WEINGARTEN REALTY

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Mr. Gabe Stivala, P.G Cardno ATC 701 University Drive Suite 701 Sacramento, CA 95825

RECEIVED

By Alameda County Environmental Health 12:13 pm, Aug 19, 201

Subject: External Soil and Soil Vapor Assessment Report

580 Market Place Shopping Center Alameda County LOP No. RO 3097

Dear Mr. Stivala:

I have reviewed and approved the subject report. Please submit it to the regulatory agencies listed in the distribution section of the report. Should any of the agencies require it, I am prepared to declare, under penalty of perjury, that to the best of my knowledge, the information contained in the report is true and correct.

Sincerely,

Charles Gurney

Weingarten Realty Investors

2600 Citadel Plaza Drive, Suite 300

Charles Gurner

Houston, Texas 77008

Date: 8 14 15



August 14, 2015 Cardno ATC 286303.R03

Ms. Karel Detterman
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
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SUBJECT External Soil and Soil Vapor Assessment Report

Dry Clean 580 3735 East Castro Valley Boulevard Alameda County LOP No. RO 3097

Ms. Detterman:

On behalf of Weingarten Realty Investors (Weingarten), Cardno ATC installed and sampled soil vapor sampling wells SV-16 through SV-24 in the exterior parking lot southeast of the retail units adjacent to the site. The work was conducted in accordance with Cardno ATC's *Exterior Soil and Soil Vapor Assessment Work Plan* (Scope of Work), dated December 19, 2014 (Cardno ATC, 2014), and *Response to Comments and Work Plan Addendum* (Addendum), dated April 22, 2015 (Cardno ATC, 2015a). The Alameda County Environmental Health (ACEH) approved the Scope of Work and Addendum, upon contingent submittals, in electronic correspondence dated May 14, 2015 (Appendix A). The ACEH granted an extension for this work in electronic correspondence dated July 8, 2015 (Appendix A).

SITE DESCRIPTION

The site is located in the 580 Market Place Shopping Center in Castro Valley, California (Plate 1). A Generalized Site Plan illustrating the layout of pertinent areas of the shopping center is included as Plate 2. The assessment targets include the Dry Clean 580 facility, the adjacent Verizon and AT&T retail outlets, and the parking lot southeast of the buildings.

SOIL VAPOR SAMPLING WELL INSTALLATIONS

The outdoor soil vapor assessment was conducted in accordance with the Scope of Work and Addendum, the protocols included in Appendix B, a site-specific safety plan, and applicable regulatory guidelines under the advisement of a professional geologist. Well locations are shown on Plate 2.

Pre-Field Activities

Prior to site mobilization for vapor assessment activities, Cardno ATC visited the site to check for subsurface obstructions and to mark the proposed locations. Underground Service Alert (USA), ACEH, and the respective tenants were notified at least 48 hours prior to the onset of field activities. Well installation permits from the ACEH are included in Appendix C.

Well Installation and Sampling

From June 1 through 6, 2015, Cardno ATC observed Gregg Drilling Company (Gregg) advance soil borings for wells SV-16 through SV-24 to a maximum depth of 22 feet bgs using hand tools. The wells were constructed as dual-completion 0.25-inch Teflon tubing wells with a soil vapor probe diffuser at 5 feet bgs ("A wells") and between 15 and 22 feet bgs ("B wells"). Select soil samples were preserved for laboratory analysis. In addition, Cardno ATC collected two soil samples from 6 to 8 feet bgs using a Shelby tube for physical soil properties analysis from wells SV-23 and SV-24. Well construction details are presented in Table 1 and on the boring logs included in Appendix D. Well locations are shown on Plate 2.

On June 22, 2015, a purge volume test was conducted on soil vapor sampling well SV-24 at both the shallow ("A") and deep ("B") intervals. Based on the results of the purge volume test, a three volume purge was selected for both the shallow and deep sample collection event. From June 25 to 26, 2015, Cardno ATC purged and sampled soil vapor wells SV-16 through SV-24. A duplicate sample was collected from well SV-23A.

To assess potential leaks in the sampling equipment, a purging and sampling manifold was connected to each well prior to purging and sampling. Cardno ATC then applied a vacuum of approximately 20 inches of mercury (in Hg) to the sample collection system and turned off the vacuum pump. The sampling manifold and tubing held the applied vacuum for five minutes at each well.

To further assess the potential for leaks in the vapor well system, a shroud was placed over the well and SummaTM canister. Helium was introduced into the shroud and maintained at a constant concentration (approximately 10%), as measured on a helium meter. Real-time helium screening was performed in the field by drawing soil vapor from the well into a Tedlar bag via a vacuum chamber and screening the contents of the

Tedlar bag with a helium meter. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. Leaked air that comprises less than 5% of the sample is considered insignificant (DTSC, 2012). Helium was detected in select Tedlar bag samples, indicating there was a slight leak in the annular seal or sampling tubing and did not exceed DTSC guidance. Field data sheets are included in Appendix E.

Laboratory Analyses - Soil Samples

Cardno ATC collected and submitted soil samples for analysis to Calscience Environmental Laboratories, Inc. (Calscience), of Garden Grove, California, a California state-certified laboratory, under COC protocol. The samples were analyzed for:

- TPHg by EPA Method 8015B.
- BTEX, MTBE, fuel oxygenates (DIPE, ETBE, TAME, and TBA), lead scavengers (EDB and 1,2-DCA), and additional VOCs by EPA Method 8260B.
- Soil grain size analysis by American Society for Testing and Materials (ASTM) Method D422.
- Physical properties by American Petroleum Institute (API) RP40, ASTM D425M, Walkley-Black, ASTM D5084, ASTM D4318, ASTM D2487, and EPA Method 9100.

Laboratory analytical reports and COC records are provided in Appendix F. Soil sample analytical results are presented in Table 2. Physical properties analyses of soil are presented in Table 3.

<u>Laboratory Analyses – Soil Vapor Samples</u>

Cardno ATC collected and submitted soil vapor samples for analysis to Calscience under COC protocol. The samples were analyzed for:

- TPHg by GC/MS C6-C12 as Gasoline.
- BTEX, MTBE, fuel oxygenates (DIPE, ETBE, TAME, and TBA), lead scavengers (EDB and 1,2-DCA), and additional VOCs by EPA Method TO-15.
- Naphthalene by EPA TO-17(M)
- Helium by ASTM-D1946(M).
- Oxygen, carbon dioxide, methane by SCAQMD 25.1M

Laboratory analytical reports and COC records are provided in Appendix F. Select soil vapor analytical results are presented in Tables 4A and 4B.

Waste Management

Soil generated during drilling activities was stored at the site in DOT-approved 55-gallon drums pending waste disposal. Eight 55-gallon drums of soil are awaiting removal from the site. Waste documentation will be reported separately.

RESULTS AND DATA EVALUATION

Cumulative soil and soil vapor analytical results are summarized in Table 2 and Tables 4A and 4B, respectively. Select soil vapor analytical results are illustrated on Plate 3. Select soil vapor analytical results are illustrated on Plate 4. Shallow and deep contour maps for soil vapor and soil are illustrated on Plates 5 through 8.

Petroleum Hydrocarbons in Soil

Petroleum hydrocarbon concentrations were reported in select soil samples collected from borings SV-20 and SV-23. Residual TPHg (1.0 mg/kg) was only reported in soil samples collected from boring SV-20 at 25 feet bgs. Residual cis-1,2-dichloroethene (0.083 mg/kg) was only reported in soil samples collected from SV-23 at 4.5 feet bgs. Petroleum hydrocarbon concentrations in the soil samples did not exceed applicable ESLs (CRWQCB-SFB, 2013).

Petroleum Hydrocarbons in Soil Vapor

Maximum vapor-phase concentrations of TPHg (89,000 μ g/m³) and benzene (270 μ g/m³) in soil vapor were reported in the samples collected from wells SV-23A and SV-19A, respectively.

Select vapor-phase concentrations exceeded ESLs (CRWQCB-SFB, 2013):

- **PCE:** 20,000 μg/m³ (SV-23A), 14,000 μg/m³ (SV-23A Dup), 17,000 μg/m³ (SV-23B); 3,000 μg/m³ (SV-24A).
- TCE: 40,000 μg/m³ (SV-23A) and 33,000 (SV-23A Dup).
- Cis-1,2-dichloroethene: 53,000 μg/m³ (SV-23A) and 47,000 (SV-23A Dup).
- Vinyl chloride: 1,700 μg/m³ (SV-23A) and 1,300 (SV-23A Dup).
- Naphthalene (EPA TO-17): 410 μg/m³ (SV-22A).

Naphthalene by EPA Method TO-17 was reported above ESLs in well SV-22A; however, naphthalene by EPA Method TO-15 in the same well collected on the same day was below reporting limits (<37 µg/m³).

CONCLUSIONS AND RECOMMENDATIONS

Based on site conditions described in this report, Cardno ATC concludes that:

- With the exception of TPHg (1.0 mg/kg) in one sample (S-25-SV20), residual petroleum hydrocarbon concentrations were not present in soil samples collected from the parking lot southeast of the site.
- Residual VOC concentrations were not present in soil samples collected from the parking lot southeast of the site.
- Vapor-phase VOC concentrations are adequately delineated in both shallow and deep soil vapor in the parking lot southeast of the site.
- Maximum VOC concentrations appear to be spatially associated with the sewer lateral southeast of the building and decrease with distance from the building.
- With the exception of naphthalene, vapor-phase petroleum hydrocarbons do not exceed ESLs.
- No point source of a petroleum hydrocarbon release was identified in this assessment.

In additional to the soil and soil vapor assessment, Cardno ATC intended that data collected would be used to further evaluate the effect of petroleum hydrocarbons on the natural attenuation of the chlorinated solvents in soil and soil vapor, and the ability of vinyl chloride to continue on the path of reductive chlorination. In Cardno ATC's opinion, the limited number of data points and detections of PCE breakdown products at the site, including vinyl chloride, does not allow meaningful evaluation of this process. Comparison of empirical data over time is the best and only accurate means of evaluating this process. Additionally, Cardno ATC is not aware of an industry-accepted model for evaluating the effects of non-chlorinated hydrocarbons on the degradation of chlorinated hydrocarbons in soil and soil vapor.

Cardno ATC has the following observations relative to the effects of non-chlorinated hydrocarbons on chlorinated hydrocarbons at the site:

- Aerobic conditions exist in soil vapor underlying the site.
- Reductive dechlorination occurs under anaerobic conditions.
- Non-chlorinated aliphatic and aromatic compounds, including fuel hydrocarbons, provide carbon to the degradation mechanism.
- Degradation is likely occurring in soil moisture rather than soil vapor; degradation rates are slower than those occurring in dissolved-phase plumes.
- Degradation of chlorinated hydrocarbons requires carbon; the presence of fuel hydrocarbons is advantageous for degradation.
- It is unlikely that the vapor-phase chlorinated hydrocarbons, including vinyl chloride, will degrade by reductive dechlorination; however, degradation by other (aerobic) mechanisms is likely.

August 14, 2015 Cardno ATC 286303.R03 Dry Clean 580, Castro Valley, California

Based on the results of this investigation, Cardno ATC concludes that the current soil vapor and soil concentrations are adequately assessed in the parking lot southeast of the dry cleaner and adjacent units and that reported subsurface hydrocarbons do not likely pose a risk to human health or the environment. Weingarten and Cardno request a meeting with the ACEH to discuss the path forward for the site following ACEH's review of this report and the *Sub-Slab Vapor and Indoor Air Assessment Report*, dated May 4, 2015 (Cardno ATC, 2015b).

LIMITATIONS

For documents cited that were not generated by Cardno ATC, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno ATC does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Mr. Gabe Stivala, Cardno ATC's Senior Project Manager for this site, at (916) 923-1097 or at gabe.stivala@cardno.com or with any questions regarding this report.

Sincerely,

MAGE

Nadya M. Vicente Senior Staff Geologist for Cardno 707 766 2000

Email: nadya.vicente@cardno.com

Gabe Stivala Senior Project Manager for Cardno ATC 916 923 1097

Email: gabe.stivala@cardno.com

OF CALIFOR

August 14, 2015 Cardno ATC 286303.R03 Dry Clean 580, Castro Valley, California

Enclosures:

References

Acronym List

Plate 1	Site Vicinity Map
Plate 2	Generalized Site Plan
Plate 3	Select Soil Vapor Analytical Results
Plate 4	Select Soil Analytical Results
Plate 5	Soil Vapor Concentrations – Shallow
Plate 6	Soil Vapor Concentrations – Deep
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Plate 8	Soil Concentrations – Deep (Greater than 15 Feet)
Table 1	Well Construction Details
Table 2	Select Soil Analytical Results, Detected Concentrations
Table 3A	Soil Properties
Table 3B	Additional Soil Properties
Table 4A	Select Soil Vapor Analytical Results, Detected Concentrations
Table 4B	Additional Select Soil Vapor Analytical Results, Detected Concentrations
Appendix A	Correspondence
Appendix B	Field Protocols
Appendix C	Permits
Appendix D	Boring Logs
Appendix E	Field Data Sheets
Appendix F	Laboratory Analytical Reports

cc: Mr. Chuck Gurney, Weingarten Realty Investors

Mr. Thomas J. Treacy, John Hancock Life Insurance Company USA

REFERENCES

California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFB). December 2013. Screening for Environmental Concerns at Sites with Indoor Air and Soil Gas.

Cardno ATC. December 19, 2014. Exterior Additional Soil and Soil Vapor Assessment Work Plan, 580 Market Place Shopping Center, Castro Valley, California, Alameda County LPO Order No. 3097.

