	ND	10.00	9.499	95	9.910	99	75-129	4	0-20	
Dichlorodifluoromethane	3.404	10.00	12.95	95	12.20	88	28-172	6	0-20	
Ethylbenzene	ND	10.00	9.328	93	9.803	98	75-125	5	0-20	
Isopropylbenzene	ND	10.00	9.616	96	10.11	101	75-130	5	0-20	
Methylene Chloride	ND	10.00	9.420	94	9.923	99	74-128	5	0-20	
Naphthalene	ND	10.00	8.067	81	8.528	85	75-136	6	0-20	
Styrene	ND	10.00	7.930	79	8.340	83	28-166	5	0-30	
Tetrachloroethene	4.395	10.00	13.26	89	13.42	90	58-124	1	0-20	
Toluene	ND	10.00	9.503	95	9.936	99	75-125	4	0-20	
t-1,2-Dichloroethene	ND	10.00	9.246	92	8.976	90	73-133	3	0-20	
Trichloroethene	11.95	10.00	20.93	90	21.41	95	75-125	2	0-20	
Trichlorofluoromethane	0.5224	10.00	12.28	118	11.61	111	68-134	6	0-20	
Vinyl Acetate	ND	10.00	7.555	76	7.381	74	65-137	2	0-20	
Vinyl Chloride	ND	10.00	10.55	105	11.05	110	52-142	5	0-20	
c-1,3-Dichloropropene	ND	10.00	7.737	77	8.132	81	75-128	5	0-20	
c-1,2-Dichloroethene	0.5382	10.00	9.071	85	9.445	89	75-130	4	0-20	
n-Butylbenzene	ND	10.00	9.013	90	9.434	94	75-125	5	0-20	
n-Propylbenzene	ND	10.00	9.672	97	10.02	100	75-129	3	0-20	
o-Xylene	ND	10.00	9.436	94	9.852	99	75-127	4	0-20	
p-Isopropyltoluene	ND	10.00	9.173	92	9.538	95	75-125	4	0-20	
sec-Butylbenzene	ND	10.00	9.209	92	9.687	97	75-129	5	0-20	
t-1,3-Dichloropropene	ND	10.00	7.621	76	8.074	81	75-125	6	0-20	
tert-Butylbenzene	ND	10.00	9.555	96	10.04	100	75-129	5	0-20	
p/m-Xylene	ND	20.00	18.73	94	19.63	98	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.902	89	8.410	84	71-131	6	0-20	
Hexachloro-1,3-Butadiene	ND	10.00	9.932	99	9.947	99	75-129	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1061-4	**Sample**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 00:02**	**170424S012**
17-04-1061-4	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 00:32**	**170424S012**
17-04-1061-4	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 01:02**	**170424S012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.6449	0.02000	0.7153	352	0.6036	0	72-132	17	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-0841-2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/18/17 00:00**	**04/24/17 13:21**	**170418SA3**
17-04-0841-2	**PDS**	**Aqueous**	**ICP/MS 03**	**04/18/17 00:00**	**04/24/17 13:02**	**170418SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.001945	0.1000	0.1014	99	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-238	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/14/17 17:23**	**170414L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.12	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5531	**LCS**	**Aqueous**	**ICP/MS 03**	**04/18/17**	**04/20/17 00:46**	**170418LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1064	106	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1013	**LCS**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 22:48**	**170417L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	20.30	101	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4657	**LCS**	**Aqueous**	**GC/MS L**	**04/26/17**	**04/26/17 22:53**	**170426L056**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	9.900	99	77-120	70-127	
1,2-Dibromoethane	10.00	9.727	97	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.557	96	80-120	73-127	
1,2-Dichloroethane	10.00	10.87	109	80-122	73-129	
Benzene	10.00	9.605	96	80-120	73-127	
Carbon Tetrachloride	10.00	8.570	86	80-129	72-137	
Chlorobenzene	10.00	10.00	100	80-120	73-127	
Ethylbenzene	10.00	9.881	99	80-120	73-127	
Toluene	10.00	9.789	98	80-120	73-127	
Trichloroethene	10.00	10.17	102	80-120	73-127	
Vinyl Chloride	10.00	10.83	108	63-135	51-147	
o-Xylene	10.00	10.00	100	80-120	73-127	
p/m-Xylene	20.00	19.84	99	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.49	105	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/14/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1160
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-493	**LCS**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 22:33**	**170424L035**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02000	100	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-1160

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-1160 Page 1 of 1

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

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 04/14/17
Page 1 of 1

WO NO. / LAB USE ONLY: **17-04-1160**

LABORATORY CLIENT: Tetra Tech Inc.
ADDRESS: 301 E. Vanderbilt Way - Ste 450
CITY: San Bernardino, CA STATE: ZIP: 92408
TEL: 909-381-4674 E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOU
PROJECT CONTACT: Robert Sabater
GLOBAL ID: LOG CODE:
P.O. NO.:
LAB CONTACT OR QUOTE NO:
SAMPLER(S): (PRINT) Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☑ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) ☐ GRO	TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH	BTEX / MTBE ☐ 8260 ☐	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 218.6	1,4-Dioxane	ICP/MS Metals	Hexcr	1,2,3-TCP
1	LTB-20170414	4-14-17	0600	W	3		✓							2												1
2	4948-N-1702	4-14-17	0913	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		4/14/17	1330
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		4/14/17	1815
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 1160

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 14 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.8 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 681

SAMPLE CONDITION:

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☑ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☑ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: [illegible]

Reviewed by: 681

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WORK ORDER NUMBER: 17-04-1061

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 04/28/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Work Order Number: 17-04-1061

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Work Order Narrative

Work Order: 17-04-1061 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/13/17. They were assigned to Work Order 17-04-1061.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-1061
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/13/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3850N-N-17Q2 (17-04-1061-1)						
Chromium, Hexavalent	9.0		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0101		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.27	J	0.24*	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	0.43	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.87		0.50	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.38	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloropropane	0.21	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.8		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	3.2		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	13		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	19		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.26	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.56		0.050	ug/L	EPA 8260B SIM	EPA 5030C
3850R-N-17Q2 (17-04-1061-2)						
Chromium, Hexavalent	0.021		0.020	ug/L	EPA 218.6	N/A
Chromium	0.000850	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	48		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	7.8		1.0	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.58	J	0.40*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.0074		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
LTB-20170413 (17-04-1061-3)						
Acetone	4.0	J	4.0*	ug/L	EPA 8260B	EPA 5030C
A-1-CW03R-N-17Q2 (17-04-1061-4)						
Chromium, Hexavalent	0.010	J	0.0099*	ug/L	EPA 218.6	N/A
Chromium	0.00105		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.45	J	0.28*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.42	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	21		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	22		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.46	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	57		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.63		0.050	ug/L	EPA 8260B SIM	EPA 5030C
B-1-CW20-N-17Q2 (17-04-1061-5)						
Chromium, Hexavalent	2.1		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00346		0.00100	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	0.34	J	0.20*	ug/L	EPA 8260B	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-1061
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/13/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850N-N-17Q2	**17-04-1061-1-J**	**04/13/17 11:24**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 21:50**	**170413L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	9.0	0.020	0.0099	1.00	

3850R-N-17Q2	**17-04-1061-2-K**	**04/13/17 13:16**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:01**	**170413L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.021	0.020	0.0099	1.00	

A-1-CW03R-N-17Q2	**17-04-1061-4-K**	**04/13/17 09:19**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:12**	**170413L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.010	0.020	0.0099	1.00	J

B-1-CW20-N-17Q2	**17-04-1061-5-K**	**04/13/17 13:05**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:23**	**170413L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.1	0.020	0.0099	1.00	

Method Blank	**099-14-567-237**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 16:50**	**170413L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850N-N-17Q2	**17-04-1061-1-K**	**04/13/17 11:24**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 02:41**	**170424LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0101	0.00100	0.000402	1.00	

3850R-N-17Q2	**17-04-1061-2-L**	**04/13/17 13:16**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 02:44**	**170424LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000850	0.00100	0.000402	1.00	J

A-1-CW03R-N-17Q2	**17-04-1061-4-N**	**04/13/17 09:19**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 02:39**	**170424LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00105	0.00100	0.000402	1.00	

B-1-CW20-N-17Q2	**17-04-1061-5-L**	**04/13/17 13:05**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 02:46**	**170424LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00346	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5544**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 20:04**	**170424LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850N-N-17Q2	**17-04-1061-1-L**	**04/13/17 11:24**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:35**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	99	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

3850R-N-17Q2	**17-04-1061-2-M**	**04/13/17 13:16**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:52**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	91	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

A-1-CW03R-N-17Q2	**17-04-1061-4-R**	**04/13/17 09:19**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/18/17 00:08**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	101	56-123	
1,4-Dioxane-d8(IDS-IS)	43	30-120	

B-1-CW20-N-17Q2	**17-04-1061-5-M**	**04/13/17 13:05**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/18/17 00:23**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	93	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-216-1013**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 22:32**	**170417L10**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	115	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850N-N-17Q2	**17-04-1061-1-A**	**04/13/17 11:24**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 13:44**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.27	0.50	0.24	1.00	J
1,1,2-Trichloroethane	0.43	0.50	0.20	1.00	J
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.87	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.38	0.50	0.20	1.00	J
1,2-Dichloropropane	0.21	0.50	0.20	1.00	J
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.8	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	3.2	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	13	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	19	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.26	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850R-N-17Q2	**17-04-1061-2-A**	**04/13/17 13:16**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 14:17**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,1-Trichloroethane	ND	1.0	0.40	2.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	0.48	2.00	
1,1,2-Trichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethene	ND	1.0	0.56	2.00	
1,1-Dichloropropene	ND	1.0	0.60	2.00	
1,2,3-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,3-Trichloropropane	ND	2.0	0.80	2.00	
1,2,4-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,4-Trimethylbenzene	ND	1.0	0.40	2.00	
1,2-Dibromo-3-Chloropropane	ND	10	4.0	2.00	
1,2-Dibromoethane	ND	1.0	0.40	2.00	
1,2-Dichlorobenzene	ND	1.0	0.40	2.00	
1,2-Dichloroethane	ND	1.0	0.40	2.00	
1,2-Dichloropropane	ND	1.0	0.40	2.00	
1,3,5-Trimethylbenzene	ND	1.0	0.40	2.00	
1,3-Dichlorobenzene	ND	1.0	0.55	2.00	
1,3-Dichloropropane	ND	2.0	0.80	2.00	
1,4-Dichlorobenzene	ND	1.0	0.40	2.00	
2,2-Dichloropropane	ND	2.0	0.80	2.00	
2-Butanone	ND	10	4.0	2.00	
2-Chlorotoluene	ND	1.0	0.40	2.00	
2-Hexanone	ND	20	8.0	2.00	
4-Chlorotoluene	ND	1.0	0.71	2.00	
4-Methyl-2-Pentanone	ND	10	4.0	2.00	
Acetone	ND	20	8.0	2.00	
Benzene	ND	1.0	0.40	2.00	
Bromobenzene	ND	1.0	0.64	2.00	
Bromochloromethane	ND	2.0	0.80	2.00	
Bromodichloromethane	ND	1.0	0.40	2.00	
Bromoform	ND	1.0	0.49	2.00	
Bromomethane	ND	2.0	0.80	2.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	2.0	0.80	2.00	
Carbon Tetrachloride	ND	1.0	0.40	2.00	
Chlorobenzene	ND	1.0	0.40	2.00	
Chloroethane	ND	1.0	0.63	2.00	
Chloroform	ND	1.0	0.40	2.00	
Chloromethane	ND	1.0	0.59	2.00	
Dibromochloromethane	ND	1.0	0.40	2.00	
Dibromomethane	ND	1.0	0.40	2.00	
Dichlorodifluoromethane	ND	2.0	0.80	2.00	
Ethylbenzene	ND	1.0	0.40	2.00	
Isopropylbenzene	ND	1.0	0.40	2.00	
Methylene Chloride	ND	2.0	1.6	2.00	
Naphthalene	ND	2.0	0.80	2.00	
Styrene	ND	1.0	0.40	2.00	
Tetrachloroethene	48	1.0	0.40	2.00	
Toluene	ND	1.0	0.40	2.00	
t-1,2-Dichloroethene	ND	1.0	0.40	2.00	
Trichloroethene	7.8	1.0	0.57	2.00	
Trichlorofluoromethane	ND	1.0	0.40	2.00	
Vinyl Acetate	ND	10	4.0	2.00	
Vinyl Chloride	ND	1.0	0.40	2.00	
c-1,3-Dichloropropene	ND	1.0	0.40	2.00	
c-1,2-Dichloroethene	0.58	1.0	0.40	2.00	J
n-Butylbenzene	ND	1.0	0.40	2.00	
n-Propylbenzene	ND	1.0	0.40	2.00	
o-Xylene	ND	1.0	0.63	2.00	
p-Isopropyltoluene	ND	1.0	0.40	2.00	
sec-Butylbenzene	ND	1.0	0.40	2.00	
t-1,3-Dichloropropene	ND	1.0	0.40	2.00	
tert-Butylbenzene	ND	1.0	0.40	2.00	
p/m-Xylene	ND	1.0	0.40	2.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.40	2.00	
2-Chloroethyl Vinyl Ether	ND	10	8.4	2.00	
Hexachloro-1,3-Butadiene	ND	4.0	1.6	2.00	
Iodomethane	ND	20	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170413	**17-04-1061-3-A**	**04/13/17 06:30**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 13:11**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.0	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW03R-N-17Q2	**17-04-1061-4-A**	**04/13/17 09:19**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 11:00**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.45	0.50	0.28	1.00	J
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.42	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	21	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	22	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.46	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	94	80-127	
1,2-Dichloroethane-d4	94	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	99	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW03R-N-17Q2	**17-04-1061-4-D**	**04/13/17 09:19**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 12:39**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	57	2.0	0.80	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	97	80-127	
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW20-N-17Q2	**17-04-1061-5-A**	**04/13/17 13:05**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 14:50**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.34	0.50	0.20	1.00	J
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4647**	**N/A**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 10:25**	**170425L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 18

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	94	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 18

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	95	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3850N-N-17Q2	**17-04-1061-1-F**	**04/13/17 11:24**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 13:31**	**170426L028**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.56	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

3850R-N-17Q2	**17-04-1061-2-H**	**04/13/17 13:16**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 03:31**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.0074	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

LTB-20170413	**17-04-1061-3-C**	**04/13/17 06:30**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 17:35**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	119	80-120	

A-1-CW03R-N-17Q2	**17-04-1061-4-I**	**04/13/17 09:19**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 14:01**	**170426L028**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.63	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	107	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW20-N-17Q2	**17-04-1061-5-H**	**04/13/17 13:05**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 04:01**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	104	80-120	

Method Blank	**099-15-118-492**	**N/A**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 12:36**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

Method Blank	**099-15-118-493**	**N/A**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 23:32**	**170424L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	101	80-120	

Method Blank	**099-15-118-494**	**N/A**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 11:32**	**170426L028**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	115	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:12**	**170413S01**
A-1-CW03R-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:34**	**170413S01**
A-1-CW03R-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 22:46**	**170413S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	ND	10.00	9.628	96	9.648	96	85-121	0	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 02:39**	**170424SA3**
A-1-CW03R-N-17Q2	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 20:12**	**170424SA3**
A-1-CW03R-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 20:15**	**170424SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.001055	0.1000	0.1032	102	0.1062	105	73-133	3	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/18/17 00:08**	**170417S10**
A-1-CW03R-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:04**	**170417S10**
A-1-CW03R-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 23:19**	**170417S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	20.47	102	20.26	101	50-130	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 11:00**	**170425S006**
A-1-CW03R-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 11:33**	**170425S006**
A-1-CW03R-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 12:06**	**170425S006**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	10.44	104	10.45	104	66-126	0	0-20	
1,2-Dibromoethane	ND	10.00	9.643	96	9.670	97	75-126	0	0-20	
1,2-Dichlorobenzene	ND	10.00	9.377	94	9.586	96	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	9.395	94	9.590	96	75-127	2	0-20	
Benzene	ND	10.00	9.479	95	9.572	96	75-125	1	0-20	
Carbon Tetrachloride	ND	10.00	10.68	107	10.72	107	69-135	0	0-20	
Chlorobenzene	ND	10.00	9.358	94	9.419	94	75-125	1	0-20	
Ethylbenzene	ND	10.00	9.657	97	9.687	97	75-125	0	0-20	
Toluene	ND	10.00	9.657	97	9.706	97	75-125	1	0-20	
Trichloroethene	22.24	10.00	30.64	84	30.84	86	75-125	1	0-20	
Vinyl Chloride	ND	10.00	11.05	111	10.99	110	52-142	1	0-20	
o-Xylene	ND	10.00	9.640	96	9.778	98	75-127	1	0-20	
p/m-Xylene	ND	20.00	19.36	97	19.28	96	75-125	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.301	93	9.692	97	71-131	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0940-6	**Sample**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 14:05**	**170424S011**
17-04-0940-6	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 16:05**	**170424S011**
17-04-0940-6	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 16:35**	**170424S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	12.62	5.000	21.12	170	18.62	120	80-120	13	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 00:02**	**170424S012**
A-1-CW03R-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 00:32**	**170424S012**
A-1-CW03R-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/25/17 01:02**	**170424S012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.6449	0.02000	0.7153	352	0.6036	0	80-120	17	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3850N-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 13:31**	**170426S009**
3850N-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 15:01**	**170426S009**
3850N-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 15:31**	**170426S009**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.5650	0.2000	0.6540	44	0.7060	70	80-120	8	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
A-1-CW03R-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/24/17 00:00**	**04/25/17 02:39**	**170424SA3**
A-1-CW03R-N-17Q2	**PDS**	**Aqueous**	**ICP/MS 03**	**04/24/17 00:00**	**04/25/17 02:34**	**170424SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.001055	0.1000	0.1044	103	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-237	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/13/17 17:01**	**170413L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.13	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5544	**LCS**	**Aqueous**	**ICP/MS 03**	**04/24/17**	**04/25/17 20:10**	**170424LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1061	106	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1013	**LCS**	**Aqueous**	**GC/MS DDD**	**04/17/17**	**04/17/17 22:48**	**170417L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	20.30	101	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4647	**LCS**	**Aqueous**	**GC/MS T**	**04/25/17**	**04/25/17 09:32**	**170425L008**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.51	105	77-120	70-127	
1,2-Dibromoethane	10.00	10.03	100	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.08	101	80-120	73-127	
1,2-Dichloroethane	10.00	9.789	98	80-122	73-129	
Benzene	10.00	10.19	102	80-120	73-127	
Carbon Tetrachloride	10.00	10.88	109	80-129	72-137	
Chlorobenzene	10.00	10.09	101	80-120	73-127	
Ethylbenzene	10.00	10.32	103	80-120	73-127	
Toluene	10.00	10.19	102	80-120	73-127	
Trichloroethene	10.00	10.33	103	80-120	73-127	
Vinyl Chloride	10.00	10.46	105	63-135	51-147	
o-Xylene	10.00	10.39	104	80-120	73-127	
p/m-Xylene	20.00	20.64	103	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.746	97	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-492	**LCS**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 11:06**	**170424L033**
099-15-118-492	**LCSD**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 11:36**	**170424L033**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01640	82	0.01830	92	80-120	11	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-493	**LCS**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 22:33**	**170424L035**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02000	100	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/13/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-1061
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-494	**LCS**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 10:02**	**170426L028**
099-15-118-494	**LCSD**	**Aqueous**	**GC/MS M**	**04/26/17**	**04/26/17 10:32**	**170426L028**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02040	102	0.01960	98	80-120	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-1061

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	834	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS T	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-1061 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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

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

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-13-2017

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WO NO. / LAB USE ONLY: **17-04-1061**

LABORATORY CLIENT: Tetra Tech Inc

ADDRESS: 301 E Vanderbilt Way

CITY: San Bernardino STATE: CA ZIP: 92408

TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOU

P.O. NO.:

PROJECT CONTACT: Robert Sabater

LAB CONTACT OR QUOTE NO:

GLOBAL ID: LOG CODE:

SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

* A-1-GW03R-N-17Q2 is an MS/MSD.

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex CR	1,2,3 TCP
1	3850N-N-17Q2	4-13-17	1124	W	12	✓	✓							5									1	1	1	4
2	3850R-N-17Q2	4-13-17	1316	W	13	✓	✓							5									1	1	1	5
3	LTB-20170413	4-13-17	0630	W	3		✓							2												1
4	A-1-GW03R-N-17Q2	4-13-17	0919	W	19	✓	✓							5									3	3	3	5
5	B-1-GW20-N-17Q2	4-13-17	1305	W	13	✓	✓							5									3	3	3	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		04/13/17	1602
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
	ECI	4/13/17	1857
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 1061

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 13 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 679

SAMPLE CONDITION:

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

CONTAINER TYPE: **(Trip Blank Lot Number:** _____**)**

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 679

Reviewed by: 1110

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WORK ORDER NUMBER: 17-04-0940

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 04/28/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Work Order Number: 17-04-0940

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Work Order Narrative

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/12/17. They were assigned to Work Order 17-04-0940.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-0940 LMC BOU 04/12/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
C-1-CW08-N-17Q2 (17-04-0940-1)						
Chromium, Hexavalent	1.1		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00757		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.48	J	0.28*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.52		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.33	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.99	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.36	J	0.29*	ug/L	EPA 8260B	EPA 5030C
C-1-CW07-N-17Q2 (17-04-0940-2)						
Chromium	0.0829		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.44	J	0.28*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.37	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.94	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	3.2		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.72		0.50	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	2.8		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
B-1-CW28-N-17Q2 (17-04-0940-4)						
Chromium	0.000983	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	13		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	3.2		0.50	ug/L	EPA 8260B	EPA 5030C
B-1-CW28-FD-17Q2 (17-04-0940-5)						
Chromium	0.000895	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.33	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	3.0		0.50	ug/L	EPA 8260B	EPA 5030C

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* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0940
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/12/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-1-CW13-N-17Q2 (17-04-0940-6)						
Chromium, Hexavalent	2.0		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00276		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	5.1		2.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	7.9		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	10		4.0	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	3.1		2.0	ug/L	EPA 8260B	EPA 5030C
Chloroform	15		2.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	100		2.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	240		5.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	13		1.2	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	2.0		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
3852F-N-17Q2 (17-04-0940-7)						
Chromium, Hexavalent	2.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00315		0.00100	mg/L	EPA 6020	EPA 3020A Total
Bromodichloromethane	0.20	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.44	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.51		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	1.1		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.0		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.58		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.027		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	1.5		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
3852H-N-17Q2 (17-04-0940-8)						
Chromium, Hexavalent	1.1		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00232		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloroethane	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	2.1		0.50	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.6		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	6.9		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.91	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	7.2		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.29		0.025	ug/L	EPA 8260B SIM	EPA 5030C

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

* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW08-N-17Q2	**17-04-0940-1-K**	**04/12/17 16:05**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 21:55**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.1	0.020	0.0099	1.00	

C-1-CW07-N-17Q2	**17-04-0940-2-K**	**04/12/17 15:00**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 22:06**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

B-1-CW28-N-17Q2	**17-04-0940-4-K**	**04/12/17 09:00**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 22:17**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

B-1-CW28-FD-17Q2	**17-04-0940-5-K**	**04/12/17 09:00**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 22:28**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

B-1-CW13-N-17Q2	**17-04-0940-6-K**	**04/12/17 10:18**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 22:40**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.0	0.020	0.0099	1.00	

3852F-N-17Q2	**17-04-0940-7-K**	**04/12/17 15:29**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 22:51**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.7	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852H-N-17Q2	**17-04-0940-8-K**	**04/12/17 16:35**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 23:02**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.1	0.020	0.0099	1.00	

Method Blank	**099-14-567-235**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 17:45**	**170412L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW08-N-17Q2	**17-04-0940-1-L**	**04/12/17 16:05**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:02**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00757	0.00100	0.000402	1.00	

C-1-CW07-N-17Q2	**17-04-0940-2-L**	**04/12/17 15:00**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:04**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0829	0.00100	0.000402	1.00	

B-1-CW28-N-17Q2	**17-04-0940-4-L**	**04/12/17 09:00**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:07**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000983	0.00100	0.000402	1.00	J

B-1-CW28-FD-17Q2	**17-04-0940-5-L**	**04/12/17 09:00**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:09**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000895	0.00100	0.000402	1.00	J

B-1-CW13-N-17Q2	**17-04-0940-6-L**	**04/12/17 10:18**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:12**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00276	0.00100	0.000402	1.00	

3852F-N-17Q2	**17-04-0940-7-L**	**04/12/17 15:29**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:14**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00315	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852H-N-17Q2	**17-04-0940-8-L**	**04/12/17 16:35**	**Aqueous**	**ICP/MS 03**	**04/19/17**	**04/21/17 17:17**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00232	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5540**	**N/A**	**Aqueous**	**ICP/MS 05**	**04/19/17**	**04/24/17 15:41**	**170419LA2**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW08-N-17Q2	**17-04-0940-1-M**	**04/12/17 16:05**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 13:18**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	96	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

C-1-CW07-N-17Q2	**17-04-0940-2-M**	**04/12/17 15:00**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 13:33**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.8	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

B-1-CW28-N-17Q2	**17-04-0940-4-M**	**04/12/17 09:00**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 13:49**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	101	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

B-1-CW28-FD-17Q2	**17-04-0940-5-M**	**04/12/17 09:00**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 14:05**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	99	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW13-N-17Q2	**17-04-0940-6-M**	**04/12/17 10:18**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 14:20**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.0	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	107	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3852F-N-17Q2	**17-04-0940-7-M**	**04/12/17 15:29**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 14:36**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.5	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

3852H-N-17Q2	**17-04-0940-8-M**	**04/12/17 16:35**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 14:52**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	101	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

Method Blank	**099-16-216-1009**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:05**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW08-N-17Q2	**17-04-0940-1-A**	**04/12/17 16:05**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 06:19**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.48	0.50	0.28	1.00	J
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.52	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.33	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.99	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	1.5	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.36	0.50	0.29	1.00	J
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW07-N-17Q2	**17-04-0940-2-A**	**04/12/17 15:00**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 06:50**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.44	0.50	0.28	1.00	J
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.37	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.29	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.94	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	3.2	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.72	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170412	**17-04-0940-3-A**	**04/12/17 06:00**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 05:48**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	95	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	100	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW28-N-17Q2	**17-04-0940-4-A**	**04/12/17 09:00**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 07:20**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.35	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	13	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	3.2	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW28-FD-17Q2	**17-04-0940-5-A**	**04/12/17 09:00**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 07:51**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.33	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	12	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	3.0	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW13-N-17Q2	**17-04-0940-6-A**	**04/12/17 10:18**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 08:21**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,1-Trichloroethane	ND	2.0	0.80	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5.1	2.0	0.96	4.00	
1,1,2-Trichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethene	7.9	2.0	1.1	4.00	
1,1-Dichloropropene	ND	2.0	1.2	4.00	
1,2,3-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,3-Trichloropropane	10	4.0	1.6	4.00	
1,2,4-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,4-Trimethylbenzene	ND	2.0	0.80	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	8.0	4.00	
1,2-Dibromoethane	ND	2.0	0.80	4.00	
1,2-Dichlorobenzene	ND	2.0	0.80	4.00	
1,2-Dichloroethane	ND	2.0	0.80	4.00	
1,2-Dichloropropane	ND	2.0	0.80	4.00	
1,3,5-Trimethylbenzene	ND	2.0	0.80	4.00	
1,3-Dichlorobenzene	ND	2.0	1.1	4.00	
1,3-Dichloropropane	ND	4.0	1.6	4.00	
1,4-Dichlorobenzene	ND	2.0	0.80	4.00	
2,2-Dichloropropane	ND	4.0	1.6	4.00	
2-Butanone	ND	20	8.0	4.00	
2-Chlorotoluene	ND	2.0	0.80	4.00	
2-Hexanone	ND	40	16	4.00	
4-Chlorotoluene	ND	2.0	1.4	4.00	
4-Methyl-2-Pentanone	ND	20	8.0	4.00	
Acetone	ND	40	16	4.00	
Benzene	ND	2.0	0.80	4.00	
Bromobenzene	ND	2.0	1.3	4.00	
Bromochloromethane	ND	4.0	1.6	4.00	
Bromodichloromethane	ND	2.0	0.80	4.00	
Bromoform	ND	2.0	0.99	4.00	
Bromomethane	ND	4.0	1.6	4.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	4.0	1.6	4.00	
Carbon Tetrachloride	3.1	2.0	0.80	4.00	
Chlorobenzene	ND	2.0	0.80	4.00	
Chloroethane	ND	2.0	1.3	4.00	
Chloroform	15	2.0	0.80	4.00	
Chloromethane	ND	2.0	1.2	4.00	
Dibromochloromethane	ND	2.0	0.80	4.00	
Dibromomethane	ND	2.0	0.80	4.00	
Dichlorodifluoromethane	ND	4.0	1.6	4.00	
Ethylbenzene	ND	2.0	0.80	4.00	
Isopropylbenzene	ND	2.0	0.80	4.00	
Methylene Chloride	ND	4.0	3.2	4.00	
Naphthalene	ND	4.0	1.6	4.00	
Styrene	ND	2.0	0.80	4.00	
Tetrachloroethene	100	2.0	0.80	4.00	
Toluene	ND	2.0	0.80	4.00	
t-1,2-Dichloroethene	ND	2.0	0.80	4.00	
Trichlorofluoromethane	ND	2.0	0.80	4.00	
Vinyl Acetate	ND	20	8.0	4.00	
Vinyl Chloride	ND	2.0	0.80	4.00	
c-1,3-Dichloropropene	ND	2.0	0.80	4.00	
c-1,2-Dichloroethene	ND	2.0	0.80	4.00	
n-Butylbenzene	ND	2.0	0.80	4.00	
n-Propylbenzene	ND	2.0	0.80	4.00	
o-Xylene	ND	2.0	1.3	4.00	
p-Isopropyltoluene	ND	2.0	0.80	4.00	
sec-Butylbenzene	ND	2.0	0.80	4.00	
t-1,3-Dichloropropene	ND	2.0	0.80	4.00	
tert-Butylbenzene	ND	2.0	0.80	4.00	
p/m-Xylene	ND	2.0	0.80	4.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.80	4.00	
2-Chloroethyl Vinyl Ether	ND	20	17	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	3.2	4.00	
Iodomethane	ND	40	20	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	99	80-127	
1,2-Dichloroethane-d4	103	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	100	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW13-N-17Q2	**17-04-0940-6-B**	**04/12/17 10:18**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 13:50**	**170424L004**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Trichloroethene	240	5.0	2.9	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	97	80-127	
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852F-N-17Q2	**17-04-0940-7-A**	**04/12/17 15:29**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 08:52**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	0.20	0.50	0.20	1.00	J
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.44	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.51	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	1.1	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	1.0	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.58	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852H-N-17Q2	**17-04-0940-8-A**	**04/12/17 16:35**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 09:22**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	0.29	0.50	0.20	1.00	J
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	2.1	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.6	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	6.9	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.91	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	1.5	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	7.2	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 27

