



DRAFT

ENVIRONMENT
& HEALTH

Via email

Ms. Amber Sharpe
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**INDOOR AIR QUALITY INVESTIGATION REPORT
3080/3011 ALFRED STREET, SANTA CLARA, CALIFORNIA**

Dear Ms. Sharpe:

The Environment & Health group of Ramboll US Corporation (Ramboll; formerly known as Ramboll Environ and ENVIRON) has prepared this letter report summarizing the results of indoor air quality investigation performed at the property located at 3080/3011 Alfred Street, Santa Clara, California (the "site").

The sampling activities were performed to evaluate indoor air quality (as compared with samples of ambient air) at the site for presence of VOCs to demonstrate site suitability as a school.

SITE BACKGROUND

The approximately 2.48-acre site is improved with an approximately 35,000 - square foot building constructed in the early 1970s as an industrial facility for manufacturing operations. The 3080 portion of the building was occupied by Fairchild Semiconductor Corporation from 1975 to 1983. The 3011 portion of the building was occupied by Micro Power Systems beginning in 1972, and Micro Power took over operation of the 3080 portion in 1984. Exar corporation purchased Micro Power in 1993 and occupied the entire site until 1996 when the site was purchased by Lincoln Properties. By 2003, Hope Services leased the site as a donation and bike repair facility.

As a result of the historical manufacturing operations, chlorinated volatile organic compounds (VOCs) are present in groundwater beneath the site and surrounding area due to releases from two former acid neutralization sumps associated with historical operations by former site occupants. The primary contaminants of potential concern (COPCs) include trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1,-DCA), 1,1-dichloroethene (1,1-DCE), and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113). Beginning in the early 1980s and under the oversight of the San Francisco Regional Water Quality Control Board (RWQCB), subsurface investigations were performed at the site by responsible parties Fairchild Semiconductor (later acquired by Schlumberger Technology Corporation) and Micro Power Systems. Groundwater remediation activities included extraction and treatment from 1988 until 2006, followed by

September 21, 2018

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bioremediation in 2009, and subsequent post-remedial monitoring. The RWQCB rescinded all cleanup requirements in April of 2012, and all related on-site groundwater monitoring wells were decommissioned. The RWQCB issued no further action for the site on October 7, 2014, based on the agency's "Closure of Low-Threat Chlorinated Solvent Sites" guidance.

As part a condition of case closure, a land use covenant ("deed restriction") was placed on the site in March 2014. Restrictions included limits on future soil excavation, a prohibition on the extraction of groundwater, and a general prohibition on property uses that create potential harm to persons or property. Neither the deed restriction nor the RWQCB closure documentation explicitly includes a limitation on the type of acceptable land use. However, in its no further action correspondence, the RWQCB indicated that, in the event a change in land use is proposed, additional investigation (e.g., soil vapor sampling) may be necessary in order to evaluate whether site conditions are acceptable for the proposed future use.

To further evaluate site conditions, Ramboll completed a soil vapor and soil screening investigation at the site in September 2016 on behalf of the Muslim Community Association (MCA), including collection of soil and soil vapor samples from eight exterior locations and sub-slab soil vapor samples from five interior locations. Ramboll compared the results to RWQCB Environmental Screening Levels (ESLs)¹, California Department of Toxic Substances Control (DTSC)-modified Regional Screening Levels (RSLs)², and/or U.S. Environmental Protection Agency (USEPA) RSLs.³ Soil sampling did not identify significant concerns, with constituents detected below the most stringent regulatory screening criteria based on residential land use (except for arsenic, which is present at concentrations in excess of the screening criterion but within the range of concentrations considered to be representative of natural or urbanized background for California soils). With regards to soil vapor, one soil vapor sample collected in the parking lot outside of the building footprint contained TCE (5,600 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) in excess of the commercial screening level in place at the time, and several VOCs (benzene, TCE, chloroform, and tetrachloroethene [PCE]) were detected in sub-slab and/or soil vapor concentrations in excess of residential regulatory screening criteria in place at the time. The report concluded that further site evaluation and/or mitigation should be evaluated in the context of the desired future use of the building, once future use was determined.

Ramboll understands that the MCA subsequently purchased the property and is considering its use for a school, which is considered to more closely align with exposure scenarios applicable to residential screening levels rather than commercial screening levels. Given the detections of multiple VOCs in sub-slab and soil vapor samples in excess of residential screening levels during the 2016 investigation and the increasing concern among regulatory authorities of vapor intrusion risks, RWQCB may require further site investigation work before concluding that the site building is appropriate for use as a school. As an initial step, Ramboll proposed an evaluation of indoor air quality (as compared with samples to be collected of ambient air) at the site for the presence of VOCs.

This memorandum includes a description of the initial indoor air sampling event and includes sample locations, methods, and analytical results.