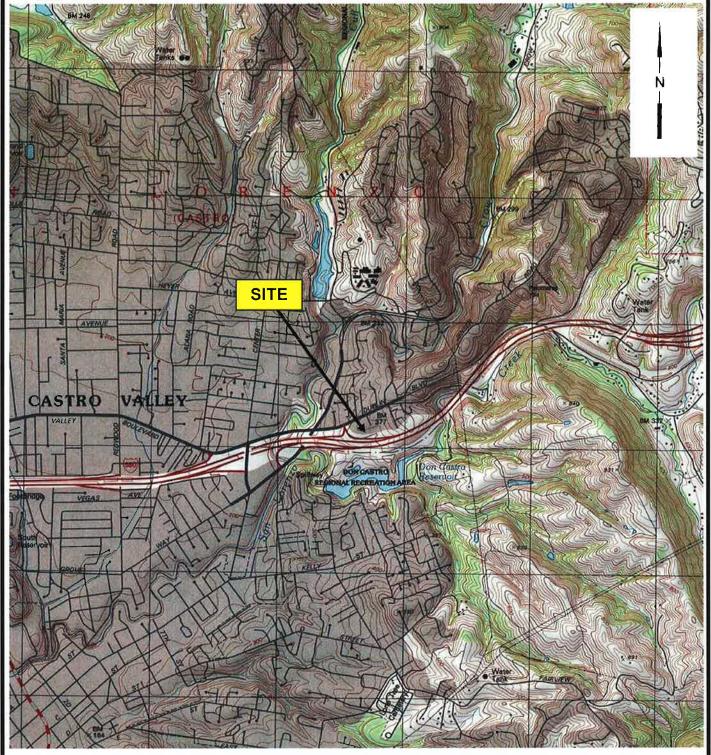
Cardno ATC. April 22, 2015a. Response to Comments and Work Plan Addendum, 580 Market Place Shopping Center, Castro Valley, California, Alameda County LPO Order No. 3097.

Cardno ATC. May 4, 2015b. Sub-Slab Vapor and Indoor Air Assessment Report, 580 Market Place Shopping Center, Castro Valley, California, Alameda County LPO Order No. 3097.

Department of Toxic Substances Control of the California Environmental Protection Agency, Department of Toxic Substances Control, California Regional Water Quality Control Board, Los Angeles Region and San Francisco Region; jointly issued (DTSC). April 2012. *Advisory – Active Soil Gas Investigations*.

ACRONYM LIST

μg/L μs 1,2-DCA acfm AS bgs BTEX CEQA cfm COC CPT DIPE DO DOT DPE DTW EDB EPA ESL	Micrograms per liter Microsiemens 1,2-dichloroethane Actual cubic feet per minute Air sparge Below ground surface Benzene, toluene, ethylbenzene, and total xylenes California Environmental Quality Act Cubic feet per minute Chain of Custody Cone Penetration (Penetrometer) Test Di-isopropyl ether Dissolved oxygen Department of Transportation Dual-phase extraction Depth to water 1,2-dibromoethane Environmental Protection Agency Environmental screening level	NEPA NGVD NPDES O&M ORP OSHA OVA P&ID PAH PCB PCE PID PLC POTW ppmv PQL psi PVC QA/QC	National Environmental Policy Act National Geodetic Vertical Datum National Pollutant Discharge Elimination System Operations and Maintenance Oxidation-reduction potential Occupational Safety and Health Administration Organic vapor analyzer Process & Instrumentation Diagram Polycyclic aromatic hydrocarbon Polychlorinated biphenyl Tetrachloroethene or perchloroethylene Photo-ionization detector Programmable logic control Publicly owned treatment works Parts per million by volume Practical quantitation limit Pounds per square inch Polyvinyl chloride Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA RL	Resource Conservation and Recovery Act
fpm GAC	Feet per minute Granular activated carbon	scfm	Reporting limit Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpa	Gallons per day Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid	•	
=			



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP CASTRO VALLEY QUADRANGLE, CALIFORNIA, DATED 1968, PHOTOREVISED 1987,

FIGURE 1

SITE VICINITY MAP

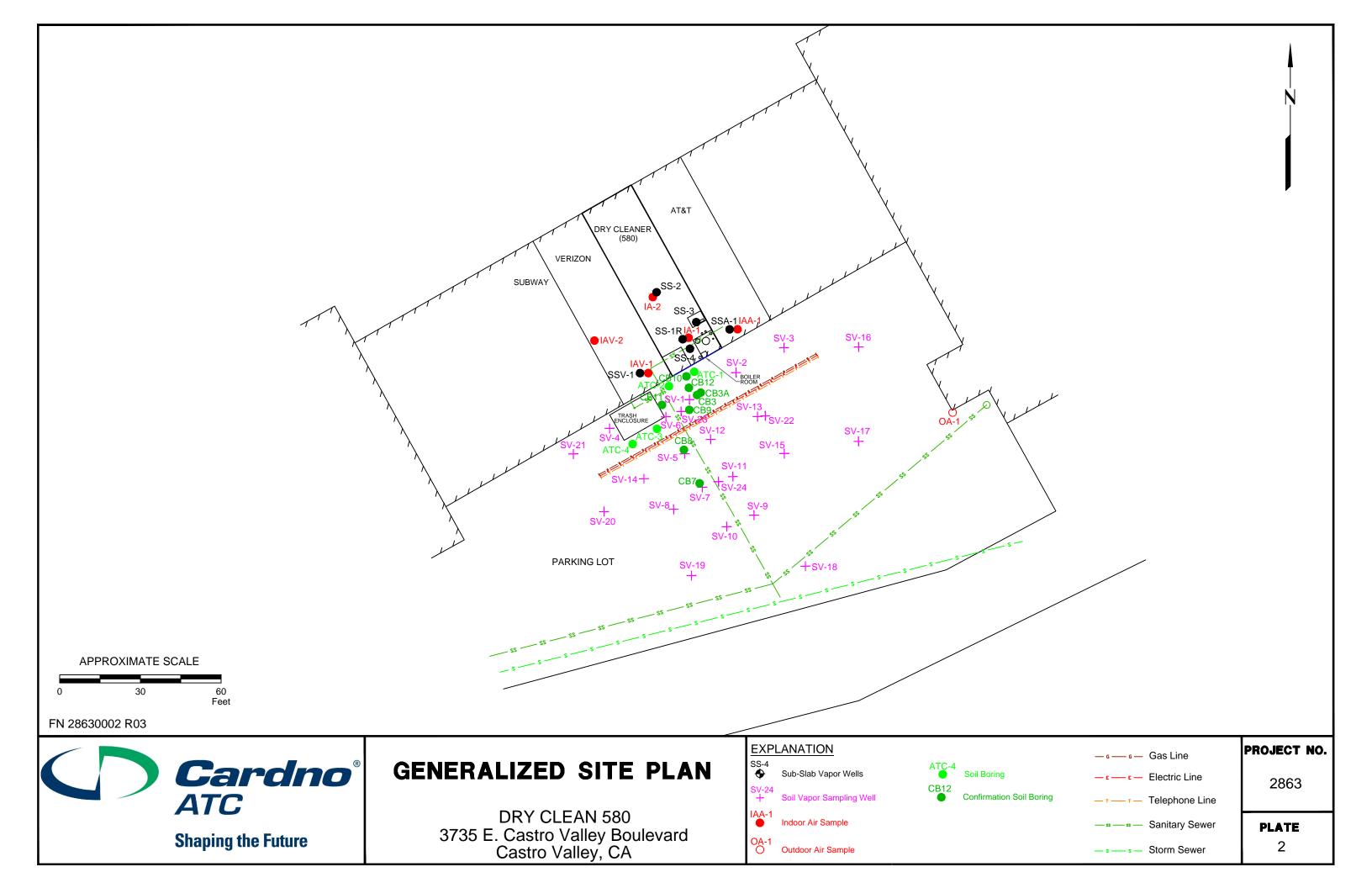
580 MARKET PLACE SHOPPING CENTER 3735-4065 EAST CASTRO VALLEY BOULEVARD CASTRO VALLEY, CALIFORNIA 94552

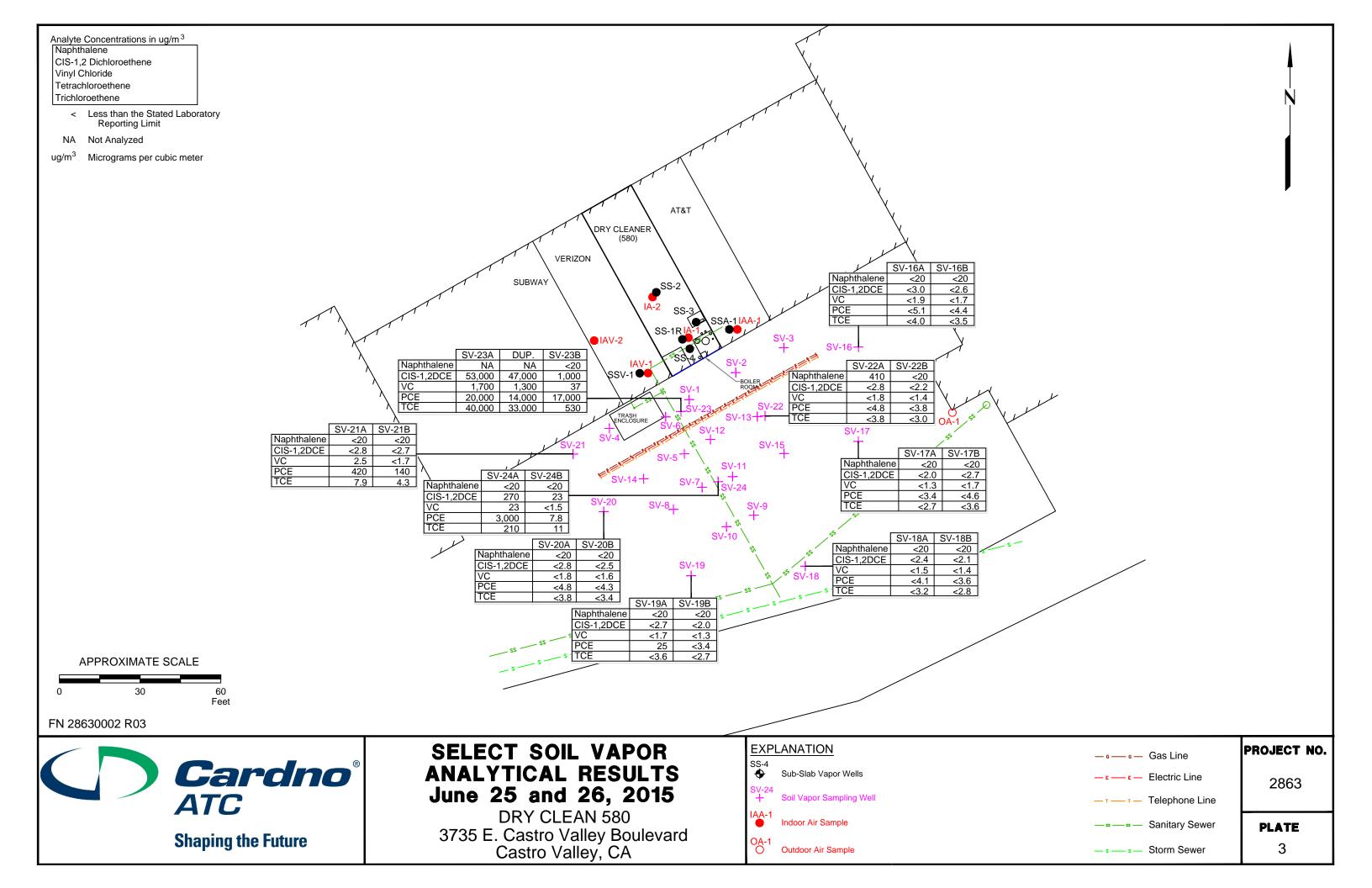


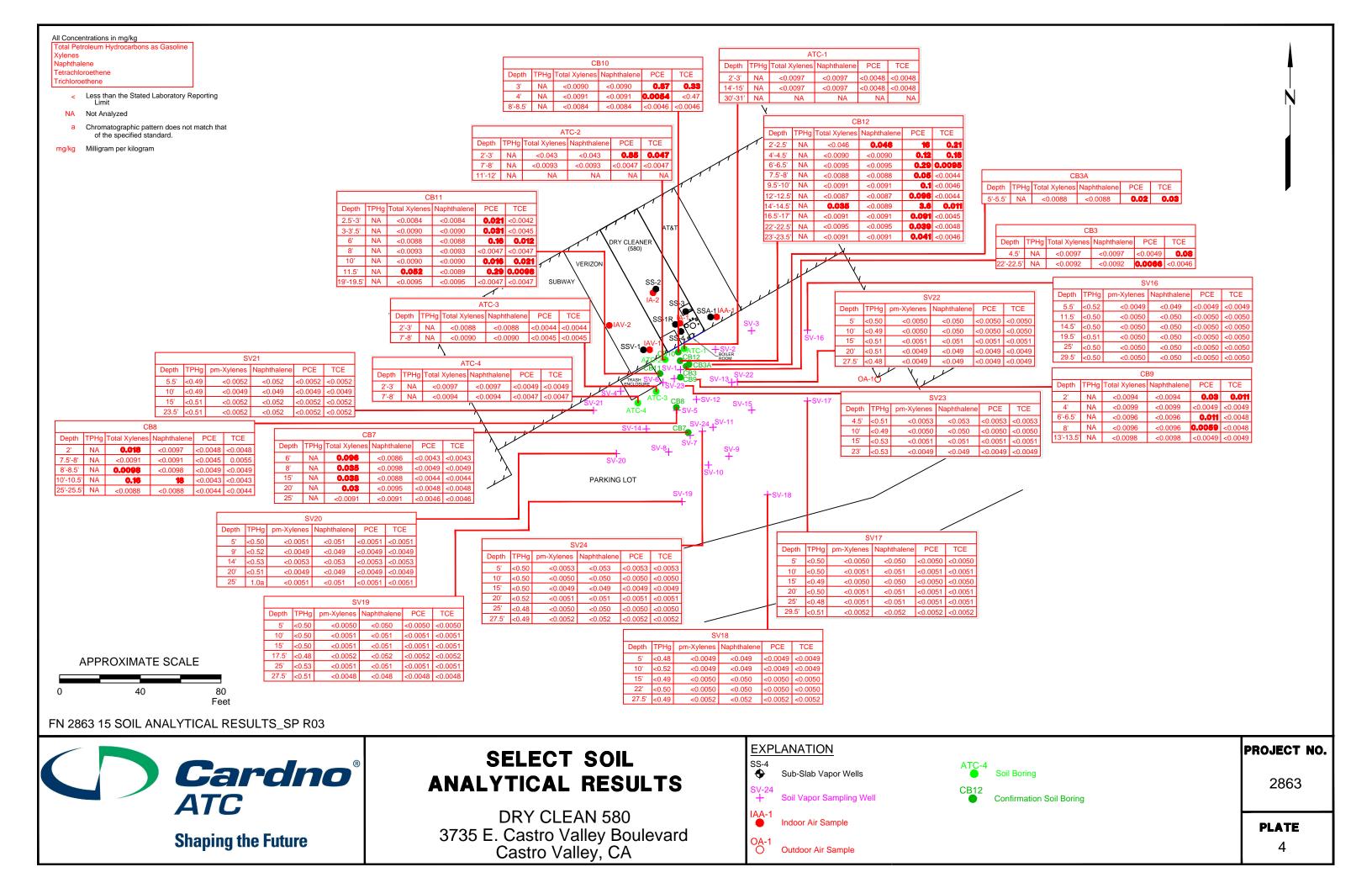
Cardino 1117 Lone Palm Ave, Ste 201B ATC Modesto, CA 95351 (209) 579-2221