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4644**	**N/A**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 23:12**	**170422L026**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 27

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 27

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	99	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4643**	**N/A**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 10:13**	**170424L004**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Trichloroethene	ND	0.50	0.29	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-120	
Dibromofluoromethane	94	80-127	
1,2-Dichloroethane-d4	96	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW08-N-17Q2	**17-04-0940-1-H**	**04/12/17 16:05**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 06:25**	**170421L050**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	80-120	

C-1-CW07-N-17Q2	**17-04-0940-2-G**	**04/12/17 15:00**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 13:06**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	102	80-120	

LTB-20170412	**17-04-0940-3-C**	**04/12/17 06:00**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 05:55**	**170421L050**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	125	80-120	2,7

B-1-CW28-N-17Q2	**17-04-0940-4-D**	**04/12/17 09:00**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 08:54**	**170421L050**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW28-FD-17Q2	**17-04-0940-5-D**	**04/12/17 09:00**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 09:24**	**170421L050**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	109	80-120	

B-1-CW13-N-17Q2	**17-04-0940-6-G**	**04/12/17 10:18**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 14:05**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	13	1.2	0.62	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

3852F-N-17Q2	**17-04-0940-7-G**	**04/12/17 15:29**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 13:36**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.027	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	111	80-120	

3852H-N-17Q2	**17-04-0940-8-G**	**04/12/17 16:35**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 14:35**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.29	0.025	0.012	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	116	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-491**	**N/A**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 05:26**	**170421L050**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	117	80-120	

Method Blank	**099-15-118-492**	**N/A**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 12:36**	**170424L033**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3852H-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 23:02**	**170412S01**
3852H-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 23:13**	**170412S01**
3852H-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 23:24**	**170412S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	1.122	10.00	11.77	107	11.91	108	85-121	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1235-2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/19/17**	**04/19/17 23:32**	**170419SA2**
17-04-1235-2	**Matrix Spike**	**Aqueous**	**ICP/MS 05**	**04/19/17**	**04/19/17 23:18**	**170419SA2**
17-04-1235-2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 05**	**04/19/17**	**04/19/17 23:21**	**170419SA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	0.1000	0.1077	108	0.1089	109	73-133	1	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0840-1	**Sample**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:09**	**170413S06**
17-04-0840-1	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:37**	**170413S06**
17-04-0840-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:53**	**170413S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	3.735	20.00	24.31	103	23.79	100	50-130	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1162-29	**Sample**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 23:42**	**170422S012**
17-04-1162-29	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 00:43**	**170422S012**
17-04-1162-29	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/23/17 01:14**	**170422S012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	9.853	99	9.906	99	66-126	1	0-20	
1,2-Dibromoethane	ND	10.00	9.932	99	9.724	97	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	10.28	103	9.697	97	75-125	6	0-20	
1,2-Dichloroethane	ND	10.00	10.65	106	10.22	102	75-127	4	0-20	
Benzene	ND	10.00	10.45	105	9.748	97	75-125	7	0-20	
Carbon Tetrachloride	ND	10.00	9.141	91	8.642	86	69-135	6	0-20	
Chlorobenzene	ND	10.00	10.49	105	9.988	100	75-125	5	0-20	
Ethylbenzene	ND	10.00	10.64	106	10.04	100	75-125	6	0-20	
Toluene	ND	10.00	10.77	108	10.03	100	75-125	7	0-20	
Trichloroethene	0.5708	10.00	11.39	108	10.51	99	75-125	8	0-20	
Vinyl Chloride	ND	10.00	11.34	113	11.38	114	52-142	0	0-20	
o-Xylene	ND	10.00	10.54	105	9.970	100	75-127	6	0-20	
p/m-Xylene	ND	20.00	21.25	106	19.91	100	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.02	100	8.920	89	71-131	12	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1319-4	**Sample**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 11:17**	**170424S003**
17-04-1319-4	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 12:49**	**170424S003**
17-04-1319-4	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 13:20**	**170424S003**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Trichloroethene	7.182	10.00	17.30	101	16.40	92	75-125	5	0-20	
Benzene	2.602	10.00	12.05	94	11.77	92	75-125	2	0-20	
Carbon Tetrachloride	ND	10.00	8.558	86	8.404	84	69-135	2	0-20	
Chlorobenzene	77.78	10.00	88.42	106	84.06	63	75-125	5	0-20	3
1,2-Dibromoethane	ND	10.00	9.489	95	9.309	93	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	10.15	101	9.651	97	75-125	5	0-20	
1,2-Dichloroethane	124.5	10.00	140.0	155	127.8	33	75-127	9	0-20	3
1,1-Dichloroethene	45.01	10.00	55.37	104	52.75	77	66-126	5	0-20	
Ethylbenzene	ND	10.00	10.00	100	9.644	96	75-125	4	0-20	
Toluene	ND	10.00	10.23	102	9.847	98	75-125	4	0-20	
Vinyl Chloride	25.26	10.00	34.95	97	34.10	88	52-142	2	0-20	
p/m-Xylene	ND	20.00	20.09	100	19.47	97	75-125	3	0-20	
o-Xylene	ND	10.00	9.982	100	9.581	96	75-127	4	0-20	
Methyl-t-Butyl Ether (MTBE)	7.136	10.00	15.37	82	16.34	92	71-131	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
C-1-CW08-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 06:25**	**170421S027**
C-1-CW08-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 06:55**	**170421S027**
C-1-CW08-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 07:25**	**170421S027**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01960	98	0.02380	119	80-120	19	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW13-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 14:05**	**170424S011**
B-1-CW13-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 16:05**	**170424S011**
B-1-CW13-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 16:35**	**170424S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	12.62	5.000	21.12	170	18.62	120	80-120	13	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-1235-2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/19/17 00:00**	**04/19/17 23:32**	**170419SA2**
17-04-1235-2	**PDS**	**Aqueous**	**ICP/MS 05**	**04/19/17 00:00**	**04/19/17 23:25**	**170419SA2**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	ND	0.1000	0.1041	104	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-235	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/12/17 17:57**	**170412L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.11	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5540	**LCS**	**Aqueous**	**ICP/MS 05**	**04/19/17**	**04/19/17 23:14**	**170419LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1033	103	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1009	**LCS**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:21**	**170413L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.24	96	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4644	**LCS**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 22:41**	**170422L026**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	9.594	96	77-120	70-127	
1,2-Dibromoethane	10.00	9.702	97	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.578	96	80-120	73-127	
1,2-Dichloroethane	10.00	10.14	101	80-122	73-129	
Benzene	10.00	9.628	96	80-120	73-127	
Carbon Tetrachloride	10.00	8.285	83	80-129	72-137	
Chlorobenzene	10.00	9.958	100	80-120	73-127	
Ethylbenzene	10.00	9.856	99	80-120	73-127	
Toluene	10.00	9.771	98	80-120	73-127	
Trichloroethene	10.00	10.08	101	80-120	73-127	
Vinyl Chloride	10.00	10.34	103	63-135	51-147	
o-Xylene	10.00	9.978	100	80-120	73-127	
p/m-Xylene	20.00	19.82	99	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.656	87	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4643	**LCS**	**Aqueous**	**GC/MS L**	**04/24/17**	**04/24/17 09:29**	**170424L004**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Trichloroethene	10.00	10.25	103	80-120	73-127	
Benzene	10.00	9.619	96	80-120	73-127	
Carbon Tetrachloride	10.00	8.789	88	80-129	72-137	
Chlorobenzene	10.00	10.09	101	80-120	73-127	
1,2-Dibromoethane	10.00	9.750	97	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.657	97	80-120	73-127	
1,2-Dichloroethane	10.00	10.12	101	80-122	73-129	
1,1-Dichloroethene	10.00	9.441	94	77-120	70-127	
Ethylbenzene	10.00	9.999	100	80-120	73-127	
Toluene	10.00	9.877	99	80-120	73-127	
Vinyl Chloride	10.00	9.853	99	63-135	51-147	
p/m-Xylene	20.00	20.15	101	80-120	73-127	
o-Xylene	10.00	10.10	101	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.370	94	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-491	**LCS**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 03:56**	**170421L050**
099-15-118-491	**LCSD**	**Aqueous**	**GC/MS M**	**04/21/17**	**04/22/17 04:26**	**170421L050**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01880	94	0.01770	88	80-120	6	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/12/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0940
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-492	**LCS**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 11:06**	**170424L033**
099-15-118-492	**LCSD**	**Aqueous**	**GC/MS M**	**04/24/17**	**04/24/17 11:36**	**170424L033**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01640	82	0.01830	92	80-120	11	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0940

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0940 Page 1 of 1

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

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-12-2017

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WO NO. / LAB USE ONLY: **17-04-0940**

LABORATORY CLIENT: Tetra Tech INC

ADDRESS: 301 E Vanderbilt Way Suite 450

CITY: San Bernardino STATE: CA ZIP: 92408

TEL:

E-MAIL:

CLIENT PROJECT NAME / NO.: LMC Box

PROJECT CONTACT: Robert Sabater

GLOBAL ID:

LOG CODE:

P.O. NO.:

LAB CONTACT OR QUOTE NO.:

SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☑ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	FOR/MS Metals	Her OR	1,2,3 TCP
1	C-1-CW08-N-1702	4-12-17	1605	W	13	✓	✓							5									1	1	1	5
2	C-1-CW07-N-1702	4-12-17	1500	W	13	✓	✓							5									1	1	1	5
3	LTB 20170412	4-12-17	0600	W	3		✓							2												1
4	B-1-CW28-N-1702	4-12-17	0900	W	13	✓	✓							5									1	1	1	5
5	B-1-CW28-FD-1702	4-12-17	0900	W	13	✓	✓							5									1	1	1	5
6	B-1-CW13-N-1702	4-12-17	1018	W	13	✓	✓							5									1	1	1	5
7	3852F-N-1702	4-12-17	1529	W	13	✓	✓							5									1	1	1	5
8	3852H-N-1702	4-12-17	1635	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	4-12-2017	1702
[signature]	Dannyle TCC	4/12/17	1910

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0940

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 12 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1110

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1110

Reviewed by: GK

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WORK ORDER NUMBER: 17-04- 0940

SAMPLE ANOMALY REPORT

DATE: 04 / 12 / 2017

SAMPLES, CONTAINERS, AND LABELS: | **Comments**

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

* Transferred at client's request.

Comments:
(-4) (-5) received 9 containers instead of 13
(received 6 vials instead of 10)

MISCELLANEOUS: (Describe) | **Comments**

HEADSPACE:

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

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

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

Comments:

Reported by: 1110

Reviewed by: 6x

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

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WORK ORDER NUMBER: 17-04-0840

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 04/27/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-0840

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Work Order Narrative

Work Order: 17-04-0840 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/11/17. They were assigned to Work Order 17-04-0840.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-0840 LMC BOU 04/11/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
A-1-CW09-N-17Q2 (17-04-0840-1)						
Chromium, Hexavalent	1.4		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00224		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	7.5		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.74		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	10		1.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.38	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloropropane	0.52		0.50	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.1		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	3.8		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	5.9		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	5.9		0.50	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	0.44	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	15		1.2	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	3.7		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
C-1-CW02-N-17Q2 (17-04-0840-2)						
Chromium	0.000600	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Dichlorodifluoromethane	0.86	J	0.40*	ug/L	EPA 8260B	EPA 5030C
LTB-20170411 (17-04-0840-3)						
Acetone	4.6	J	4.0*	ug/L	EPA 8260B	EPA 5030C
A-1-CW02-N-17Q2 (17-04-0840-4)						
Chromium	0.00365		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.41	J	0.24*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	21		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	4.2		0.50	ug/L	EPA 8260B	EPA 5030C
B-6-CW08-N-17Q2 (17-04-0840-5)						
Chromium, Hexavalent	0.028		0.020	ug/L	EPA 218.6	N/A
Chromium	0.000834	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.43	J	0.24*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.27	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	3.2		0.50	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	0.24	J	0.20*	ug/L	EPA 8260B	EPA 5030C

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* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0840
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/11/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-6-CW05-N-17Q2 (17-04-0840-6)						
Chromium, Hexavalent	0.10		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00172		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.27	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.20	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	0.24	J	0.20*	ug/L	EPA 8260B	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW09-N-17Q2	**17-04-0840-1-L**	**04/11/17 16:13**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 21:59**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.4	0.020	0.0099	1.00	

C-1-CW02-N-17Q2	**17-04-0840-2-L**	**04/11/17 12:43**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:09**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

A-1-CW02-N-17Q2	**17-04-0840-4-L**	**04/11/17 10:21**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:21**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

B-6-CW08-N-17Q2	**17-04-0840-5-L**	**04/11/17 13:57**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:32**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.028	0.020	0.0099	1.00	

B-6-CW05-N-17Q2	**17-04-0840-6-L**	**04/11/17 15:20**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:43**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.10	0.020	0.0099	1.00	

Method Blank	**099-14-567-236**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 16:37**	**170411L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW09-N-17Q2	**17-04-0840-1-K**	**04/11/17 16:13**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:26**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00224	0.00100	0.000402	1.00	

C-1-CW02-N-17Q2	**17-04-0840-2-K**	**04/11/17 12:43**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:29**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000600	0.00100	0.000402	1.00	J

A-1-CW02-N-17Q2	**17-04-0840-4-K**	**04/11/17 10:21**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 20:07**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00365	0.00100	0.000402	1.00	

B-6-CW08-N-17Q2	**17-04-0840-5-K**	**04/11/17 13:57**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 20:10**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000834	0.00100	0.000402	1.00	J

B-6-CW05-N-17Q2	**17-04-0840-6-K**	**04/11/17 15:20**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 20:12**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00172	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5537**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 01:58**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW09-N-17Q2	**17-04-0840-1-M**	**04/11/17 16:13**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:09**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	3.7	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	85	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

C-1-CW02-N-17Q2	**17-04-0840-2-M**	**04/11/17 12:43**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:25**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	90	56-123	
1,4-Dioxane-d8(IDS-IS)	43	30-120	

A-1-CW02-N-17Q2	**17-04-0840-4-M**	**04/11/17 10:21**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:42**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	84	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

B-6-CW08-N-17Q2	**17-04-0840-5-M**	**04/11/17 13:57**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:58**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW05-N-17Q2	**17-04-0840-6-M**	**04/11/17 15:20**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 01:14**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	83	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

Method Blank	**099-16-216-1009**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:05**	**170413L06**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW09-N-17Q2	**17-04-0840-1-A**	**04/11/17 16:13**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 22:06**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.9	0.50	0.24	1.00	
1,1,2-Trichloroethane	7.5	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.74	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	10	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.38	0.50	0.20	1.00	J
1,2-Dichloropropane	0.52	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.1	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	3.8	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	5.9	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	5.9	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	0.44	0.50	0.20	1.00	J
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW02-N-17Q2	**17-04-0840-2-B**	**04/11/17 12:43**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 13:32**	**170422L005**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.86	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170411	**17-04-0840-3-A**	**04/11/17 07:00**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 21:35**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.6	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW02-N-17Q2	**17-04-0840-4-B**	**04/11/17 10:21**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 14:02**	**170422L005**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.41	0.50	0.24	1.00	J
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.29	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	21	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	4.2	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW08-N-17Q2	**17-04-0840-5-A**	**04/11/17 13:57**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 14:33**	**170422L005**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.43	0.50	0.24	1.00	J
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.27	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	12	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	3.2	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	0.24	0.50	0.20	1.00	J
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW05-N-17Q2	**17-04-0840-6-A**	**04/11/17 15:20**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 15:03**	**170422L005**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.27	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.20	0.50	0.20	1.00	J
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	0.24	0.50	0.20	1.00	J
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4633**	**N/A**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 11:52**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	94	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	96	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4639**	**N/A**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 10:53**	**170422L005**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 24

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	107	80-128	
Toluene-d8	94	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW09-N-17Q2	**17-04-0840-1-G**	**04/11/17 16:13**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 14:34**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	15	1.2	0.62	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	111	80-120	

C-1-CW02-N-17Q2	**17-04-0840-2-G**	**04/11/17 12:43**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 16:33**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	118	80-120	

LTB-20170411	**17-04-0840-3-C**	**04/11/17 07:00**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 17:00**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	103	80-120	

A-1-CW02-N-17Q2	**17-04-0840-4-G**	**04/11/17 10:21**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 17:03**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW08-N-17Q2	**17-04-0840-5-G**	**04/11/17 13:57**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 17:33**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	109	80-120	

B-6-CW05-N-17Q2	**17-04-0840-6-G**	**04/11/17 15:20**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 18:04**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

Method Blank	**099-15-118-484**	**N/A**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 12:32**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	80-120	

Method Blank	**099-15-118-487**	**N/A**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 11:34**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-6-CW05-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:43**	**170411S01**
B-6-CW05-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 22:54**	**170411S01**
B-6-CW05-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 23:06**	**170411S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	0.1050	10.00	10.51	104	10.78	107	85-121	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1153-8	**Sample**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:08**	**170417SA3**
17-04-1153-8	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:03**	**170417SA3**
17-04-1153-8	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:06**	**170417SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	0.1000	0.09347	93	0.09325	93	73-133	0	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW09-N-17Q2	**Sample**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/14/17 00:09**	**170413S06**
A-1-CW09-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:37**	**170413S06**
A-1-CW09-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:53**	**170413S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	3.735	20.00	24.31	103	23.79	100	50-130	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0729-1	**Sample**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 13:26**	**170421S007**
17-04-0729-1	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 13:57**	**170421S007**
17-04-0729-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 14:27**	**170421S007**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	2.492	10.00	12.11	96	12.82	103	66-126	6	0-20	
1,2-Dibromoethane	ND	10.00	9.127	91	9.658	97	75-126	6	0-20	
1,2-Dichlorobenzene	ND	10.00	9.015	90	9.756	98	75-125	8	0-20	
1,2-Dichloroethane	ND	10.00	9.624	96	10.23	102	75-127	6	0-20	
Benzene	ND	10.00	9.052	91	9.375	94	75-125	4	0-20	
Carbon Tetrachloride	1.099	10.00	8.964	79	9.474	84	69-135	6	0-20	
Chlorobenzene	ND	10.00	9.259	93	9.760	98	75-125	5	0-20	
Ethylbenzene	ND	10.00	9.191	92	9.849	98	75-125	7	0-20	
Toluene	ND	10.00	9.315	93	9.762	98	75-125	5	0-20	
Trichloroethene	20.58	10.00	29.62	90	29.91	93	75-125	1	0-20	
Vinyl Chloride	ND	10.00	11.72	117	11.77	118	52-142	0	0-20	
o-Xylene	ND	10.00	9.303	93	9.796	98	75-127	5	0-20	
p/m-Xylene	ND	20.00	18.32	92	19.62	98	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.580	96	8.964	90	71-131	7	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1162-18	**Sample**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 11:30**	**170422S001**
17-04-1162-18	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 12:00**	**170422S001**
17-04-1162-18	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 12:31**	**170422S001**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	1.521	10.00	12.82	113	12.11	106	66-126	6	0-20	
1,2-Dibromoethane	ND	10.00	9.703	97	9.547	95	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	10.30	103	9.847	98	75-125	5	0-20	
1,2-Dichloroethane	0.7651	10.00	11.26	105	10.79	100	75-127	4	0-20	
Benzene	ND	10.00	10.40	104	9.936	99	75-125	5	0-20	
Carbon Tetrachloride	ND	10.00	9.648	96	9.337	93	69-135	3	0-20	
Chlorobenzene	ND	10.00	10.79	108	10.27	103	75-125	5	0-20	
Ethylbenzene	ND	10.00	10.90	109	10.15	102	75-125	7	0-20	
Toluene	ND	10.00	10.63	106	10.21	102	75-125	4	0-20	
Trichloroethene	20.58	10.00	32.14	116	30.98	104	75-125	4	0-20	
Vinyl Chloride	ND	10.00	11.63	116	11.50	115	52-142	1	0-20	
o-Xylene	ND	10.00	10.65	106	10.11	101	75-127	5	0-20	
p/m-Xylene	ND	20.00	21.69	108	20.39	102	75-125	6	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.662	87	9.239	92	71-131	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0944-2	**Sample**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 13:39**	**170413S014**
17-04-0944-2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 15:00**	**170413S014**
17-04-0944-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 15:31**	**170413S014**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01800	90	0.01560	78	80-120	14	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0598-8	**Sample**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 12:34**	**170417S008**
17-04-0598-8	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 15:03**	**170417S008**
17-04-0598-8	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 15:34**	**170417S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.005600	0.02000	0.02790	112	0.02590	102	80-120	7	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-1153-8	**Sample**	**Aqueous**	**ICP/MS 03**	**04/17/17 00:00**	**04/19/17 02:08**	**170417SA3**
17-04-1153-8	**PDS**	**Aqueous**	**ICP/MS 03**	**04/17/17 00:00**	**04/24/17 11:42**	**170417SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	ND	0.1000	0.1000	100	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-236	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/11/17 16:48**	**170411L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.10	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5537	**LCS**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:01**	**170417LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1031	103	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1009	**LCS**	**Aqueous**	**GC/MS DDD**	**04/13/17**	**04/13/17 23:21**	**170413L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.24	96	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4633	**LCS**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 11:06**	**170421L006**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.03	100	77-120	70-127	
1,2-Dibromoethane	10.00	10.32	103	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.20	102	80-120	73-127	
1,2-Dichloroethane	10.00	10.40	104	80-122	73-129	
Benzene	10.00	9.936	99	80-120	73-127	
Carbon Tetrachloride	10.00	8.834	88	80-129	72-137	
Chlorobenzene	10.00	10.34	103	80-120	73-127	
Ethylbenzene	10.00	10.33	103	80-120	73-127	
Toluene	10.00	10.32	103	80-120	73-127	
Trichloroethene	10.00	10.32	103	80-120	73-127	
Vinyl Chloride	10.00	10.39	104	63-135	51-147	
o-Xylene	10.00	10.39	104	80-120	73-127	
p/m-Xylene	20.00	20.84	104	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.23	102	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4639	**LCS**	**Aqueous**	**GC/MS L**	**04/22/17**	**04/22/17 10:14**	**170422L005**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	9.840	98	77-120	70-127	
1,2-Dibromoethane	10.00	9.850	99	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.07	101	80-120	73-127	
1,2-Dichloroethane	10.00	10.36	104	80-122	73-129	
Benzene	10.00	9.888	99	80-120	73-127	
Carbon Tetrachloride	10.00	8.893	89	80-129	72-137	
Chlorobenzene	10.00	10.12	101	80-120	73-127	
Ethylbenzene	10.00	10.13	101	80-120	73-127	
Toluene	10.00	10.14	101	80-120	73-127	
Trichloroethene	10.00	10.18	102	80-120	73-127	
Vinyl Chloride	10.00	10.02	100	63-135	51-147	
o-Xylene	10.00	10.08	101	80-120	73-127	
p/m-Xylene	20.00	20.13	101	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.522	85	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-484	**LCS**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 11:28**	**170413L029**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01880	94	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/11/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0840
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-487	**LCS**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 10:34**	**170417L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01960	98	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0840

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0840 Page 1 of 1

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

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

WO NO. / LAB USE ONLY
17-04-0840

CHAIN-OF-CUSTODY RECORD

Date 4-11-2017
Page 1 of 1

LABORATORY CLIENT: Tetra Tech INC
ADDRESS: 301 E Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC Bou
P.O. NO.:
PROJECT CONTACT: Robert Sabater
LAB CONTACT OR QUOTE NO:
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex CR	1,2,3 TCP
1	A-1-CW09-N-17Q2	4-11-17	1613	W	13	✓	✓							S									1	1	1	5
2	C-1-CW02-N-17Q2	4-11-17	1243	W	13	✓	✓							S									1	1	1	5
3	LTB-20170411	4-11-17	0700	W	3	✓	✓							2												1
4	A-1-CW02-N-17Q2	4-11-17	1021	W	13	✓	✓							S									1	1	1	5
5	B-6-CW08-N-17Q2	4-11-17	1357	W	13	✓	✓							S									1	1	1	5
6	B-6-CW05-N-17Q2	4-11-17	1520	W	13	✓	✓							S									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	4-11-17	1646
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	Danny K ECL	4/11/17	1845
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0840

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: Tetra Tech

DATE: 04 / 11 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1052

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** (10) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4$.H_2O, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1053

Reviewed by: 619

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WORK ORDER NUMBER: 17-04- 0840

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Tetra Tech

DATE: 04 / 11 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.8 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1053

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

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1053

Reviewed by: 619

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WORK ORDER NUMBER: 17-04-0729

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Approved for release on 04/25/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-0729

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Work Order Narrative

Work Order: 17-04-0729 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/10/17. They were assigned to Work Order 17-04-0729.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0729
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/10/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
MW-04-N-17Q2 (17-04-0729-1)						
Chromium, Hexavalent	2.2		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00249		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	2.5		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.58	J	0.40*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.22	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Acetone	11		10	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.1		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Naphthalene	0.82	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	29		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	21		0.50	ug/L	EPA 8260B	EPA 5030C
Trichlorofluoromethane	0.34	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.96		0.050	ug/L	EPA 8260B SIM	EPA 5030C
SW-5-N-17Q2 (17-04-0729-2)						
Chromium, Hexavalent	4.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0570		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.1		1.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethane	0.60	J	0.40*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	3.8		1.0	ug/L	EPA 8260B	EPA 5030C
Acetone	11	J	8.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.67	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.94	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	51		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	32		1.0	ug/L	EPA 8260B	EPA 5030C
B-5-CW02-N-17Q2 (17-04-0729-3)						
Chromium	0.000679	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Dichlorodifluoromethane	0.91	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.70		0.50	ug/L	EPA 8260B	EPA 5030C
B-1-CW27-N-17Q2 (17-04-0729-5)						
Chromium, Hexavalent	5.2		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00611		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.32	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	4.0		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	2.3		0.50	ug/L	EPA 8260B	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0729
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/10/17
Attn:	Robert Sabater		Page 2 of 3