¹ San Francisco Regional Water Quality Control Board, 2016. Environmental Screening Levels, revision 3. February.

² California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office (HERO). 2018. HERO Human Health Risk Assessment(HHRA) Note 3, DTSC-modified Screening Levels (DTSC-SLs). June.

³ United States Environmental Protection Agency (USEPA). 2018. Regional Screening Levels (RSLs). May.

SCOPE OF WORK

The scope of work described herein was performed in accordance with the *Proposal for Indoor and Ambient Air Sampling 3080/3011 Alfred Street, Santa Clara, California* dated April 19, 2018.⁴

Indoor Air Investigation

Indoor air sampling was conducted on June 28, 2018. The building's heating, ventilation, and air conditioning (HVAC) systems were active. With the exception of a garage door and several standard doors along the northern side of the building which were open for most of the day, other doors and windows were generally kept closed throughout the day. Prior to sampling, observations of sampling areas were made to assess the potential for interference from chemicals present in the building, and no chemical containers were observed. Bicycles and associated repair equipment were present in the building. Readings taken with a calibrated photoionization detector (PID) indicated VOC concentrations in the building ranged between 25 to 230 parts per billion (ppb), compared to a range of 7 to 11 ppb outside the building.

During the sampling event, five indoor air samples and three ambient air samples were collected at the site. Within the building, two of the indoor air samples were collected in a preferential pathway location (i.e., bathrooms) and three were collected in office and warehouse areas (See Figure 1). Ambient air samples were collected along the perimeter of the building. The samples were collected using stainless steel SUMMA canisters individually-certified to be clean for target analytes by Eurofins CalScience Inc., in Garden Grove, California. The sample canisters were initially checked for leaks and any observable pressure decreases were followed by adjustments and re-tightening of connection fittings. All samples were integrated composite samples collected over approximately eight hours. Indoor air samples were collected at an approximate height between three and five feet and ambient air samples were collected at an approximate height of six feet as recommended by the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC).⁵ Samples were sealed, labeled, and sent under chain-of-custody documentation to a California accredited analytical laboratory to be analyzed for VOCs using Environmental Protection Agency (USEPA) Method TO-15 Selective Ion Method (SIM).

Indoor Air Sampling Results

Analytical results of the indoor and ambient air samples collected during the July sampling are summarized in Table 1. The results are compared to ambient concentrations collected from outdoor areas of the site and the DTSC-modified RSLs or the USEPA RSLs for residential air. The results indicate detections of benzene and carbon tetrachloride in both ambient and indoor air ranging from 0.20 to 0.28 $\mu\text{g}/\text{m}^3$ and 0.23 to 0.39 $\mu\text{g}/\text{m}^3$ respectively. Chloroform was detected in all indoor samples ranging from 0.13 to 0.97 $\mu\text{g}/\text{m}^3$, and 1,2-dichloroethane (1,2-DCA) was detected in three of the five indoor air samples (B01, B02, and B05) at concentrations between 0.13 and 0.14 $\mu\text{g}/\text{m}^3$.

Indoor air concentrations of both benzene and carbon tetrachloride were consistent with ambient air concentrations; these detections are likely due to ambient outdoor air quality.

Four of the five indoor air locations contained chloroform concentrations between 0.13 $\mu\text{g}/\text{m}^3$ and 0.16 $\mu\text{g}/\text{m}^3$, slightly above the residential screening criterion of 0.12 $\mu\text{g}/\text{m}^3$. The fifth location, a bathroom, contained chloroform at a concentration of 0.97 $\mu\text{g}/\text{m}^3$. Chloroform was not detected in ambient air. Chloroform was not previously detected in sub-slab soil gas in the 2016 investigation. One of the most

⁴ Ramboll. 2018. Proposal for Indoor and Ambient Air Sampling, 3080/3011 Alfred Street, Santa Clara, California. April.

⁵ Department of Toxic Substances Control (DTSC). 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October

significant indoor sources of chloroform is chlorinated tap water; small amounts of chloroform can be formed during the process of adding chlorine to water to destroy bacteria and chloroform can enter the air directly from vapors evaporating from water.⁶ As noted, the highest concentration of chloroform detected was in the bathroom.

Three of the five indoor air concentrations contained 1,2-DCA concentrations between 0.13 µg/m³ and 0.14 µg/m³, slightly above the screening criterion of 0.11 µg/m³. The chemical was not detected in the two remaining indoor air locations, nor was it detected in ambient air. 1,2-DCA was also not previously detected in sub-slab soil gas in the 2016 investigation.

DATA EVALUATION AND CONCLUSIONS

Both chloroform and 1,2-DCA exceed residential screening criteria and were only detected in indoor air. No exceedances of commercial screening criteria were noted during this investigation. Of note, neither chloroform nor 1,2-DCA were identified in sub-slab soil vapor during the 2016 investigation. In addition, with the exception of Freon, none of the subsurface COPCs for the site were detected in indoor air.