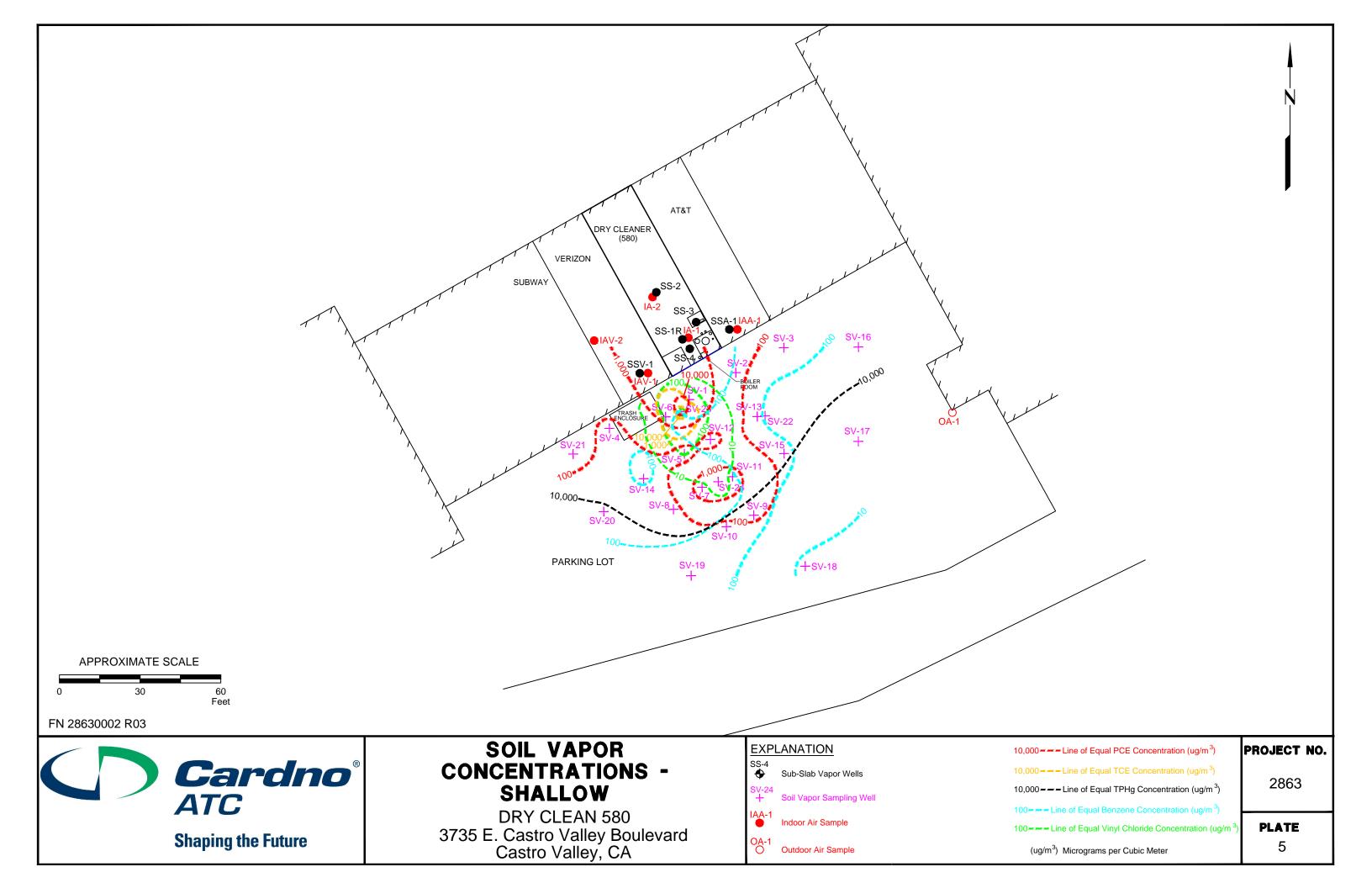
Shaping the Future

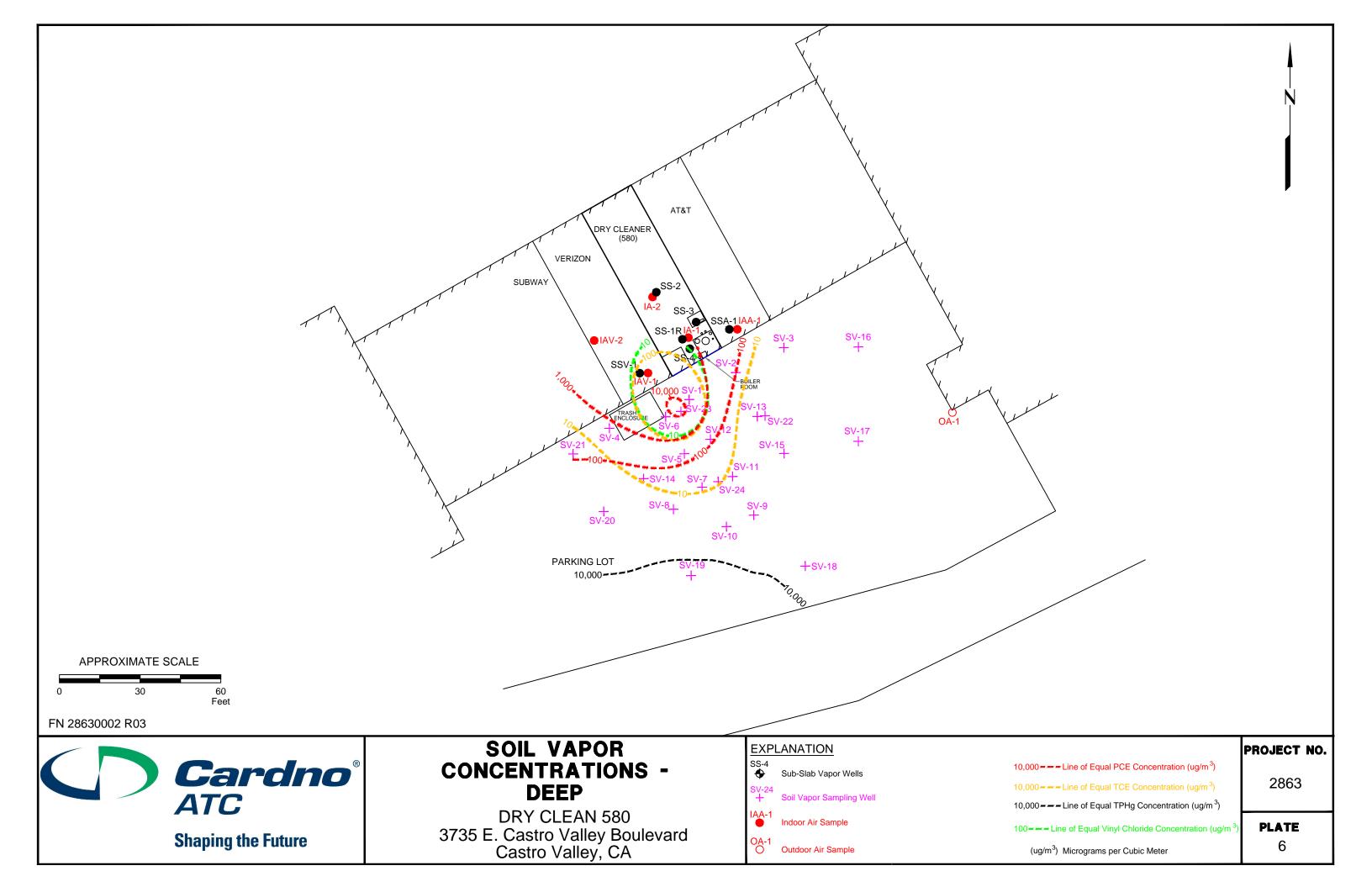
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DRAWN BY: JK	DATE: 10/12	FILE: LOCATION

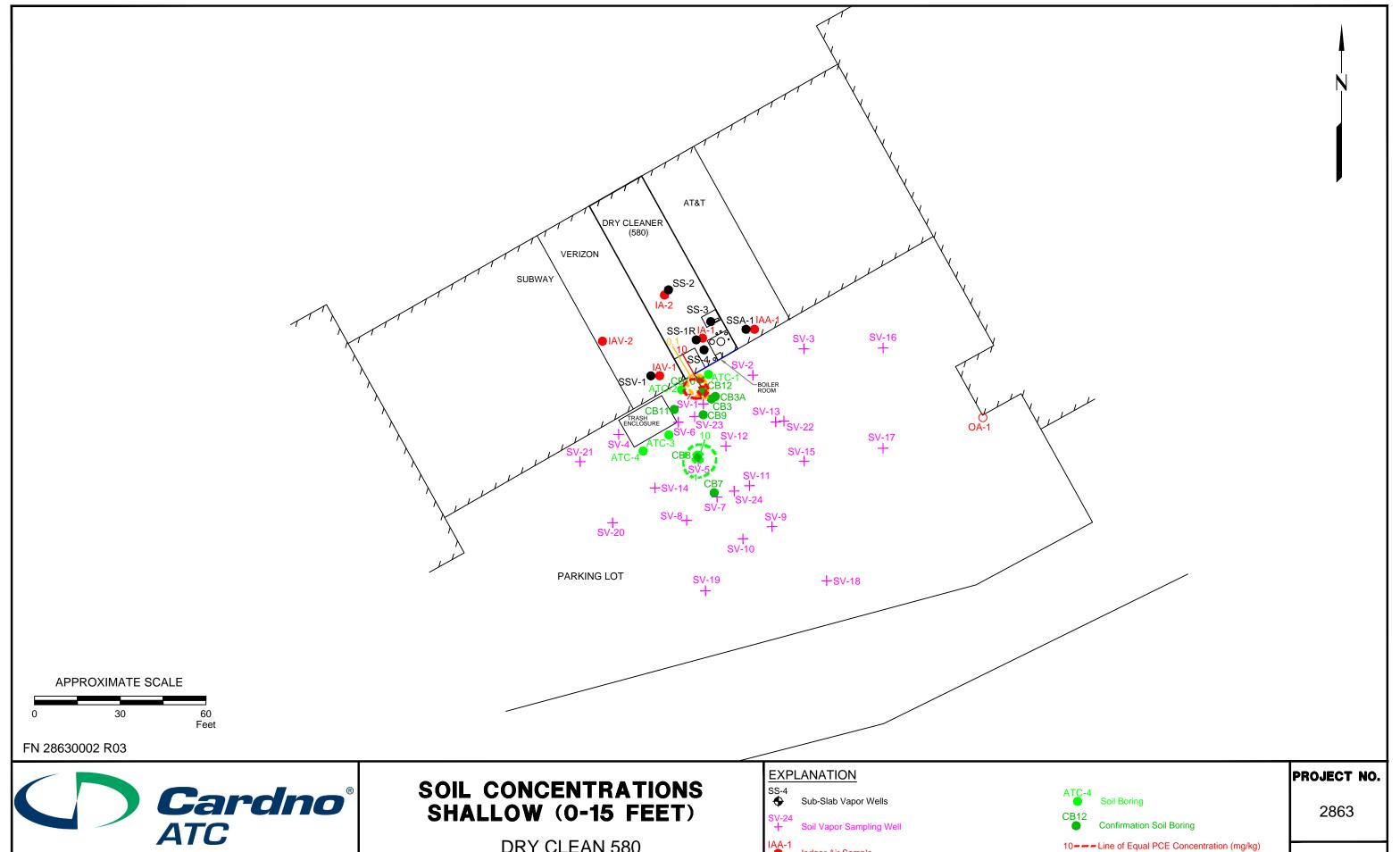












Shaping the Future

DRY CLEAN 580 3735 E. Castro Valley Boulevard Castro Valley, CA

Indoor Air Sample

Outdoor Air Sample

0.1===Line of Equal TCE Concentration (mg/kg) 10--- Line of Equal Naphthalene Concentration (mg/kg) **PLATE**