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
A-1-CW05-N-17Q2 (17-04-0729-6)						
Chromium	0.000622	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Dichlorodifluoromethane	0.84	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	4.0		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.44	J	0.29*	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	2.3		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
A-1-CW05-FD-17Q2 (17-04-0729-7)						
Chromium	0.000512	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.4	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.85	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	4.3		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.50		0.50	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	2.7		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
A-1-CW04-N-17Q2 (17-04-0729-8)						
Chromium, Hexavalent	0.88		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00164		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3		0.50	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	7.4		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.76		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	17		1.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.42	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloropropane	0.50		0.50	ug/L	EPA 8260B	EPA 5030C
Acetone	4.7	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.91		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	3.6		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.88	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	5.2		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	4.8		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	25		2.5	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	2.0		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0729
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/10/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3862E-N-17Q2 (17-04-0729-9)						
Chromium, Hexavalent	1.0		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00166		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.58		0.50	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.40	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.87	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	15		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	32		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.21	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.013		0.0050	ug/L	EPA 8260B SIM	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-04-N-17Q2	**17-04-0729-1-K**	**04/10/17 08:58**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 21:21**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.2	0.020	0.0099	1.00	

SW-5-N-17Q2	**17-04-0729-2-K**	**04/10/17 13:20**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 21:32**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	4.7	0.020	0.0099	1.00	

B-5-CW02-N-17Q2	**17-04-0729-3-K**	**04/10/17 15:56**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 21:43**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

B-1-CW27-N-17Q2	**17-04-0729-5-K**	**04/10/17 09:11**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 21:54**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	5.2	0.020	0.0099	1.00	

A-1-CW05-N-17Q2	**17-04-0729-6-G**	**04/10/17 11:36**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:06**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

A-1-CW05-FD-17Q2	**17-04-0729-7-G**	**04/10/17 11:36**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:17**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW04-N-17Q2	**17-04-0729-8-G**	**04/10/17 13:26**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:28**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.88	0.020	0.0099	1.00	

3862E-N-17Q2	**17-04-0729-9-G**	**04/10/17 15:22**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:39**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.0	0.020	0.0099	1.00	

Method Blank	**099-14-567-234**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 16:29**	**170410L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-04-N-17Q2	**17-04-0729-1-L**	**04/10/17 08:58**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:06**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00249	0.00100	0.000402	1.00	

SW-5-N-17Q2	**17-04-0729-2-L**	**04/10/17 13:20**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:09**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0570	0.00100	0.000402	1.00	

B-5-CW02-N-17Q2	**17-04-0729-3-L**	**04/10/17 15:56**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:11**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000679	0.00100	0.000402	1.00	J

B-1-CW27-N-17Q2	**17-04-0729-5-L**	**04/10/17 09:11**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/21/17 11:09**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00611	0.00100	0.000402	1.00	

A-1-CW05-N-17Q2	**17-04-0729-6-L**	**04/10/17 11:36**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:16**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000622	0.00100	0.000402	1.00	J

A-1-CW05-FD-17Q2	**17-04-0729-7-L**	**04/10/17 11:36**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:19**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000512	0.00100	0.000402	1.00	J

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW04-N-17Q2	**17-04-0729-8-L**	**04/10/17 13:26**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:21**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00164	0.00100	0.000402	1.00	

3862E-N-17Q2	**17-04-0729-9-L**	**04/10/17 15:22**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/20/17 19:24**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00166	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5537**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 01:58**	**170417LA3**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-04-N-17Q2	**17-04-0729-1-M**	**04/10/17 08:58**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 18:25**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	102	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

SW-5-N-17Q2	**17-04-0729-2-M**	**04/10/17 13:20**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 18:40**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	99	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

B-5-CW02-N-17Q2	**17-04-0729-3-M**	**04/10/17 15:56**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 18:56**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	99	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

B-1-CW27-N-17Q2	**17-04-0729-5-M**	**04/10/17 09:11**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 19:12**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	102	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW05-N-17Q2	**17-04-0729-6-I**	**04/10/17 11:36**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 19:28**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.3	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	103	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

A-1-CW05-FD-17Q2	**17-04-0729-7-I**	**04/10/17 11:36**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 19:43**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.7	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	100	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

A-1-CW04-N-17Q2	**17-04-0729-8-M**	**04/10/17 13:26**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 19:59**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.0	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	97	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3862E-N-17Q2	**17-04-0729-9-M**	**04/10/17 15:22**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 20:15**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	100	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-216-1005**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 15:00**	**170412L07**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	43	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-04-N-17Q2	**17-04-0729-1-B**	**04/10/17 08:58**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 13:26**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	2.5	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	0.58	1.0	0.40	1.00	J
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.22	0.50	0.20	1.00	J
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	11	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.1	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.5	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	0.82	1.0	0.40	1.00	J
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	29	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	21	0.50	0.29	1.00	
Trichlorofluoromethane	0.34	0.50	0.20	1.00	J
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SW-5-N-17Q2	**17-04-0729-2-B**	**04/10/17 13:20**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 14:58**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,1-Trichloroethane	ND	1.0	0.40	2.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.1	1.0	0.48	2.00	
1,1,2-Trichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethane	0.60	1.0	0.40	2.00	J
1,1-Dichloroethene	3.8	1.0	0.56	2.00	
1,1-Dichloropropene	ND	1.0	0.60	2.00	
1,2,3-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,3-Trichloropropane	ND	2.0	0.80	2.00	
1,2,4-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,4-Trimethylbenzene	ND	1.0	0.40	2.00	
1,2-Dibromo-3-Chloropropane	ND	10	4.0	2.00	
1,2-Dibromoethane	ND	1.0	0.40	2.00	
1,2-Dichlorobenzene	ND	1.0	0.40	2.00	
1,2-Dichloroethane	ND	1.0	0.40	2.00	
1,2-Dichloropropane	ND	1.0	0.40	2.00	
1,3,5-Trimethylbenzene	ND	1.0	0.40	2.00	
1,3-Dichlorobenzene	ND	1.0	0.55	2.00	
1,3-Dichloropropane	ND	2.0	0.80	2.00	
1,4-Dichlorobenzene	ND	1.0	0.40	2.00	
2,2-Dichloropropane	ND	2.0	0.80	2.00	
2-Butanone	ND	10	4.0	2.00	
2-Chlorotoluene	ND	1.0	0.40	2.00	
2-Hexanone	ND	20	8.0	2.00	
4-Chlorotoluene	ND	1.0	0.71	2.00	
4-Methyl-2-Pentanone	ND	10	4.0	2.00	
Acetone	11	20	8.0	2.00	J
Benzene	ND	1.0	0.40	2.00	
Bromobenzene	ND	1.0	0.64	2.00	
Bromochloromethane	ND	2.0	0.80	2.00	
Bromodichloromethane	ND	1.0	0.40	2.00	
Bromoform	ND	1.0	0.49	2.00	
Bromomethane	ND	2.0	0.80	2.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	2.0	0.80	2.00	
Carbon Tetrachloride	0.67	1.0	0.40	2.00	J
Chlorobenzene	ND	1.0	0.40	2.00	
Chloroethane	ND	1.0	0.63	2.00	
Chloroform	0.94	1.0	0.40	2.00	J
Chloromethane	ND	1.0	0.59	2.00	
Dibromochloromethane	ND	1.0	0.40	2.00	
Dibromomethane	ND	1.0	0.40	2.00	
Dichlorodifluoromethane	ND	2.0	0.80	2.00	
Ethylbenzene	ND	1.0	0.40	2.00	
Isopropylbenzene	ND	1.0	0.40	2.00	
Methylene Chloride	ND	2.0	1.6	2.00	
Naphthalene	ND	2.0	0.80	2.00	
Styrene	ND	1.0	0.40	2.00	
Tetrachloroethene	51	1.0	0.40	2.00	
Toluene	ND	1.0	0.40	2.00	
t-1,2-Dichloroethene	ND	1.0	0.40	2.00	
Trichloroethene	32	1.0	0.57	2.00	
Trichlorofluoromethane	ND	1.0	0.40	2.00	
Vinyl Acetate	ND	10	4.0	2.00	
Vinyl Chloride	ND	1.0	0.40	2.00	
c-1,3-Dichloropropene	ND	1.0	0.40	2.00	
c-1,2-Dichloroethene	ND	1.0	0.40	2.00	
n-Butylbenzene	ND	1.0	0.40	2.00	
n-Propylbenzene	ND	1.0	0.40	2.00	
o-Xylene	ND	1.0	0.63	2.00	
p-Isopropyltoluene	ND	1.0	0.40	2.00	
sec-Butylbenzene	ND	1.0	0.40	2.00	
t-1,3-Dichloropropene	ND	1.0	0.40	2.00	
tert-Butylbenzene	ND	1.0	0.40	2.00	
p/m-Xylene	ND	1.0	0.40	2.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.40	2.00	
2-Chloroethyl Vinyl Ether	ND	10	8.4	2.00	
Hexachloro-1,3-Butadiene	ND	4.0	1.6	2.00	
Iodomethane	ND	20	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-5-CW02-N-17Q2	**17-04-0729-3-D**	**04/10/17 15:56**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 15:28**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.91	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.70	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170410	**17-04-0729-4-B**	**04/10/17 06:30**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 12:56**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	95	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW27-N-17Q2	**17-04-0729-5-B**	**04/10/17 09:11**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 15:59**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.32	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	4.0	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	2.3	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	96	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW05-N-17Q2	**17-04-0729-6-B**	**04/10/17 11:36**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 16:30**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.84	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	4.0	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.44	0.50	0.29	1.00	J
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	96	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW05-FD-17Q2	**17-04-0729-7-B**	**04/10/17 11:36**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 17:00**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.4	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.85	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	4.3	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.50	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW04-N-17Q2	**17-04-0729-8-B**	**04/10/17 13:26**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 17:31**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3	0.50	0.24	1.00	
1,1,2-Trichloroethane	7.4	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.76	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	17	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.42	0.50	0.20	1.00	J
1,2-Dichloropropane	0.50	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.7	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.91	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	3.6	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.88	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	5.2	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	4.8	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	99	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3862E-N-17Q2	**17-04-0729-9-C**	**04/10/17 15:22**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 18:01**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.58	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.40	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.29	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.87	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	15	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	32	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.21	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	96	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4633**	**N/A**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 11:52**	**170421L006**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	94	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	96	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-04-N-17Q2	**17-04-0729-1-F**	**04/10/17 08:58**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/13/17 02:13**	**170412L047**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.96	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	80-120	

SW-5-N-17Q2	**17-04-0729-2-G**	**04/10/17 13:20**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 18:30**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

B-5-CW02-N-17Q2	**17-04-0729-3-G**	**04/10/17 15:56**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 19:00**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	100	80-120	

B-1-CW27-N-17Q2	**17-04-0729-5-G**	**04/10/17 09:11**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 19:30**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW05-N-17Q2	**17-04-0729-6-E**	**04/10/17 11:36**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 18:28**	**170414L032**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	114	80-120	

A-1-CW05-FD-17Q2	**17-04-0729-7-F**	**04/10/17 11:36**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 18:58**	**170414L032**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

A-1-CW04-N-17Q2	**17-04-0729-8-G**	**04/10/17 13:26**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 13:59**	**170414L032**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	25	2.5	1.2	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	120	80-120	

3862E-N-17Q2	**17-04-0729-9-J**	**04/10/17 15:22**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 19:28**	**170414L032**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.013	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-483**	**N/A**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/12/17 23:14**	**170412L047**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

Method Blank	**099-15-118-484**	**N/A**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 12:32**	**170413L029**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	80-120	

Method Blank	**099-15-118-485**	**N/A**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 11:58**	**170414L032**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3862E-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:39**	**170410S01**
3862E-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 22:51**	**170410S01**
3862E-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 23:02**	**170410S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	1.015	10.00	11.62	106	11.91	109	85-121	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1153-8	**Sample**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:08**	**170417SA3**
17-04-1153-8	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:03**	**170417SA3**
17-04-1153-8	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:06**	**170417SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	0.1000	0.09347	93	0.09325	93	73-133	0	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0796-1	**Sample**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/13/17 15:36**	**170412S07**
17-04-0796-1	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 15:32**	**170412S07**
17-04-0796-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 15:47**	**170412S07**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	241.6	20.00	264.1	112	272.2	153	50-130	3	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-04-N-17Q2	**Sample**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 13:26**	**170421S007**
MW-04-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 13:57**	**170421S007**
MW-04-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 14:27**	**170421S007**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	2.492	10.00	12.11	96	12.82	103	66-126	6	0-20	
1,2-Dibromoethane	ND	10.00	9.127	91	9.658	97	75-126	6	0-20	
1,2-Dichlorobenzene	ND	10.00	9.015	90	9.756	98	75-125	8	0-20	
1,2-Dichloroethane	ND	10.00	9.624	96	10.23	102	75-127	6	0-20	
Benzene	ND	10.00	9.052	91	9.375	94	75-125	4	0-20	
Carbon Tetrachloride	1.099	10.00	8.964	79	9.474	84	69-135	6	0-20	
Chlorobenzene	ND	10.00	9.259	93	9.760	98	75-125	5	0-20	
Ethylbenzene	ND	10.00	9.191	92	9.849	98	75-125	7	0-20	
Toluene	ND	10.00	9.315	93	9.762	98	75-125	5	0-20	
Trichloroethene	20.58	10.00	29.62	90	29.91	93	75-125	1	0-20	
Vinyl Chloride	ND	10.00	11.72	117	11.77	118	52-142	0	0-20	
o-Xylene	ND	10.00	9.303	93	9.796	98	75-127	5	0-20	
p/m-Xylene	ND	20.00	18.32	92	19.62	98	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.580	96	8.964	90	71-131	7	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0793-19	**Sample**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/12/17 23:44**	**170412S028**
17-04-0793-19	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/13/17 00:14**	**170412S028**
17-04-0793-19	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/13/17 00:44**	**170412S028**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02130	106	0.02400	120	80-120	12	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0944-2	**Sample**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 13:39**	**170413S014**
17-04-0944-2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 15:00**	**170413S014**
17-04-0944-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 15:31**	**170413S014**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01800	90	0.01560	78	80-120	14	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-1-CW04-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 13:59**	**170414S011**
A-1-CW04-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 14:59**	**170414S011**
A-1-CW04-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 15:29**	**170414S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	24.65	10.00	37.40	128	33.05	84	80-120	12	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-1153-8	**Sample**	**Aqueous**	**ICP/MS 03**	**04/17/17 00:00**	**04/19/17 02:08**	**170417SA3**
17-04-1153-8	**PDS**	**Aqueous**	**ICP/MS 03**	**04/17/17 00:00**	**04/24/17 11:42**	**170417SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	ND	0.1000	0.1000	100	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-234	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/10/17 16:40**	**170410L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.04	100	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5537	**LCS**	**Aqueous**	**ICP/MS 03**	**04/17/17**	**04/19/17 02:01**	**170417LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1031	103	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1005	**LCS**	**Aqueous**	**GC/MS DDD**	**04/12/17**	**04/12/17 15:16**	**170412L07**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.91	100	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4633	**LCS**	**Aqueous**	**GC/MS L**	**04/21/17**	**04/21/17 11:06**	**170421L006**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.03	100	77-120	70-127	
1,2-Dibromoethane	10.00	10.32	103	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.20	102	80-120	73-127	
1,2-Dichloroethane	10.00	10.40	104	80-122	73-129	
Benzene	10.00	9.936	99	80-120	73-127	
Carbon Tetrachloride	10.00	8.834	88	80-129	72-137	
Chlorobenzene	10.00	10.34	103	80-120	73-127	
Ethylbenzene	10.00	10.33	103	80-120	73-127	
Toluene	10.00	10.32	103	80-120	73-127	
Trichloroethene	10.00	10.32	103	80-120	73-127	
Vinyl Chloride	10.00	10.39	104	63-135	51-147	
o-Xylene	10.00	10.39	104	80-120	73-127	
p/m-Xylene	20.00	20.84	104	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.23	102	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-483	**LCS**	**Aqueous**	**GC/MS M**	**04/12/17**	**04/12/17 22:15**	**170412L047**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01680	84	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-484	**LCS**	**Aqueous**	**GC/MS M**	**04/13/17**	**04/13/17 11:28**	**170413L029**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01880	94	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/10/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0729
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-485	**LCS**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 10:58**	**170414L032**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01920	96	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0729

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0729 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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

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

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-10-2017
Page 1 of 1

WO NO. / LAB USE ONLY
17-04-0729

LABORATORY CLIENT: Tetra Tech INC
ADDRESS: 301 E Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC B04
P.O. NO.:
PROJECT CONTACT: Robert Sabater
LAB CONTACT OR QUOTE NO:
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH	BTEX / MTBE ☐ 8260 ☐	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex CR	1,2,3 TCP
1	MW-04-N-17Q2	4-10-17	0858	W	13	✓	✓							5									1	1	1	5
2	SW-5-N-17Q	4-10-17	1320	W	13	✓	✓							5									1	1	1	5
3	B-5-CW02-N-17Q2	4-10-17	1556	W	13	✓	✓							5									1	1	1	5
4	LTB-20170410	4-10-17	0630	W	3		✓							2												1
5	B-1-CW27-N-17Q2	4-10-17	0911	W	13	✓	✓							5									1	1	1	5
6	A-1-CW05-N-17Q2	4-10-17	1136	W	13	✓	✓							5									1	1	1	5
7	A-1-CW05-FD-17Q2	4-10-17	1136	W	13	✓	✓							5									1	1	1	5
8	A-1-CW04-N-17Q2	4-10-17	1326	W	13	✓	✓							5									1	1	1	5
9	3862E-N-17Q2	4-10-17	1522	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	4-10-17	1644
[signature]	[signature]	4/10/17	1830

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0724

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 10 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1110

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑ 4/10/17	☑	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☑ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** (10) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1110

Reviewed by: 681

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WORK ORDER NUMBER: 17-04- 0729

SAMPLE ANOMALY REPORT

DATE: 04 / 10 / 2017

SAMPLES, CONTAINERS, AND LABELS:

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

* Transferred at client's request.

Comments

(-2) labeled as SW-5-N-17Q2 collection date & time matched.

(-6) & (-7) Received 9 containers instead of 13 (received 6 vials instead of 10).

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

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

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

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

Comments:

Reported by: 1110

Reviewed by: 68.

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

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WORK ORDER NUMBER: 17-04-0598

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Approved for release on 04/25/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-0598

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Work Order Narrative

Work Order: 17-04-0598 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/07/17. They were assigned to Work Order 17-04-0598.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0598
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/07/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
MW-03-N-17Q2 (17-04-0598-1)						
Chromium, Hexavalent	2.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00297		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	7.2		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.53	J	0.40*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.32	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Acetone	4.1	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.78		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	2.6		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	32		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
Trichlorofluoromethane	0.34	J	0.20*	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.25	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.93		0.050	ug/L	EPA 8260B SIM	EPA 5030C
MW-08-N-17Q2 (17-04-0598-2)						
Chromium, Hexavalent	2.1		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00281		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.4		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	2.1		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.65	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Acetone	6.3	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.57		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	4.3		0.50	ug/L	EPA 8260B	EPA 5030C
Naphthalene	0.45	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	24		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	71		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.93		0.050	ug/L	EPA 8260B SIM	EPA 5030C

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* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0598
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/07/17
Attn:	Robert Sabater		Page 2 of 3

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
MW-07-N-17Q2 (17-04-0598-3)						
Chromium, Hexavalent	1.9		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00262		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	2.9		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.40	J	0.40*	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	0.23	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Acetone	4.0	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.34	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.9		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	17		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	34		1.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.60		0.050	ug/L	EPA 8260B SIM	EPA 5030C
3871H-N-17Q2 (17-04-0598-5)						
Chromium, Hexavalent	9.6		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0114		0.00100	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	120		4.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	140		4.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.084		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
3871J-N-17Q2 (17-04-0598-6)						
Chromium, Hexavalent	3.8		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00447		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	5.5	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.25	J	0.20*	ug/L	EPA 8260B	EPA 5030C
3861F-N-17Q2 (17-04-0598-7)						
Chromium, Hexavalent	4.9		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00556		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	7.2	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.39	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	7.0		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	4.1		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.0045	J	0.0025*	ug/L	EPA 8260B SIM	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0598
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/07/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3861D-N-17Q2 (17-04-0598-8)						
Chromium, Hexavalent	6.8		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00894		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.1	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.41	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.2		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	7.1		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	24		0.50	ug/L	EPA 8260B	EPA 5030C
Toluene	0.41	J	0.20*	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.21	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	160		10	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.0056		0.0050	ug/L	EPA 8260B SIM	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-03-N-17Q2	**17-04-0598-1-M**	**04/07/17 12:58**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 21:40**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.7	0.020	0.0099	1.00	

MW-08-N-17Q2	**17-04-0598-2-M**	**04/07/17 11:01**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 21:51**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.1	0.020	0.0099	1.00	

MW-07-N-17Q2	**17-04-0598-3-M**	**04/07/17 09:26**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:02**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.9	0.020	0.0099	1.00	

3871H-N-17Q2	**17-04-0598-5-M**	**04/07/17 09:45**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:14**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	9.6	0.020	0.0099	1.00	

3871J-N-17Q2	**17-04-0598-6-M**	**04/07/17 11:02**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:25**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	3.8	0.020	0.0099	1.00	

3861F-N-17Q2	**17-04-0598-7-M**	**04/07/17 12:19**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:36**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	4.9	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861D-N-17Q2	**17-04-0598-8-M**	**04/07/17 13:50**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:47**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	6.8	0.020	0.0099	1.00	

Method Blank	**099-14-567-233**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 19:31**	**170407L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-03-N-17Q2	**17-04-0598-1-L**	**04/07/17 12:58**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:22**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00297	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-08-N-17Q2	**17-04-0598-2-L**	**04/07/17 11:01**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:25**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00281	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-07-N-17Q2	**17-04-0598-3-L**	**04/07/17 09:26**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:29**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00262	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871H-N-17Q2	**17-04-0598-5-L**	**04/07/17 09:45**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:33**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.0114	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871J-N-17Q2	**17-04-0598-6-L**	**04/07/17 11:02**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:36**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00447	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861F-N-17Q2	**17-04-0598-7-L**	**04/07/17 12:19**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:51**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00556	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861D-N-17Q2	**17-04-0598-8-L**	**04/07/17 13:50**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:18**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	0.00894	0.00100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-5525**	**N/A**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 15:53**	**170417LA1**

Parameter	Result	RL	DF	Qualifiers
Chromium	ND	0.00100	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-03-N-17Q2	**17-04-0598-1-K**	**04/07/17 12:58**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 01:55**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	113	56-123	
1,4-Dioxane-d8(IDS-IS)	45	30-120	

MW-08-N-17Q2	**17-04-0598-2-K**	**04/07/17 11:01**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 02:11**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	120	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

MW-07-N-17Q2	**17-04-0598-3-K**	**04/07/17 09:26**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 02:28**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	109	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

3871H-N-17Q2	**17-04-0598-5-K**	**04/07/17 09:45**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 02:44**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	112	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871J-N-17Q2	**17-04-0598-6-K**	**04/07/17 11:02**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 03:00**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	113	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

3861F-N-17Q2	**17-04-0598-7-K**	**04/07/17 12:19**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/14/17 15:07**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

3861D-N-17Q2	**17-04-0598-8-K**	**04/07/17 13:50**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 03:32**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	88	56-123	
1,4-Dioxane-d8(IDS-IS)	59	30-120	

Method Blank	**099-16-216-1007**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/10/17 21:40**	**170410L09**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-03-N-17Q2	**17-04-0598-1-A**	**04/07/17 12:58**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 03:32**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.9	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	7.2	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	0.53	1.0	0.40	1.00	J
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.32	0.50	0.20	1.00	J
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.1	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.78	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	2.6	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	32	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	12	0.50	0.29	1.00	
Trichlorofluoromethane	0.34	0.50	0.20	1.00	J
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.25	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-08-N-17Q2	**17-04-0598-2-A**	**04/07/17 11:01**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 04:05**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.4	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	2.1	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	0.65	1.0	0.40	1.00	J
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	6.3	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.57	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	4.3	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	0.45	1.0	0.40	1.00	J
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	24	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	103	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	99	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-08-N-17Q2	**17-04-0598-2-B**	**04/07/17 11:01**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 13:00**	**170420L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	71	2.0	0.80	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	104	80-127	
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-07-N-17Q2	**17-04-0598-3-A**	**04/07/17 09:26**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 04:37**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.9	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	2.9	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	0.40	1.0	0.40	1.00	J
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.23	0.50	0.20	1.00	J
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.0	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.34	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.9	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	17	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	105	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	98	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-07-N-17Q2	**17-04-0598-3-B**	**04/07/17 09:26**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 13:32**	**170420L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	34	1.0	0.40	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170407	**17-04-0598-4-A**	**04/07/17 07:00**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 10:49**	**170420L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	94	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	91	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871H-N-17Q2	**17-04-0598-5-A**	**04/07/17 09:45**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 05:10**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	4.0	1.6	8.00	
1,1,1-Trichloroethane	ND	4.0	1.6	8.00	
1,1,2,2-Tetrachloroethane	ND	4.0	1.6	8.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	4.0	1.9	8.00	
1,1,2-Trichloroethane	ND	4.0	1.6	8.00	
1,1-Dichloroethane	ND	4.0	1.6	8.00	
1,1-Dichloroethene	ND	4.0	2.2	8.00	
1,1-Dichloropropene	ND	4.0	2.4	8.00	
1,2,3-Trichlorobenzene	ND	4.0	1.6	8.00	
1,2,3-Trichloropropane	ND	8.0	3.2	8.00	
1,2,4-Trichlorobenzene	ND	4.0	1.6	8.00	
1,2,4-Trimethylbenzene	ND	4.0	1.6	8.00	
1,2-Dibromo-3-Chloropropane	ND	40	16	8.00	
1,2-Dibromoethane	ND	4.0	1.6	8.00	
1,2-Dichlorobenzene	ND	4.0	1.6	8.00	
1,2-Dichloroethane	ND	4.0	1.6	8.00	
1,2-Dichloropropane	ND	4.0	1.6	8.00	
1,3,5-Trimethylbenzene	ND	4.0	1.6	8.00	
1,3-Dichlorobenzene	ND	4.0	2.2	8.00	
1,3-Dichloropropane	ND	8.0	3.2	8.00	
1,4-Dichlorobenzene	ND	4.0	1.6	8.00	
2,2-Dichloropropane	ND	8.0	3.2	8.00	
2-Butanone	ND	40	16	8.00	
2-Chlorotoluene	ND	4.0	1.6	8.00	
2-Hexanone	ND	80	32	8.00	
4-Chlorotoluene	ND	4.0	2.8	8.00	
4-Methyl-2-Pentanone	ND	40	16	8.00	
Acetone	ND	80	32	8.00	
Benzene	ND	4.0	1.6	8.00	
Bromobenzene	ND	4.0	2.6	8.00	
Bromochloromethane	ND	8.0	3.2	8.00	
Bromodichloromethane	ND	4.0	1.6	8.00	
Bromoform	ND	4.0	2.0	8.00	
Bromomethane	ND	8.0	3.2	8.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	8.0	3.2	8.00	
Carbon Tetrachloride	ND	4.0	1.6	8.00	
Chlorobenzene	ND	4.0	1.6	8.00	
Chloroethane	ND	4.0	2.5	8.00	
Chloroform	ND	4.0	1.6	8.00	
Chloromethane	ND	4.0	2.4	8.00	
Dibromochloromethane	ND	4.0	1.6	8.00	
Dibromomethane	ND	4.0	1.6	8.00	
Dichlorodifluoromethane	ND	8.0	3.2	8.00	
Ethylbenzene	ND	4.0	1.6	8.00	
Isopropylbenzene	ND	4.0	1.6	8.00	
Methylene Chloride	ND	8.0	6.4	8.00	
Naphthalene	ND	8.0	3.2	8.00	
Styrene	ND	4.0	1.6	8.00	
Tetrachloroethene	120	4.0	1.6	8.00	
Toluene	ND	4.0	1.6	8.00	
t-1,2-Dichloroethene	ND	4.0	1.6	8.00	
Trichloroethene	140	4.0	2.3	8.00	
Trichlorofluoromethane	ND	4.0	1.6	8.00	
Vinyl Acetate	ND	40	16	8.00	
Vinyl Chloride	ND	4.0	1.6	8.00	
c-1,3-Dichloropropene	ND	4.0	1.6	8.00	
c-1,2-Dichloroethene	ND	4.0	1.6	8.00	
n-Butylbenzene	ND	4.0	1.6	8.00	
n-Propylbenzene	ND	4.0	1.6	8.00	
o-Xylene	ND	4.0	2.5	8.00	
p-Isopropyltoluene	ND	4.0	1.6	8.00	
sec-Butylbenzene	ND	4.0	1.6	8.00	
t-1,3-Dichloropropene	ND	4.0	1.6	8.00	
tert-Butylbenzene	ND	4.0	1.6	8.00	
p/m-Xylene	ND	4.0	1.6	8.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.0	1.6	8.00	
2-Chloroethyl Vinyl Ether	ND	40	33	8.00	
Hexachloro-1,3-Butadiene	ND	16	6.4	8.00	
Iodomethane	ND	80	40	8.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871J-N-17Q2	**17-04-0598-6-A**	**04/07/17 11:02**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 05:43**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	5.5	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.25	0.50	0.20	1.00	J
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861F-N-17Q2	**17-04-0598-7-A**	**04/07/17 12:19**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 06:15**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	7.2	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.39	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	7.0	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	4.1	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861D-N-17Q2	**17-04-0598-8-A**	**04/07/17 13:50**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 01:21**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.1	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.41	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.2	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	7.1	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	24	0.50	0.20	1.00	
Toluene	0.41	0.50	0.20	1.00	J
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.21	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	102	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	100	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3861D-N-17Q2	**17-04-0598-8-B**	**04/07/17 13:50**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 02:59**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Trichloroethene	160	10	5.7	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4628**	**N/A**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 00:48**	**170419L037**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4629**	**N/A**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 10:14**	**170420L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	ND	0.50	0.20	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Naphthalene	ND	1.0	0.40	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
Styrene	ND	0.50	0.20	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
Iodomethane	ND	10	5.0	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	96	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	96	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-03-N-17Q2	**17-04-0598-1-F**	**04/07/17 12:58**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 13:04**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.93	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