While acceptable for the current commercial land use, these findings warrant further evaluation in relation to potential use for a school. Next steps may include development of site-specific Risk-Based Target Concentrations (RBTCs) for school students and teachers and another round of indoor air sampling in a different season of the year.

Based on available data, it is possible that the findings in indoor air represent contributions from materials and/or operations in the building, rather than vapor migration from the subsurface. Obvious sources of such interference were not observed during the survey performed on the day of the sampling event, however as previously mentioned the PID readings were higher indoors than outdoors. If found to be from the subsurface, as these compounds were typically present at concentrations only slightly above the screening criteria, one possible mitigation measure to reduce indoor air concentrations could include an adjustment to the facility HVAC system to increase the air exchange rate within the building.

CLOSING

If you have any questions or need further information, please contact us.

Sincerely,

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Attachments

⁶ Agency for Toxic Substances & Disease Registry (ATSDR). 1997. Toxicological Profile for Chloroform. September. <http://www.atsdr.cdc.gov/ToxProfiles/TP.asp?id=53&tid=16>

TABLE

TABLE 1: INDOOR AND AMBIENT AIR DATA - JUNE 2018
3080/3011 ALFRED STREET, SANTA CLARA, CALIFORNIA

Analyte [1,2]	Screening Criteria		Unit	Ambient Air			Indoor Air				
	Value	Source [3]		AA01	AA02	AA03	B01	B02	B03	B04	B05
				south 06/28/18	west 06/28/18	north 06/28/18	office 06/28/18	warehouse 06/28/18	warehouse 06/28/18	break/office 06/28/18	restroom 06/28/18
Benzene	0.097	DTSC	µg/m3	0.20	0.24	0.28	0.31	0.23	0.28	0.39	0.24
Carbon Tetrachloride	0.067	DTSC	µg/m3	0.56	0.52	0.57	0.57	0.58	0.58	0.54	0.53
Chloroethane	10,000	USEPA	µg/m3	0.091	ND<0.066	ND<0.066	ND<0.066	ND<0.066	0.074	ND<0.066	ND<0.066
Chloroform	0.12	USEPA	µg/m3	ND<0.12	ND<0.12	ND<0.12	0.13	0.14	0.16	0.16	0.97
Chloromethane	94	USEPA	µg/m3	1.2	1.0	1.1	1.1	1.1	1.2	1.2	0.97
Dibromochloromethane	0.13	DTSC	µg/m3	ND<0.21	ND<0.21	ND<0.21	ND<0.21	ND<0.21	ND<0.21	ND<0.21	ND<0.21
Dichlorodifluoromethane	100	USEPA	µg/m3	2.7	2.6	2.8	2.7	2.8	2.9	2.9	2.3
1,2-Dichloroethane	0.11	USEPA	µg/m3	ND<0.1	ND<0.1	ND<0.1	0.13	0.13	ND<0.1	ND<0.1	0.14
1,1-Difluoroethane	42,000	USEPA	µg/m3	0.92	0.68	ND<0.68	1.7	2.9	1.1	1.1	1.9
Ethylbenzene	1.1	USEPA	µg/m3	ND<0.11	0.14	0.13	0.34	0.30	0.17	0.17	0.19
Methylene Chloride	1.0	DTSC	µg/m3	0.35	0.29	0.40	0.42	0.95	0.66	0.69	0.64
Toluene	310	DTSC	µg/m3	0.48	0.94	0.75	1.2	1.1	0.97	1.2	1.0
Trichlorofluoromethane	1,300	DTSC	µg/m3	1.4	1.3	1.4	1.4	1.4	1.4	1.3	1.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	5,200	USEPA	µg/m3	0.56	0.52	0.53	0.56	0.56	0.57	0.55	0.54
o-Xylene	100	USEPA	µg/m3	0.12	0.17	0.18	0.30	0.30	0.20	0.21	0.20
p/m-Xylene	--	--	µg/m3	ND<0.22	ND<0.22	ND<0.22	0.35	0.29	0.22	0.23	0.23

Notes:

Detected compounds are shown in **bold**.

Highlighted values indicate detection at concentration greater than residential screening criteria

ND<# = not detected at or above laboratory detection limit as shown

-- = not available

µg/m3 = microgram per cubic meter

DTSC = Department of Toxic Substances Control

USEPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound

[1] All samples were analyzed for VOCs by USEPA Method TO-15 SIM.

[2] Only detected chemicals are summarized in this table.

[3] Screening criteria based on USEPA RSLs and HERO modified screening levels for residential land use.

References:

California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office (HERO). 2018. HERO

Human Health Risk Assessment(HHRA) Note 3, DTSC-modified Screening Levels (DTSC-SLs). June.