7

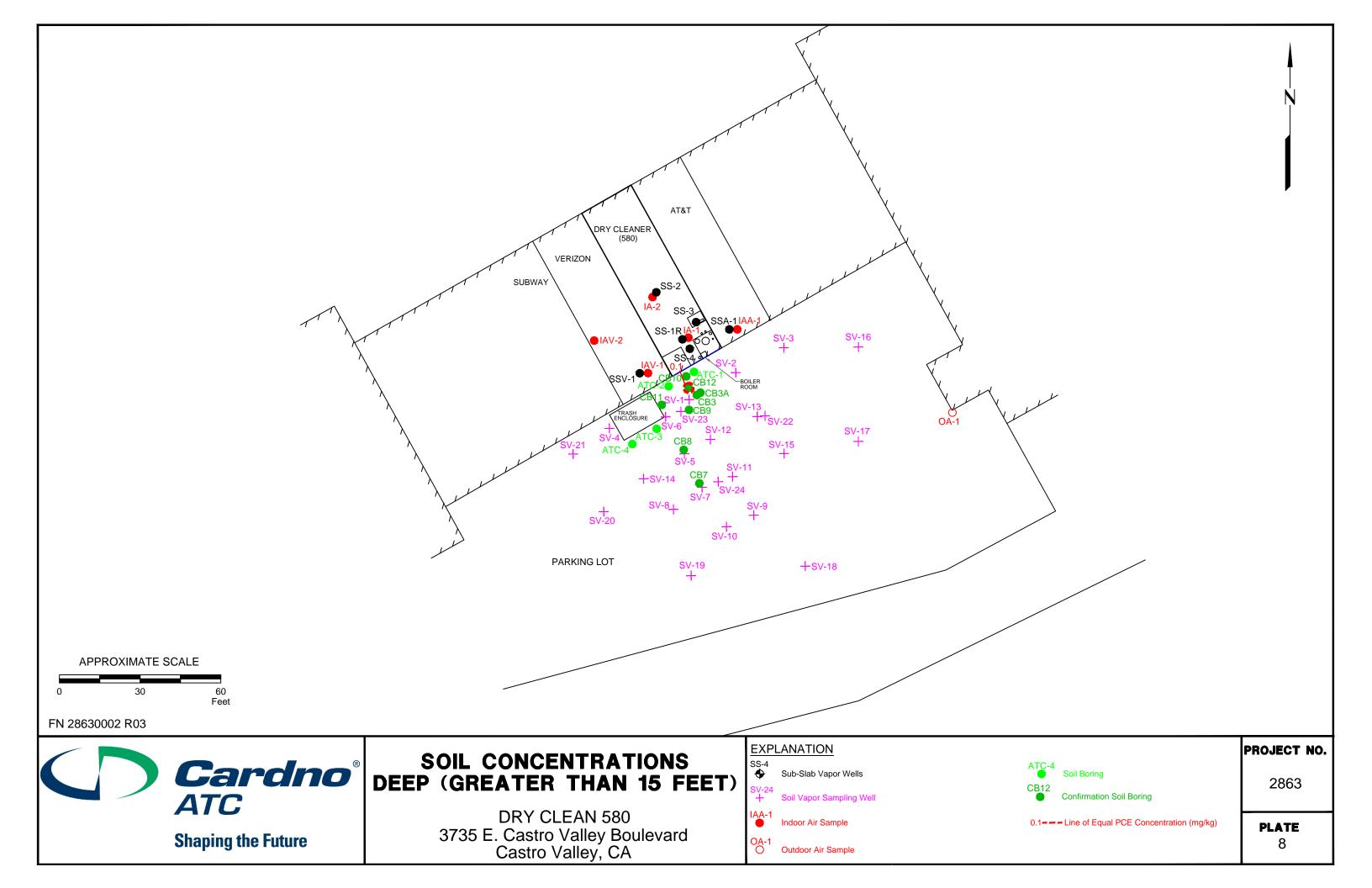


TABLE 1 WELL CONSTRUCTION DETAILS

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 1 of 1)

	Well	Boring	Well	Borehole	Casing	Screened	Slot	Filter Pack	Well	Filter
Well	Installation	Depth	Depth	Diameter	Diameter	Interval	Size	Interval	Casing	Pack
ID	Date	(feet)	(feet)	(inches)	(inches)	(feet)	(inches)	(feet)	Material	Material
SV-16A	06/03/15	30	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-16B	06/03/15	30	20	4	0.25	19.25-19.75	SS Mesh	19-20	Teflon Tubing	#3 Sand
SV-17A	06/03/15	30	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-17B	06/03/15	30	20	4	0.25	19.25-19.75	SS Mesh	19-20	Teflon Tubing	#3 Sand
SV-18A	06/04/15	28	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-18B	06/04/15	28	22	4	0.25	21.25-21.75	SS Mesh	21-22	Teflon Tubing	#3 Sand
SV-19A	06/04/15	28	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-19B	06/04/15	28	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand
SV-20A	06/04/15	27	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-20B	06/04/15	27	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand
SV-21A	06/05/15	24	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-21B	06/05/15	24	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand
SV-22A	06/04/15	28	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-22B	06/04/15	28	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand
SV-23A	06/05/15	25	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-23B	06/05/15	25	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand
SV-24A	06/05/15	24	5	4	0.25	4.25-4.75	SS Mesh	4-5	Teflon Tubing	#3 Sand
SV-24B	06/05/15	24	15	4	0.25	14.25-14.75	SS Mesh	14-15	Teflon Tubing	#3 Sand

Notes:

SS = Stainless steel.

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 1 of 4)

			EPA 8015B						EPA 8260	В				
											c-1,2-			
				Ethyl-			Total	Naph-	Tetrachloro-	Trichloro-	dichloro-	t-1,2-dichloro-		Additional
Sampling	Sampling	Sampling	TPHg	benzene	o-Xylenes	pm-Xylenes	•	thalene	ethene	ethene	ethene	ethene	Acetone	VOCs
ID	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Environmental				trial Soil wh				king Water	•	ber 2013)				
Shallow (≤10 fee			500	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
Deep (>10 feet l	bgs), Table C-	-2	770	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
Limited Subsu	rface Assessi	ment												
ATC-1 (2')	2-3	03/01/12		<0.0048			< 0.0097	< 0.0097	< 0.0048	< 0.0048	< 0.0048	<0.0048	<0.048	ND
ATC-1 (15')	14-15	03/01/12		<0.0048			< 0.0097	< 0.0097	<0.0048	< 0.0048	< 0.0048	<0.0048	0.062	ND
ATC-1 (31')	30-31	03/01/12												
ATC-2 (2')	2-3	03/01/12		< 0.022			< 0.043	< 0.043	0.85	0.047	< 0.022	< 0.022	< 0.22	ND
ATC-2 (7.5')	7-8	03/01/12		< 0.0047			<0.0093	< 0.0093	< 0.0047	< 0.0047	< 0.0047	< 0.0047	0.071	ND
ATC-2 (12')	11-12	03/01/12												
ATC-3 (2')	2-3	03/01/12		<0.0044			<0.0088	<0.0088	<0.0044	<0.0044	<0.0044	<0.0044	<0.044	ND
ATC-3 (8')	7-8	03/01/12		<0.0045			<0.0090	<0.0090	< 0.0045	<0.0045	<0.0045	< 0.0045	<0.045	ND
ATC-4 (2')	2-3	03/01/12		<0.0049			<0.0097	< 0.0097	< 0.0049	<0.0049	<0.0049	<0.0049	<0.049	ND
ATC-4 (8')	7-8	03/01/12		< 0.0047			< 0.0094	< 0.0094	< 0.0047	< 0.0047	< 0.0047	< 0.0047	0.079	ND
7.1.0 1 (0)	. 0	00/01/12		10.00			10.000	10.000	10.00	10.00	10.00	10.00	0.0.0	
Data Gap Asse	ssment													
CB3-4.5	4.5	02/06/14		< 0.0049			< 0.0097	< 0.0097	< 0.0049	0.08	0.063	0.0057	< 0.049	ND
CB3 22-22.5	22-22.5	02/06/14		<0.0046			<0.0092	<0.0092	0.0066	<0.0046	< 0.0046	<0.0046	0.12	ND
CB3A 5-5.5	5-5.5	02/07/14		<0.0044			<0.0088	<0.0088	0.02	0.03	<0.0044	<0.0044	<0.044	ND
CB7-6	6	02/05/14		0.014			0.096	<0.0086	< 0.0043	< 0.0043	<0.0043	< 0.0043	0.15	ND
CB7-8	8	02/05/14		0.0062			0.035	<0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.11	ND
CB7-15	15	02/05/14		0.0063			0.038	<0.0088	< 0.0044	< 0.0044	< 0.0044	< 0.0044	0.092	ND
CB7-20	20	02/05/14		0.0049			0.03	< 0.0095	<0.0048	< 0.0048	<0.0048	<0.0048	0.073	ND
CB7-25	25	02/05/14		<0.0046			<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	0.077	ND
CB8-2	2	02/05/14		<0.0048			0.018	<0.0097	<0.0048	<0.0048	<0.0048	<0.0048	<0.048	ND
CB8 7.5-8	7.5-8	02/05/14		<0.0045			<0.001	<0.0091	<0.0045	0.0055	<0.0048	<0.0048	0.052	ND
CB8 8-8.5	8-8.5	02/05/14		<0.0043			0.0098	<0.0091	<0.0043	< 0.0033	<0.0043	<0.0049	< 0.032	ND
CB8 10-10.5	10-10.5	02/05/14		0.025			0.0098	18	<0.0049	<0.0049	<0.0049	<0.0049	0.11	ND
CB8 25-25.5	25-25.5	02/05/14		<0.025			<0.0088	< 0.0088	<0.0043	<0.0043	<0.0043	<0.0043	0.11	ND
GB0 20-20.5	20-20.0	02/03/14		<0.0044			<0.0000	<0.0000	<0.00 44	<0.00 44	<0.0044	<0.0044	0.074	ND
CB9-2	2	02/06/14		<0.0047			<0.0094	< 0.0094	0.03	0.011	< 0.0047	<0.0047	<0.047	ND
CB9-4	4	02/06/14		<0.0049			<0.0099	<0.0099	<0.0049	<0.0049	0.007	< 0.0049	< 0.049	ND
CB9 6-6.5	6-6.5	02/06/14		<0.0048			<0.0096	<0.0096	0.011	<0.0048	<0.0048	<0.0048	<0.048	ND
CB9-8	8	02/06/14		<0.0048			<0.0096	<0.0096	0.0059	<0.0048	<0.0048	<0.0048	0.067	ND
CB9 13-13.5	13-13.5	02/06/14		< 0.0049			<0.0098	<0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.062	ND

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			EPA 8015B						EPA 8260	В				
											c-1,2-			
				Ethyl-			Total	Naph-	Tetrachloro-	Trichloro-	dichloro-	t-1,2-dichloro-		Additional
Sampling	Sampling	Sampling	TPHg	benzene	o-Xylenes	pm-Xylenes	-	thalene	ethene	ethene	ethene	ethene	Acetone	VOCs
ID	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Environmental								_		-				
Shallow (≤10 fee			500	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
Deep (>10 feet b	gs), Table C-	2	770	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
CB10-3	3	02/06/14		< 0.0045			< 0.0090	< 0.0090	0.87	0.33	0.054	< 0.0045	0.053	ND
CB10-4	4	02/06/14		< 0.0046			< 0.0091	< 0.0091	0.0054	<0.47	0.21	0.0057	0.056	ND
CB10 8-8.5	8-8.5	02/06/14		< 0.0046			<0.0091	< 0.0091	< 0.0046	< 0.0046	0.035	< 0.0046	< 0.046	ND
CB11 2.5-3	2.5-3	02/06/14		< 0.0042			<0.0084	<0.0084	0.021	< 0.0042	< 0.0042	< 0.0042	< 0.042	ND
CB11 3-3.5	3-3.5	02/06/14		< 0.0045			<0.0090	< 0.0090	0.031	< 0.0045	< 0.0045	< 0.0045	< 0.045	ND
CB11-6	6	02/06/14		< 0.0044			<0.0088	<0.0088	0.16	0.012	0.0058	< 0.0044	0.076	ND
CB11-8	8	02/06/14		< 0.0047			< 0.0093	< 0.0093	< 0.0047	< 0.0047	< 0.0047	< 0.0047	0.048	ND
CB11-10	10	02/06/14		< 0.0045			<0.0090	<0.0090	0.016	0.021	< 0.0045	< 0.0045	< 0.045	ND
CB11-11.5	11.5	02/06/14		0.0077			0.052	<0.0089	0.29	0.0098	< 0.0045	< 0.0045	0.11	ND
CB11 19-19.5	19-19.5	02/06/14		<0.0047			<0.0095	<0.0095	<0.0047	<0.0047	<0.0047	<0.0047	0.052	ND
CB12 2-2.5	2-2.5	02/07/14		<0.023			<0.046	0.046	16	0.21	<0.023	<0.023	<0.23	ND
CB12 4-4.5	4-4.5	02/07/14		< 0.0045			< 0.0090	<0.0090	0.12	0.18	0.052	0.0046	< 0.045	ND
CB12 6-6.5	6-6.5	02/07/14		<0.0048			< 0.0095	< 0.0095	0.29	0.0095	0.01	<0.0048	<0.048	ND
CB12 7.5-8	7.5-8	02/07/14		< 0.0044			<0.0088	<0.0088	0.05	< 0.0044	<0.0044	< 0.0044	< 0.049	ND
CB12 9.5-10	9.5-10	02/07/14		< 0.0046			< 0.0091	< 0.0091	0.1	< 0.0046	<0.0046	<0.0046	<0.046	ND
CB12 12-12.5	12-12.5	02/07/14		< 0.0044			<0.0087	<0.0087	0.098	< 0.0044	< 0.0044	< 0.0044	< 0.044	ND
CB12 14-14.5	14-14.5	02/07/14		0.0058			0.035	<0.0089	3.6	0.011	< 0.0044	< 0.0044	< 0.044	ND
CB12 16.5-17	16.5-17	02/07/14		< 0.0045			< 0.0091	< 0.0091	0.091	< 0.0045	<0.0045	< 0.0045	0.11	ND
CB12 22-22.5	22-22.5	02/07/14		<0.0048			< 0.0095	< 0.0095	0.039	<0.0048	< 0.0048	<0.0048	0.12	ND
CB12 23-23.5	23-23.5	02/07/14		<0.0046			<0.0091	<0.0091	0.041	<0.0046	<0.0046	<0.0046	< 0.046	ND
Soil Vapor Well	Inctallation													
S-5.5-SV16	5.5	06/03/15	<0.52	<0.0049	<0.0049	< 0.0049		<0.049	< 0.0049	<0.0049	<0.0049	<0.0049	<0.12	ND
S-11.5-SV16	11.5	06/03/15	< 0.50	<0.0049	<0.0049	<0.0049		<0.049	<0.0049	<0.0049	<0.0049	<0.0049	<0.12	ND
S-14.5-SV16	14.5	06/03/15	<0.50	<0.0050	<0.0050	<0.0050		<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.13	ND
S-19.5-SV16	19.5	06/03/15	<0.50	<0.0050	<0.0050	<0.0050		<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.13	ND
S-25-SV16	25	06/03/15	<0.50	<0.0050	<0.0050	<0.0050		<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.12	ND
S-29.5-SV16	29.5	06/03/15	<0.50	<0.0050	<0.0050	<0.0050		<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.12	ND
3-23.3-3 v 10	23.3	00/03/13	\0.50	~0.0030	<u> </u>	\0.0030		<0.030	\0.0030	~0.0000	<0.0000	\0.0030	\0.12	ND
S-5-SV17	5	06/03/15	<0.50	<0.0050	< 0.0050	< 0.0050		< 0.050	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.12	ND
S-10-SV17	10	06/03/15	< 0.50	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-15-SV17	15	06/03/15	< 0.49	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.12	ND
S-20-SV17	20	06/03/15	< 0.50	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-25-SV17	25	06/04/15	<0.48	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND

Dry Clean 580
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Castro Valley, California
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			EPA 8015B						EPA 8260	В				
											c-1,2-		·	
				Ethyl-			Total	Naph-	Tetrachloro-	Trichloro-	dichloro-	t-1,2-dichloro-		Additional
Sampling	Sampling	Sampling	TPHg	benzene	o-Xylenes	pm-Xylenes	-	thalene	ethene	ethene	ethene	ethene	Acetone	VOCs
ID	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Environmental								-	•		0.40	0.07	0.5	
Shallow (≤10 fee			500	3.3	2.3b	2.3b	2.3 2.3	1.2 1.2	0.7	0.46	0.19	0.67	0.5 0.5	
Deep (>10 feet b	ogs), Table C-	-2	770	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
S-29.5-SV17	29.5	06/04/15	<0.51	<0.0052	<0.0052	<0.0052		<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.13	ND
S-5-SV18	5	06/04/15	< 0.48	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-10-SV18	10	06/04/15	< 0.52	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-15-SV18	15	06/04/15	< 0.49	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.13	ND
S-22-SV18	22	06/04/15	< 0.50	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.12	ND
S-27.5-SV18	27.5	06/04/15	<0.49	<0.0052	<0.0052	<0.0052		<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.13	ND
S-5-SV19	5	06/04/15	< 0.50	<0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	<0.0050	<0.0050	<0.13	ND
S-10-SV19	10	06/04/15	< 0.50	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-15-SV19	15	06/04/15	< 0.50	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-17.5-SV19	17.5	06/04/15	<0.48	< 0.0052	< 0.0052	< 0.0052		< 0.052	< 0.0052	< 0.0052	< 0.0052	< 0.0052	<0.13	ND
S-25-SV19	25	06/04/15	< 0.53	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-27.5-SV19	27.5	06/04/15	<0.51	<0.0048	<0.0048	<0.0048		<0.048	<0.0048	<0.0048	<0.0048	<0.0048	<0.12	ND
S-5-SV20	5	06/04/15	<0.50	<0.0051	<0.0051	<0.0051		<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.13	ND
S-9-SV20	9	06/04/15	< 0.52	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-14-SV20	14	06/04/15	< 0.53	< 0.0053	< 0.0053	< 0.0053		< 0.053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	<0.13	ND
S-20-SV20	20	06/04/15	<0.51	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-25-SV20	25	06/04/15	1.0a	<0.0051	<0.0051	<0.0051		<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.13	ND
S-5.5-SV21	5.5	06/05/15	< 0.49	<0.0052	<0.0052	< 0.0052		< 0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.13	ND
S-10-SV21	10	06/05/15	< 0.49	< 0.0049	< 0.0049	<0.0049		<0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-15-SV21	15	06/05/15	<0.51	<0.0052	< 0.0052	<0.0052		< 0.052	< 0.0052	< 0.0052	< 0.0052	< 0.0052	<0.13	ND
S-23.5-SV21	23.5	06/05/15	<0.51	<0.0052	<0.0052	<0.0052		<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.13	ND
S-5-SV22	5	06/04/15	<0.50	<0.0050	<0.0050	<0.0050		<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.12	ND
S-10-SV22	10	06/04/15	< 0.49	<0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.12	ND
S-15-SV22	15	06/04/15	<0.51	<0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-20-SV22	20	06/04/15	<0.51	<0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-27.5-SV22	27.5	06/04/15	<0.48	<0.0049	<0.0049	<0.0049		<0.049	<0.0049	<0.0049	<0.0049	<0.0049	<0.12	ND
S-4.5-SV23	4.5	06/05/15	<0.51	<0.0053	<0.0053	<0.0053		<0.053	<0.0053	<0.0053	0.083	<0.0053	<0.13	ND
S-10-SV23	10	06/05/15	< 0.49	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.13	ND
S-15-SV23	15	06/05/15	< 0.53	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	<0.0051	<0.13	ND
S-23-SV23	23	06/05/15	< 0.53	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 4 of 4)

			EPA 8015B						EPA 8260	В				
				Ethyl-			Total	Naph-	Tetrachloro-	Trichloro-	c-1,2- dichloro-	t-1,2-dichloro-		Additional
Sampling	Sampling	Sampling	TPHg	benzene	o-Xylenes	pm-Xylenes	Xylenes	thalene	ethene	ethene	ethene	ethene	Acetone	VOCs
ID	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Environmental	Screening L	evels, Comn	nercial/Indust	trial Soil wh	ere Ground	water is a Pot	ential Drin	king Water	Source (Decem	ber 2013)				
Shallow (≤10 fee	et bgs), Table	A-2	500	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
Deep (>10 feet b	ogs), Table C	-2	770	3.3	2.3b	2.3b	2.3	1.2	0.7	0.46	0.19	0.67	0.5	
S-5-SV24	5	06/05/15	<0.50	<0.0053	<0.0053	<0.0053		<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.13	ND
S-10-SV24	10	06/05/15	< 0.50	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.12	ND
S-15-SV24	15	06/05/15	< 0.50	< 0.0049	< 0.0049	< 0.0049		< 0.049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	<0.12	ND
S-20-SV24	20	06/05/15	< 0.52	< 0.0051	< 0.0051	< 0.0051		< 0.051	< 0.0051	< 0.0051	< 0.0051	< 0.0051	<0.13	ND
S-25-SV24	25	06/05/15	<0.48	< 0.0050	< 0.0050	< 0.0050		< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.12	ND
S-27.5-SV24	27.5	06/05/15	<0.49	<0.0052	<0.0052	<0.0052		<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.13	ND
Notes:														
TPHg	=	Total petrole	um hydrocarb	ons as gaso	oline.									
VOCs	=	Volatile orga	inic compound	ds.										
mg/kg	=	Milligrams p	er kilogram.											
ND	=	Not detected	d at or above t	he laborator	y reporting lir	mit.								
<	=	Less than th	e stated labor	atory reporti	ng limit.									
	=	Not analyze	d.											

Chromatographic pattern does not match that of the specified standard.

Screening level for total xylenes.

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TABLE 3A SOIL PROPERTIES

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 1 of 1)

			Mois	ture	Dens	sity		Po	rosity		Total Pore Fluid	Organio	Carbon	Permeab	ility to Air	Permeability	Hydraulic
Sample	Sample	Sample	Cont	tent	Dry Bulk	Grain	Total	Air Filled	Water Filled	Effective	Saturations	Total	Fraction	Effective	Specific	To Water	Conductivity
Name	Date	Orientation	(% weight)	(cm³/cm³)	(g/cm ³)	(g/cm ³)	(cm ³ /cm ³)	(%Pv)	(mg/kg)	(g/g)	(millidarcy)	(millidarcy)	(millidarcy)	(cm/s)			
•		-		-			-				•			-			
S-6-Shelby23	06/05/15	Vertical	16.66	0.288	1.73	2.67	0.352	0.064	0.288	0.014	81.8	7,600	7.60E-03	6.27	3,689	0.0103	1.02E-08
S-6-Shelby24	06/05/15	Vertical	11.79	0.237	2.01	2.65	0.242	0.005	0.237	0.058	97.9	9,100	9.10E-03	85.0	3,281	0.192	1.90E-07
•																	

N	0	tes
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Particle Size Distribution = Grain size distribution analyzed using ASTM D4464.

USCS/Plasticity Chart Symbol = Unified Soil Classification System chart symbol analyzed using ATM D4318.

USCS Classification = Unified Soil Classification System classification analyzed using ASTM D2487.

USDA/SCS Soil Texture Scheme = United States Department of Agriculture/Soil Conservation Service soil texture scheme analyzed using USDA.

Atterberg Limits = Atterberg limits analyzed using ASTM D4318.

Moisture Content = Moisture content analyzed using ASTM D2216.

Dry Bulk Density = Dry density analyzed using API RP40.

Grain Density = Grain density analyzed using API RP40.

Total Porosity = Total porosity analyzed using API RP40.

Water Filled Porosity = Water filled porosity analyzed using API RP40.

Effective Porosity = Effective porosity analyzed using API RP40.

Effective Porosity = Effective porosity analyzed using Mapi RP40.

Effective Porosity = Total pore fluid saturations analyzed using API RP40.

Total Organic Carbon = Total organic carbon analyzed using Walkley-Bl

Effective Porosity = Effective porosity analyzed using modifed ASTM D425.

Total Pore Fluid Saturations = Total pore fluid saturations analyzed using API RP40.

Total Organic Carbon = Total organic carbon analyzed using Walkley-Black.

Fraction Organic Carbon analyzed using Walkley-Black.

Effective Permiability to Air = Effective permiability to air analyzed using API RP40.

Permiability to Water = Effective permiability to water analyzed using API RP40.

Hydraulic Conductivity = Saturated hydraulic conductivity analyzed using EPA Method 9100.

feet bgs = Feet below ground surface.

mm = Millimeter.

%Pv = Percent per pore volume. g/cm³ = Grams per cubic centimeter.

cm³/cm³ = Cubic centimeter per cubic centimeter.

cm² = Centimeters squared.
cm/s = Centimeters per second.
mg/kg = Milligrams per kilogram.
g/g = Grams per gram.

--- = Not avaliable/Not applicable.

TABLE 3B ADDITIONAL SOIL PROPERTIES

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 1 of 1)

		At	tterberg l	_imits	USCS		USDA/SCS	Grain	Medium			Comp	onent Per	centage	S			Silt
Sample	Sample	Liquid	Plastic	Plasticity	Chart	USCS	Soil Texture	Size	Grain				Sand Size	ze				and
Name	Date	Limit	Limit	Index	Symbol	Classicfication	Scheme	Description	Size	Gravel	Vcoarse	Course	Medium	Fine	Vfine	Silt	Clay	Clay
S-6-Shelby23	06/05/15	37	17	20	CL	Lean Clay with Sand	Loam	Silt	0.019	0.00	0.00	0.00	3.62	10.92	13.78	48.77	22.90	71.7
S-6-Shelby24	06/05/15	23	15	8	CL	Sandy Lean Clay	Loam	Silt	0.033	0.00	0.00	1.36	8.97	12.43	15.26	43.51	18.46	62.0
Particle Size Distribution	=.	Grain s	ize distrik	oution anal	yzed using	3 ASTM D4464.												
USCS/Plasticity Chart Symbol	=	Unified	Soil Clas	sification S	System ch	art symbol analyzed usir	ng ATM D4318											
USCS Classification	=	Unified	Soil Clas	sification S	System cla	ssification analyzed usin	g ASTM D248	7.										
USDA/SCS Soil Texture Scheme	=	United	States D	epartment	of Agricult	ure/Soil Conservation Se	ervice soil text	ure scheme and	alyzed using	USDA.								
Atterberg Limits	=	Atterbe	erg limits analyzed using ASTM D4318.															
Moisture Content	=	Moistur	tre content analyzed using ASTM D2216.															
Dry Bulk Density	=	Dry der	nsity anal	yzed using	API RP4).												
Grain Density	=	Grain d	lensity ar	alyzed usi	ng API RF	40.												
Total Porosity	=	Total po	orosity ar	nalyzed usi	ng API RF	P40.												
Air Filled Porosity	=	Air filled	d porosity	analyzed	using API	RP40.												
Water Filled Porosity	=	Water f	illed porc	sity analyz	ed using /	API RP40.												
Effective Porosity	=	Effectiv	e porosit	y analyzed	l using mo	difed ASTM D425.												
Total Pore Fluid Saturations	=	Total po	ore fluid s	saturations	analyzed	using API RP40.												
Total Organic Carbon	=	Total or	rganic ca	rbon analy	zed using	Walkley-Black.												
Fraction Organic Carbon	=	Fraction	n organic	carbon ar	alyzed us	ing Walkley-Black.												
Effective Permiability to Air	=	Effective permiability to air analyzed using API RP40.																
Specific Permiability to Air	=			•	•	sing API RP40.												
Permiability to Water	=	Effectiv	e permia	bility to wa	ter analyz	ed using API RP40.												
Hydraulic Conductivity	=	Saturat	ed hydra	ulic condu	ctivity anal	yzed using EPA Method	9100.											
feet bgs	=			nd surface		. •												

Millimeter.

=

Percent per pore volume. Grams per cubic centimeter.

Centimeters squared.

Grams per gram. Not avaliable/Not applicable.

Centimeters per second. Milligrams per kilogram.