MW-08-N-17Q2	**17-04-0598-2-F**	**04/07/17 11:01**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 13:34**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.93	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

MW-07-N-17Q2	**17-04-0598-3-F**	**04/07/17 09:26**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 14:04**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.60	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

3871H-N-17Q2	**17-04-0598-5-H**	**04/07/17 09:45**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/15/17 06:24**	**170414L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.084	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	119	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3871J-N-17Q2	**17-04-0598-6-H**	**04/07/17 11:02**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/15/17 06:54**	**170414L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	112	80-120	

3861F-N-17Q2	**17-04-0598-7-H**	**04/07/17 12:19**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/15/17 07:24**	**170414L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.0045	0.0050	0.0025	1.00	J

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

3861D-N-17Q2	**17-04-0598-8-H**	**04/07/17 13:50**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 12:34**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.0056	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	110	80-120	

Method Blank	**099-15-118-486**	**N/A**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 23:27**	**170414L054**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	104	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-487**	**N/A**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 11:34**	**170417L018**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	106	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:47**	**170407S01**
3861D-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 22:59**	**170407S01**
3861D-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 23:10**	**170407S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	6.800	10.00	17.29	105	17.50	107	85-121	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:18**	**170417SA1**
3861D-N-17Q2	**Matrix Spike**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 16:00**	**170417SA1**
3861D-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 19:07**	**170417SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.008942	0.1000	0.1151	106	0.1131	104	73-133	2	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 03:32**	**170410S09A**
3861D-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 01:24**	**170410S09A**
3861D-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/11/17 01:39**	**170410S09A**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	21.11	106	19.33	97	50-130	9	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 01:21**	**170419S022**
3861D-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 01:54**	**170419S022**
3861D-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/20/17 02:26**	**170419S022**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	10.98	110	10.48	105	66-126	5	0-20	
1,2-Dibromoethane	ND	10.00	9.917	99	9.620	96	75-126	3	0-20	
1,2-Dichlorobenzene	ND	10.00	9.823	98	9.509	95	75-125	3	0-20	
1,2-Dichloroethane	ND	10.00	9.779	98	9.512	95	75-127	3	0-20	
Benzene	ND	10.00	9.960	100	9.670	97	75-125	3	0-20	
Carbon Tetrachloride	ND	10.00	11.51	115	10.89	109	69-135	6	0-20	
Chlorobenzene	ND	10.00	9.789	98	9.566	96	75-125	2	0-20	
Ethylbenzene	ND	10.00	9.968	100	9.684	97	75-125	3	0-20	
Toluene	ND	10.00	10.47	105	10.21	102	75-125	3	0-20	
Trichloroethene	159.3	10.00	161.0	17	162.3	30	75-125	1	0-20	3
Vinyl Chloride	ND	10.00	12.42	124	11.95	119	52-142	4	0-20	
o-Xylene	ND	10.00	9.833	98	9.495	95	75-127	3	0-20	
p/m-Xylene	ND	20.00	19.80	99	19.05	95	75-125	4	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.25	103	9.783	98	71-131	5	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	64.30	129	70.66	141	20-180	9	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.34	103	9.752	98	64-136	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.964	100	9.455	95	73-133	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	9.479	95	9.244	92	75-125	3	0-20	
Ethanol	ND	100.0	126.3	126	123.9	124	73-139	2	0-27	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-1153-3	**Sample**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 11:22**	**170420S006**
17-04-1153-3	**Matrix Spike**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 11:54**	**170420S006**
17-04-1153-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 12:27**	**170420S006**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	9.316	93	8.568	86	75-125	8	0-20	
Carbon Tetrachloride	ND	10.00	10.35	103	9.437	94	69-135	9	0-20	
Chlorobenzene	ND	10.00	9.317	93	8.693	87	75-125	7	0-20	
1,2-Dibromoethane	ND	10.00	9.438	94	9.262	93	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	9.509	95	8.729	87	75-125	9	0-20	
1,2-Dichloroethane	ND	10.00	9.211	92	8.763	88	75-127	5	0-20	
1,1-Dichloroethene	0.5449	10.00	10.54	100	9.532	90	66-126	10	0-20	
Ethylbenzene	ND	10.00	9.546	95	8.660	87	75-125	10	0-20	
Toluene	ND	10.00	9.487	95	8.664	87	75-125	9	0-20	
Trichloroethene	ND	10.00	9.507	95	8.656	87	75-125	9	0-20	
Vinyl Chloride	2.568	10.00	14.32	118	14.31	117	52-142	0	0-20	
p/m-Xylene	ND	20.00	18.99	95	17.41	87	75-125	9	0-20	
o-Xylene	ND	10.00	9.340	93	8.558	86	75-127	9	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.204	92	9.132	91	71-131	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	52.82	106	52.97	106	20-180	0	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	9.537	95	9.124	91	64-136	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.135	91	8.926	89	73-133	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.838	88	8.545	85	75-125	3	0-20	
Ethanol	ND	100.0	99.08	99	107.7	108	73-139	8	0-27	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0600-3	**Sample**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 23:56**	**170414S027**
17-04-0600-3	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/15/17 00:26**	**170414S027**
17-04-0600-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/15/17 00:56**	**170414S027**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	21.46	107	20.58	103	80-120	4	0-20	
1,2,3-Trichloropropane	0.005200	0.02000	0.02790	114	0.02700	109	80-120	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 12:34**	**170417S008**
3861D-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 15:03**	**170417S008**
3861D-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 15:34**	**170417S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	23.12	116	23.44	117	80-120	1	0-20	
1,2,3-Trichloropropane	0.005600	0.02000	0.02790	112	0.02590	102	80-120	7	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
3861D-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/17/17 00:00**	**04/17/17 19:18**	**170417SA1**
3861D-N-17Q2	**PDS**	**Aqueous**	**ICP/MS 05**	**04/17/17 00:00**	**04/17/17 19:11**	**170417SA1**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.008942	0.1000	0.1098	101	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-233	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/07/17 19:42**	**170407L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.10	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5525	**LCS**	**Aqueous**	**ICP/MS 05**	**04/17/17**	**04/17/17 15:57**	**170417LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1124	112	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1007	**LCS**	**Aqueous**	**GC/MS DDD**	**04/10/17**	**04/10/17 21:56**	**170410L09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	18.50	93	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4628	**LCS**	**Aqueous**	**GC/MS T**	**04/19/17**	**04/19/17 23:43**	**170419L037**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.71	107	77-120	70-127	
1,2-Dibromoethane	10.00	10.44	104	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.13	101	80-120	73-127	
1,2-Dichloroethane	10.00	10.11	101	80-122	73-129	
Benzene	10.00	10.08	101	80-120	73-127	
Carbon Tetrachloride	10.00	10.81	108	80-129	72-137	
Chlorobenzene	10.00	10.06	101	80-120	73-127	
Ethylbenzene	10.00	10.12	101	80-120	73-127	
Toluene	10.00	10.12	101	80-120	73-127	
Trichloroethene	10.00	10.13	101	80-120	73-127	
Vinyl Chloride	10.00	11.11	111	63-135	51-147	
o-Xylene	10.00	10.13	101	80-120	73-127	
p/m-Xylene	20.00	20.12	101	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.68	107	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	53.27	107	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	10.83	108	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.51	105	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.951	100	80-120	73-127	
Ethanol	100.0	109.7	110	73-133	63-143	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4629	**LCS**	**Aqueous**	**GC/MS T**	**04/20/17**	**04/20/17 09:27**	**170420L010**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.16	102	80-120	73-127	
Carbon Tetrachloride	10.00	10.62	106	80-129	72-137	
Chlorobenzene	10.00	10.18	102	80-120	73-127	
1,2-Dibromoethane	10.00	9.913	99	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.08	101	80-120	73-127	
1,2-Dichloroethane	10.00	9.906	99	80-122	73-129	
1,1-Dichloroethene	10.00	10.59	106	77-120	70-127	
Ethylbenzene	10.00	10.26	103	80-120	73-127	
Toluene	10.00	10.20	102	80-120	73-127	
Trichloroethene	10.00	10.45	105	80-120	73-127	
Vinyl Chloride	10.00	10.71	107	63-135	51-147	
p/m-Xylene	20.00	20.63	103	80-120	73-127	
o-Xylene	10.00	10.17	102	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.932	99	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	51.36	103	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	10.37	104	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	9.960	100	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.513	95	80-120	73-127	
Ethanol	100.0	110.8	111	73-133	63-143	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-486	**LCS**	**Aqueous**	**GC/MS M**	**04/14/17**	**04/14/17 22:27**	**170414L054**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	20.00	100	80-120	
1,2,3-Trichloropropane	0.02000	0.01910	96	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/07/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0598
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-487	**LCS**	**Aqueous**	**GC/MS M**	**04/17/17**	**04/17/17 10:34**	**170417L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	21.09	105	80-120	
1,2,3-Trichloropropane	0.02000	0.01960	98	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0598

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	834	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 05	1
EPA 8260B	EPA 5030C	316	GC/MS T	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0598 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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

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

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-7-2017
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WO NO. / LAB USE ONLY: **17-04-0598**

LABORATORY CLIENT: Tetra Tech INC.
ADDRESS: 301 E Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOY
P.O. NO.:
PROJECT CONTACT: Robert Sabater
LAB CONTACT OR QUOTE NO:
GLOBAL ID: LOG CODE:
SAMPLER(S): (PRINT) Jason Cooke, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:
*3861D-N-17Q2 is an MS/MSD

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ___	BTEX / MTBE ☐ 8260 ☐ ___	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex Cr	1,2,3 TCP
1	MW-03-N-17Q2	4-7-17	1258	W	13	✓	✓							5									1	1	1	5
2	MW-08-N-17Q2	4-7-17	1101	W	13	✓	✓							5									1	1	1	5
3	MW-07-N-17Q2	4-7-17	0926	W	13	✓	✓							5									1	1	1	5
4	FTB-20170407	4-7-17	0700	W	3		✓							2												1
5	3871H-N-17Q2	4-7-17	0945	W	13	✓	✓							5									1	1	1	5
6	3871J-N-17Q2	4-7-17	1102	W	13	✓	✓							5									1	1	1	5
7	3861F-N-17Q2	4-7-17	1219	W	13	✓	✓							5									1	1	1	5
8	3861D-N-17Q2	4-7-17	1350	W	19	✓	✓							5									3	3	3	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	4-7-2017	1620
[signature]	[signature] TTI	4/7/17	1625

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0598

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 7 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.8 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 681

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ 10 VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 681

Reviewed by: 1053

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WORK ORDER NUMBER: 17-04-0454

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 04/24/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-0454

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Work Order Narrative

Work Order: 17-04-0454 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/06/17. They were assigned to Work Order 17-04-0454.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0454
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/06/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-1-CW30-N-17Q2 (17-04-0454-1)						
Chromium, Hexavalent	0.59		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0333		0.00100	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	110		5.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	200		5.0	ug/L	EPA 8260B	EPA 5030C
B-1-CW31-N-17Q2 (17-04-0454-2)						
Chromium, Hexavalent	16		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0217		0.00100	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	55		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	47		1.0	ug/L	EPA 8260B	EPA 5030C
B-1-CW33-N-17Q2 (17-04-0454-3)						
Chromium, Hexavalent	0.44		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0149		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	15		10	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	17		10	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	630		10	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	180		10	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.87		0.050	ug/L	EPA 8260B SIM	EPA 5030C
1,4-Dioxane	1.2		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
A-1-CW08-N-17Q2 (17-04-0454-5)						
Chromium, Hexavalent	1.2		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00176		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	1.4		1.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	67		2.0	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.0		1.0	ug/L	EPA 8260B	EPA 5030C
Chloroform	30		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	28		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	69		1.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	87		5.0	ug/L	EPA 8260B SIM	EPA 5030C
B-6-CW14-N-17Q2 (17-04-0454-6)						
Chromium, Hexavalent	1.2		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00177		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.5	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	22		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	5.1		0.50	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	1.8		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0454
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/06/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
C-1-CW05-N-17Q2 (17-04-0454-7)						
Chromium, Hexavalent	0.18		0.020	ug/L	EPA 218.6	N/A
Chromium	0.000735	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethane	1.1		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	1.9		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.68		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.29	J	0.29*	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.30	J	0.20*	ug/L	EPA 8260B	EPA 5030C
B-6-CW02-N-17Q2 (17-04-0454-8)						
Chromium, Hexavalent	2.5		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00295		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.56		0.50	ug/L	EPA 8260B	EPA 5030C
B-6-CW02-FD-17Q2 (17-04-0454-9)						
Chromium, Hexavalent	2.5		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00311		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.2	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.37	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.54		0.50	ug/L	EPA 8260B	EPA 5030C

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW30-N-17Q2	**17-04-0454-1-K**	**04/06/17 14:44**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 21:13**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.59	0.020	0.0099	1.00	

B-1-CW31-N-17Q2	**17-04-0454-2-K**	**04/06/17 13:05**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 21:24**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	16	0.020	0.0099	1.00	

B-1-CW33-N-17Q2	**17-04-0454-3-K**	**04/06/17 09:04**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 21:35**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.44	0.020	0.0099	1.00	

A-1-CW08-N-17Q2	**17-04-0454-5-K**	**04/06/17 14:44**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 21:46**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.2	0.020	0.0099	1.00	

B-6-CW14-N-17Q2	**17-04-0454-6-K**	**04/06/17 11:47**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 21:58**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.2	0.020	0.0099	1.00	

C-1-CW05-N-17Q2	**17-04-0454-7-K**	**04/06/17 09:52**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:09**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.18	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW02-N-17Q2	**17-04-0454-8-K**	**04/06/17 16:21**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:20**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.5	0.020	0.0099	1.00	

B-6-CW02-FD-17Q2	**17-04-0454-9-K**	**04/06/17 16:21**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:31**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.5	0.020	0.0099	1.00	

Method Blank	**099-14-567-232**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 19:46**	**170406L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW30-N-17Q2	**17-04-0454-1-L**	**04/06/17 14:44**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:35**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0333	0.00100	0.000402	1.00	

B-1-CW31-N-17Q2	**17-04-0454-2-L**	**04/06/17 13:05**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:45**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0217	0.00100	0.000402	1.00	

B-1-CW33-N-17Q2	**17-04-0454-3-L**	**04/06/17 09:04**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:47**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0149	0.00100	0.000402	1.00	

A-1-CW08-N-17Q2	**17-04-0454-5-L**	**04/06/17 14:44**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:52**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00176	0.00100	0.000402	1.00	

B-6-CW14-N-17Q2	**17-04-0454-6-L**	**04/06/17 11:47**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:55**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00177	0.00100	0.000402	1.00	

C-1-CW05-N-17Q2	**17-04-0454-7-L**	**04/06/17 09:52**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 00:57**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000735	0.00100	0.000402	1.00	J

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW02-N-17Q2	**17-04-0454-8-G**	**04/06/17 16:21**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 01:00**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00295	0.00100	0.000402	1.00	

B-6-CW02-FD-17Q2	**17-04-0454-9-G**	**04/06/17 16:21**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 01:02**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00311	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5532**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 04:11**	**170415LA6**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW30-N-17Q2	**17-04-0454-1-M**	**04/06/17 14:44**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 08:37**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	107	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

B-1-CW31-N-17Q2	**17-04-0454-2-M**	**04/06/17 13:05**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 08:53**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

B-1-CW33-N-17Q2	**17-04-0454-3-M**	**04/06/17 09:04**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 09:09**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.2	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	108	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

A-1-CW08-N-17Q2	**17-04-0454-5-M**	**04/06/17 14:44**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 09:24**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	107	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW14-N-17Q2	**17-04-0454-6-M**	**04/06/17 11:47**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 09:40**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.8	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	110	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

C-1-CW05-N-17Q2	**17-04-0454-7-M**	**04/06/17 09:52**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 09:56**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	108	56-123	
1,4-Dioxane-d8(IDS-IS)	36	30-120	

B-6-CW02-N-17Q2	**17-04-0454-8-H**	**04/06/17 16:21**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 10:12**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

B-6-CW02-FD-17Q2	**17-04-0454-9-H**	**04/06/17 16:21**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 10:28**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	35	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-216-1000**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 04:23**	**170407L15**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	110	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW30-N-17Q2	**17-04-0454-1-A**	**04/06/17 14:44**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/08/17 04:36**	**170407L043**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	5.0	2.0	10.0	
1,1,1-Trichloroethane	ND	5.0	2.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	2.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	2.4	10.0	
1,1,2-Trichloroethane	ND	5.0	2.0	10.0	
1,1-Dichloroethane	ND	5.0	2.0	10.0	
1,1-Dichloroethene	ND	5.0	2.8	10.0	
1,1-Dichloropropene	ND	5.0	3.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	2.0	10.0	
1,2,3-Trichloropropane	ND	10	4.0	10.0	
1,2,4-Trichlorobenzene	ND	5.0	2.0	10.0	
1,2,4-Trimethylbenzene	ND	5.0	2.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	20	10.0	
1,2-Dibromoethane	ND	5.0	2.0	10.0	
1,2-Dichlorobenzene	ND	5.0	2.0	10.0	
1,2-Dichloroethane	ND	5.0	2.0	10.0	
1,2-Dichloropropane	ND	5.0	2.0	10.0	
1,3,5-Trimethylbenzene	ND	5.0	2.0	10.0	
1,3-Dichlorobenzene	ND	5.0	2.8	10.0	
1,3-Dichloropropane	ND	10	4.0	10.0	
1,4-Dichlorobenzene	ND	5.0	2.0	10.0	
2,2-Dichloropropane	ND	10	4.0	10.0	
2-Butanone	ND	50	20	10.0	
2-Chlorotoluene	ND	5.0	2.0	10.0	
2-Hexanone	ND	100	40	10.0	
4-Chlorotoluene	ND	5.0	3.6	10.0	
4-Methyl-2-Pentanone	ND	50	20	10.0	
Acetone	ND	100	40	10.0	
Benzene	ND	5.0	2.0	10.0	
Bromobenzene	ND	5.0	3.2	10.0	
Bromochloromethane	ND	10	4.0	10.0	
Bromodichloromethane	ND	5.0	2.0	10.0	
Bromoform	ND	5.0	2.5	10.0	
Bromomethane	ND	10	4.0	10.0	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	10	4.0	10.0	
Carbon Tetrachloride	ND	5.0	2.0	10.0	
Chlorobenzene	ND	5.0	2.0	10.0	
Chloroethane	ND	5.0	3.2	10.0	
Chloroform	ND	5.0	2.0	10.0	
Chloromethane	ND	5.0	2.9	10.0	
Dibromochloromethane	ND	5.0	2.0	10.0	
Dibromomethane	ND	5.0	2.0	10.0	
Dichlorodifluoromethane	ND	10	4.0	10.0	
Ethylbenzene	ND	5.0	2.0	10.0	
Isopropylbenzene	ND	5.0	2.0	10.0	
Methylene Chloride	ND	10	8.0	10.0	
Naphthalene	ND	10	4.0	10.0	
Styrene	ND	5.0	2.0	10.0	
Tetrachloroethene	110	5.0	2.0	10.0	
Toluene	ND	5.0	2.0	10.0	
t-1,2-Dichloroethene	ND	5.0	2.0	10.0	
Trichloroethene	200	5.0	2.9	10.0	
Trichlorofluoromethane	ND	5.0	2.0	10.0	
Vinyl Acetate	ND	50	20	10.0	
Vinyl Chloride	ND	5.0	2.0	10.0	
c-1,3-Dichloropropene	ND	5.0	2.0	10.0	
c-1,2-Dichloroethene	ND	5.0	2.0	10.0	
n-Butylbenzene	ND	5.0	2.0	10.0	
n-Propylbenzene	ND	5.0	2.0	10.0	
o-Xylene	ND	5.0	3.2	10.0	
p-Isopropyltoluene	ND	5.0	2.0	10.0	
sec-Butylbenzene	ND	5.0	2.0	10.0	
t-1,3-Dichloropropene	ND	5.0	2.0	10.0	
tert-Butylbenzene	ND	5.0	2.0	10.0	
p/m-Xylene	ND	5.0	2.0	10.0	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	2.0	10.0	
2-Chloroethyl Vinyl Ether	ND	50	42	10.0	
Hexachloro-1,3-Butadiene	ND	20	8.0	10.0	
Iodomethane	ND	100	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-120	
Dibromofluoromethane	101	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	102	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW31-N-17Q2	**17-04-0454-2-C**	**04/06/17 13:05**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 15:50**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,1-Trichloroethane	ND	1.0	0.40	2.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	0.48	2.00	
1,1,2-Trichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethene	ND	1.0	0.56	2.00	
1,1-Dichloropropene	ND	1.0	0.60	2.00	
1,2,3-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,3-Trichloropropane	ND	2.0	0.80	2.00	
1,2,4-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,4-Trimethylbenzene	ND	1.0	0.40	2.00	
1,2-Dibromo-3-Chloropropane	ND	10	4.0	2.00	
1,2-Dibromoethane	ND	1.0	0.40	2.00	
1,2-Dichlorobenzene	ND	1.0	0.40	2.00	
1,2-Dichloroethane	ND	1.0	0.40	2.00	
1,2-Dichloropropane	ND	1.0	0.40	2.00	
1,3,5-Trimethylbenzene	ND	1.0	0.40	2.00	
1,3-Dichlorobenzene	ND	1.0	0.55	2.00	
1,3-Dichloropropane	ND	2.0	0.80	2.00	
1,4-Dichlorobenzene	ND	1.0	0.40	2.00	
2,2-Dichloropropane	ND	2.0	0.80	2.00	
2-Butanone	ND	10	4.0	2.00	
2-Chlorotoluene	ND	1.0	0.40	2.00	
2-Hexanone	ND	20	8.0	2.00	
4-Chlorotoluene	ND	1.0	0.71	2.00	
4-Methyl-2-Pentanone	ND	10	4.0	2.00	
Acetone	ND	20	8.0	2.00	
Benzene	ND	1.0	0.40	2.00	
Bromobenzene	ND	1.0	0.64	2.00	
Bromochloromethane	ND	2.0	0.80	2.00	
Bromodichloromethane	ND	1.0	0.40	2.00	
Bromoform	ND	1.0	0.49	2.00	
Bromomethane	ND	2.0	0.80	2.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	2.0	0.80	2.00	
Carbon Tetrachloride	ND	1.0	0.40	2.00	
Chlorobenzene	ND	1.0	0.40	2.00	
Chloroethane	ND	1.0	0.63	2.00	
Chloroform	ND	1.0	0.40	2.00	
Chloromethane	ND	1.0	0.59	2.00	
Dibromochloromethane	ND	1.0	0.40	2.00	
Dibromomethane	ND	1.0	0.40	2.00	
Dichlorodifluoromethane	ND	2.0	0.80	2.00	
Ethylbenzene	ND	1.0	0.40	2.00	
Isopropylbenzene	ND	1.0	0.40	2.00	
Methylene Chloride	ND	2.0	1.6	2.00	
Naphthalene	ND	2.0	0.80	2.00	
Styrene	ND	1.0	0.40	2.00	
Tetrachloroethene	55	1.0	0.40	2.00	
Toluene	ND	1.0	0.40	2.00	
t-1,2-Dichloroethene	ND	1.0	0.40	2.00	
Trichloroethene	47	1.0	0.57	2.00	
Trichlorofluoromethane	ND	1.0	0.40	2.00	
Vinyl Acetate	ND	10	4.0	2.00	
Vinyl Chloride	ND	1.0	0.40	2.00	
c-1,3-Dichloropropene	ND	1.0	0.40	2.00	
c-1,2-Dichloroethene	ND	1.0	0.40	2.00	
n-Butylbenzene	ND	1.0	0.40	2.00	
n-Propylbenzene	ND	1.0	0.40	2.00	
o-Xylene	ND	1.0	0.63	2.00	
p-Isopropyltoluene	ND	1.0	0.40	2.00	
sec-Butylbenzene	ND	1.0	0.40	2.00	
t-1,3-Dichloropropene	ND	1.0	0.40	2.00	
tert-Butylbenzene	ND	1.0	0.40	2.00	
p/m-Xylene	ND	1.0	0.40	2.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.40	2.00	
2-Chloroethyl Vinyl Ether	ND	10	8.4	2.00	
Hexachloro-1,3-Butadiene	ND	4.0	1.6	2.00	
Iodomethane	ND	20	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	98	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW33-N-17Q2	**17-04-0454-3-C**	**04/06/17 09:04**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 14:48**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	10	4.0	20.0	
1,1,1-Trichloroethane	ND	10	4.0	20.0	
1,1,2,2-Tetrachloroethane	ND	10	4.0	20.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	15	10	4.8	20.0	
1,1,2-Trichloroethane	ND	10	4.0	20.0	
1,1-Dichloroethane	ND	10	4.0	20.0	
1,1-Dichloroethene	17	10	5.6	20.0	
1,1-Dichloropropene	ND	10	6.0	20.0	
1,2,3-Trichlorobenzene	ND	10	4.0	20.0	
1,2,3-Trichloropropane	ND	20	8.0	20.0	
1,2,4-Trichlorobenzene	ND	10	4.0	20.0	
1,2,4-Trimethylbenzene	ND	10	4.0	20.0	
1,2-Dibromo-3-Chloropropane	ND	100	40	20.0	
1,2-Dibromoethane	ND	10	4.0	20.0	
1,2-Dichlorobenzene	ND	10	4.0	20.0	
1,2-Dichloroethane	ND	10	4.0	20.0	
1,2-Dichloropropane	ND	10	4.0	20.0	
1,3,5-Trimethylbenzene	ND	10	4.0	20.0	
1,3-Dichlorobenzene	ND	10	5.5	20.0	
1,3-Dichloropropane	ND	20	8.0	20.0	
1,4-Dichlorobenzene	ND	10	4.0	20.0	
2,2-Dichloropropane	ND	20	8.0	20.0	
2-Butanone	ND	100	40	20.0	
2-Chlorotoluene	ND	10	4.0	20.0	
2-Hexanone	ND	200	80	20.0	
4-Chlorotoluene	ND	10	7.1	20.0	
4-Methyl-2-Pentanone	ND	100	40	20.0	
Acetone	ND	200	80	20.0	
Benzene	ND	10	4.0	20.0	
Bromobenzene	ND	10	6.4	20.0	
Bromochloromethane	ND	20	8.0	20.0	
Bromodichloromethane	ND	10	4.0	20.0	
Bromoform	ND	10	4.9	20.0	
Bromomethane	ND	20	8.0	20.0	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	20	8.0	20.0	
Carbon Tetrachloride	ND	10	4.0	20.0	
Chlorobenzene	ND	10	4.0	20.0	
Chloroethane	ND	10	6.3	20.0	
Chloroform	ND	10	4.0	20.0	
Chloromethane	ND	10	5.9	20.0	
Dibromochloromethane	ND	10	4.0	20.0	
Dibromomethane	ND	10	4.0	20.0	
Dichlorodifluoromethane	ND	20	8.0	20.0	
Ethylbenzene	ND	10	4.0	20.0	
Isopropylbenzene	ND	10	4.0	20.0	
Methylene Chloride	ND	20	16	20.0	
Naphthalene	ND	20	8.0	20.0	
Styrene	ND	10	4.0	20.0	
Tetrachloroethene	630	10	4.0	20.0	
Toluene	ND	10	4.0	20.0	
t-1,2-Dichloroethene	ND	10	4.0	20.0	
Trichloroethene	180	10	5.7	20.0	
Trichlorofluoromethane	ND	10	4.0	20.0	
Vinyl Acetate	ND	100	40	20.0	
Vinyl Chloride	ND	10	4.0	20.0	
c-1,3-Dichloropropene	ND	10	4.0	20.0	
c-1,2-Dichloroethene	ND	10	4.0	20.0	
n-Butylbenzene	ND	10	4.0	20.0	
n-Propylbenzene	ND	10	4.0	20.0	
o-Xylene	ND	10	6.3	20.0	
p-Isopropyltoluene	ND	10	4.0	20.0	
sec-Butylbenzene	ND	10	4.0	20.0	
t-1,3-Dichloropropene	ND	10	4.0	20.0	
tert-Butylbenzene	ND	10	4.0	20.0	
p/m-Xylene	ND	10	4.0	20.0	
Methyl-t-Butyl Ether (MTBE)	ND	10	4.0	20.0	
2-Chloroethyl Vinyl Ether	ND	100	84	20.0	
Hexachloro-1,3-Butadiene	ND	40	16	20.0	
Iodomethane	ND	200	100	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20160406	**17-04-0454-4-A**	**04/06/17 07:00**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/07/17 23:24**	**170407L043**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	105	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW08-N-17Q2	**17-04-0454-5-C**	**04/06/17 14:44**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 16:20**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,1-Trichloroethane	ND	1.0	0.40	2.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	0.48	2.00	
1,1,2-Trichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethene	1.4	1.0	0.56	2.00	
1,1-Dichloropropene	ND	1.0	0.60	2.00	
1,2,3-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,3-Trichloropropane	67	2.0	0.80	2.00	
1,2,4-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,4-Trimethylbenzene	ND	1.0	0.40	2.00	
1,2-Dibromo-3-Chloropropane	ND	10	4.0	2.00	
1,2-Dibromoethane	ND	1.0	0.40	2.00	
1,2-Dichlorobenzene	ND	1.0	0.40	2.00	
1,2-Dichloroethane	ND	1.0	0.40	2.00	
1,2-Dichloropropane	ND	1.0	0.40	2.00	
1,3,5-Trimethylbenzene	ND	1.0	0.40	2.00	
1,3-Dichlorobenzene	ND	1.0	0.55	2.00	
1,3-Dichloropropane	ND	2.0	0.80	2.00	
1,4-Dichlorobenzene	ND	1.0	0.40	2.00	
2,2-Dichloropropane	ND	2.0	0.80	2.00	
2-Butanone	ND	10	4.0	2.00	
2-Chlorotoluene	ND	1.0	0.40	2.00	
2-Hexanone	ND	20	8.0	2.00	
4-Chlorotoluene	ND	1.0	0.71	2.00	
4-Methyl-2-Pentanone	ND	10	4.0	2.00	
Acetone	ND	20	8.0	2.00	
Benzene	ND	1.0	0.40	2.00	
Bromobenzene	ND	1.0	0.64	2.00	
Bromochloromethane	ND	2.0	0.80	2.00	
Bromodichloromethane	ND	1.0	0.40	2.00	
Bromoform	ND	1.0	0.49	2.00	
Bromomethane	ND	2.0	0.80	2.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	2.0	0.80	2.00	
Carbon Tetrachloride	1.0	1.0	0.40	2.00	
Chlorobenzene	ND	1.0	0.40	2.00	
Chloroethane	ND	1.0	0.63	2.00	
Chloroform	30	1.0	0.40	2.00	
Chloromethane	ND	1.0	0.59	2.00	
Dibromochloromethane	ND	1.0	0.40	2.00	
Dibromomethane	ND	1.0	0.40	2.00	
Dichlorodifluoromethane	ND	2.0	0.80	2.00	
Ethylbenzene	ND	1.0	0.40	2.00	
Isopropylbenzene	ND	1.0	0.40	2.00	
Methylene Chloride	ND	2.0	1.6	2.00	
Naphthalene	ND	2.0	0.80	2.00	
Styrene	ND	1.0	0.40	2.00	
Tetrachloroethene	28	1.0	0.40	2.00	
Toluene	ND	1.0	0.40	2.00	
t-1,2-Dichloroethene	ND	1.0	0.40	2.00	
Trichloroethene	69	1.0	0.57	2.00	
Trichlorofluoromethane	ND	1.0	0.40	2.00	
Vinyl Acetate	ND	10	4.0	2.00	
Vinyl Chloride	ND	1.0	0.40	2.00	
c-1,3-Dichloropropene	ND	1.0	0.40	2.00	
c-1,2-Dichloroethene	ND	1.0	0.40	2.00	
n-Butylbenzene	ND	1.0	0.40	2.00	
n-Propylbenzene	ND	1.0	0.40	2.00	
o-Xylene	ND	1.0	0.63	2.00	
p-Isopropyltoluene	ND	1.0	0.40	2.00	
sec-Butylbenzene	ND	1.0	0.40	2.00	
t-1,3-Dichloropropene	ND	1.0	0.40	2.00	
tert-Butylbenzene	ND	1.0	0.40	2.00	
p/m-Xylene	ND	1.0	0.40	2.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.40	2.00	
2-Chloroethyl Vinyl Ether	ND	10	8.4	2.00	
Hexachloro-1,3-Butadiene	ND	4.0	1.6	2.00	
Iodomethane	ND	20	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	98	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW14-N-17Q2	**17-04-0454-6-C**	**04/06/17 11:47**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 16:51**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.5	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.29	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	22	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	5.1	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	97	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	100	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-CW05-N-17Q2	**17-04-0454-7-C**	**04/06/17 09:52**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 17:22**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	1.1	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	1.9	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.68	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.29	0.50	0.29	1.00	J
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.30	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	95	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW02-N-17Q2	**17-04-0454-8-C**	**04/06/17 16:21**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 17:52**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.35	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.56	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	96	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	97	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW02-FD-17Q2	**17-04-0454-9-C**	**04/06/17 16:21**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 18:23**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.2	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.37	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.54	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4613**	**N/A**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/07/17 22:53**	**170407L043**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-120	
Dibromofluoromethane	103	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	102	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 31 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4626**	**N/A**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 10:40**	**170419L010**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 32 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	95	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 33 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	90	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW30-N-17Q2	**17-04-0454-1-F**	**04/06/17 14:44**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/12/17 00:18**	**170411L078**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	91	80-120	