United States Environmental Protection Agency (USEPA). 2018. Regional Screening Levels (RSLs). May.

FIGURE



Ambient and Indoor Air Sample Locations - June 2018

3080/3011 Alfred Street,
Santa Clara, California

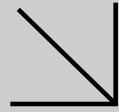
FIGURE
1



APPENDIX A
LABORATORY ANALYTICAL REPORT



Calscience



WORK ORDER NUMBER: 18-06-2222

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: RAMBOLL ENVIRON

Client Project Name: MCA Santa Clara / 1690008670

Attention: Dan Clark
2200 Powell Street
Suite 700
Emeryville, CA 94608-1958

Vikas Patel

Approved for release on 07/09/2018 by:
Vikas Patel
Project Manager

ResultLink ▶

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



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Work Order Number: 18-06-2222

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/29/18. They were assigned to Work Order 18-06-2222.

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.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



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Sample Summary

Client: RAMBOLL ENVIRON	Work Order: 18-06-2222
2200 Powell Street, Suite 700	Project Name: MCA Santa Clara / 1690008670
Emeryville, CA 94608-1958	PO Number:
	Date/Time Received: 06/29/18 10:00
	Number of Containers: 8

Attn: Dan Clark

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
B01_20180628	18-06-2222-1	06/28/18 16:06	1	Air
B02_20180628	18-06-2222-2	06/28/18 16:08	1	Air
B03_20180628	18-06-2222-3	06/28/18 16:09	1	Air
B04_20180628	18-06-2222-4	06/28/18 16:11	1	Air
B05_20180628	18-06-2222-5	06/28/18 16:13	1	Air
AA01_20180628	18-06-2222-6	06/28/18 16:16	1	Air
AA02_20180628	18-06-2222-7	06/28/18 16:17	1	Air
AA03_20180628	18-06-2222-8	06/28/18 16:19	1	Air



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Detections Summary

Client: RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Work Order: 18-06-2222
Project Name: MCA Santa Clara / 1690008670
Received: 06/29/18

Attn: Dan Clark

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Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B01_20180628 (18-06-2222-1)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	1.7		0.68	ug/m3	EPA TO-15 SIM	N/A
1,2-Dichloroethane	0.13		0.10	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.31		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.57		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.13		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.7		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.34		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.42		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.30		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	0.35		0.22	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.2		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A
B02_20180628 (18-06-2222-2)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.9		0.68	ug/m3	EPA TO-15 SIM	N/A
1,2-Dichloroethane	0.13		0.10	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.23		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.58		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.14		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.8		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.30		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.95		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.30		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	0.29		0.22	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.1		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A

* MDL is shown



Calscience

Detections Summary

Client: RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Work Order: 18-06-2222
Project Name: MCA Santa Clara / 1690008670
Received: 06/29/18

Attn: Dan Clark

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Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B03_20180628 (18-06-2222-3)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	1.1		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.28		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.58		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroethane	0.074		0.066	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.16		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.2		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.9		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.17		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.66		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.20		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	0.22		0.22	ug/m3	EPA TO-15 SIM	N/A
Toluene	0.97		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A
B04_20180628 (18-06-2222-4)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.55		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	1.1		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.39		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.54		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.16		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.2		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.9		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.17		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.69		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.21		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	0.23		0.22	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.2		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A

* MDL is shown



Calscience

Detections Summary

Client: RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Work Order: 18-06-2222
Project Name: MCA Santa Clara / 1690008670
Received: 06/29/18

Attn: Dan Clark

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Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
B05_20180628 (18-06-2222-5)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.54		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	1.9		0.68	ug/m3	EPA TO-15 SIM	N/A
1,2-Dichloroethane	0.14		0.10	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.24		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.53		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.97		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	0.97		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.3		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.19		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.64		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.20		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	0.23		0.22	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.0		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A
AA01_20180628 (18-06-2222-6)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	0.92		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.20		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.56		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloroethane	0.091		0.066	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.2		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.7		0.12	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.35		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.12		0.11	ug/m3	EPA TO-15 SIM	N/A
Toluene	0.48		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A
AA02_20180628 (18-06-2222-7)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52		0.19	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	0.68		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.24		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.52		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.0		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.6		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.14		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.29		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.17		0.11	ug/m3	EPA TO-15 SIM	N/A
Toluene	0.94		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A

* MDL is shown



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Detections Summary

Client: RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Work Order: 18-06-2222
Project Name: MCA Santa Clara / 1690008670
Received: 06/29/18

Attn: Dan Clark

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Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
AA03_20180628 (18-06-2222-8)						
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.53		0.19	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.28		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.57		0.31	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Dichlorodifluoromethane	2.8		0.12	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.13		0.11	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.40		0.17	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.18		0.11	ug/m3	EPA TO-15 SIM	N/A
Toluene	0.75		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A