Cubic centimeter per cubic centimeter.

mm %Pv

g/cm³

cm³/cm³ cm²

cm/s

mg/kg g/g

Dry Clean 580
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			ASTM D	-1946		GC/MS						EPA TO-1	15				
Sampling	Sampling	Helium	Methane	CO ₂	O ₂ + Ar	TPHg	MTBE	В	Т	Е	o-X	pm-X	1,2-DCA	TBA	PCE	TCE	Ethanol
ID	Date	(%V)	(%V)	(%V)	(%V)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Environmen	tal Screening	g Levels, S	Shallow Soil (Gas, Table	e E-2 (Decei	mber 2013)											
Commercial/	Industrial					2,500,000	47,000	420	1,300,000	4,900	440,000d	440,000d	580		2,100	3,000	
Phase II Sub	osurface Inve	stigation															
SG-1	11/11/97														<1,000	<1,000	
SG-2	11/11/97														<1,000	<1,000	
SG-3	11/11/97														<1,000	<1,000	
SG-4	11/11/97														5,800	<1,000	
SG-4	11/11/97														4,000	<1,000	
SG-5	11/11/97														65,000	<1,000	
SG-5	11/11/97														119,700	6,800	
SG-5	11/11/97														<1,000	<1,000	
SG-6	11/11/97														1,700	<1,000	
SG-7	11/11/97														<1,000	<1,000	
SG-8	11/12/97														29,700	2,100	
SG-8	11/12/97														30,300	1,400	
SG-8 Dup	11/12/97														24,600	1,100	
SG-9	11/12/97														33,500	<1,000	
SG-10	11/12/97														14,000	<1,000	
SG-10	11/12/97														4,700	<1,000	
SG-11	11/12/97														105,900	1,400	
Data Gap As	seesement																
SV-1	01/06/14							<35	<200	<100	<100	<200	<45		9,500	600	
SV-2	01/06/14							110	<200	<100	<100	<200	<45		190	<100	
SV-3	01/06/14							170	<200	<100	<100	<200	<45		<100	<100	
SV-4	01/07/14							72	<200	<100	<100	<200	<45		<100	<100	
SV-5	01/07/14							56	<200	<100	<100	<200	<45		<100	450	
SV-6	01/07/14							83	<200	<100	<100	<200	<45		1,800	1,400	
SV-7	01/07/14							<35	<200	<100	<100	<200	<45		3,600	<100	
SV-8	01/07/14							<35	<200	<100	<100	<200	<45		<100	<100	
SV-9	01/17/14							170	<200	190	160	560	<45		160	<100	
SV-10	01/17/14							170	<200	270	270	910	<45		<100	<100	
SV-11	01/17/14							91	<200	<100	<100	270	<45		2,200	<100	
SV-12	01/17/14							290	<200	<100	<100	<200	<45		<100	<100	
SV-13	01/17/14							400	280	<100	<100	<200	<45		<100	<100	
SV-14	01/17/14							150	<200	<100	<100	<200	<45		<100	<100	
SV-15	01/17/14							150	<200	<100	<100	<200	<45		<100	<100	

Dry Clean 580 3735 East Castro Valley Boulevard Castro Valley, California (Page 2 of 2)

		ASTM D-1946				GC/MS	EPA TO-15										
Sampling	Sampling	Helium	Methane	CO ₂	O ₂ + Ar	TPHg	MTBE	В	T	E	o-X	pm-X	1,2-DCA	TBA	PCE	TCE	Ethanol
ID	Date	(%V)	(%V)	(%V)	(%V)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Environmental Screening Levels, Shallow Soil Gas, Table E-2 (December 2013)						mber 2013)											
Commercial/Ir	ndustrial					2,500,000	47,000	420	1,300,000	4,900	440,000d	440,000d	580		2,100	3,000	
Soil Vapor Well Installation																	
SV-16A	06/25/15	0.0687	0.25	2.6	3.8	15,000	<11	74	63	13	12	36	<3.0	<9.1	<5.1	<4.0	<14
SV-16B	06/25/15	0.0215	0.41	21	2.4	38,000	<9.4	56	40	12	9.0	22	3.0	<7.9	<4.4	<3.5	<12
SV-17A	06/25/15	0.0286	0.026	0.75	8.7	4,500	<7.2	12	18	4.0	4.4	13	<2.0	43	<3.4	<2.7	<9.4
SV-17B	06/25/15	0.0301	0.36	17	4.8	38,000	14	63	34	13	12	24	<2.7	160	<4.6	<3.6	<13
SV-18A	06/25/15	0.0137	0.026	0.69	8.0	5,500	<8.7	6.1	8.3	3.7	17	29	<2.4	22	<4.1	<3.2	<11
SV-18B	06/25/15	0.0219	0.38	23	6.4	14,000	<7.6	65	17	11	9.3	21	<2.1	<6.4	<3.6	<2.8	<10
SV-19A	06/25/15	0.0717	0.0043	0.14	8.8	8400	<9.7	270	15	130	3.8	<12	<2.7	24	25	<3.6	<13
SV-19B	06/25/15	0.0355	0.018	20	8.1	5,900	<7.2	25	11	<2.2	<2.2	<8.7	<2.0	74	<3.4	<2.7	14
SV-20A	06/25/15	0.0241	0.0039	4.6	4.1	8,800	<10	11	12	3.5	<3.1	<12	<2.9	25	<4.8	<3.8	<13
SV-20B	06/25/15	0.0297	0.041	11	7.6	25,000	30	37	27	13	10	18	<2.6	180	<4.3	<3.4	12
SV-21A	06/26/15	0.0316	0.61	3.8	5.0	29,000	<10	69	33	14	9.5	19	<2.9	<8.5	420	7.9	<13
SV-21B	06/26/15	0.0220	0.13	28	3.7	21,000	<9.7	63	25	23	23	56	<2.7	<8.1	140	4.3	<13
SV-22A	06/26/15	0.0279	0.82	1.1	4.8	21,000	<10	46	33	8.7	7.8	15	<2.9	18	<4.8	<3.8	<13
SV-22B	06/26/15	0.0187	0.55	56	2.2	16,000	<8.1	42	9.3	10	7.8	16	<2.3	55	<3.8	<3.0	11
SV-23A	06/26/15	0.0159	0.45	0.85	13	89,000	<29	90	37	<8.7	<8.7	<35	<8.1	<24	20,000	40,000	<38
SV-23A Dup	06/26/15	0.0139	0.49	1.1	10	86,000	<29	110	34	14	<8.7	<35	<8.1	<24	14,000	33,000	<38
SV-23B	06/26/15	0.0140	0.41	28	2.8	47,000	<8.8	54	82	21	16	27	<2.5	<7.4	17,000	530	<11
SV-24A	06/26/15	0.0169	0.025	2.1	7.9	14,000	<9.2	18	8.5	<2.8	<2.8	<11	<2.6	<7.7	3,000	210	<12
SV-24B	06/26/15	0.0186	0.19	17	8.2	21,000	<8.6	40	26	12	8.6	16	<2.4	30	7.8	11	12

N	otoo:	
- 17	otes:	

TPHg = Total petroleum hydrocarbons as gasoline.

MTBE = Methyl tertiary butyl ether.

BTEX = Benzene, ethylbenzene, toluene, and total xylenes.

1,2-DCA = 1,2-dichloroethane. TBA = Tertiary butyl alcohol.

PCE = Tetrachloroethene.

TCE = Trichloroethene.

VOCs = Volatile organic compounds.

 CO_2 = Carbon dioxide. O_2 + Ar = Oxygen plus argon.

 $\mu g/m^3$ = Micrograms per cubic meter.

%V = Percent by volume.

ND = Not detected at or above the laboratory reporting limit.

= Less than the stated laboratory reporting limit.

a = Chloroethane.

b = 4-methyl-2-pentanone.

c = 4-ethyltoluene.

d = ESL for total xylenes.

e = 1,1-dichloroethene.

TABLE 4B ADDITIONAL SELECT SOIL VAPOR ANALYTICAL RESULTS, DETECTED CONCENTRATIONS

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
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		EPA TO-17		EPA TO-15 (EPA 8010 in 1997)														
					Bromo-						1,1-	c-1,2-	t-1,2-	Dichloro-	1,2,4-	1,3,5-		
		Naph-	Naph-		dichloro-	2-	Carbon	Chloro-	Chloro-	Chloro-	dichloro-	dichloro-	dichloro-	difluoro-	trimethyl-	trimethyl-	Vinyl	
Sampling	Sampling	thalene	thalene	Acetone	methane	Butanone	Disulfide	benzene	methane	form	ethane	ethene	ethene	methane	benzene	benzene	Chloride	Additional VOCs
ID	Date	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(μg/m ³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Environment	al Screening	Levels, Sha	llow Soil (Gas, Table E-2	(December	2013)												
Commercial/I	ndustrial	360	360	140,000,000	330			4,400,000	390,000	2,300	7,700	31,000	260,000				160	
Phase II Subsurface Investigation																		
SG-1	11/11/97											<1,000	<1,000				<1,000	ND
SG-2	11/11/97											<1,000	<1,000				<1,000	ND
SG-3	11/11/97											<1,000	<1,000				<1,000	ND
SG-4	11/11/97											<1,000	<1,000				<1,000	ND
SG-4	11/11/97											<1,000	<1,000				<1,000	ND
SG-5	11/11/97											<1,000	<1,000				<1,000	ND
SG-5	11/11/97											<1,000	<1,000				<1,000	ND
SG-5	11/11/97											<1,000	<1,000				<1,000	ND
SG-6	11/11/97											<1,000	<1,000				<1,000	ND
SG-7	11/11/97											<1,000	<1,000				<1,000	ND
SG-8	11/12/97											<1,000	<1,000				<1,000	ND
SG-8	11/12/97											<1,000	<1,000				<1,000	ND
SG-8 Dup	11/12/97											<1,000	<1,000				<1,000	ND
SG-9	11/12/97											<1,000	<1,000				<1,000	ND
SG-10	11/12/97											<1,000	<1,000				<1,000	ND
SG-10	11/12/97											<1,000	<1,000				<1,000	ND
SG-11	11/12/97											<1,000	<1,000				<1,000	ND
Data Gap As																		
SV-1	01/06/14									<100	280	7,400	330	<100			190	ND
SV-1	01/06/14									<100	<100	<100 <100	<100	<100			<13	ND ND
SV-3	01/06/14									<100	<100	<100	<100	<100			<13	ND ND
SV-3	01/06/14									<100	<100	<100	<100	<100			<13	ND ND
SV-5	01/07/14									<100	<100	650	<100	<100			110	ND ND
SV-6	01/07/14									<100	110	960	<100	<100			110	ND ND
SV-7	01/07/14									<100	<100	<100	<100	<100			<13	ND ND
SV-7 SV-8	01/07/14									<100	<100	<100	<100	<100			<13	ND ND
										<100		<100		<100				ND ND
SV-9 SV-10	01/17/14 01/17/14									<100 <100	<100 <100	<100 <100	<100 <100	<100 <100			<13 <13	ND ND
SV-11	01/17/14									<100	<100	<100	<100	<100			<13	ND
SV-12	01/17/14									<100	<100	<100	<100	<100			43	ND ND
SV-13	01/17/14									<100	<100	<100	<100	<100			<13	
SV-14	01/17/14									<100	<100	<100	<100	<100			<13	ND
SV-15	01/17/14									<100	<100	<100	<100	<100			<13	ND

TABLE 4B

ADDITIONAL SELECT SOIL VAPOR ANALYTICAL RESULTS, DETECTED CONCENTRATIONS

Dry Clean 580

3735 East Castro Valley Boulevard

Castro Valley, California

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		EPA TO-17							Е	PA TO-1	5 (EPA 801	0 in 1997)						
					Bromo-						1,1-	c-1,2-	t-1,2-	Dichloro-	1,2,4-	1,3,5-		
		Naph-	Naph-		dichloro-	2-	Carbon	Chloro-	Chloro-	Chloro-	dichloro-	dichloro-	dichloro-	difluoro-	trimethyl-	trimethyl-	Vinyl	
Sampling	Sampling	thalene	thalene	Acetone	methane	Butanone	Disulfide	benzene	methane	form	ethane	ethene	ethene	methane	benzene	benzene	Chloride	Additional VOCs
ID	Date	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m ³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Environmental Screening Levels, Shallow Soil Gas, Table E-2 (December 2013)																		
Commercial/I	ndustrial	360	360	140,000,000	330			4,400,000	390,000	2,300	7,700	31,000	260,000				160	
Soil Vapor Well Installation																		
SV-16A	06/25/15	<20	<39	50	<5.0	<6.6	580	4.4	<1.5	16	<3.0	<3.0	<3.0	5.3	<11	<3.7	<1.9	ND
SV-16B	06/25/15	<20	<34	<6.2	<4.4	<5.8	690	4.0	<1.3	11	<2.6	<2.6	<2.6	<3.2	<9.6	<3.2	<1.7	ND
SV-17A	06/25/15	<20	<26	56	4.0	<4.4	55	3.6	3.2	12	<2.0	<2.0	<2.0	3.3	<7.4	<2.5	<1.3	ND
SV-17B	06/25/15	<20	<35	180	<4.5	8.2	510	8.0	2.3	3.9	<2.7	<2.7	<2.7	6.6	13	4.7	<1.7	ND
SV-18A	06/25/15	<20	<32	<5.7	15	<5.3	170	5.2	2.1	45	<2.4	<2.4	<2.4	4.8	24	11	<1.5	4.8c
SV-18B	06/25/15	<20	<28	<5.0	<3.6	<4.7	380	10	1.2	5.1	<2.1	<2.1	<2.1	<2.6	<7.8	<2.6	<1.4	ND
SV-19A	06/25/15	<20	<35	<6.4	22	9.2	190	4.6	3.3	57	<2.7	<2.7	<2.7	5.1	<9.9	<3.3	<1.7	ND
SV-19B	06/25/15	<20	<26	150	7.4	5.3	710	7.9	<1.0	11	<2.0	<2.0	<2.0	<2.5	<7.4	<2.5	<1.3	ND
SV-20A	06/25/15	<20	<37	<6.7	6.0	10	100	5.0	3.2	19	<2.9	<2.8	<2.8	<3.5	<10	<3.5	<1.8	ND
SV-20B	06/25/15	<20	<33	220	<4.3	14	1,100	4.8	1.9	7.7	<2.6	<2.5	<2.5	<3.1	<9.4	3.1	<1.6	ND
SV-21A	06/25/15	<20	<37	<6.7	<4.7	7.6	350	10	3.2	16	<2.9	<2.8	<2.8	3.8	<10	<3.5	2.5	ND
SV-21B	06/25/15	<20	<35	150	<4.5	13	480	38	<1.4	4.6	<2.7	<2.7	<2.7	<3.3	10	3.8	<1.7	ND
SV-22A	06/25/15	410	<37	<6.7	<4.7	8.8	82	<3.2	2.0	29	<2.9	<2.8	<2.8	4.7	<10	<3.5	<1.8	9.9b
SV-22B	06/25/15	<20	<30	100	<3.8	9.9	250	<2.6	<1.2	<2.8	<2.3	<2.2	<2.2	<2.8	<8.3	<2.8	<1.4	20b
SV-23A	06/25/15		<100	<19	<13	<18	600	<9.2	4.7	55	3,700	53,000	4,700	<9.9	<29	<9.8	1,700	ND
SV-23A Dup	06/25/15		<100	<19	<13	<18	910	<9.2	6.5	67	<8.1	47,000	4,300	<9.9	<29	<9.8	1,300	2,500e
SV-23B	06/25/15	<20	<32	<5.8	<4.1	<5.4	820	5.0	2.5	6.8	<2.5	1,000	86	<3.0	61	17	37	2.9a, 11c, 80e
SV-24A	06/25/15	<20	<33	<6.0	8.3	<5.6	410	4.7	5.9	51	<2.6	270	61	3.2	<9.4	<3.1	23	19e
SV-24B	06/25/15	<20	<31	<5.7	<4.0	19	2,400	11	3.8	3.9	<2.4	23	4.1	<2.9	<8.8	3.1	<1.5	ND