B-1-CW31-N-17Q2	**17-04-0454-2-F**	**04/06/17 13:05**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/12/17 03:47**	**170411L078**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	89	80-120	

B-1-CW33-N-17Q2	**17-04-0454-3-H**	**04/06/17 09:04**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 14:09**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.87	0.050	0.025	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	114	80-120	

LTB-20160406	**17-04-0454-4-C**	**04/06/17 07:00**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/11/17 23:48**	**170411L078**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	88	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-1-CW08-N-17Q2	**17-04-0454-5-H**	**04/06/17 14:44**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 19:07**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	87	5.0	2.5	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	103	80-120	

B-6-CW14-N-17Q2	**17-04-0454-6-H**	**04/06/17 11:47**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 18:38**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

C-1-CW05-N-17Q2	**17-04-0454-7-H**	**04/06/17 09:52**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 12:09**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	119	80-120	

B-6-CW02-N-17Q2	**17-04-0454-8-F**	**04/06/17 16:21**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 12:39**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	113	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-CW02-FD-17Q2	**17-04-0454-9-E**	**04/06/17 16:21**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 13:09**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	104	80-120	

Method Blank	**099-15-118-481**	**N/A**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/11/17 23:18**	**170411L078**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	80-120	

Method Blank	**099-15-118-489**	**N/A**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 11:33**	**170418L051**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	112	80-120	

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

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-6-CW02-FD-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:31**	**170406S01**
B-6-CW02-FD-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:43**	**170406S01**
B-6-CW02-FD-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 22:54**	**170406S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	2.533	10.00	13.29	108	12.88	103	85-121	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0984-2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/20/17 17:20**	**170415SA6**
17-04-0984-2	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/20/17 17:09**	**170415SA6**
17-04-0984-2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/20/17 17:12**	**170415SA6**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	0.1000	0.09454	95	0.09343	93	73-133	1	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0319-3	**Sample**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 05:26**	**170407S15**
17-04-0319-3	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 04:55**	**170407S15**
17-04-0319-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 05:10**	**170407S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	19.71	99	19.76	99	50-130	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0581-8	**Sample**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 11:45**	**170419S008**
17-04-0581-8	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 12:15**	**170419S008**
17-04-0581-8	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 12:46**	**170419S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	100.0	79.92	80	95.14	95	66-126	17	0-20	
1,2-Dibromoethane	ND	100.0	84.58	85	89.81	90	75-126	6	0-20	
1,2-Dichlorobenzene	ND	100.0	79.66	80	89.05	89	75-125	11	0-20	
1,2-Dichloroethane	53.86	100.0	132.6	79	143.3	89	75-127	8	0-20	
Benzene	970.6	100.0	949.1	0	1032	62	75-125	8	0-20	3
Carbon Tetrachloride	ND	100.0	70.48	70	86.95	87	69-135	21	0-20	4
Chlorobenzene	ND	100.0	77.18	77	87.37	87	75-125	12	0-20	
Ethylbenzene	61.25	100.0	136.4	75	153.1	92	75-125	12	0-20	
Toluene	ND	100.0	78.80	79	90.47	90	75-125	14	0-20	
Trichloroethene	ND	100.0	73.55	74	86.31	86	75-125	16	0-20	3
Vinyl Chloride	ND	100.0	112.3	112	120.4	120	52-142	7	0-20	
o-Xylene	15.96	100.0	93.21	77	105.1	89	75-127	12	0-20	
p/m-Xylene	76.40	200.0	226.1	75	254.3	89	75-125	12	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	100.0	81.27	81	89.27	89	71-131	9	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0468-1	**Sample**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/07/17 23:56**	**170407S023**
17-04-0468-1	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/08/17 00:27**	**170407S023**
17-04-0468-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/08/17 00:58**	**170407S023**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	8.476	85	8.529	85	66-126	1	0-20	
1,2-Dibromoethane	ND	10.00	9.761	98	9.292	93	75-126	5	0-20	
1,2-Dichlorobenzene	ND	10.00	10.06	101	9.799	98	75-125	3	0-20	
1,2-Dichloroethane	ND	10.00	10.03	100	9.748	97	75-127	3	0-20	
Benzene	ND	10.00	9.367	94	9.086	91	75-125	3	0-20	
Carbon Tetrachloride	ND	10.00	10.21	102	9.770	98	69-135	4	0-20	
Chlorobenzene	ND	10.00	9.881	99	9.584	96	75-125	3	0-20	
Ethylbenzene	ND	10.00	9.885	99	9.482	95	75-125	4	0-20	
Toluene	ND	10.00	9.749	97	9.507	95	75-125	3	0-20	
Trichloroethene	ND	10.00	8.932	89	8.577	86	75-125	4	0-20	
Vinyl Chloride	ND	10.00	10.77	108	10.10	101	52-142	6	0-20	
o-Xylene	ND	10.00	10.43	104	9.801	98	75-127	6	0-20	
p/m-Xylene	ND	20.00	20.33	102	19.14	96	75-125	6	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.196	92	9.150	92	71-131	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW30-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/12/17 00:18**	**170411S039**
B-1-CW30-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/12/17 00:47**	**170411S039**
B-1-CW30-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/12/17 01:17**	**170411S039**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02140	107	0.02660	133	80-120	22	0-20	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW33-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 14:09**	**170418S019**
B-1-CW33-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 16:08**	**170418S019**
B-1-CW33-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 16:38**	**170418S019**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.8690	0.2000	0.8720	2	0.9300	30	80-120	6	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-0984-2	**Sample**	**Aqueous**	**ICP/MS 03**	**04/15/17 00:00**	**04/20/17 17:20**	**170415SA6**
17-04-0984-2	**PDS**	**Aqueous**	**ICP/MS 03**	**04/15/17 00:00**	**04/20/17 17:15**	**170415SA6**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	ND	0.1000	0.09362	94	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-232	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/06/17 19:58**	**170406L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.18	102	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5532	**LCS**	**Aqueous**	**ICP/MS 03**	**04/15/17**	**04/19/17 04:16**	**170415LA6**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1012	101	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1000	**LCS**	**Aqueous**	**GC/MS DDD**	**04/07/17**	**04/08/17 04:39**	**170407L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.48	97	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-4626	**LCS**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 09:25**	**170419L010**
099-10-025-4626	**LCSD**	**Aqueous**	**GC/MS L**	**04/19/17**	**04/19/17 09:55**	**170419L010**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	10.00	9.855	99	10.02	100	77-120	70-127	2	0-26	
1,2-Dibromoethane	10.00	9.639	96	9.885	99	80-120	73-127	3	0-32	
1,2-Dichlorobenzene	10.00	9.981	100	10.16	102	80-120	73-127	2	0-30	
1,2-Dichloroethane	10.00	9.628	96	9.787	98	80-122	73-129	2	0-23	
Benzene	10.00	9.915	99	9.937	99	80-120	73-127	0	0-22	
Carbon Tetrachloride	10.00	9.562	96	9.395	94	80-129	72-137	2	0-36	
Chlorobenzene	10.00	9.923	99	10.02	100	80-120	73-127	1	0-29	
Ethylbenzene	10.00	10.14	101	10.12	101	80-120	73-127	0	0-25	
Toluene	10.00	10.05	100	10.11	101	80-120	73-127	1	0-28	
Trichloroethene	10.00	9.845	98	9.780	98	80-120	73-127	1	0-25	
Vinyl Chloride	10.00	10.03	100	10.26	103	63-135	51-147	2	0-30	
o-Xylene	10.00	10.02	100	10.21	102	80-120	73-127	2	0-30	
p/m-Xylene	20.00	20.09	100	20.34	102	80-120	73-127	1	0-30	
Methyl-t-Butyl Ether (MTBE)	10.00	9.142	91	10.51	105	75-123	67-131	14	0-27	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4613	**LCS**	**Aqueous**	**GC/MS FFF**	**04/07/17**	**04/07/17 21:51**	**170407L043**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	9.373	94	77-120	70-127	
1,2-Dibromoethane	10.00	9.494	95	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.776	98	80-120	73-127	
1,2-Dichloroethane	10.00	10.06	101	80-122	73-129	
Benzene	10.00	9.453	95	80-120	73-127	
Carbon Tetrachloride	10.00	10.22	102	80-129	72-137	
Chlorobenzene	10.00	9.693	97	80-120	73-127	
Ethylbenzene	10.00	9.731	97	80-120	73-127	
Toluene	10.00	9.844	98	80-120	73-127	
Trichloroethene	10.00	9.216	92	80-120	73-127	
Vinyl Chloride	10.00	9.069	91	63-135	51-147	
o-Xylene	10.00	10.10	101	80-120	73-127	
p/m-Xylene	20.00	20.01	100	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.058	91	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-481	**LCS**	**Aqueous**	**GC/MS M**	**04/11/17**	**04/11/17 22:18**	**170411L078**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02050	102	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/06/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0454
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-489	**LCS**	**Aqueous**	**GC/MS M**	**04/18/17**	**04/18/17 10:33**	**170418L051**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02070	104	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0454

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	823	GC/MS FFF	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8260B SIM	EPA 5030C	867	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0454 Page 1 of 1

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

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-6-2017
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WO NO. / LAB USE ONLY: **17-04-0454**

LABORATORY CLIENT: Tetra Tech INC
ADDRESS: 301 E Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL:
E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOY
PROJECT CONTACT: Robert Sabater
GLOBAL ID:
LOG CODE:
P.O. NO.:
LAB CONTACT OR QUOTE NO:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ___	BTEX / MTBE ☐ 8260 ☐ ___	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex CR	1,2,3 TCP
1	B-1-GW30-N-17Q2	4-6-17	1444	W	13	✓	✓							5									1	1	1	5
2	B-1-GW31-N-17Q2	4-6-17	1305	W	13	✓	✓							5									1	1	1	5
3	B-1-GW33-N-17Q2	4-6-17	0904	W	13	✓	✓							5									1	1	1	5
4	LTB-20160406	4-6-17	0700	W	3		✓							2												1
5	A-1-GW08-N-17Q2	4-6-17	1444	W	13	✓	✓							5									1	1	1	5
6	B-6-GW14-N-17Q2	4-6-17	1147	W	13	✓	✓							5									1	1	1	5
7	C-1-GW05-N-17Q2	4-6-17	0952	W	13	✓	✓							5									1	1	1	5
8	B-6-GW02-N-17Q2	4-6-17	1621	W	13	✓	✓							5									1	1	1	5
9	B-6-GW02-FD-17Q2	4-6-17	1621	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	4-6-2017	1703
[signature]	[signature] DANNYLE TCC	4/6/17	1855

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0454

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 6 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC (CF: 0.0°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1017

SAMPLE CONDITION:

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

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ 10 VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☑ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1091

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 1019

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WORK ORDER NUMBER: 17-04- 0454

SAMPLE ANOMALY REPORT

DATE: 04 / 6 / 2017

SAMPLES, CONTAINERS, AND LABELS:

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

* Transferred at client's request.

Comments

(-8)(-9) Received 9 containers instead of 13.
1 x 250mL Plastic Bottle
1 x 500mL Amber glass Bottle
1 x 250mL Plastic Bottle w/ HNO_3
6 x vials w/ HCL

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

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

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

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

Comments:

Reported by: 1017

Reviewed by: 619

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

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WORK ORDER NUMBER: 17-04-0322

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Vikas Patel

Approved for release on 04/24/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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

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Work Order Number: 17-04-0322

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Work Order Narrative

Work Order: 17-04-0322 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/05/17. They were assigned to Work Order 17-04-0322.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0322
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/05/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-1-CW34-N-17Q2 (17-04-0322-1)						
Chromium, Hexavalent	16		0.40	ug/L	EPA 218.6	N/A
Chromium	0.0321		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.50		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.4		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	13		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	22		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	7.8		0.50	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	0.23	J	0.20*	ug/L	EPA 8260B	EPA 5030C
B-1-CW34-FD-17Q2 (17-04-0322-2)						
Chromium, Hexavalent	17		0.40	ug/L	EPA 218.6	N/A
Chromium	0.0296		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.47	J	0.28*	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.4		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	13		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	21		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	7.6		0.50	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	0.24	J	0.20*	ug/L	EPA 8260B	EPA 5030C
B-1-CW32-N-17Q2 (17-04-0322-3)						
Chromium, Hexavalent	8.8		0.040	ug/L	EPA 218.6	N/A
Chromium	0.0474		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	5.6		2.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	14		2.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	110		2.0	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	4.1		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.011		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
3870D-N-17Q2 (17-04-0322-4)						
Chromium, Hexavalent	17		0.040	ug/L	EPA 218.6	N/A
Chromium	0.0186		0.00100	mg/L	EPA 6020	EPA 3020A Total
3880-N-17Q2 (17-04-0322-5)						
Chromium, Hexavalent	6.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00794		0.00100	mg/L	EPA 6020	EPA 3020A Total

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* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0322
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/05/17
Attn:	Robert Sabater		Page 2 of 3

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3852L-N-17Q2 (17-04-0322-7)						
Chromium, Hexavalent	1.8		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00448		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.5	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.28	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.46	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	1.3		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.032		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
3872Q-N-17Q2 (17-04-0322-8)						
Chromium, Hexavalent	0.68		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00126		0.00100	mg/L	EPA 6020	EPA 3020A Total
Tetrachloroethene	83		2.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	30		2.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.045		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
3872S-N-17Q2 (17-04-0322-9)						
Chromium, Hexavalent	7.9		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00785		0.00100	mg/L	EPA 6020	EPA 3020A Total
B-1-CW11-N-17Q2 (17-04-0322-10)						
Chromium, Hexavalent	2.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00319		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,2-Dichloroethane	0.21	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.48	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	2.6		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	2.3		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.78		0.50	ug/L	EPA 8260B	EPA 5030C
Trichlorofluoromethane	0.29	J	0.20*	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.95		0.50	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	1.0		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
3862D-N-17Q2 (17-04-0322-11)						
Chromium, Hexavalent	8.5		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00901		0.00100	mg/L	EPA 6020	EPA 3020A Total
Carbon Tetrachloride	1.1		1.0	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.89	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	1.5	J	0.80*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	14		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	89		5.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.023		0.0050	ug/L	EPA 8260B SIM	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0322
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/05/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

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

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-N-17Q2	**17-04-0322-1-I**	**04/05/17 14:38**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 21:54**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	16	0.40	0.20	20.0	

B-1-CW34-FD-17Q2	**17-04-0322-2-I**	**04/05/17 14:38**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 22:05**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	17	0.40	0.20	20.0	

B-1-CW32-N-17Q2	**17-04-0322-3-M**	**04/05/17 12:52**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 22:16**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	8.8	0.040	0.020	2.00	

3870D-N-17Q2	**17-04-0322-4-M**	**04/05/17 11:28**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 22:28**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	17	0.040	0.020	2.00	

3880-N-17Q2	**17-04-0322-5-M**	**04/05/17 09:50**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 22:39**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	6.7	0.020	0.0099	1.00	

3852L-N-17Q2	**17-04-0322-7-M**	**04/05/17 15:03**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 22:50**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.8	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872Q-N-17Q2	**17-04-0322-8-M**	**04/05/17 13:26**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:01**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.68	0.020	0.0099	1.00	

3872S-N-17Q2	**17-04-0322-9-M**	**04/05/17 12:10**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:13**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	7.9	0.020	0.0099	1.00	

B-1-CW11-N-17Q2	**17-04-0322-10-R**	**04/05/17 09:25**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:24**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.7	0.020	0.0099	1.00	

3862D-N-17Q2	**17-04-0322-11-M**	**04/05/17 16:25**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:35**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	8.5	0.020	0.0099	1.00	

Method Blank	**099-14-567-231**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 20:22**	**170405L01**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-N-17Q2	**17-04-0322-1-G**	**04/05/17 14:38**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:31**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0321	0.00100	0.000402	1.00	

B-1-CW34-FD-17Q2	**17-04-0322-2-G**	**04/05/17 14:38**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:34**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0296	0.00100	0.000402	1.00	

B-1-CW32-N-17Q2	**17-04-0322-3-G**	**04/05/17 12:52**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:38**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0474	0.00100	0.000402	1.00	

3870D-N-17Q2	**17-04-0322-4-G**	**04/05/17 11:28**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:42**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0186	0.00100	0.000402	1.00	

3880-N-17Q2	**17-04-0322-5-G**	**04/05/17 09:50**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:45**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00794	0.00100	0.000402	1.00	

3852L-N-17Q2	**17-04-0322-7-G**	**04/05/17 15:03**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:49**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00448	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872Q-N-17Q2	**17-04-0322-8-G**	**04/05/17 13:26**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:53**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00126	0.00100	0.000402	1.00	

3872S-N-17Q2	**17-04-0322-9-G**	**04/05/17 12:10**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:56**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00785	0.00100	0.000402	1.00	

B-1-CW11-N-17Q2	**17-04-0322-10-G**	**04/05/17 09:25**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:27**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00319	0.00100	0.000402	1.00	

3862D-N-17Q2	**17-04-0322-11-G**	**04/05/17 16:25**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 01:52**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00901	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5529**	**N/A**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/17/17 23:43**	**170414LA5**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-N-17Q2	**17-04-0322-1-H**	**04/05/17 14:38**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 00:57**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	90	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

B-1-CW34-FD-17Q2	**17-04-0322-2-H**	**04/05/17 14:38**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 01:13**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	96	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

B-1-CW32-N-17Q2	**17-04-0322-3-H**	**04/05/17 12:52**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 01:29**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

3870D-N-17Q2	**17-04-0322-4-H**	**04/05/17 11:28**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 01:45**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	87	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3880-N-17Q2	**17-04-0322-5-H**	**04/05/17 09:50**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 02:00**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	90	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

3852L-N-17Q2	**17-04-0322-7-H**	**04/05/17 15:03**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 02:16**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	85	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

3872Q-N-17Q2	**17-04-0322-8-H**	**04/05/17 13:26**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 02:32**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	83	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

3872S-N-17Q2	**17-04-0322-9-H**	**04/05/17 12:10**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 02:48**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	102	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW11-N-17Q2	**17-04-0322-10-H**	**04/05/17 09:25**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 03:04**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	1.0	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	87	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

3862D-N-17Q2	**17-04-0322-11-H**	**04/05/17 16:25**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 03:20**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	92	56-123	
1,4-Dioxane-d8(IDS-IS)	38	30-120	