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

Return to Contents

* MDL is shown



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B01_20180628	18-06-2222-1-A	06/28/18 16:06	Air	GC/MS DD	N/A	07/01/18 01:13	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	1.7	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	0.13	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.31	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.57	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	0.13	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.7	0.12	1.00	
Ethylbenzene	0.34	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.42	0.17	1.00	
o-Xylene	0.30	0.11	1.00	
p/m-Xylene	0.35	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	1.2	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	91	45-153		

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



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	100	37-163	
Toluene-d8	101	73-121	



Return to Contents

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

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B02_20180628	18-06-2222-2-A	06/28/18 16:08	Air	GC/MS DD	N/A	07/01/18 02:04	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	2.9	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	0.13	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.23	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.58	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	0.14	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.8	0.12	1.00	
Ethylbenzene	0.30	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.95	0.17	1.00	
o-Xylene	0.30	0.11	1.00	
p/m-Xylene	0.29	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	1.1	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	92	45-153		

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

Analytical Report

RAMBOLL ENVIRON	Date Received:	06/29/18
2200 Powell Street, Suite 700	Work Order:	18-06-2222
Emeryville, CA 94608-1958	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: MCA Santa Clara / 1690008670		Page 4 of 18

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	101	37-163	
Toluene-d8	102	73-121	



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B03_20180628	18-06-2222-3-A	06/28/18 16:09	Air	GC/MS DD	N/A	07/01/18 02:56	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	1.1	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.28	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.58	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	0.074	0.066	1.00	
Chloroform	0.16	0.12	1.00	
Chloromethane	1.2	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.9	0.12	1.00	
Ethylbenzene	0.17	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.66	0.17	1.00	
o-Xylene	0.20	0.11	1.00	
p/m-Xylene	0.22	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	0.97	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	45-153	

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



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	101	37-163	
Toluene-d8	102	73-121	

Return to Contents

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



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B04_20180628	18-06-2222-4-A	06/28/18 16:11	Air	GC/MS DD	N/A	07/01/18 03:48	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.55	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	1.1	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.39	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.54	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	0.16	0.12	1.00	
Chloromethane	1.2	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.9	0.12	1.00	
Ethylbenzene	0.17	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.69	0.17	1.00	
o-Xylene	0.21	0.11	1.00	
p/m-Xylene	0.23	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	1.2	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	45-153	

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	100	37-163	
Toluene-d8	100	73-121	



Return to Contents

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B05_20180628	18-06-2222-5-A	06/28/18 16:13	Air	GC/MS DD	N/A	07/01/18 04:38	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.54	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	1.9	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	0.14	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.24	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.53	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	0.97	0.12	1.00	
Chloromethane	0.97	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.3	0.12	1.00	
Ethylbenzene	0.19	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.64	0.17	1.00	
o-Xylene	0.20	0.11	1.00	
p/m-Xylene	0.23	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	1.0	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	87	45-153		

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

Analytical Report

RAMBOLL ENVIRON	Date Received:	06/29/18
2200 Powell Street, Suite 700	Work Order:	18-06-2222
Emeryville, CA 94608-1958	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: MCA Santa Clara / 1690008670		Page 10 of 18

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	102	37-163	
Toluene-d8	100	73-121	

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AA01_20180628	18-06-2222-6-A	06/28/18 16:16	Air	GC/MS DD	N/A	07/01/18 05:30	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.56	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	0.92	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.20	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.56	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	0.091	0.066	1.00	
Chloroform	ND	0.12	1.00	
Chloromethane	1.2	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.7	0.12	1.00	
Ethylbenzene	ND	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.35	0.17	1.00	
o-Xylene	0.12	0.11	1.00	
p/m-Xylene	ND	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	0.48	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	45-153	

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	101	37-163	
Toluene-d8	102	73-121	



Return to Contents

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AA02_20180628	18-06-2222-7-A	06/28/18 16:17	Air	GC/MS DD	N/A	07/01/18 06:20	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	0.68	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.24	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.52	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	ND	0.12	1.00	
Chloromethane	1.0	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.6	0.12	1.00	
Ethylbenzene	0.14	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.29	0.17	1.00	
o-Xylene	0.17	0.11	1.00	
p/m-Xylene	ND	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	0.94	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	82	45-153	

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



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	102	37-163	
Toluene-d8	100	73-121	

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

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AA03_20180628	18-06-2222-8-A	06/28/18 16:19	Air	GC/MS DD	N/A	07/01/18 07:12	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.53	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	ND	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	0.28	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	0.57	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	ND	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	2.8	0.12	1.00	
Ethylbenzene	0.13	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	0.40	0.17	1.00	
o-Xylene	0.18	0.11	1.00	
p/m-Xylene	ND	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	0.75	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	45-153	

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



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Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	99	37-163	
Toluene-d8	102	73-121	