Notes:		
TPHg	=	Total petroleum hydrocarbons as gasoline.
MTBE	=	Methyl tertiary butyl ether.
BTEX	=	Benzene, ethylbenzene, toluene, and total xylenes.
1,2-DCA	=	1,2-dichloroethane.
TBA	=	Tertiary butyl alcohol.
PCE	=	Tetrachloroethene.
TCE	=	Trichloroethene.
VOCs	=	Volatile organic compounds.
CO ₂	=	Carbon dioxide.
O_2 + Ar	=	Oxygen plus argon.
μg/m ³	=	Micrograms per cubic meter.
%V	=	Percent by volume.
ND	=	Not detected at or above the laboratory reporting limit.
<	=	Less than the stated laboratory reporting limit.
а	=	Chloroethane.
b	=	4-methyl-2-pentanone.
С	=	4-ethyltoluene.
d	=	ESL for total xylenes.
е	=	1,1-dichloroethene.

APPENDIX A CORRESPONDENCE

From: Detterman, Karel, Env. Health [mailto:Karel.Detterman@acgov.org]

Sent: Wednesday, July 08, 2015 5:10 PM

To: gabe stivala

Cc: 'John Bobbitt'; Roe, Dilan, Env. Health; Matt Herman (<u>matt.herman@cardno.com</u>); Charles Gurney **Subject:** RE: RO3097 SCP Program 580 Market Place Shopping Center, East Castro Valley Boulevard, Castro

Valley, CA

Hello Gabe:

The report deadline has been extended as follows:

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

 August 14, 2015 July 15, 2015 – Soil and Groundwater Investigation Report File to be named: RO3097_SWI_R_yyyy-mm-dd

Thank you,

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510 567 6708

Direct: 510.567.6708 Fax: 510.337.9335

Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: gabe stivala [mailto:gabe.stivala@cardno.com]

Sent: Tuesday, July 07, 2015 9:47 AM **To:** Detterman, Karel, Env. Health

Cc: 'John Bobbitt'; Roe, Dilan, Env. Health; Matt Herman (<u>matt.herman@cardno.com</u>); Charles Gurney **Subject:** RE: RO3097 SCP Program 580 Market Place Shopping Center, East Castro Valley Boulevard, Castro

Valley, CA

Hi Karel,

We have completed the field work for the external soil and soil gas assessment, however we will not have our soil vapor analytical results from the laboratory until July 15, which is the ACEH established due date for the report. As such, we are requesting an extension for the submittal of the final report to August 14, 2015. Please let me know if this is acceptable.

Best regards,

Gabe Stivala, P.G

SENIOR PROJECT MANAGER/GEOLOGIST ENGINEERING & ENVIRONMENTAL SERVICES DIVISION CARDNO

Direct (+1) 916-386-3870 Mobile (+1) 925-223-7123 Fax (+1) 916-923-6251 Address 701 University Avenue Suite 200, Sacramento, CA 95825 Email gabe.stivala@cardno.com Web www.cardno.com

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From: Detterman, Karel, Env. Health [mailto:Karel.Detterman@acgov.org]

Sent: Thursday, May 14, 2015 3:04 PM

To: Charles Gurney

Cc: 'John Bobbitt'; Roe, Dilan, Env. Health; gabe stivala

Subject: RE: RO3097 SCP Program 580 Market Place Shopping Center, East Castro Valley Boulevard, Castro

Valley, CA

Hello Chuck:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Response to Comments and Work Plan Addendum* (Addendum) dated April 22, 2015, prepared and submitted on your behalf by Cardno ATC. The Addendum was submitted in response to a conference call with the Cardno representatives on April 10, 2015. Thank you for submitting the Addendum.

Based on ACEH staff review of the work plan, the Addendum is approved for implementation. Submittal of a revised work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you perform the proposed work and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: karel.detterman@acgov.org) prior to the start of field activities.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

• **July 15, 2015** – Soil and Groundwater Investigation Report File to be named: RO3097_SWI_R_yyyy-mm-dd

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please send me an e-mail message at karel.detterman@acgov.org or call me at (510) 567-6708.

Karel Detterman, PG Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Direct: 510.567.6708 Fax: 510.337.9335

Email: karel.detterman@acgov.org

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http://www.acgov.org/aceh/lop/ust.htm

APPENDIX B FIELD PROTOCOLS



Soil Vapor Sampling Well Installation and Sampling Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Well Construction

The borehole is advanced to the desired depth using either a direct-push rig, hand auger, or air vacuum rig. Lithologic conditions are recorded on a boring log during borehole advancement, and select soil matrix sampling may be conducted based on soil characteristics.

Each soil vapor sampling (SVS) well is constructed using inert screen material attached to ½-to ½-inch outer diameter inert tubing. A gas-tight vacuum fitting or valve is attached to the top of each length of tubing using a female compression fitting. Each screen is set within a minimum of a 12-inch thick appropriately sized sand pack, with a minimum of 3 inches of sand pack above the top of the screen. A minimum of 4 inches of dry granular bentonite is set above each screen and associated sand pack. In SVS wells with multiple and separate casings and screens, the annular space between the top of the dry granular bentonite above the deep screen and the bottom of the sand pack associated with the shallow screen is sealed with a minimum of 18 inches of hydrated bentonite. The remainder of the annular space of the well is sealed with hydrated bentonite to 1 foot below ground surface. Wellheads are finished with traffic-rated well boxes set in concrete flush with the surrounding grade. No glues, chemical cements, or solvents are used in well construction.

A boring log is completed with the construction details for each well, including the materials of construction, depth of the borehole, screen length, and annular seal thickness.

Soil Vapor Sampling

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, shroud, and laboratory-prepared, gas-tight, opaque containers such as Summa™ canisters. Samples may also be collected using a syringe and analyzed by a mobile laboratory. Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 31 and 25 inches of mercury (in. Hg). New inert tubing is used to purge and sample each well. Prior to purging and sampling each SVS well, the sampling manifold is connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at approximately 24 to 28 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 5 minutes per vacuum gauge reading.

When required, Cardno conducts a purge volume versus constituent concentration test on at least one SVS well prior to purging and sampling activities. The purge volume test well is selected based on the location of the anticipated source of chemical constituents at the site and on the location of anticipated maximum soil vapor concentrations based on lithologic conditions. If the SVS well has been in place for more than 1 week, it is assumed that soil vapor in the sand pack has equilibrated with the surrounding soil, and only the screen and tubing volumes are included in the purge volume calculation. If the SVS well has been in place for less than 1 week, the volume of the sand pack around the screen is included in the purge volume calculation. A photo-ionization detector (PID) or on-site mobile laboratory is used to evaluate concentrations of chemical constituents in the vapor stream after 1, 3, and 10 volumes of vapor have been purged from the SVS well. Purging is conducted at a rate of 100 to 200

milliliters per minute (ml/min). The purge volume exhibiting the highest concentration is the volume of vapor purged from each SVS well prior to sampling. If the three separate purge volumes produce equal concentrations a default of 3 purge volumes is extracted prior to sampling.

Prior to sampling, a helium leak test is performed at each SVS well, including a summa canister and its fittings, to check for leaks in the SVS annulus. To assess the potential for leaks in the SVS well annulus, a shroud is placed over the SVS well and summa canister and the shroud is filled with a measured amount of helium. Helium screening is performed in the field by drawing soil gas into a Tedlar bag via a lung-box and screening the contents of the Tedlar bag with a helium meter. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. A leak that comprises less than 5% of the sample is insignificant. Helium screening is also performed using laboratory analysis of the contents of the summa canister collected under the shroud. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. Soil vapor samples are submitted under chain-of-custody protocol for the specified laboratory analyses.

At a minimum, weather conditions (temperature, barometric pressure and precipitation), the sampling flow rate, the purge volume, the helium leak detection percentage results, the sample canister identification number, the method of sample collection, and the vacuum of the sampling canister at the start and end of sample collection (if applicable) are recorded on a log for each SVS well purged and sampled.

Decontamination Procedures

If soil samples are collected, Cardno or the contracted driller decontaminates the soil sampling equipment between each sampling interval using a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned or triple-rinsed prior to advancing each borehole.

Waste Treatment and Disposal

Soil cuttings generated from the well installation are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination water is stored on site in labeled, regulatory-approved storage containers, and is subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

APPENDIX C PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 05/28/2015 By jamesy Permit Numbers: W2015-0456
Permits Valid from 06/03/2015 to 06/03/2015

Application Id: 1432765171430 City of Project Site:Castro Valley

Site Location: 3735-4065 East Castro Valley Blvd. 580 Market Place Shopping Center.

Project Start Date: 06/03/2015 Completion Date:06/03/2015

Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Cardno ERI - Matthew Herman Phone: 707-766-2027

601 North McDowell Blvd., Petaluma, CA 94954

Property Owner: Weingarten Realty Investors Phone: 713-866-6855

2600 Citadel Plaza Dr. #200, Houston, TX 77008

Client: Weingarten Realty Investors Phone: 713-866-6855 2600 Citadel Plaza Dr. #200, Houston, TX 77008

Contact: Matthew Herman **Phone:** 707-766-2027 **Cell:** 707-338-8010

Total Due: \$265.00

Receipt Number: WR2015-0264 Total Amount Paid: \$265.00

Payer Name : Matt Herman Paid By: MC PAID IN FULL

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 9 Wells

Driller: Gregg Drilling &Testing, Inc. - Lic #: 485165 - Method: auger Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015- 0456	05/28/2015	09/01/2015	SV-16	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-17	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-18	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-19	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-20	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-21	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-22	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-23	4.00 in.	0.25 in.	4.00 ft	15.00 ft
W2015- 0456	05/28/2015	09/01/2015	SV-24	4.00 in.	0.25 in.	4.00 ft	15.00 ft

Specific Work Permit Conditions

- 1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
- 2. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and

Alameda County Public Works Agency - Water Resources Well Permit

all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

- 3. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 5. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.
- 6. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
- 7. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 8. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
- 9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 10. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

APPENDIX D BORING LOGS



Reviewed By:

BORING LOG SV-16

(Page 1 of 2)

: Gregg Drilling Drilling Co.: Drilling Method: : Solid-Stem Auger Sampling Method: Direct Push 3 4" Borehole Diameter:

Dates Drilled:

: 0.25" Casing Diameter: Location E-W : -122.050797 Location N-S : 37.694549 ; 30' bgs Total Depth: First GW Depth: : Not Encountered