Method Blank	**099-16-216-998**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/06/17 23:54**	**170406L13**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-N-17Q2	**17-04-0322-1-B**	**04/05/17 14:38**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 23:54**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.50	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.4	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	13	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	22	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	7.8	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	0.23	0.50	0.20	1.00	J
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	113	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	118	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-FD-17Q2	**17-04-0322-2-B**	**04/05/17 14:38**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 01:26**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.47	0.50	0.28	1.00	J
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.4	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	13	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	21	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	7.6	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	0.24	0.50	0.20	1.00	J
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	110	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	110	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW32-N-17Q2	**17-04-0322-3-B**	**04/05/17 12:52**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 01:57**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,1-Trichloroethane	ND	2.0	0.80	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.0	0.96	4.00	
1,1,2-Trichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethene	ND	2.0	1.1	4.00	
1,1-Dichloropropene	ND	2.0	1.2	4.00	
1,2,3-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,3-Trichloropropane	ND	4.0	1.6	4.00	
1,2,4-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,4-Trimethylbenzene	ND	2.0	0.80	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	8.0	4.00	
1,2-Dibromoethane	ND	2.0	0.80	4.00	
1,2-Dichlorobenzene	ND	2.0	0.80	4.00	
1,2-Dichloroethane	ND	2.0	0.80	4.00	
1,2-Dichloropropane	ND	2.0	0.80	4.00	
1,3,5-Trimethylbenzene	ND	2.0	0.80	4.00	
1,3-Dichlorobenzene	ND	2.0	1.1	4.00	
1,3-Dichloropropane	ND	4.0	1.6	4.00	
1,4-Dichlorobenzene	ND	2.0	0.80	4.00	
2,2-Dichloropropane	ND	4.0	1.6	4.00	
2-Butanone	ND	20	8.0	4.00	
2-Chlorotoluene	ND	2.0	0.80	4.00	
2-Hexanone	ND	40	16	4.00	
4-Chlorotoluene	ND	2.0	1.4	4.00	
4-Methyl-2-Pentanone	ND	20	8.0	4.00	
Acetone	ND	40	16	4.00	
Benzene	ND	2.0	0.80	4.00	
Bromobenzene	ND	2.0	1.3	4.00	
Bromochloromethane	ND	4.0	1.6	4.00	
Bromodichloromethane	ND	2.0	0.80	4.00	
Bromoform	ND	2.0	0.99	4.00	
Bromomethane	ND	4.0	1.6	4.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	4.0	1.6	4.00	
Carbon Tetrachloride	ND	2.0	0.80	4.00	
Chlorobenzene	ND	2.0	0.80	4.00	
Chloroethane	ND	2.0	1.3	4.00	
Chloroform	5.6	2.0	0.80	4.00	
Chloromethane	ND	2.0	1.2	4.00	
Dibromochloromethane	ND	2.0	0.80	4.00	
Dibromomethane	ND	2.0	0.80	4.00	
Dichlorodifluoromethane	ND	4.0	1.6	4.00	
Ethylbenzene	ND	2.0	0.80	4.00	
Isopropylbenzene	ND	2.0	0.80	4.00	
Methylene Chloride	ND	4.0	3.2	4.00	
Naphthalene	ND	4.0	1.6	4.00	
Styrene	ND	2.0	0.80	4.00	
Tetrachloroethene	14	2.0	0.80	4.00	
Toluene	ND	2.0	0.80	4.00	
t-1,2-Dichloroethene	ND	2.0	0.80	4.00	
Trichloroethene	110	2.0	1.1	4.00	
Trichlorofluoromethane	ND	2.0	0.80	4.00	
Vinyl Acetate	ND	20	8.0	4.00	
Vinyl Chloride	ND	2.0	0.80	4.00	
c-1,3-Dichloropropene	ND	2.0	0.80	4.00	
c-1,2-Dichloroethene	4.1	2.0	0.80	4.00	
n-Butylbenzene	ND	2.0	0.80	4.00	
n-Propylbenzene	ND	2.0	0.80	4.00	
o-Xylene	ND	2.0	1.3	4.00	
p-Isopropyltoluene	ND	2.0	0.80	4.00	
sec-Butylbenzene	ND	2.0	0.80	4.00	
t-1,3-Dichloropropene	ND	2.0	0.80	4.00	
tert-Butylbenzene	ND	2.0	0.80	4.00	
p/m-Xylene	ND	2.0	0.80	4.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.80	4.00	
2-Chloroethyl Vinyl Ether	ND	20	17	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	3.2	4.00	
Iodomethane	ND	40	20	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	108	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	115	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3870D-N-17Q2	**17-04-0322-4-B**	**04/05/17 11:28**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 02:28**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	115	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	121	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3880-N-17Q2	**17-04-0322-5-B**	**04/05/17 09:50**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 02:58**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	114	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	119	80-128	
Toluene-d8	100	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170405	**17-04-0322-6-B**	**04/05/17 07:00**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 20:51**	**170417L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	115	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852L-N-17Q2	**17-04-0322-7-B**	**04/05/17 15:03**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 03:29**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.5	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.28	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.46	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	1.3	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	114	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	118	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872Q-N-17Q2	**17-04-0322-8-B**	**04/05/17 13:26**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 04:00**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,1-Trichloroethane	ND	2.0	0.80	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.0	0.96	4.00	
1,1,2-Trichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethene	ND	2.0	1.1	4.00	
1,1-Dichloropropene	ND	2.0	1.2	4.00	
1,2,3-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,3-Trichloropropane	ND	4.0	1.6	4.00	
1,2,4-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,4-Trimethylbenzene	ND	2.0	0.80	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	8.0	4.00	
1,2-Dibromoethane	ND	2.0	0.80	4.00	
1,2-Dichlorobenzene	ND	2.0	0.80	4.00	
1,2-Dichloroethane	ND	2.0	0.80	4.00	
1,2-Dichloropropane	ND	2.0	0.80	4.00	
1,3,5-Trimethylbenzene	ND	2.0	0.80	4.00	
1,3-Dichlorobenzene	ND	2.0	1.1	4.00	
1,3-Dichloropropane	ND	4.0	1.6	4.00	
1,4-Dichlorobenzene	ND	2.0	0.80	4.00	
2,2-Dichloropropane	ND	4.0	1.6	4.00	
2-Butanone	ND	20	8.0	4.00	
2-Chlorotoluene	ND	2.0	0.80	4.00	
2-Hexanone	ND	40	16	4.00	
4-Chlorotoluene	ND	2.0	1.4	4.00	
4-Methyl-2-Pentanone	ND	20	8.0	4.00	
Acetone	ND	40	16	4.00	
Benzene	ND	2.0	0.80	4.00	
Bromobenzene	ND	2.0	1.3	4.00	
Bromochloromethane	ND	4.0	1.6	4.00	
Bromodichloromethane	ND	2.0	0.80	4.00	
Bromoform	ND	2.0	0.99	4.00	
Bromomethane	ND	4.0	1.6	4.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	4.0	1.6	4.00	
Carbon Tetrachloride	ND	2.0	0.80	4.00	
Chlorobenzene	ND	2.0	0.80	4.00	
Chloroethane	ND	2.0	1.3	4.00	
Chloroform	ND	2.0	0.80	4.00	
Chloromethane	ND	2.0	1.2	4.00	
Dibromochloromethane	ND	2.0	0.80	4.00	
Dibromomethane	ND	2.0	0.80	4.00	
Dichlorodifluoromethane	ND	4.0	1.6	4.00	
Ethylbenzene	ND	2.0	0.80	4.00	
Isopropylbenzene	ND	2.0	0.80	4.00	
Methylene Chloride	ND	4.0	3.2	4.00	
Naphthalene	ND	4.0	1.6	4.00	
Styrene	ND	2.0	0.80	4.00	
Tetrachloroethene	83	2.0	0.80	4.00	
Toluene	ND	2.0	0.80	4.00	
t-1,2-Dichloroethene	ND	2.0	0.80	4.00	
Trichloroethene	30	2.0	1.1	4.00	
Trichlorofluoromethane	ND	2.0	0.80	4.00	
Vinyl Acetate	ND	20	8.0	4.00	
Vinyl Chloride	ND	2.0	0.80	4.00	
c-1,3-Dichloropropene	ND	2.0	0.80	4.00	
c-1,2-Dichloroethene	ND	2.0	0.80	4.00	
n-Butylbenzene	ND	2.0	0.80	4.00	
n-Propylbenzene	ND	2.0	0.80	4.00	
o-Xylene	ND	2.0	1.3	4.00	
p-Isopropyltoluene	ND	2.0	0.80	4.00	
sec-Butylbenzene	ND	2.0	0.80	4.00	
t-1,3-Dichloropropene	ND	2.0	0.80	4.00	
tert-Butylbenzene	ND	2.0	0.80	4.00	
p/m-Xylene	ND	2.0	0.80	4.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.80	4.00	
2-Chloroethyl Vinyl Ether	ND	20	17	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	3.2	4.00	
Iodomethane	ND	40	20	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	111	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	98	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872S-N-17Q2	**17-04-0322-9-B**	**04/05/17 12:10**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 04:30**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-120	
Dibromofluoromethane	114	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW11-N-17Q2	**17-04-0322-10-B**	**04/05/17 09:25**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 23:24**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	0.21	0.50	0.20	1.00	J
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.48	0.50	0.20	1.00	J
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	2.6	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	2.3	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.78	0.50	0.29	1.00	
Trichlorofluoromethane	0.29	0.50	0.20	1.00	J
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.95	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	119	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	99	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 31 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3862D-N-17Q2	**17-04-0322-11-A**	**04/05/17 16:25**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 05:01**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,1-Trichloroethane	ND	1.0	0.40	2.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.40	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	0.48	2.00	
1,1,2-Trichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethane	ND	1.0	0.40	2.00	
1,1-Dichloroethene	ND	1.0	0.56	2.00	
1,1-Dichloropropene	ND	1.0	0.60	2.00	
1,2,3-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,3-Trichloropropane	ND	2.0	0.80	2.00	
1,2,4-Trichlorobenzene	ND	1.0	0.40	2.00	
1,2,4-Trimethylbenzene	ND	1.0	0.40	2.00	
1,2-Dibromo-3-Chloropropane	ND	10	4.0	2.00	
1,2-Dibromoethane	ND	1.0	0.40	2.00	
1,2-Dichlorobenzene	ND	1.0	0.40	2.00	
1,2-Dichloroethane	ND	1.0	0.40	2.00	
1,2-Dichloropropane	ND	1.0	0.40	2.00	
1,3,5-Trimethylbenzene	ND	1.0	0.40	2.00	
1,3-Dichlorobenzene	ND	1.0	0.55	2.00	
1,3-Dichloropropane	ND	2.0	0.80	2.00	
1,4-Dichlorobenzene	ND	1.0	0.40	2.00	
2,2-Dichloropropane	ND	2.0	0.80	2.00	
2-Butanone	ND	10	4.0	2.00	
2-Chlorotoluene	ND	1.0	0.40	2.00	
2-Hexanone	ND	20	8.0	2.00	
4-Chlorotoluene	ND	1.0	0.71	2.00	
4-Methyl-2-Pentanone	ND	10	4.0	2.00	
Acetone	ND	20	8.0	2.00	
Benzene	ND	1.0	0.40	2.00	
Bromobenzene	ND	1.0	0.64	2.00	
Bromochloromethane	ND	2.0	0.80	2.00	
Bromodichloromethane	ND	1.0	0.40	2.00	
Bromoform	ND	1.0	0.49	2.00	
Bromomethane	ND	2.0	0.80	2.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 32 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	2.0	0.80	2.00	
Carbon Tetrachloride	1.1	1.0	0.40	2.00	
Chlorobenzene	ND	1.0	0.40	2.00	
Chloroethane	ND	1.0	0.63	2.00	
Chloroform	0.89	1.0	0.40	2.00	J
Chloromethane	ND	1.0	0.59	2.00	
Dibromochloromethane	ND	1.0	0.40	2.00	
Dibromomethane	ND	1.0	0.40	2.00	
Dichlorodifluoromethane	1.5	2.0	0.80	2.00	J
Ethylbenzene	ND	1.0	0.40	2.00	
Isopropylbenzene	ND	1.0	0.40	2.00	
Methylene Chloride	ND	2.0	1.6	2.00	
Naphthalene	ND	2.0	0.80	2.00	
Styrene	ND	1.0	0.40	2.00	
Tetrachloroethene	14	1.0	0.40	2.00	
Toluene	ND	1.0	0.40	2.00	
t-1,2-Dichloroethene	ND	1.0	0.40	2.00	
Trichlorofluoromethane	ND	1.0	0.40	2.00	
Vinyl Acetate	ND	10	4.0	2.00	
Vinyl Chloride	ND	1.0	0.40	2.00	
c-1,3-Dichloropropene	ND	1.0	0.40	2.00	
c-1,2-Dichloroethene	ND	1.0	0.40	2.00	
n-Butylbenzene	ND	1.0	0.40	2.00	
n-Propylbenzene	ND	1.0	0.40	2.00	
o-Xylene	ND	1.0	0.63	2.00	
p-Isopropyltoluene	ND	1.0	0.40	2.00	
sec-Butylbenzene	ND	1.0	0.40	2.00	
t-1,3-Dichloropropene	ND	1.0	0.40	2.00	
tert-Butylbenzene	ND	1.0	0.40	2.00	
p/m-Xylene	ND	1.0	0.40	2.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.40	2.00	
2-Chloroethyl Vinyl Ether	ND	10	8.4	2.00	
Hexachloro-1,3-Butadiene	ND	4.0	1.6	2.00	
Iodomethane	ND	20	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	113	80-127	
1,2-Dichloroethane-d4	121	80-128	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 33 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
Toluene-d8	102	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3862D-N-17Q2	**17-04-0322-11-A**	**04/05/17 16:25**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 05:32**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Trichloroethene	89	5.0	2.9	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	111	80-127	
1,2-Dichloroethane-d4	123	80-128	
Toluene-d8	101	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 34 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4622**	**N/A**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 11:00**	**170417L008**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 35 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	104	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 36 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	97	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 37 of 39

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4623**	**N/A**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 22:53**	**170417L025**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 38 of 39

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	108	80-127	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 39 of 39

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	97	80-120	

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

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW34-N-17Q2	**17-04-0322-1-F**	**04/05/17 14:38**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 16:39**	**170410L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	116	80-120	

B-1-CW34-FD-17Q2	**17-04-0322-2-F**	**04/05/17 14:38**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 17:09**	**170410L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	99	80-120	

B-1-CW32-N-17Q2	**17-04-0322-3-F**	**04/05/17 12:52**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 17:39**	**170410L035**

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

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.011	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	99	80-120	

3870D-N-17Q2	**17-04-0322-4-F**	**04/05/17 11:28**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 18:09**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	91	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3880-N-17Q2	**17-04-0322-5-F**	**04/05/17 09:50**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 18:39**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	93	80-120	

LTB-20170405	**17-04-0322-6-C**	**04/05/17 07:00**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 13:10**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	80-120	

3852L-N-17Q2	**17-04-0322-7-F**	**04/05/17 15:03**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 19:09**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.032	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	95	80-120	

3872Q-N-17Q2	**17-04-0322-8-F**	**04/05/17 13:26**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 19:39**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.045	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	94	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872S-N-17Q2	**17-04-0322-9-F**	**04/05/17 12:10**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 20:09**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	96	80-120	

B-1-CW11-N-17Q2	**17-04-0322-10-F**	**04/05/17 09:25**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 13:40**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	103	80-120	

3862D-N-17Q2	**17-04-0322-11-F**	**04/05/17 16:25**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 20:39**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.023	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	97	80-120	

Method Blank	**099-15-118-478**	**N/A**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 12:11**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	95	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:24**	**170405S01**
B-1-CW11-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:46**	**170405S01**
B-1-CW11-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 23:58**	**170405S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	2.726	10.00	13.27	105	13.57	108	85-121	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:27**	**170414SA5**
B-1-CW11-N-17Q2	**Matrix Spike**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:01**	**170414SA5**
B-1-CW11-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/18/17 00:05**	**170414SA5**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.003187	0.1000	0.1053	102	0.1031	100	73-133	2	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 03:04**	**170406S13**
B-1-CW11-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 00:25**	**170406S13**
B-1-CW11-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 00:42**	**170406S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	1.004	20.00	22.23	106	20.56	98	50-130	8	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0812-10	**Sample**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 11:38**	**170417S004**
17-04-0812-10	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 12:09**	**170417S004**
17-04-0812-10	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 12:40**	**170417S004**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	40.00	40.89	102	37.31	93	66-126	9	0-20	
1,2-Dibromoethane	ND	40.00	40.09	100	38.95	97	75-126	3	0-20	
1,2-Dichlorobenzene	ND	40.00	39.39	98	38.17	95	75-125	3	0-20	
1,2-Dichloroethane	ND	40.00	39.67	99	36.93	92	75-127	7	0-20	
Benzene	ND	40.00	42.71	107	39.64	99	75-125	7	0-20	
Carbon Tetrachloride	ND	40.00	48.18	120	45.49	114	69-135	6	0-20	
Chlorobenzene	ND	40.00	41.49	104	38.79	97	75-125	7	0-20	
Ethylbenzene	ND	40.00	44.13	110	41.07	103	75-125	7	0-20	
Toluene	ND	40.00	42.59	106	39.56	99	75-125	7	0-20	
Trichloroethene	ND	40.00	42.88	107	39.37	98	75-125	9	0-20	
Vinyl Chloride	129.4	40.00	173.5	110	175.2	115	52-142	1	0-20	
o-Xylene	ND	40.00	44.32	111	40.85	102	75-127	8	0-20	
p/m-Xylene	ND	80.00	88.99	111	82.77	103	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	40.00	35.80	90	33.94	85	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 23:24**	**170417S011**
B-1-CW11-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 00:25**	**170417S011**
B-1-CW11-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/18/17 00:56**	**170417S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	10.00	8.527	85	9.028	90	66-126	6	0-20	
1,2-Dibromoethane	ND	10.00	9.232	92	9.860	99	75-126	7	0-20	
1,2-Dichlorobenzene	ND	10.00	8.880	89	9.253	93	75-125	4	0-20	
1,2-Dichloroethane	ND	10.00	9.325	93	9.685	97	75-127	4	0-20	
Benzene	ND	10.00	9.007	90	9.657	97	75-125	7	0-20	
Carbon Tetrachloride	ND	10.00	10.06	101	11.21	112	69-135	11	0-20	
Chlorobenzene	ND	10.00	9.006	90	9.636	96	75-125	7	0-20	
Ethylbenzene	ND	10.00	9.365	94	10.14	101	75-125	8	0-20	
Toluene	ND	10.00	9.258	93	9.875	99	75-125	6	0-20	
Trichloroethene	0.7838	10.00	9.781	90	10.54	98	75-125	7	0-20	
Vinyl Chloride	ND	10.00	11.31	113	11.74	117	52-142	4	0-20	
o-Xylene	ND	10.00	9.618	96	10.34	103	75-127	7	0-20	
p/m-Xylene	ND	20.00	19.27	96	20.59	103	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	7.873	79	8.250	83	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 13:40**	**170410S020**
B-1-CW11-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 15:10**	**170410S020**
B-1-CW11-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 15:40**	**170410S020**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01940	97	0.02180	109	80-120	12	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
B-1-CW11-N-17Q2	**Sample**	**Aqueous**	**ICP/MS 05**	**04/14/17 00:00**	**04/18/17 00:27**	**170414SA5**
B-1-CW11-N-17Q2	**PDS**	**Aqueous**	**ICP/MS 05**	**04/14/17 00:00**	**04/18/17 00:09**	**170414SA5**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.003187	0.1000	0.1038	101	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-231	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/05/17 20:33**	**170405L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	9.989	100	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5529	**LCS**	**Aqueous**	**ICP/MS 05**	**04/14/17**	**04/17/17 23:58**	**170414LA5**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.09935	99	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-998	**LCS**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 00:10**	**170406L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	19.04	95	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4622	**LCS**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 10:08**	**170417L008**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	8.719	87	77-120	70-127	
1,2-Dibromoethane	10.00	10.64	106	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.17	102	80-120	73-127	
1,2-Dichloroethane	10.00	9.858	99	80-122	73-129	
Benzene	10.00	10.16	102	80-120	73-127	
Carbon Tetrachloride	10.00	10.82	108	80-129	72-137	
Chlorobenzene	10.00	10.40	104	80-120	73-127	
Ethylbenzene	10.00	10.70	107	80-120	73-127	
Toluene	10.00	10.38	104	80-120	73-127	
Trichloroethene	10.00	10.25	103	80-120	73-127	
Vinyl Chloride	10.00	10.36	104	63-135	51-147	
o-Xylene	10.00	10.96	110	80-120	73-127	
p/m-Xylene	20.00	21.84	109	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.641	86	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4623	**LCS**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 22:22**	**170417L025**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	7.665	77	77-120	70-127	
1,2-Dibromoethane	10.00	10.44	104	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.786	98	80-120	73-127	
1,2-Dichloroethane	10.00	10.11	101	80-122	73-129	
Benzene	10.00	10.10	101	80-120	73-127	
Carbon Tetrachloride	10.00	8.520	85	80-129	72-137	
Chlorobenzene	10.00	10.08	101	80-120	73-127	
Ethylbenzene	10.00	10.23	102	80-120	73-127	
Toluene	10.00	10.20	102	80-120	73-127	
Trichloroethene	10.00	9.781	98	80-120	73-127	
Vinyl Chloride	10.00	9.647	96	63-135	51-147	
o-Xylene	10.00	10.61	106	80-120	73-127	
p/m-Xylene	20.00	20.81	104	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.738	87	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/05/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0322
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-478	**LCS**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 11:04**	**170410L035**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02250	112	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0322

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 05	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	907	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0322 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

Date 4-5-2017

Page 1 of 2

WO NO. / LAB USE ONLY: 17-04-0322

LABORATORY CLIENT: Tetra Tech INC

ADDRESS: 301 E Vanderbilt Way Suite 450

CITY: San Bernardino STATE: CA ZIP: 92408

TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOU

PROJECT CONTACT: Robert Sabater

P.O. NO.:

LAB CONTACT OR QUOTE NO:

GLOBAL ID: LOG CODE:

SAMPLER(S): (PRINT) Jasan Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

B-1-CW11 = MS/MSD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	Hex CR	1,2,3 TCP
1	B-1-CW34-N-1702	4-5-17	1438	W	9	✓	✓							3									1	1	1	3
2	B-1-CW34-FD-1702		1438		9	✓	✓							3									1	1	1	3
3	B-1-CW32-N-1702		1252		13	✓	✓							5									1	1	1	5
4	3870D-N-1702		1128		13	✓	✓							5									1	1	1	5
5	3880-N-1702		0950		13	✓	✓							5									1	1	1	5
6	ITB-20170405		0700		3		✓							2												1
7	3852L-N-1702		1503		13	✓	✓							5									1	1	1	5
8	3872Q-N-1702		1326		13	✓	✓							5									1	1	1	5
9	3872S-N-1702		1210		13	✓	✓							5									1	1	1	5
10	B-1-CW11-N-1702		0925		19	✓	✓							5									3	3	3	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	04/05/17	1711
[signature]	Dannyle TTZ	4/5/17	~~1900~~ 1900

2016-04-01-Revision

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CHAIN-OF-CUSTODY RECORD

DATE: 04/05/17
PAGE: 2 OF 2

WO NO. / LAB USE ONLY: 17-04-0322

LABORATORY CLIENT: Tetra Tech Inc.
ADDRESS: 301 E Vanderbilt Way Ste 45
CITY: San Bernardino STATE: CA ZIP: 92408
TEL:
E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOU
PROJECT CONTACT: Robert Sabater
GLOBAL ID:
LOG CODE:
P.O. NO.:
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calde

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD:
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) ☐ GRO	TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4-Dioxane	ICP/MS metals	Hex Chrom	1,2,3-TCP
01	3862D-N-1792	04/05/17	1625	W	13	✓	✓							5									1	1	1	5

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	04/05/17	1711
[signature]	[signature] TTC	4/5/17	1900

2015-05-13 Revision

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WORK ORDER NUMBER: 17-04- 0322

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: Tetra Tech

DATE: 04 / 5 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1017

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑ 5/5/17	☑	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☑	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na₂** ☐ 100PJ ☐ 100PJ**na₂** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na₂** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na₂** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 802/1017

Reviewed by: 601/1053

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WORK ORDER NUMBER: 17-04- 0522

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Tetra Tech

DATE: 04 / 5 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.8 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1017

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: **(Trip Blank Lot Number: _____)**

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1017

Reviewed by: 1052

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WORK ORDER NUMBER: 17-04- 0322

SAMPLE ANOMALY REPORT

DATE: 04 / 05 / 2017

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☑ Client sample label(s) do not match COC (comment)
  - ☐ Project information
  - ☑ Client sample ID
  - ☐ Sampling date and/or time
  - ☐ Number of container(s)
  - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
  - ☐ Broken
  - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (not transferred; duplicate bag submitted)
  - ☐ Leaking (transferred into ECI Tedlar™ bags*)
  - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

Comments

(-1) 7 of 13 containers labeled as 3872L-N-17Q2
Date & Time Matched
vials A,B,C,D,E,F are correct

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**
-9	L	10			

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments:

Reported by: 802

Reviewed by: 1053

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

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Vikas Patel

From: Calder, Vanessa <Vanessa.Calder@tetratech.com>
Sent: Thursday, April 06, 2017 10:41 AM
To: Vikas Patel; Sabater, Robert
Cc: Erick Ovalle
Subject: Re: Sample receipt confirmation / 17-04-0322 / LMC BOU

Hey Vik,

My apologies. All bottles are for sample 3852L, not 3872L. Feel free to call me if you have any further questions.
Thank you,
Vanessa
909-844-7277

From: Vikas Patel <VikasPatel@eurofinsUS.com>
Sent: Thursday, April 6, 2017 9:40:08 AM
To: Sabater, Robert; Calder, Vanessa
Cc: Erick Ovalle; Vikas Patel
Subject: Sample receipt confirmation / 17-04-0322 / LMC BOU

Sample receipt confirmation(s) attached. Please review and advise of any changes required.

Please confirm the sample ID for sample 3852L-N-17Q2, some of the containers are labeled as 3872L-N-17Q2.

Thank you for using Eurofins Calscience.

Regards,

Vik Patel
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
USA

Phone: +1 714 895 5494
Fax: +1 714 894 7501

VikasPatel@EurofinsUS.com
www.EurofinsUS.com/Env

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 17-04-0177

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Approved for release on 05/03/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-04-0177

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Work Order Narrative

Work Order: 17-04-0177 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/04/17. They were assigned to Work Order 17-04-0177.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-0177 LMC BOU 04/04/17
Attn:	Robert Sabater		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B-1-CW12-N-17Q2 (17-04-0177-1)						
Chromium, Hexavalent	11		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0115		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	1.9		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	2.5		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	5.5		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	14		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	1.1		0.50	ug/L	EPA 8260B	EPA 5030C
3860K-N-17Q2 (17-04-0177-2)						
Chromium, Hexavalent	1.9		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00344		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloro-1,2,2-Trifluoroethane	8.5		5.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	17		5.0	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	29		10	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	200		5.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	210		5.0	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	2.3	J	2.0*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	32		2.5	ug/L	EPA 8260B SIM	EPA 5030C
B1-CW17-N-17Q2 (17-04-0177-3)						
Chromium, Hexavalent	20		0.020	ug/L	EPA 218.6	N/A
Chromium	0.0246		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	2.9		2.0	ug/L	EPA 8260B	EPA 5030C
Chloroform	4.3		2.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	70		2.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	94		2.0	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	3.2		2.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	2.9		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
3831Q-N-17Q2 (17-04-0177-4)						
Chromium	0.0213		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethane	0.21	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.28	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.66		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	1.2		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	9.2		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.40	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.011		0.0050	ug/L	EPA 8260B SIM	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-0177 LMC BOU 04/04/17
Attn:	Robert Sabater		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3830Q-N-17Q2 (17-04-0177-5)						
Chromium, Hexavalent	0.19		0.020	ug/L	EPA 218.6	N/A
Chromium	0.000770	J	0.000402*	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethane	0.62		0.50	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	0.78	J	0.40*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.50		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.51		0.50	ug/L	EPA 8260B	EPA 5030C
3830S-N-17Q2 (17-04-0177-6)						
Chromium, Hexavalent	0.93		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00403		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	1.4	J	0.80*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	2.9		2.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	85		2.0	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	1.6	J	0.80*	ug/L	EPA 8260B	EPA 5030C
3851N-N-17Q2 (17-04-0177-7)						
Chromium, Hexavalent	1.2		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00172		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethane	0.28	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Acetone	5.7	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Dichlorodifluoromethane	1.2		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	0.67		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	0.56		0.50	ug/L	EPA 8260B	EPA 5030C

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW12-N-17Q2	**17-04-0177-1-K**	**04/04/17 15:00**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 22:10**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	11	0.020	0.0099	1.00	

3860K-N-17Q2	**17-04-0177-2-K**	**04/04/17 11:36**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 22:21**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.9	0.020	0.0099	1.00	

B1-CW17-N-17Q2	**17-04-0177-3-K**	**04/04/17 08:31**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 22:33**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	20	0.020	0.0099	1.00	

3831Q-N-17Q2	**17-04-0177-4-K**	**04/04/17 10:14**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 22:44**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

3830Q-N-17Q2	**17-04-0177-5-K**	**04/04/17 12:29**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 22:55**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.19	0.020	0.0099	1.00	

3830S-N-17Q2	**17-04-0177-6-K**	**04/04/17 14:13**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 23:06**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.93	0.020	0.0099	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851N-N-17Q2	**17-04-0177-7-K**	**04/04/17 16:37**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 23:18**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.2	0.020	0.0099	1.00	

Method Blank	**099-14-567-230**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 18:36**	**170404L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW12-N-17Q2	**17-04-0177-1-L**	**04/04/17 15:00**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:32**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0115	0.00100	0.000402	1.00	

3860K-N-17Q2	**17-04-0177-2-L**	**04/04/17 11:36**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:36**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00344	0.00100	0.000402	1.00	

B1-CW17-N-17Q2	**17-04-0177-3-L**	**04/04/17 08:31**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:40**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0246	0.00100	0.000402	1.00	

3831Q-N-17Q2	**17-04-0177-4-L**	**04/04/17 10:14**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:43**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.0213	0.00100	0.000402	1.00	

3830Q-N-17Q2	**17-04-0177-5-L**	**04/04/17 12:29**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 01:39**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.000770	0.00100	0.000402	1.00	J

3830S-N-17Q2	**17-04-0177-6-L**	**04/04/17 14:13**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 01:43**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00403	0.00100	0.000402	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851N-N-17Q2	**17-04-0177-7-L**	**04/04/17 16:37**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 01:46**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00172	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5524**	**N/A**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:31**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW12-N-17Q2	**17-04-0177-1-M**	**04/04/17 15:00**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 19:40**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	107	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

3860K-N-17Q2	**17-04-0177-2-M**	**04/04/17 11:36**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 19:56**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	43	30-120	

B1-CW17-N-17Q2	**17-04-0177-3-M**	**04/04/17 08:31**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 20:12**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	2.9	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	41	30-120	

3831Q-N-17Q2	**17-04-0177-4-M**	**04/04/17 10:14**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 20:28**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3830Q-N-17Q2	**17-04-0177-5-M**	**04/04/17 12:29**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 20:44**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	110	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3830S-N-17Q2	**17-04-0177-6-M**	**04/04/17 14:13**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 21:00**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3851N-N-17Q2	**17-04-0177-7-M**	**04/04/17 16:37**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 21:16**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	106	56-123	
1,4-Dioxane-d8(IDS-IS)	39	30-120	