Return to Contents

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-052-2086	N/A	Air	GC/MS DD	N/A	06/30/18 22:10	180630L01

Parameter	Result	RL	DF	Qualifiers
1,1,1-Trichloroethane	ND	0.14	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.19	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
1,1-Difluoroethane	ND	0.68	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Benzene	ND	0.080	1.00	
Bromodichloromethane	ND	0.17	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Carbon Tetrachloride	ND	0.31	1.00	
Chlorobenzene	ND	0.12	1.00	
Chloroethane	ND	0.066	1.00	
Chloroform	ND	0.12	1.00	
Chloromethane	ND	0.052	1.00	
Dibromochloromethane	ND	0.21	1.00	
Dichlorodifluoromethane	ND	0.12	1.00	
Ethylbenzene	ND	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Methylene Chloride	ND	0.17	1.00	
o-Xylene	ND	0.11	1.00	
p/m-Xylene	ND	0.22	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
Tetrachloroethene	ND	0.17	1.00	
Toluene	ND	0.19	1.00	
Trichloroethene	ND	0.13	1.00	
Trichlorofluoromethane	ND	0.14	1.00	
Vinyl Chloride	ND	0.13	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	79	45-153	

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



Calscience

Analytical Report

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Project: MCA Santa Clara / 1690008670

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,2-Dichloroethane-d4	99	37-163	
Toluene-d8	101	73-121	

Return to Contents

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



Calscience

Quality Control - LCS/LCSD

RAMBOLL ENVIRON
2200 Powell Street, Suite 700
Emeryville, CA 94608-1958

Date Received: 06/29/18
Work Order: 18-06-2222
Preparation: N/A
Method: EPA TO-15 SIM

Project: MCA Santa Clara / 1690008670

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
095-01-052-2086	LCS	Air	GC/MS DD	N/A	06/30/18 20:31	180630L01				
095-01-052-2086	LCSD	Air	GC/MS DD	N/A	06/30/18 21:19	180630L01				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,1,1-Trichloroethane	2.728	2.498	92	3.115	114	50-150	33-167	22	0-30	
1,1,2,2-Tetrachloroethane	3.433	3.688	107	3.580	104	50-150	33-167	3	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.832	3.888	101	3.734	97	50-150	33-167	4	0-30	
1,1,2-Trichloroethane	2.728	2.875	105	2.798	103	27-171	3-195	3	0-38	
1,1-Dichloroethane	2.024	2.159	107	2.076	103	50-150	33-167	4	0-30	
1,1-Dichloroethene	1.982	2.063	104	1.999	101	50-150	33-167	3	0-30	
1,1-Difluoroethane	1.351	1.256	93	1.132	84	50-150	33-167	10	0-30	
1,2,4-Trimethylbenzene	2.458	2.789	113	2.681	109	50-150	33-167	4	0-30	
1,2-Dichloroethane	2.024	2.134	105	2.099	104	28-166	5-189	2	0-40	
1,3,5-Trimethylbenzene	2.458	2.736	111	2.579	105	50-150	33-167	6	0-30	
4-Ethyltoluene	2.458	2.560	104	2.450	100	50-150	33-167	4	0-30	
Benzene	1.597	1.575	99	1.545	97	27-153	6-174	2	0-34	
Bromodichloromethane	3.350	3.579	107	3.385	101	50-150	33-167	6	0-30	
c-1,2-Dichloroethene	1.982	2.047	103	1.993	101	35-165	13-187	3	0-35	
Carbon Tetrachloride	3.146	3.439	109	3.402	108	7-187	0-217	1	0-31	
Chlorobenzene	2.302	2.438	106	2.357	102	50-150	33-167	3	0-30	
Chloroethane	1.319	1.601	121	1.414	107	50-150	33-167	12	0-30	
Chloroform	2.441	2.610	107	2.529	104	50-150	33-167	3	0-30	
Chloromethane	1.033	1.045	101	0.9328	90	50-150	33-167	11	0-30	
Dibromochloromethane	4.259	4.599	108	4.394	103	50-150	33-167	5	0-30	
Dichlorodifluoromethane	2.473	3.316	134	2.740	111	50-150	33-167	19	0-30	
Ethylbenzene	2.171	2.595	120	1.865	86	27-153	6-174	33	0-46	
Hexachloro-1,3-Butadiene	5.333	7.407	139	7.167	134	50-150	33-167	3	0-30	
Methyl-t-Butyl Ether (MTBE)	1.803	1.900	105	1.890	105	50-150	33-167	1	0-30	
Methylene Chloride	1.737	1.660	96	1.613	93	50-150	33-167	3	0-30	
o-Xylene	2.171	2.193	101	2.095	96	22-160	0-183	5	0-48	
p/m-Xylene	4.342	2.385	55	2.234	51	21-165	0-189	7	0-51	
t-1,2-Dichloroethene	1.982	2.068	104	2.047	103	50-150	33-167	1	0-30	
Tetrachloroethene	3.391	3.743	110	3.631	107	34-154	14-174	3	0-33	
Toluene	1.884	1.873	99	1.788	95	28-154	7-175	5	0-42	
Trichloroethene	2.687	2.818	105	2.770	103	43-139	27-155	2	0-31	
Trichlorofluoromethane	2.809	3.035	108	2.925	104	50-150	33-167	4	0-30	
Vinyl Chloride	1.278	1.323	104	1.231	96	44-140	28-156	7	0-33	