Method Blank	**099-16-216-1001**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 16:16**	**170408L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	111	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW12-N-17Q2	**17-04-0177-1-A**	**04/04/17 15:00**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 01:08**	**170413L043**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	1.9	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.5	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	2.5	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	5.5	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	14	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	1.1	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	111	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	110	80-128	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3860K-N-17Q2	**17-04-0177-2-A**	**04/04/17 11:36**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 01:38**	**170413L043**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	5.0	2.0	10.0	
1,1,1-Trichloroethane	ND	5.0	2.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	2.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	8.5	5.0	2.4	10.0	
1,1,2-Trichloroethane	ND	5.0	2.0	10.0	
1,1-Dichloroethane	ND	5.0	2.0	10.0	
1,1-Dichloroethene	17	5.0	2.8	10.0	
1,1-Dichloropropene	ND	5.0	3.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	2.0	10.0	
1,2,3-Trichloropropane	29	10	4.0	10.0	
1,2,4-Trichlorobenzene	ND	5.0	2.0	10.0	
1,2,4-Trimethylbenzene	ND	5.0	2.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	20	10.0	
1,2-Dibromoethane	ND	5.0	2.0	10.0	
1,2-Dichlorobenzene	ND	5.0	2.0	10.0	
1,2-Dichloroethane	ND	5.0	2.0	10.0	
1,2-Dichloropropane	ND	5.0	2.0	10.0	
1,3,5-Trimethylbenzene	ND	5.0	2.0	10.0	
1,3-Dichlorobenzene	ND	5.0	2.8	10.0	
1,3-Dichloropropane	ND	10	4.0	10.0	
1,4-Dichlorobenzene	ND	5.0	2.0	10.0	
2,2-Dichloropropane	ND	10	4.0	10.0	
2-Butanone	ND	50	20	10.0	
2-Chlorotoluene	ND	5.0	2.0	10.0	
2-Hexanone	ND	100	40	10.0	
4-Chlorotoluene	ND	5.0	3.6	10.0	
4-Methyl-2-Pentanone	ND	50	20	10.0	
Acetone	ND	100	40	10.0	
Benzene	ND	5.0	2.0	10.0	
Bromobenzene	ND	5.0	3.2	10.0	
Bromochloromethane	ND	10	4.0	10.0	
Bromodichloromethane	ND	5.0	2.0	10.0	
Bromoform	ND	5.0	2.5	10.0	
Bromomethane	ND	10	4.0	10.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	10	4.0	10.0	
Carbon Tetrachloride	ND	5.0	2.0	10.0	
Chlorobenzene	ND	5.0	2.0	10.0	
Chloroethane	ND	5.0	3.2	10.0	
Chloroform	ND	5.0	2.0	10.0	
Chloromethane	ND	5.0	2.9	10.0	
Dibromochloromethane	ND	5.0	2.0	10.0	
Dibromomethane	ND	5.0	2.0	10.0	
Dichlorodifluoromethane	ND	10	4.0	10.0	
Ethylbenzene	ND	5.0	2.0	10.0	
Isopropylbenzene	ND	5.0	2.0	10.0	
Methylene Chloride	ND	10	8.0	10.0	
Naphthalene	ND	10	4.0	10.0	
Styrene	ND	5.0	2.0	10.0	
Tetrachloroethene	200	5.0	2.0	10.0	
Toluene	ND	5.0	2.0	10.0	
t-1,2-Dichloroethene	ND	5.0	2.0	10.0	
Trichloroethene	210	5.0	2.9	10.0	
Trichlorofluoromethane	ND	5.0	2.0	10.0	
Vinyl Acetate	ND	50	20	10.0	
Vinyl Chloride	ND	5.0	2.0	10.0	
c-1,3-Dichloropropene	ND	5.0	2.0	10.0	
c-1,2-Dichloroethene	2.3	5.0	2.0	10.0	J
n-Butylbenzene	ND	5.0	2.0	10.0	
n-Propylbenzene	ND	5.0	2.0	10.0	
o-Xylene	ND	5.0	3.2	10.0	
p-Isopropyltoluene	ND	5.0	2.0	10.0	
sec-Butylbenzene	ND	5.0	2.0	10.0	
t-1,3-Dichloropropene	ND	5.0	2.0	10.0	
tert-Butylbenzene	ND	5.0	2.0	10.0	
p/m-Xylene	ND	5.0	2.0	10.0	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	2.0	10.0	
2-Chloroethyl Vinyl Ether	ND	50	42	10.0	
Hexachloro-1,3-Butadiene	ND	20	8.0	10.0	
Iodomethane	ND	100	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	105	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	117	80-128	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B1-CW17-N-17Q2	**17-04-0177-3-C**	**04/04/17 08:31**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 13:41**	**170417L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,1-Trichloroethane	ND	2.0	0.80	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.0	0.96	4.00	
1,1,2-Trichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethene	2.9	2.0	1.1	4.00	
1,1-Dichloropropene	ND	2.0	1.2	4.00	
1,2,3-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,3-Trichloropropane	ND	4.0	1.6	4.00	
1,2,4-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,4-Trimethylbenzene	ND	2.0	0.80	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	8.0	4.00	
1,2-Dibromoethane	ND	2.0	0.80	4.00	
1,2-Dichlorobenzene	ND	2.0	0.80	4.00	
1,2-Dichloroethane	ND	2.0	0.80	4.00	
1,2-Dichloropropane	ND	2.0	0.80	4.00	
1,3,5-Trimethylbenzene	ND	2.0	0.80	4.00	
1,3-Dichlorobenzene	ND	2.0	1.1	4.00	
1,3-Dichloropropane	ND	4.0	1.6	4.00	
1,4-Dichlorobenzene	ND	2.0	0.80	4.00	
2,2-Dichloropropane	ND	4.0	1.6	4.00	
2-Butanone	ND	20	8.0	4.00	
2-Chlorotoluene	ND	2.0	0.80	4.00	
2-Hexanone	ND	40	16	4.00	
4-Chlorotoluene	ND	2.0	1.4	4.00	
4-Methyl-2-Pentanone	ND	20	8.0	4.00	
Acetone	ND	40	16	4.00	
Benzene	ND	2.0	0.80	4.00	
Bromobenzene	ND	2.0	1.3	4.00	
Bromochloromethane	ND	4.0	1.6	4.00	
Bromodichloromethane	ND	2.0	0.80	4.00	
Bromoform	ND	2.0	0.99	4.00	
Bromomethane	ND	4.0	1.6	4.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	4.0	1.6	4.00	
Carbon Tetrachloride	ND	2.0	0.80	4.00	
Chlorobenzene	ND	2.0	0.80	4.00	
Chloroethane	ND	2.0	1.3	4.00	
Chloroform	4.3	2.0	0.80	4.00	
Chloromethane	ND	2.0	1.2	4.00	
Dibromochloromethane	ND	2.0	0.80	4.00	
Dibromomethane	ND	2.0	0.80	4.00	
Dichlorodifluoromethane	ND	4.0	1.6	4.00	
Ethylbenzene	ND	2.0	0.80	4.00	
Isopropylbenzene	ND	2.0	0.80	4.00	
Methylene Chloride	ND	4.0	3.2	4.00	
Naphthalene	ND	4.0	1.6	4.00	
Styrene	ND	2.0	0.80	4.00	
Tetrachloroethene	70	2.0	0.80	4.00	
Toluene	ND	2.0	0.80	4.00	
t-1,2-Dichloroethene	ND	2.0	0.80	4.00	
Trichloroethene	94	2.0	1.1	4.00	
Trichlorofluoromethane	ND	2.0	0.80	4.00	
Vinyl Acetate	ND	20	8.0	4.00	
Vinyl Chloride	ND	2.0	0.80	4.00	
c-1,3-Dichloropropene	ND	2.0	0.80	4.00	
c-1,2-Dichloroethene	3.2	2.0	0.80	4.00	
n-Butylbenzene	ND	2.0	0.80	4.00	
n-Propylbenzene	ND	2.0	0.80	4.00	
o-Xylene	ND	2.0	1.3	4.00	
p-Isopropyltoluene	ND	2.0	0.80	4.00	
sec-Butylbenzene	ND	2.0	0.80	4.00	
t-1,3-Dichloropropene	ND	2.0	0.80	4.00	
tert-Butylbenzene	ND	2.0	0.80	4.00	
p/m-Xylene	ND	2.0	0.80	4.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.80	4.00	
2-Chloroethyl Vinyl Ether	ND	20	17	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	3.2	4.00	
Iodomethane	ND	40	20	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	108	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	110	80-128	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3831Q-N-17Q2	**17-04-0177-4-A**	**04/04/17 10:14**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 18:25**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	0.21	0.50	0.20	1.00	J
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.28	0.50	0.20	1.00	J
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.66	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	1.2	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	9.2	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.40	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	113	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3830Q-N-17Q2	**17-04-0177-5-A**	**04/04/17 12:29**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 18:56**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	0.62	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	0.78	1.0	0.40	1.00	J
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.50	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.51	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	68-120	
Dibromofluoromethane	114	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	118	80-128	
Toluene-d8	98	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3830S-N-17Q2	**17-04-0177-6-A**	**04/04/17 14:13**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 19:26**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,1-Trichloroethane	ND	2.0	0.80	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	0.80	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.0	0.96	4.00	
1,1,2-Trichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethane	ND	2.0	0.80	4.00	
1,1-Dichloroethene	ND	2.0	1.1	4.00	
1,1-Dichloropropene	ND	2.0	1.2	4.00	
1,2,3-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,3-Trichloropropane	ND	4.0	1.6	4.00	
1,2,4-Trichlorobenzene	ND	2.0	0.80	4.00	
1,2,4-Trimethylbenzene	ND	2.0	0.80	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	8.0	4.00	
1,2-Dibromoethane	ND	2.0	0.80	4.00	
1,2-Dichlorobenzene	ND	2.0	0.80	4.00	
1,2-Dichloroethane	ND	2.0	0.80	4.00	
1,2-Dichloropropane	ND	2.0	0.80	4.00	
1,3,5-Trimethylbenzene	ND	2.0	0.80	4.00	
1,3-Dichlorobenzene	ND	2.0	1.1	4.00	
1,3-Dichloropropane	ND	4.0	1.6	4.00	
1,4-Dichlorobenzene	ND	2.0	0.80	4.00	
2,2-Dichloropropane	ND	4.0	1.6	4.00	
2-Butanone	ND	20	8.0	4.00	
2-Chlorotoluene	ND	2.0	0.80	4.00	
2-Hexanone	ND	40	16	4.00	
4-Chlorotoluene	ND	2.0	1.4	4.00	
4-Methyl-2-Pentanone	ND	20	8.0	4.00	
Acetone	ND	40	16	4.00	
Benzene	ND	2.0	0.80	4.00	
Bromobenzene	ND	2.0	1.3	4.00	
Bromochloromethane	ND	4.0	1.6	4.00	
Bromodichloromethane	ND	2.0	0.80	4.00	
Bromoform	ND	2.0	0.99	4.00	
Bromomethane	ND	4.0	1.6	4.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	4.0	1.6	4.00	
Carbon Tetrachloride	ND	2.0	0.80	4.00	
Chlorobenzene	ND	2.0	0.80	4.00	
Chloroethane	ND	2.0	1.3	4.00	
Chloroform	1.4	2.0	0.80	4.00	J
Chloromethane	ND	2.0	1.2	4.00	
Dibromochloromethane	ND	2.0	0.80	4.00	
Dibromomethane	ND	2.0	0.80	4.00	
Dichlorodifluoromethane	ND	4.0	1.6	4.00	
Ethylbenzene	ND	2.0	0.80	4.00	
Isopropylbenzene	ND	2.0	0.80	4.00	
Methylene Chloride	ND	4.0	3.2	4.00	
Naphthalene	ND	4.0	1.6	4.00	
Styrene	ND	2.0	0.80	4.00	
Tetrachloroethene	2.9	2.0	0.80	4.00	
Toluene	ND	2.0	0.80	4.00	
t-1,2-Dichloroethene	ND	2.0	0.80	4.00	
Trichloroethene	85	2.0	1.1	4.00	
Trichlorofluoromethane	ND	2.0	0.80	4.00	
Vinyl Acetate	ND	20	8.0	4.00	
Vinyl Chloride	ND	2.0	0.80	4.00	
c-1,3-Dichloropropene	ND	2.0	0.80	4.00	
c-1,2-Dichloroethene	ND	2.0	0.80	4.00	
n-Butylbenzene	ND	2.0	0.80	4.00	
n-Propylbenzene	ND	2.0	0.80	4.00	
o-Xylene	ND	2.0	1.3	4.00	
p-Isopropyltoluene	ND	2.0	0.80	4.00	
sec-Butylbenzene	ND	2.0	0.80	4.00	
t-1,3-Dichloropropene	ND	2.0	0.80	4.00	
tert-Butylbenzene	ND	2.0	0.80	4.00	
p/m-Xylene	ND	2.0	0.80	4.00	
Methyl-t-Butyl Ether (MTBE)	1.6	2.0	0.80	4.00	J
2-Chloroethyl Vinyl Ether	ND	20	17	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	3.2	4.00	
Iodomethane	ND	40	20	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	109	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851N-N-17Q2	**17-04-0177-7-A**	**04/04/17 16:37**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 19:57**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	0.28	0.50	0.20	1.00	J
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	5.7	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	1.2	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	0.67	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	0.56	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	110	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170404	**17-04-0177-8-A**	**04/04/17 07:00**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 17:24**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	114	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	115	80-128	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4617**	**N/A**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 00:37**	**170413L043**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-120	
Dibromofluoromethane	100	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	109	80-128	
Toluene-d8	97	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4618**	**N/A**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 12:40**	**170414L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	98	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	95	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 31 of 33

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4622**	**N/A**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 11:00**	**170417L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 32 of 33

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	104	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 33 of 33

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	97	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-1-CW12-N-17Q2	**17-04-0177-1-F**	**04/04/17 15:00**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/08/17 01:35**	**170407L045**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	100	67-133	

3860K-N-17Q2	**17-04-0177-2-H**	**04/04/17 11:36**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 14:40**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	32	2.5	1.2	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	67-133	

B1-CW17-N-17Q2	**17-04-0177-3-G**	**04/04/17 08:31**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 12:41**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	89	67-133	

3831Q-N-17Q2	**17-04-0177-4-H**	**04/04/17 10:14**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 14:10**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.011	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	101	67-133	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3830Q-N-17Q2	**17-04-0177-5-H**	**04/04/17 12:29**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 17:11**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	107	67-133	

3830S-N-17Q2	**17-04-0177-6-H**	**04/04/17 14:13**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 17:41**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	96	67-133	

3851N-N-17Q2	**17-04-0177-7-H**	**04/04/17 16:37**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 18:11**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	67-133	

LTB-20170404	**17-04-0177-8-B**	**04/04/17 07:00**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 12:41**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	67-133	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-475**	**N/A**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/07/17 22:36**	**170407L045**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	102	67-133	

Method Blank	**099-15-118-476**	**N/A**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 11:41**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	67-133	

Method Blank	**099-15-118-478**	**N/A**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 12:11**	**170410L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	95	67-133	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3851N-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 23:18**	**170404S01**
3851N-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 23:29**	**170404S01**
3851N-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 23:40**	**170404S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	1.220	10.00	11.60	104	11.81	106	85-121	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0732-1	**Sample**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 22:12**	**170413SA3**
17-04-0732-1	**Matrix Spike**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:57**	**170413SA3**
17-04-0732-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 22:01**	**170413SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.01372	0.1000	0.1169	103	0.1110	97	73-133	5	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0178-3	**Sample**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 17:35**	**170408S10**
17-04-0178-3	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 16:47**	**170408S10**
17-04-0178-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 17:03**	**170408S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	18.78	94	19.14	96	50-130	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-1-CW12-N-17Q2	**Sample**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 01:08**	**170413S027**
B-1-CW12-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 02:09**	**170413S027**
B-1-CW12-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/14/17 02:40**	**170413S027**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	1.879	10.00	9.512	76	11.28	94	66-126	17	0-20	
1,2-Dibromoethane	ND	10.00	9.253	93	9.618	96	75-126	4	0-20	
1,2-Dichlorobenzene	ND	10.00	9.105	91	9.313	93	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	9.996	100	9.420	94	75-127	6	0-20	
Benzene	ND	10.00	9.667	97	9.322	93	75-125	4	0-20	
Carbon Tetrachloride	ND	10.00	9.433	94	9.899	99	69-135	5	0-20	
Chlorobenzene	ND	10.00	8.833	88	9.187	92	75-125	4	0-20	
Ethylbenzene	ND	10.00	9.192	92	9.538	95	75-125	4	0-20	
Toluene	ND	10.00	9.113	91	9.343	93	75-125	2	0-20	
Trichloroethene	13.54	10.00	21.27	77	22.03	85	75-125	4	0-20	
Vinyl Chloride	ND	10.00	10.77	108	11.59	116	52-142	7	0-20	
o-Xylene	ND	10.00	9.426	94	9.768	98	75-127	4	0-20	
p/m-Xylene	ND	20.00	18.26	91	19.14	96	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.774	88	8.967	90	71-131	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0719-2	**Sample**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 14:20**	**170414S008**
17-04-0719-2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 14:51**	**170414S008**
17-04-0719-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 15:21**	**170414S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	11.26	80.00	76.22	81	75.22	80	66-126	1	0-20	
1,2-Dibromoethane	ND	80.00	71.28	89	72.41	91	75-126	2	0-20	
1,2-Dichlorobenzene	ND	80.00	68.63	86	70.62	88	75-125	3	0-20	
1,2-Dichloroethane	ND	80.00	68.47	86	69.62	87	75-127	2	0-20	
Benzene	ND	80.00	69.04	86	68.75	86	75-125	0	0-20	
Carbon Tetrachloride	ND	80.00	72.94	91	74.00	92	69-135	1	0-20	
Chlorobenzene	ND	80.00	71.82	90	71.80	90	75-125	0	0-20	
Ethylbenzene	ND	80.00	73.13	91	71.87	90	75-125	2	0-20	
Toluene	ND	80.00	68.98	86	69.76	87	75-125	1	0-20	
Trichloroethene	ND	80.00	68.40	85	67.92	85	75-125	1	0-20	
Vinyl Chloride	5.784	80.00	78.97	91	75.75	87	52-142	4	0-20	
o-Xylene	ND	80.00	73.69	92	73.36	92	75-127	0	0-20	
p/m-Xylene	ND	160.0	147.5	92	144.5	90	75-125	2	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	80.00	68.22	85	65.20	81	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 6 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0812-10	**Sample**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 11:38**	**170417S004**
17-04-0812-10	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 12:09**	**170417S004**
17-04-0812-10	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 12:40**	**170417S004**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	ND	40.00	40.89	102	37.31	93	66-126	9	0-20	
1,2-Dibromoethane	ND	40.00	40.09	100	38.95	97	75-126	3	0-20	
1,2-Dichlorobenzene	ND	40.00	39.39	98	38.17	95	75-125	3	0-20	
1,2-Dichloroethane	ND	40.00	39.67	99	36.93	92	75-127	7	0-20	
Benzene	ND	40.00	42.71	107	39.64	99	75-125	7	0-20	
Carbon Tetrachloride	ND	40.00	48.18	120	45.49	114	69-135	6	0-20	
Chlorobenzene	ND	40.00	41.49	104	38.79	97	75-125	7	0-20	
Ethylbenzene	ND	40.00	44.13	110	41.07	103	75-125	7	0-20	
Toluene	ND	40.00	42.59	106	39.56	99	75-125	7	0-20	
Trichloroethene	ND	40.00	42.88	107	39.37	98	75-125	9	0-20	
Vinyl Chloride	129.4	40.00	173.5	110	175.2	115	52-142	1	0-20	
o-Xylene	ND	40.00	44.32	111	40.85	102	75-127	8	0-20	
p/m-Xylene	ND	80.00	88.99	111	82.77	103	75-125	7	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	40.00	35.80	90	33.94	85	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0173-3	**Sample**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/07/17 23:06**	**170407S025**
17-04-0173-3	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/08/17 00:06**	**170407S025**
17-04-0173-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/08/17 00:36**	**170407S025**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02440	122	0.02370	118	72-132	3	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 8 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0186-1	**Sample**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 13:40**	**170408S010**
17-04-0186-1	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 15:40**	**170408S010**
17-04-0186-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 16:10**	**170408S010**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02770	138	0.03130	156	70-130	12	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 9 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0322-10	**Sample**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 13:40**	**170410S020**
17-04-0322-10	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 15:10**	**170410S020**
17-04-0322-10	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 15:40**	**170410S020**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01940	97	0.02180	109	72-132	12	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-0732-1	**Sample**	**Aqueous**	**ICP/MS 05**	**04/13/17 00:00**	**04/14/17 22:12**	**170413SA3**
17-04-0732-1	**PDS**	**Aqueous**	**ICP/MS 05**	**04/13/17 00:00**	**04/14/17 22:05**	**170413SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.01372	0.1000	0.1189	105	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-230	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/04/17 18:48**	**170404L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.03	100	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5524	**LCS**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:35**	**170413LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1005	101	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-1001	**LCS**	**Aqueous**	**GC/MS DDD**	**04/08/17**	**04/08/17 16:32**	**170408L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	18.80	94	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-4617	**LCS**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/13/17 22:04**	**170413L043**
099-10-025-4617	**LCSD**	**Aqueous**	**GC/MS L**	**04/13/17**	**04/13/17 22:34**	**170413L043**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	10.00	10.07	101	10.22	102	77-120	70-127	2	0-26	
1,2-Dibromoethane	10.00	10.28	103	10.31	103	80-120	73-127	0	0-32	
1,2-Dichlorobenzene	10.00	9.886	99	10.02	100	80-120	73-127	1	0-30	
1,2-Dichloroethane	10.00	10.05	101	10.03	100	80-122	73-129	0	0-23	
Benzene	10.00	10.28	103	10.13	101	80-120	73-127	1	0-22	
Carbon Tetrachloride	10.00	10.46	105	10.37	104	80-129	72-137	1	0-36	
Chlorobenzene	10.00	10.24	102	10.13	101	80-120	73-127	1	0-29	
Ethylbenzene	10.00	10.57	106	10.59	106	80-120	73-127	0	0-25	
Toluene	10.00	10.37	104	10.12	101	80-120	73-127	2	0-28	
Trichloroethene	10.00	10.30	103	9.939	99	80-120	73-127	4	0-25	
Vinyl Chloride	10.00	11.06	111	10.41	104	63-135	51-147	6	0-30	
o-Xylene	10.00	10.81	108	10.83	108	80-120	73-127	0	0-30	
p/m-Xylene	20.00	21.49	107	21.26	106	80-120	73-127	1	0-30	
Methyl-t-Butyl Ether (MTBE)	10.00	9.519	95	9.337	93	75-123	67-131	2	0-27	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4618	**LCS**	**Aqueous**	**GC/MS L**	**04/14/17**	**04/14/17 10:29**	**170414L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	8.672	87	77-120	70-127	
1,2-Dibromoethane	10.00	10.16	102	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.625	96	80-120	73-127	
1,2-Dichloroethane	10.00	9.608	96	80-122	73-129	
Benzene	10.00	9.369	94	80-120	73-127	
Carbon Tetrachloride	10.00	9.910	99	80-129	72-137	
Chlorobenzene	10.00	9.337	93	80-120	73-127	
Ethylbenzene	10.00	9.554	96	80-120	73-127	
Toluene	10.00	9.437	94	80-120	73-127	
Trichloroethene	10.00	9.128	91	80-120	73-127	
Vinyl Chloride	10.00	9.740	97	63-135	51-147	
o-Xylene	10.00	9.880	99	80-120	73-127	
p/m-Xylene	20.00	19.30	96	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.550	95	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 6 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4622	**LCS**	**Aqueous**	**GC/MS L**	**04/17/17**	**04/17/17 10:08**	**170417L008**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	8.719	87	77-120	70-127	
1,2-Dibromoethane	10.00	10.64	106	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.17	102	80-120	73-127	
1,2-Dichloroethane	10.00	9.858	99	80-122	73-129	
Benzene	10.00	10.16	102	80-120	73-127	
Carbon Tetrachloride	10.00	10.82	108	80-129	72-137	
Chlorobenzene	10.00	10.40	104	80-120	73-127	
Ethylbenzene	10.00	10.70	107	80-120	73-127	
Toluene	10.00	10.38	104	80-120	73-127	
Trichloroethene	10.00	10.25	103	80-120	73-127	
Vinyl Chloride	10.00	10.36	104	63-135	51-147	
o-Xylene	10.00	10.96	110	80-120	73-127	
p/m-Xylene	20.00	21.84	109	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.641	86	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-475	**LCS**	**Aqueous**	**GC/MS M**	**04/07/17**	**04/07/17 21:07**	**170407L045**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02320	116	72-132	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 8 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-476	**LCS**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 10:42**	**170408L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02380	119	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/04/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0177
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 9 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-478	**LCS**	**Aqueous**	**GC/MS M**	**04/10/17**	**04/10/17 11:04**	**170410L035**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02250	112	72-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0177

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 05	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	823	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1

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Glossary of Terms and Qualifiers

Work Order: 17-04-0177 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-4-2017
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WO NO. / LAB USE ONLY: 17-04-0177

LABORATORY CLIENT: TetraTech Inc
ADDRESS: 301 E Vanderbilt Way Suite 450
CITY: San Bernardino STATE: CA ZIP: 92408
TEL: 909-381-1674 E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOG
P.O. NO.:
PROJECT CONTACT: Robert Sabater
LAB CONTACT OR QUOTE NO:
GLOBAL ID:
LOG CODE:
SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD
☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	Hex CR	ICP/MS metals	1,2,3,TCP
1	B-1-GW12-N-1702	4-4-17	1500	W	13	✓	✓							5									1	1	1	5
2	3860K-N-1702	4-4-17	1136	W	13	✓	✓							5									1	1	1	5
3	B-1-GW17-N-1702	4-4-17	0831	W	13	✓	✓							5									1	1	1	5
4	3831Q	4-4-17	1014	W	13	✓	✓							5									1	1	1	5
5	3830Q	4-4-17	1229	W	13	✓	✓							5									1	1	1	5
6	3830S	4-4-17	1413	W	13	✓	✓							5									1	1	1	5
7	3851N-N-1702	4-4-17	1637	W	13	✓	✓							5									1	1	1	5
8	LTB-20170404	4-4-17	0700	W	3		✓							2												1

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
	Jeff Chandler	04/04/17	1727
Jeff Chandler	ECI	4/4/17	1903

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0177

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 4 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.0 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1017

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOAh (10) ☐ VOA**na₂** ☐ 100PJ ☐ 100PJ**na₂** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na₂** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na₂** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1017

Reviewed by: 68

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WORK ORDER NUMBER: 17-04- 0177

SAMPLE ANOMALY REPORT

DATE: 04 / 4 / 2017

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☑ Client sample label(s) do not match COC (comment)
  - ☐ Project information
  - ☑ Client sample ID
  - ☐ Sampling date and/or time
  - ☑ Number of container(s)
  - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
  - ☐ Broken
  - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (not transferred; duplicate bag submitted)
  - ☐ Leaking (transferred into ECI Tedlar™ bags*)
  - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

Comments

Labeled as:
(-4) 3831Q-N-17Q2
(-5) 3830Q-N-17Q2
(-6) 3830S-N-17Q2
date and time matched.
(-8) Received 2 vials instead of 3.
2 x Vials w/ HCL

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments:

Reported by: 1017

Reviewed by: 681

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

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Erick Ovalle

From: Calder, Vanessa <Vanessa.Calder@tetratech.com>
Sent: Thursday, April 06, 2017 5:22 PM
To: Erick Ovalle
Subject: Re: 04/04/2017 COC

Hi Erick,

In regards to lines 4,5 and 6 of the COC dated 04/04/2017. Please use the sample id's found on the bottles sample labels. The id's listed on the COC are incomplete.

For example, line 4 lists sample as 3831Q. This should be 3831Q-N-17Q2. The following lines 5 and 6 should be labeled following the same pattern.

Thank you for catching my mistake, apologies for the inconvenience.

Thank you,
Vanessa

Notify us here to report this email as spam.

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WORK ORDER NUMBER: 17-04-0067

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Tetra Tech, Inc.

Client Project Name: LMC BOU

Attention: Robert Sabater
301 E. Vanderbilt Way, Suite 450
San Bernardino, CA 92408-3562

Approved for release on 04/19/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 17-04-0067

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Work Order Narrative

Work Order: 17-04-0067 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/03/17. They were assigned to Work Order 17-04-0067.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Detections Summary

Client:	Tetra Tech, Inc. 301 E. Vanderbilt Way, Suite 450 San Bernardino, CA 92408-3562	Work Order: Project Name: Received:	17-04-0067 LMC BOU 04/03/17
Attn:	Robert Sabater		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3872M-N-17Q2 (17-04-0067-1)						
Chromium, Hexavalent	4.4		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00487		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	4.7	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	3.9		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	2.0		0.50	ug/L	EPA 8260B	EPA 5030C
3872L-N-17Q2 (17-04-0067-2)						
Chromium, Hexavalent	4.4		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00590		0.00100	mg/L	EPA 6020	EPA 3020A Total
Chloroform	0.59		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.23	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	300		10	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	240		10	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.095		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
3872N-N-17Q2 (17-04-0067-3)						
Chromium, Hexavalent	6.7		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00788		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	9.3	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.70		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	310		10	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	120		10	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.31		0.025	ug/L	EPA 8260B SIM	EPA 5030C
3852N-N-17Q2 (17-04-0067-4)						
Chromium, Hexavalent	2.5		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00322		0.00100	mg/L	EPA 6020	EPA 3020A Total
Acetone	7.4	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	3.8		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	2.6		0.50	ug/L	EPA 8260B	EPA 5030C

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* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0067
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/03/17
Attn:	Robert Sabater		Page 2 of 3

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
3852M-N-17Q2 (17-04-0067-5)						
Chromium, Hexavalent	0.63		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00153		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloroethane	0.25	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.69		0.50	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	1.0		0.50	ug/L	EPA 8260B	EPA 5030C
Acetone	5.4	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.2		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	8.8		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.21		0.025	ug/L	EPA 8260B SIM	EPA 5030C
3852M-FD-17Q2 (17-04-0067-6)						
Chromium, Hexavalent	0.60		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00333		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1,2-Trichloroethane	0.26	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	0.70		0.50	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	1.0		0.50	ug/L	EPA 8260B	EPA 5030C
Acetone	9.2	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	1.2		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	1.5		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	8.6		0.50	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.22	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.20		0.025	ug/L	EPA 8260B SIM	EPA 5030C
3851M-N-17Q2 (17-04-0067-7)						
Chromium, Hexavalent	1.9		0.020	ug/L	EPA 218.6	N/A
Chromium	0.00303		0.00100	mg/L	EPA 6020	EPA 3020A Total
1,1-Dichloroethene	0.57		0.50	ug/L	EPA 8260B	EPA 5030C
Acetone	9.2	J	4.0*	ug/L	EPA 8260B	EPA 5030C
Carbon Tetrachloride	0.53		0.50	ug/L	EPA 8260B	EPA 5030C
Chloroform	0.62		0.50	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	2.2		0.50	ug/L	EPA 8260B	EPA 5030C
Toluene	0.35	J	0.20*	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	12		0.50	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	0.24	J	0.20*	ug/L	EPA 8260B	EPA 5030C
1,2,3-Trichloropropane	0.057		0.0050	ug/L	EPA 8260B SIM	EPA 5030C
LTB-20170403 (17-04-0067-8)						
Acetone	11		10	ug/L	EPA 8260B	EPA 5030C

* MDL is shown

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Detections Summary

Client:	Tetra Tech, Inc.	Work Order:	17-04-0067
	301 E. Vanderbilt Way, Suite 450	Project Name:	LMC BOU
	San Bernardino, CA 92408-3562	Received:	04/03/17
Attn:	Robert Sabater		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872M-N-17Q2	**17-04-0067-1-K**	**04/03/17 15:32**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 21:20**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	4.4	0.020	0.0099	1.00	

3872L-N-17Q2	**17-04-0067-2-K**	**04/03/17 13:48**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 21:31**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	4.4	0.020	0.0099	1.00	

3872N-N-17Q2	**17-04-0067-3-K**	**04/03/17 11:51**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 21:43**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	6.7	0.020	0.0099	1.00	

3852N-N-17Q2	**17-04-0067-4-K**	**04/03/17 11:58**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 21:54**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	2.5	0.020	0.0099	1.00	

3852M-N-17Q2	**17-04-0067-5-K**	**04/03/17 13:29**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 22:05**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.63	0.020	0.0099	1.00	

3852M-FD-17Q2	**17-04-0067-6-K**	**04/03/17 13:29**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 22:16**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	0.60	0.020	0.0099	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851M-N-17Q2	**17-04-0067-7-K**	**04/03/17 15:29**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 22:28**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	1.9	0.020	0.0099	1.00	

Method Blank	**099-14-567-229**	**N/A**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 15:43**	**170403L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium, Hexavalent	ND	0.020	0.0099	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872M-N-17Q2	**17-04-0067-1-L**	**04/03/17 15:32**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 23:55**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00487	0.00100	0.000402	1.00	

3872L-N-17Q2	**17-04-0067-2-L**	**04/03/17 13:48**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:10**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00590	0.00100	0.000402	1.00	

3872N-N-17Q2	**17-04-0067-3-L**	**04/03/17 11:51**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:14**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00788	0.00100	0.000402	1.00	

3852N-N-17Q2	**17-04-0067-4-L**	**04/03/17 11:58**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:18**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00322	0.00100	0.000402	1.00	

3852M-N-17Q2	**17-04-0067-5-L**	**04/03/17 13:29**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:21**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00153	0.00100	0.000402	1.00	

3852M-FD-17Q2	**17-04-0067-6-L**	**04/03/17 13:29**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:25**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00333	0.00100	0.000402	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851M-N-17Q2	**17-04-0067-7-L**	**04/03/17 15:29**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/15/17 00:29**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	0.00303	0.00100	0.000402	1.00	

Method Blank	**096-06-003-5524**	**N/A**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:31**	**170413LA3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chromium	ND	0.00100	0.000402	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872M-N-17Q2	**17-04-0067-1-M**	**04/03/17 15:32**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 07:50**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	86	56-123	
1,4-Dioxane-d8(IDS-IS)	42	30-120	

3872L-N-17Q2	**17-04-0067-2-M**	**04/03/17 13:48**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 08:06**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	90	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3872N-N-17Q2	**17-04-0067-3-M**	**04/03/17 11:51**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 08:22**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	90	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

3852N-N-17Q2	**17-04-0067-4-M**	**04/03/17 11:58**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 08:38**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	88	56-123	
1,4-Dioxane-d8(IDS-IS)	43	30-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
		Units:	ug/L
Project: LMC BOU			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852M-N-17Q2	**17-04-0067-5-M**	**04/03/17 13:29**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 08:54**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3852M-FD-17Q2	**17-04-0067-6-M**	**04/03/17 13:29**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 09:10**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	89	56-123	
1,4-Dioxane-d8(IDS-IS)	40	30-120	

3851M-N-17Q2	**17-04-0067-7-M**	**04/03/17 15:29**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 09:26**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	88	56-123	
1,4-Dioxane-d8(IDS-IS)	37	30-120	

Method Blank	**099-16-216-996**	**N/A**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 06:15**	**170406L12**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,4-Dioxane	ND	1.0	0.28	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	105	56-123	
1,4-Dioxane-d8(IDS-IS)	44	30-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 1 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872M-N-17Q2	**17-04-0067-1-A**	**04/03/17 15:32**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 03:50**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	4.7	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 2 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	3.9	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	2.0	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	116	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 3 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	118	80-128	
Toluene-d8	95	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 4 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872L-N-17Q2	**17-04-0067-2-A**	**04/03/17 13:48**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 04:21**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 5 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.59	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.23	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	118	80-127	
1,2-Dichloroethane-d4	115	80-128	
Toluene-d8	108	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 6 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872L-N-17Q2	**17-04-0067-2-B**	**04/03/17 13:48**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 14:04**	**170406L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	300	10	4.0	20.0	
Trichloroethene	240	10	5.7	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	83	68-120	
Dibromofluoromethane	120	80-127	
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 7 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872N-N-17Q2	**17-04-0067-3-A**	**04/03/17 11:51**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 04:52**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	9.3	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 8 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.70	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	83	68-120	
Dibromofluoromethane	119	80-127	
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	106	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 9 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872N-N-17Q2	**17-04-0067-3-B**	**04/03/17 11:51**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 14:35**	**170406L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	310	10	4.0	20.0	
Trichloroethene	120	10	5.7	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	120	80-127	
1,2-Dichloroethane-d4	117	80-128	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 10 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852N-N-17Q2	**17-04-0067-4-A**	**04/03/17 11:58**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 05:22**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	7.4	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 11 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	3.8	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	2.6	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	118	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 12 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	117	80-128	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 13 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852M-N-17Q2	**17-04-0067-5-B**	**04/03/17 13:29**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 16:07**	**170406L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	0.25	0.50	0.20	1.00	J
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.69	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	1.0	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	5.4	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 14 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.2	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.5	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	8.8	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	12	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	117	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 15 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 16 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852M-FD-17Q2	**17-04-0067-6-A**	**04/03/17 13:29**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 06:24**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	0.26	0.50	0.20	1.00	J
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.70	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	1.0	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	9.2	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 17 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	1.2	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	1.5	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	8.6	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	12	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.22	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	68-120	
Dibromofluoromethane	120	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 18 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	122	80-128	
Toluene-d8	92	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 19 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3851M-N-17Q2	**17-04-0067-7-A**	**04/03/17 15:29**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 06:54**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	0.57	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	9.2	10	4.0	1.00	J
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 20 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	0.53	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	0.62	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	2.2	0.50	0.20	1.00	
Toluene	0.35	0.50	0.20	1.00	J
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	12	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	0.24	0.50	0.20	1.00	J
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	116	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 21 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	115	80-128	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 22 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LTB-20170403	**17-04-0067-8-A**	**04/03/17 08:00**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 03:20**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	11	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 23 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	113	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 24 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	116	80-128	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 25 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4606**	**N/A**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/04/17 22:44**	**170404L041**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 26 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
Naphthalene	ND	1.0	0.40	1.00	
Styrene	ND	0.50	0.20	1.00	
Tetrachloroethene	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
Iodomethane	ND	10	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	68-120	
Dibromofluoromethane	107	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 27 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	113	80-128	
Toluene-d8	98	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 28 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-4608**	**N/A**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 09:56**	**170406L008**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tetrachloroethene	ND	0.50	0.20	1.00	
Trichloroethene	ND	0.50	0.29	1.00	
Acetone	ND	10	4.0	1.00	
Benzene	ND	0.50	0.20	1.00	
Bromobenzene	ND	0.50	0.32	1.00	
Bromochloromethane	ND	1.0	0.40	1.00	
Bromodichloromethane	ND	0.50	0.20	1.00	
Bromoform	ND	0.50	0.25	1.00	
Bromomethane	ND	1.0	0.40	1.00	
2-Butanone	ND	5.0	2.0	1.00	
n-Butylbenzene	ND	0.50	0.20	1.00	
sec-Butylbenzene	ND	0.50	0.20	1.00	
tert-Butylbenzene	ND	0.50	0.20	1.00	
Carbon Disulfide	ND	1.0	0.40	1.00	
Carbon Tetrachloride	ND	0.50	0.20	1.00	
Chlorobenzene	ND	0.50	0.20	1.00	
Chloroethane	ND	0.50	0.32	1.00	
2-Chloroethyl Vinyl Ether	ND	5.0	4.2	1.00	
Chloroform	ND	0.50	0.20	1.00	
Chloromethane	ND	0.50	0.29	1.00	
2-Chlorotoluene	ND	0.50	0.20	1.00	
4-Chlorotoluene	ND	0.50	0.36	1.00	
Dibromochloromethane	ND	0.50	0.20	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	1.00	
1,2-Dibromoethane	ND	0.50	0.20	1.00	
Dibromomethane	ND	0.50	0.20	1.00	
1,2-Dichlorobenzene	ND	0.50	0.20	1.00	
1,3-Dichlorobenzene	ND	0.50	0.28	1.00	
1,4-Dichlorobenzene	ND	0.50	0.20	1.00	
Dichlorodifluoromethane	ND	1.0	0.40	1.00	
1,1-Dichloroethane	ND	0.50	0.20	1.00	
1,2-Dichloroethane	ND	0.50	0.20	1.00	
1,1-Dichloroethene	ND	0.50	0.28	1.00	
c-1,2-Dichloroethene	ND	0.50	0.20	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 29 of 30

Parameter	Result	RL	MDL	DF	Qualifiers
t-1,2-Dichloroethene	ND	0.50	0.20	1.00	
1,2-Dichloropropane	ND	0.50	0.20	1.00	
1,3-Dichloropropane	ND	1.0	0.40	1.00	
2,2-Dichloropropane	ND	1.0	0.40	1.00	
1,1-Dichloropropene	ND	0.50	0.30	1.00	
c-1,3-Dichloropropene	ND	0.50	0.20	1.00	
t-1,3-Dichloropropene	ND	0.50	0.20	1.00	
Ethylbenzene	ND	0.50	0.20	1.00	
2-Hexanone	ND	10	4.0	1.00	
Isopropylbenzene	ND	0.50	0.20	1.00	
p-Isopropyltoluene	ND	0.50	0.20	1.00	
Methylene Chloride	ND	1.0	0.80	1.00	
4-Methyl-2-Pentanone	ND	5.0	2.0	1.00	
Naphthalene	ND	1.0	0.40	1.00	
n-Propylbenzene	ND	0.50	0.20	1.00	
Styrene	ND	0.50	0.20	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	0.20	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	0.20	1.00	
Toluene	ND	0.50	0.20	1.00	
1,2,3-Trichlorobenzene	ND	0.50	0.20	1.00	
1,2,4-Trichlorobenzene	ND	0.50	0.20	1.00	
1,1,1-Trichloroethane	ND	0.50	0.20	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	0.80	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	0.24	1.00	
1,1,2-Trichloroethane	ND	0.50	0.20	1.00	
Iodomethane	ND	10	5.0	1.00	
Trichlorofluoromethane	ND	0.50	0.20	1.00	
1,2,3-Trichloropropane	ND	1.0	0.40	1.00	
1,2,4-Trimethylbenzene	ND	0.50	0.20	1.00	
1,3,5-Trimethylbenzene	ND	0.50	0.20	1.00	
Vinyl Acetate	ND	5.0	2.0	1.00	
Vinyl Chloride	ND	0.50	0.20	1.00	
p/m-Xylene	ND	0.50	0.20	1.00	
o-Xylene	ND	0.50	0.32	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.20	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	106	80-127	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: LMC BOU			Page 30 of 30

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	97	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3872M-N-17Q2	**17-04-0067-1-F**	**04/03/17 15:32**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 16:51**	**170404L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	101	80-120	

3872L-N-17Q2	**17-04-0067-2-F**	**04/03/17 13:48**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 19:51**	**170404L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.095	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	98	80-120	

3872N-N-17Q2	**17-04-0067-3-H**	**04/03/17 11:51**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 15:52**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.31	0.025	0.012	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	107	80-120	

3852N-N-17Q2	**17-04-0067-4-G**	**04/03/17 11:58**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 12:11**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	109	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
3852M-N-17Q2	**17-04-0067-5-F**	**04/03/17 13:29**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 16:52**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.21	0.025	0.012	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	92	80-120	

3852M-FD-17Q2	**17-04-0067-6-F**	**04/03/17 13:29**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 17:22**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.20	0.025	0.012	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	108	80-120	

3851M-N-17Q2	**17-04-0067-7-F**	**04/03/17 15:29**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 17:52**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	0.057	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	97	80-120	

LTB-20170403	**17-04-0067-8-B**	**04/03/17 08:00**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 14:52**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	109	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
		Units:	ug/L
Project: LMC BOU			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-473**	**N/A**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 16:21**	**170404L035**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	104	80-120	

Method Blank	**099-15-118-474**	**N/A**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 11:53**	**170406L019**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	104	80-120	

Method Blank	**099-15-118-476**	**N/A**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 11:41**	**170408L018**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1,2,3-Trichloropropane	ND	0.0050	0.0025	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Dichlorobutane	90	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3872M-N-17Q2	**Sample**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 21:20**	**170403S01**
3872M-N-17Q2	**Matrix Spike**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 22:39**	**170403S01**
3872M-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 22:50**	**170403S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	4.357	10.00	15.00	106	15.18	108	85-121	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0732-1	**Sample**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 22:12**	**170413SA3**
17-04-0732-1	**Matrix Spike**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:57**	**170413SA3**
17-04-0732-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 22:01**	**170413SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	0.01372	0.1000	0.1169	103	0.1110	97	73-133	5	0-11	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0251-4	**Sample**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 07:34**	**170406S12**
17-04-0251-4	**Matrix Spike**	**Aqueous**	**GC/MS DDD**	**04/05/17**	**04/07/17 19:40**	**170406S12**
17-04-0251-4	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS DDD**	**04/05/17**	**04/07/17 19:56**	**170406S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	ND	20.00	20.51	103	20.90	105	50-130	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-2297-3	**Sample**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/04/17 23:45**	**170404S020**
17-03-2297-3	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 01:48**	**170404S020**
17-03-2297-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/05/17 02:18**	**170404S020**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloroethene	4.909	10.00	16.15	112	13.86	90	66-126	15	0-20	
1,2-Dibromoethane	ND	10.00	9.642	96	9.099	91	75-126	6	0-20	
1,2-Dichlorobenzene	ND	10.00	8.946	89	8.386	84	75-125	6	0-20	
1,2-Dichloroethane	ND	10.00	9.170	92	8.735	87	75-127	5	0-20	
Benzene	ND	10.00	9.271	93	8.687	87	75-125	7	0-20	
Carbon Tetrachloride	ND	10.00	9.667	97	8.928	89	69-135	8	0-20	
Chlorobenzene	ND	10.00	9.194	92	8.416	84	75-125	9	0-20	
Ethylbenzene	ND	10.00	8.998	90	8.037	80	75-125	11	0-20	
Toluene	ND	10.00	9.409	94	7.952	80	75-125	17	0-20	
Trichloroethene	28.08	10.00	31.75	37	29.72	16	75-125	7	0-20	3
Vinyl Chloride	ND	10.00	12.20	122	11.63	116	52-142	5	0-20	
o-Xylene	ND	10.00	9.019	90	8.121	81	75-127	10	0-20	
p/m-Xylene	ND	20.00	18.21	91	16.26	81	75-125	11	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	11.56	116	10.16	102	71-131	13	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0251-4	**Sample**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 11:00**	**170406S007**
17-04-0251-4	**Matrix Spike**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 12:32**	**170406S007**
17-04-0251-4	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 13:03**	**170406S007**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Trichloroethene	ND	10.00	8.965	90	7.920	79	75-125	12	0-20	
Benzene	ND	10.00	9.313	93	8.052	81	75-125	15	0-20	
Carbon Tetrachloride	ND	10.00	10.86	109	9.504	95	69-135	13	0-20	
Chlorobenzene	ND	10.00	9.535	95	8.685	87	75-125	9	0-20	
1,2-Dibromoethane	ND	10.00	9.689	97	9.005	90	75-126	7	0-20	
1,2-Dichlorobenzene	ND	10.00	9.310	93	8.592	86	75-125	8	0-20	
1,2-Dichloroethane	ND	10.00	9.091	91	8.216	82	75-127	10	0-20	
1,1-Dichloroethene	ND	10.00	10.03	100	9.973	100	66-126	1	0-20	
Ethylbenzene	ND	10.00	9.461	95	8.348	83	75-125	12	0-20	
Toluene	ND	10.00	9.275	93	8.418	84	75-125	10	0-20	
Vinyl Chloride	ND	10.00	9.435	94	10.28	103	52-142	9	0-20	
p/m-Xylene	ND	20.00	19.25	96	17.08	85	75-125	12	0-20	
o-Xylene	ND	10.00	9.707	97	8.675	87	75-127	11	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.57	106	11.08	111	71-131	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
3872M-N-17Q2	**Sample**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 16:51**	**170404S018**
3872M-N-17Q2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 17:21**	**170404S018**
3872M-N-17Q2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 17:51**	**170404S018**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02300	115	0.02110	106	80-120	9	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0068-2	**Sample**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 12:23**	**170406S008**
17-04-0068-2	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 13:23**	**170406S008**
17-04-0068-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 13:53**	**170406S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02360	118	0.02040	102	80-120	15	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-04-0186-1	**Sample**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 13:40**	**170408S010**
17-04-0186-1	**Matrix Spike**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 15:40**	**170408S010**
17-04-0186-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 16:10**	**170408S010**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.02770	138	0.03130	156	70-130	12	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
17-04-0732-1	**Sample**	**Aqueous**	**ICP/MS 05**	**04/13/17 00:00**	**04/14/17 22:12**	**170413SA3**
17-04-0732-1	**PDS**	**Aqueous**	**ICP/MS 05**	**04/13/17 00:00**	**04/14/17 22:05**	**170413SA3**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Chromium	0.01372	0.1000	0.1189	105	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	N/A
		Method:	EPA 218.6
Project: LMC BOU			Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-567-229	**LCS**	**Aqueous**	**IC 16**	**N/A**	**04/03/17 15:54**	**170403L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium, Hexavalent	10.00	10.13	101	95-107	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3020A Total
		Method:	EPA 6020
Project: LMC BOU			Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-5524	**LCS**	**Aqueous**	**ICP/MS 05**	**04/13/17**	**04/14/17 21:35**	**170413LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	0.1000	0.1005	101	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 3510C
		Method:	EPA 8270C (M) Isotope Dilution
Project: LMC BOU			Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-996	**LCS**	**Aqueous**	**GC/MS DDD**	**04/06/17**	**04/07/17 06:31**	**170406L12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,4-Dioxane	20.00	18.58	93	50-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 4 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4606	**LCS**	**Aqueous**	**GC/MS L**	**04/04/17**	**04/04/17 22:13**	**170404L041**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1-Dichloroethene	10.00	10.66	107	77-120	70-127	
1,2-Dibromoethane	10.00	10.30	103	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.843	98	80-120	73-127	
1,2-Dichloroethane	10.00	9.825	98	80-122	73-129	
Benzene	10.00	9.825	98	80-120	73-127	
Carbon Tetrachloride	10.00	9.782	98	80-129	72-137	
Chlorobenzene	10.00	9.859	99	80-120	73-127	
Ethylbenzene	10.00	9.749	97	80-120	73-127	
Toluene	10.00	9.882	99	80-120	73-127	
Trichloroethene	10.00	9.307	93	80-120	73-127	
Vinyl Chloride	10.00	9.366	94	63-135	51-147	
o-Xylene	10.00	10.05	100	80-120	73-127	
p/m-Xylene	20.00	19.69	98	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.98	110	75-123	67-131	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: LMC BOU			Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-10-025-4608	**LCS**	**Aqueous**	**GC/MS L**	**04/06/17**	**04/06/17 09:15**	**170406L008**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Trichloroethene	10.00	9.166	92	80-120	73-127	
Benzene	10.00	9.410	94	80-120	73-127	
Carbon Tetrachloride	10.00	9.768	98	80-129	72-137	
Chlorobenzene	10.00	9.737	97	80-120	73-127	
1,2-Dibromoethane	10.00	9.889	99	80-120	73-127	
1,2-Dichlorobenzene	10.00	9.457	95	80-120	73-127	
1,2-Dichloroethane	10.00	9.311	93	80-122	73-129	
1,1-Dichloroethene	10.00	10.56	106	77-120	70-127	
Ethylbenzene	10.00	9.373	94	80-120	73-127	
Toluene	10.00	9.597	96	80-120	73-127	
Vinyl Chloride	10.00	9.549	95	63-135	51-147	
p/m-Xylene	20.00	18.96	95	80-120	73-127	
o-Xylene	10.00	9.693	97	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	12.67	127	75-123	67-131	ME

Total number of LCS compounds: 14
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-473	**LCS**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 14:52**	**170404L035**
099-15-118-473	**LCSD**	**Aqueous**	**GC/MS M**	**04/04/17**	**04/04/17 15:22**	**170404L035**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02350	118	0.02270	114	80-120	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-474	**LCS**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 10:23**	**170406L019**
099-15-118-474	**LCSD**	**Aqueous**	**GC/MS M**	**04/06/17**	**04/06/17 10:53**	**170406L019**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02030	102	0.02330	116	80-120	14	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Tetra Tech, Inc.		Date Received:	04/03/17
301 E. Vanderbilt Way, Suite 450		Work Order:	17-04-0067
San Bernardino, CA 92408-3562		Preparation:	EPA 5030C
		Method:	EPA 8260B SIM
Project: LMC BOU			Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-118-476	**LCS**	**Aqueous**	**GC/MS M**	**04/08/17**	**04/08/17 10:42**	**170408L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02380	119	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-04-0067

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 218.6	N/A	1065	IC 16	1
EPA 6020	EPA 3020A Total	598	ICP/MS 05	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B SIM	EPA 5030C	486	GC/MS M	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	907	GC/MS DDD	1

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Glossary of Terms and Qualifiers

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Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

Date 4-3-2017

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WO NO. / LAB USE ONLY: **17-04-0067**

LABORATORY CLIENT: Tetra Tech INC

ADDRESS: 301E Vanderbilt Way Suite 450

CITY: San Bernardino STATE: CA ZIP: 92408

TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: LMC BOU

PROJECT CONTACT: Robert SaBAter

GLOBAL ID: LOG CODE:

P.O. NO.:

LAB CONTACT OR QUOTE NO:

SAMPLER(S): (PRINT) Jason Cook, Vanessa Calder

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☑ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	1,4 Dioxane	ICP/MS Metals	1,2,3TCP
1	3872M-N-17Q2	4-3-17	1532	W	13	✓	✓							5								1	1	1	5
2	3872L-N-17Q2	↓	1348	↓	13	✓	✓							5								1	1	1	5
3	3872N-N-17Q2		1151		13	✓	✓							5								1	1	1	5
4	3852N-N-17Q2		1158		13	✓	✓							5								1	1	1	5
5	3852M-N-17Q2		1329		13	✓	✓							5								1	1	1	5
6	3852M-FD-17Q2		1329		13	✓	✓							5								1	1	1	5
7	3851M-N-17Q2		1529		13	✓	✓							5								1	1	1	5
8	TB-20170403	↓	0800	↓	2		✓							2											

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Jason Cook	Jeff Chandler	4-3-17	1620
Jeff Chandler	Shane ECI	4/3/17	1810

2016-04-01-Revision

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WORK ORDER NUMBER: 17-04- 0067

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Tetra Tech

DATE: 04 / 3 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.8 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 1091

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1091
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 681

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (10) (Trip Blank Lot Number: 170328A)

Aqueous: ☐ VOA ☑ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☑ 250PB ☑ 250PB**n** ☑ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 681

Reviewed by: 679

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Vikas Patel

From: Sabater, Robert <Robert.Sabater@tetratech.com>
Sent: Tuesday, April 04, 2017 11:37 AM
To: Vikas Patel
Cc: Erick Ovalle; Calder, Vanessa
Subject: Re: Sample receipt confirmation / 17-04-0067 / LMC BOU

Vik,

Yes. 1,2,3-TCP.

Robert

Sent from my iPhone

On Apr 4, 2017, at 11:21 AM, Vikas Patel <VikasPatel@eurofinsUS.com> wrote:

> Hey Robert – I am assuming you meant 1,2,3-TCP. We will analyze sample for VOCs first. If we have enough sample remaining we will analyze sample for 1,2,3-TCP by 8260 SIM.
>
> For future submittals, can you submit 3 vials for the trip blank sample?
>
> Vik Patel
> Eurofins Calscience, Inc.
> Phone: +1 714 895 5494
>
> ---
>
> **From:** Sabater, Robert [mailto:Robert.Sabater@tetratech.com]
> **Sent:** Tuesday, April 04, 2017 10:45 AM
> **To:** Erick Ovalle
> **Cc:** Vikas Patel
> **Subject:** Re: Sample receipt confirmation / 17-04-0067 / LMC BOU
>
> Erick,
>
> It looks good to me. I do have one question, is there enough sample in the VOC trip blank to run for 2,3,2-TCP also?
>
> Robert
>
> Sent from my iPhone
>
> On Apr 4, 2017, at 9:49 AM, Erick Ovalle <ErickOvalle@eurofinsUS.com> wrote:
>
>> Sample receipt confirmation attached. **Please review and advise of any changes required.**
>>
>> Please call with any questions or concerns.
>>
>> Best Regards,
>> Erick Ovalle
>> Project Manager Assistant

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