Total number of LCS compounds: 33

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

RAMBOLL ENVIRON	Date Received:	06/29/18
2200 Powell Street, Suite 700	Work Order:	18-06-2222
Emeryville, CA 94608-1958	Preparation:	N/A
	Method:	EPA TO-15 SIM
Project: MCA Santa Clara / 1690008670		Page 2 of 2

Total number of ME compounds: 0
Total number of ME compounds allowed: 2
LCS ME CL validation result: Pass


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Summa Canister Vacuum Summary

Work Order: 18-06-2222

Page 1 of 1

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
B01_20180628	-29.50 in Hg	-5.00 in Hg	D573	Summa Canister 6L
B02_20180628	-29.50 in Hg	-5.90 in Hg	SIM072	Summa Canister 6L
B03_20180628	-29.50 in Hg	-6.50 in Hg	D468	Summa Canister 6L
B04_20180628	-29.50 in Hg	-5.90 in Hg	D772	Summa Canister 6L
B05_20180628	-29.50 in Hg	-5.10 in Hg	D893	Summa Canister 6L
AA01_20180628	-29.50 in Hg	-5.80 in Hg	D484	Summa Canister 6L
AA02_20180628	-29.50 in Hg	-7.00 in Hg	D807	Summa Canister 6L
AA03_20180628	-29.50 in Hg	-6.10 in Hg	D715	Summa Canister 6L



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Sample Analysis Summary Report

Work Order: 18-06-2222

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA TO-15 SIM	N/A	460	GC/MS DD	2


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

Glossary of Terms and Qualifiers

Work Order: 18-06-2222

Page 1 of 1

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



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY

18-06-2222

DATE: 6/28/18
PAGE: 1 OF 1

CLIENT PROJECT NAME / NO.:

MCA SANTA CLARA

P.O. NO.:

1090008070

PROJECT CONTACT:

DAN CLARK

LAB CONTACT OR QUOTE NO.:

905284

PROJECT ADDRESS:

3080/3100 ALFRED ST

SAMPLER(S) (PRINT)

EF

CITY: STATE: ZIP:

SANTA CLARA CA

REQUESTED ANALYSES

3 Boxes

SPECIAL INSTRUCTIONS:

WIP IT UP

LABORATORY CLIENT: **BAMBOLL**

ADDRESS: **2200 POWELL ST SUITE 700**

CITY: **EMERYVILLE** STATE: **CA** ZIP: **94608**

TEL: **510-470-2583** EMAIL: **EF@FINESTONE@EMAIL.COM**

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

UNITS: **ug/m³**

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX		SAMPLING EQUIPMENT			START SAMPLING INFORMATION			STOP SAMPLING INFORMATION			REQUESTED ANALYSES
			Indoor (I) Soil Vap. (SV) Ambient (A)	Media ID	Canister Size 6L or 1L	Flow Controller ID	Date	Time (24 hr clock)	Canister Pressure (In Hg)	Date	Time (24 hr clock)	Canister Pressure (In Hg)		
1	B01-20180628	B	I	D573	0L	FC470	6/28/18	823	-32	6/28/18	1606	-7		
2	B02-20180628	B	I	S1072		FC412		828	-30		1608	-7		
3	B03-20180628	B	I	D168		FC380		828	-31		1609	-8		
4	B04-20180628	B	I	D778		FC434		835	-33		1611	-5.5		
5	B05-20180628	B	I	D823		FC441		833	-33		1613	-8		
6	AA01-20180628	AA	A	D484		FC385		835	-32		1616	-7		
7	AA02-20180628	AA	A	D807		FC460		837	-32		1617	-6		
8	AA03-20180628	AA	A	D715		FC255		838	-30		1619	-7		

Relinquished by: (Signature) *[Signature]* Date: 6/28/18 Time: 17:07

Relinquished by: (Signature) *[Signature]* Date: 6/29/18 Time: 10:00

Relinquished by: (Signature) *[Signature]* Date: Date: Time:

Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:

Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:

Received by: (Signature/Affiliation) *[Signature]* Date: Date: Time:

2222

ORIGIN ID: ZSMA (510) 420-2583
RAMBOLL
2200 POWELL ST STE 700
EMERYVILLE, CA 94608
UNITED STATES US

ORIGIN ID: ZSMA (510) 420-2583
RAMBOLL
2200 POWELL ST STE 700
EMERYVILLE, CA 94608
UNITED STATES US

SHIP DATE: 28JUN18
ACTWT: 28.70 LB
CAD: 6997766/SSFO1904
DIMS: 19x19x17 IN
BILL THIRD PARTY

Part # 158297-4357 HMBR EXP 04/19

TO EUROFINS CALSCIENCE INC
SAMPLE RECEIVING
7440 LINCOLN WAY

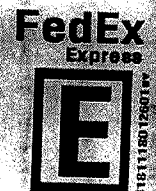
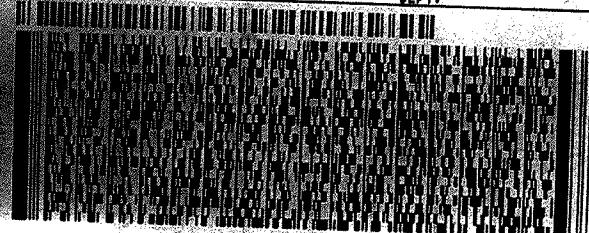
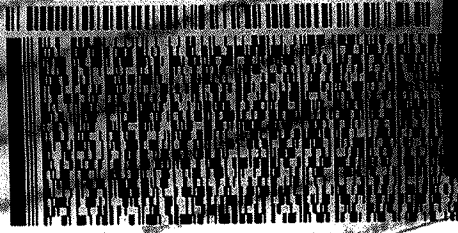
TO EUROFINS CALSCIENCE INC
SAMPLE RECEIVING
7440 LINCOLN WAY

GARDEN GROVE CA 92841

GARDEN GROVE CA 92841

(000) 000-0000 REF: INU: PG1 DEPT:

(000) 000-0000 REF: INU: PG1 DEPT:



TRK# 7816 3743 8755
0201

FF PR TRK# 7816 3744 5919
0201

FRI - 29 JUN 10:30A
PRIORITY OVERNIGHT

92 A

02 APVA

92841
CA-US SNA

ORIGIN ID: ZSMA (510) 420-2583
RAMBOLL
2200 POWELL ST STE 700
EMERYVILLE, CA 94608
UNITED STATES US

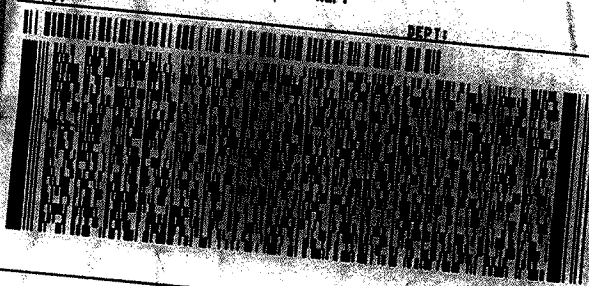
SHIP DATE: 28JUN18
ACTWT: 34.90 LB
CAD: 6997766/SSFO1904
DIMS: 19x19x17 IN
BILL THIRD PARTY

Part # 158297-4357 HMBR EXP 04/19

TO EUROFINS CALSCIENCE INC
SAMPLE RECEIVING
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(000) 000-0000 REF: INU: PG1 DEPT:



TRK# 7816 3745 1616
0201

FRI - 29 JUN 10:30A
PRIORITY OVERNIGHT

92 APVA

92841
CA-US SNA

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: Ramboll

DATE: 06/29/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): _____ °C (w/ CF): _____ °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: JRG

CUSTODY SEAL:

Cooler Present and Intact Present but Not Intact ^{BOX} Not Present N/A Checked by: JRG

Sample(s) Present and Intact Present but Not Intact Not Present N/A Checked by: 300

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

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: VOA VOA_h VOA_{na2} 100PJ 100PJ_{na2} 125AGB 125AGB_h 125AGB_p 125PB 125PB_zna (pH__9)

250AGB 250CGB 250CGBs (pH__2) 250PB 250PB_n (pH__2) 500AGB 500AGJ 500AGJ_s (pH__2) 500PB

1AGB 1AGB_{na2} 1AGBs (pH__2) 1AGBs (O&G) 1PB 1PB_{na} (pH__12) _____ _____ _____

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® (____) TerraCores® (____) _____ _____ _____

Air: Tedlar™ Canister Sorbent Tube PUF _____ **Other Matrix** (____): _____ _____ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO₃, **na** = NaOH, **na₂** = Na₂S₂O₃, **p** = H₃PO₄, Labeled/Checked by: 300

s = H₂SO₄, **u** = ultra-pure, **x** = Na₂SO₃+NaHSO₄.H₂O, **z**na = Zn (CH₃CO₂)₂ + NaOH Reviewed by: JRG