: 6/3/15

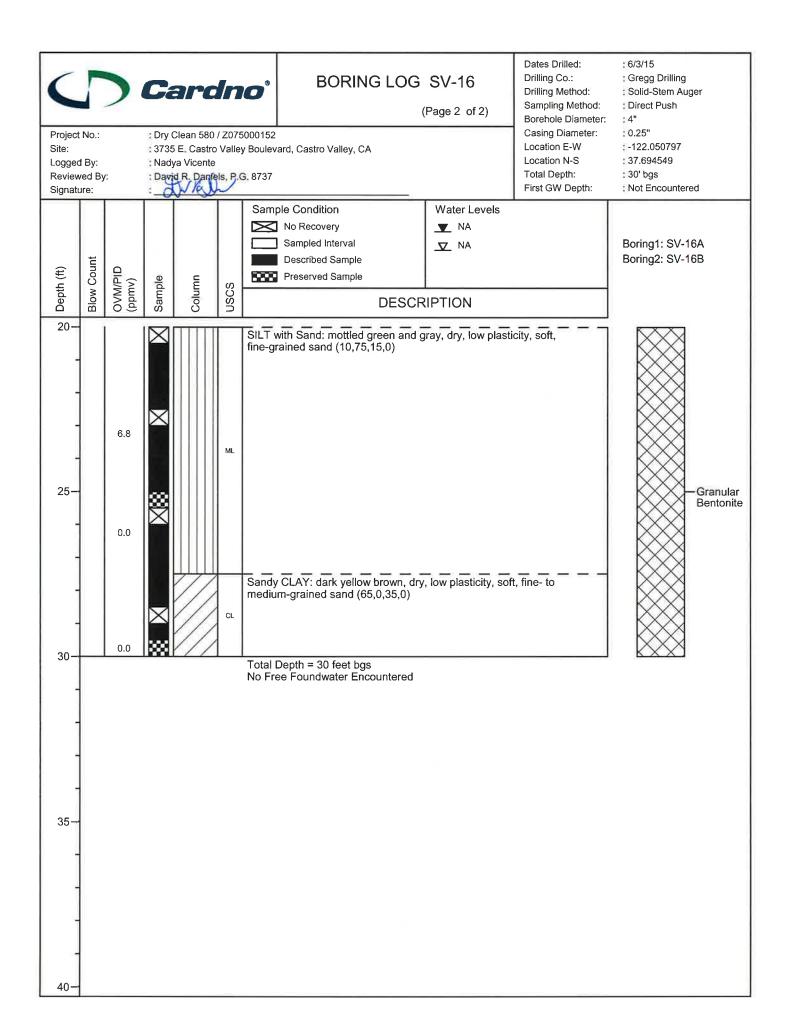
Boring1: SV-16A Boring2: SV-16B

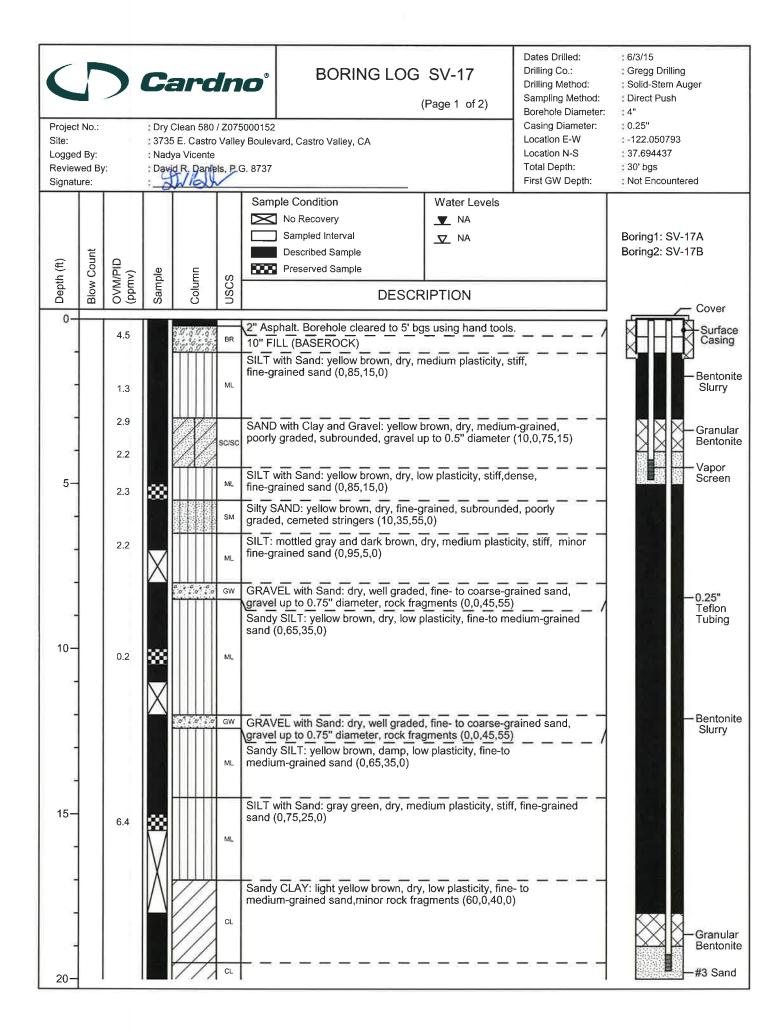
David R. Daniels, P.G. 8737

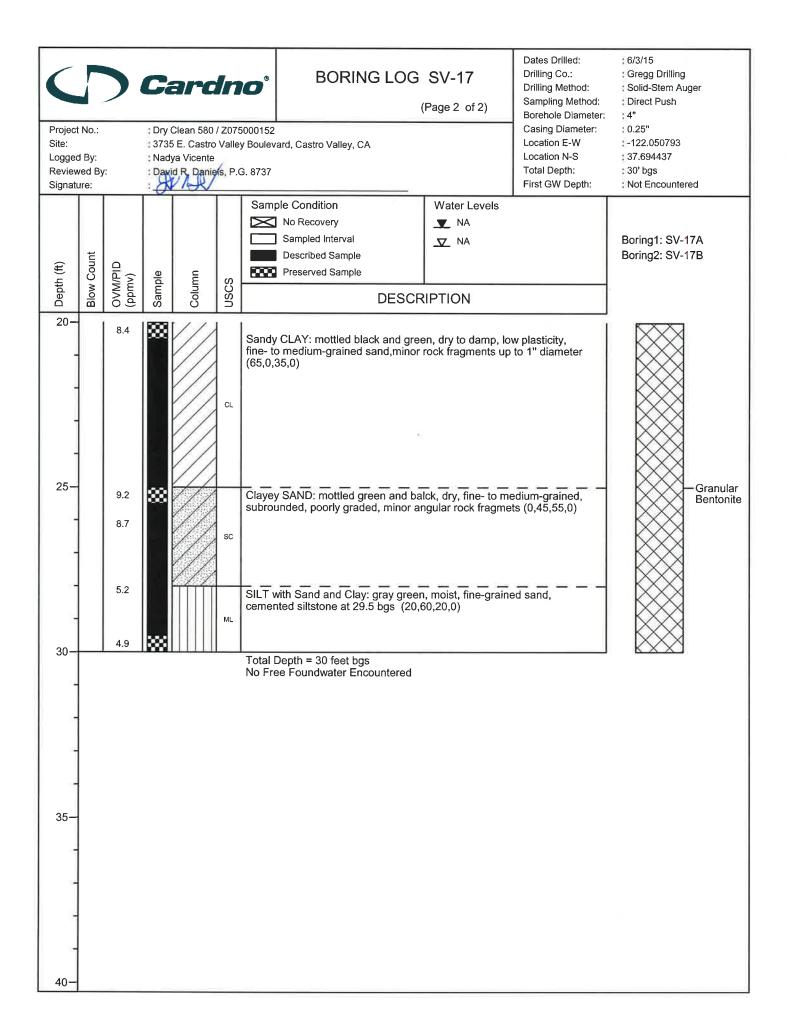
Signature: Water Levels Sample Condition

/ Count	//PID (vr	eld	mn	Ş	No Recovery Sampled Interval Described Sample Preserved Sample	▼ NA ▼ NA
Blow	NVO ndd)	Sam	Colu	nsc	DESCR	RIPTION

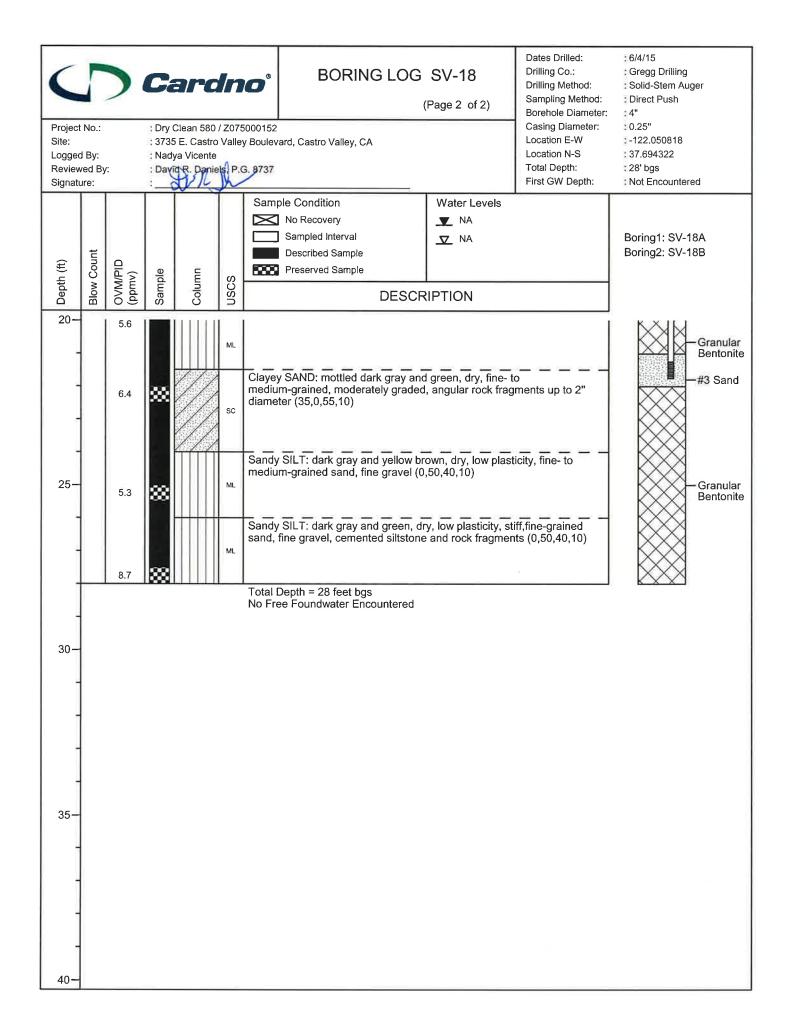
Œ	Sount	요 (a)	⊆		Preserved Sample		Borring2. OV 10B
Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	uscs	DESCF	RIPTION	
0-	ш.	03	0)					Cover
		1.7		0.80.80	BR	2" Asphalt. Borehole cleared to 5' bo	gs using hand tools.	Surface Casing
					ML	SILT with Sand: yellow brown, dry, n fine-grained sand (0,85,15,0)	nedium plasticity, stiff,	—Bentonite
		2.6			CL	Sandy CLAY: mottled dark brown ar to medium-grained sand (55,0,45,0)	nd green, dry, low plasticity, fine-	Slurry
	1	3.5						- Granular
		1.9		M	sc/sc	SAND with Clay and Gravel: yellow poorly graded, subrounded, gravel u	up to 1" diameter (10,0,75,15)	Bentonite
5-		2.0			ML	SILT with Sand: dark green brown, of (5,75,20,0)	damp, low plasticity, dense	Screen
		5.7			ML	Sandy SILT: dark green and black, of fine- to medium-grained sand (0,70,	dry, stiff, low plasticity, dense, 30,0)	
	-	4.1			CL	Sandy CLAY: mottled dark brown ar to medium-grained sand (65,0,35,0)		—0.25"
-								Teflon Tubing
10-	-	3.5	×			SILT with Sand: mottled black and g fine-grained sand, minor rounded gr (0,80,15,5)	green, dry, low plasticity, ravel up to 0.25" diameter	
		5.9	88		ML			
			X	ЩЩ				— Bentonite Slurry
			\bigcirc		CL	CLAY with Sand: mottled dark gray fine- to medium-grained sand (75,1	and green, dry, low plasticity, soft, 0,25,0)	
1	1			Hiff	1	SILT: mottled dark yellow brown and	d green, dry, medium plasticity,	
15-	-	6.2				stiff, dense, minor fine-grained sand	1 (0,95,5,0)	
-			IIXI		ML			
		0.4						
1	1		X			Clayey SAND: dark yellow brown, d subrounded, poorly graded, iron oxi	ry, fine- to medium grained, ide staining (30,0,70,0)	
6					sc	,, ,, ,,		— Granular
20-		5.2	^ 		ML	SILT with Sand: mottled green and fine-grained sand (10,75,15,0)	gray, dry, low plasticity, soft,	Bentonite #3 Sand

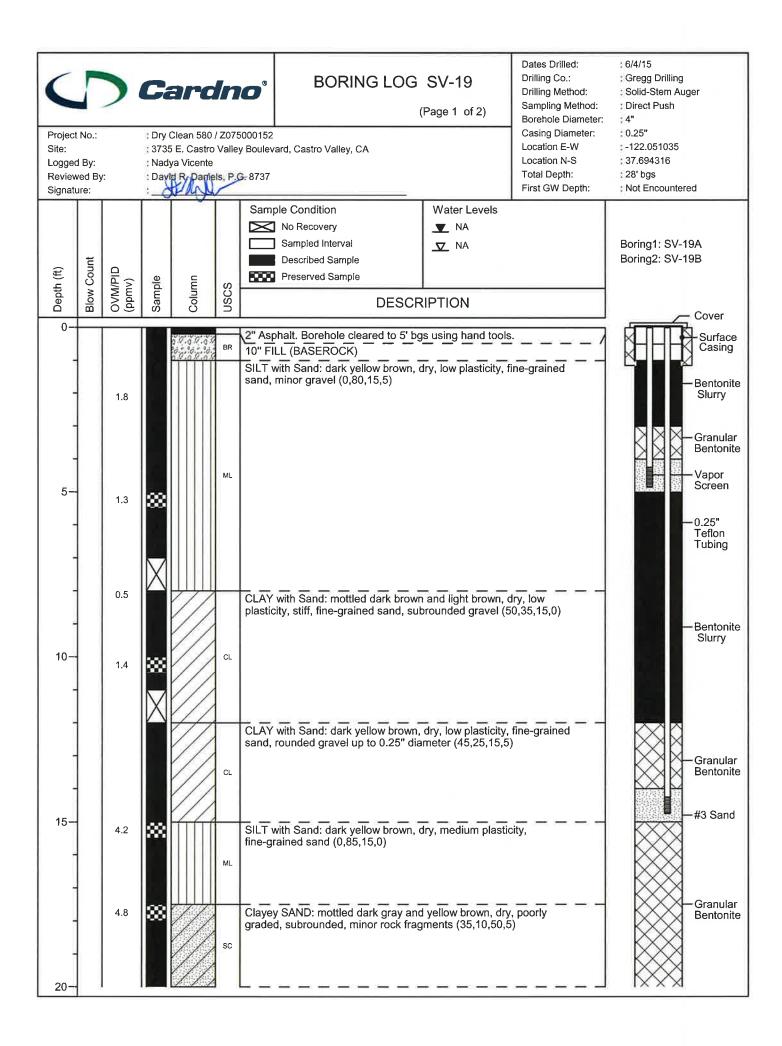


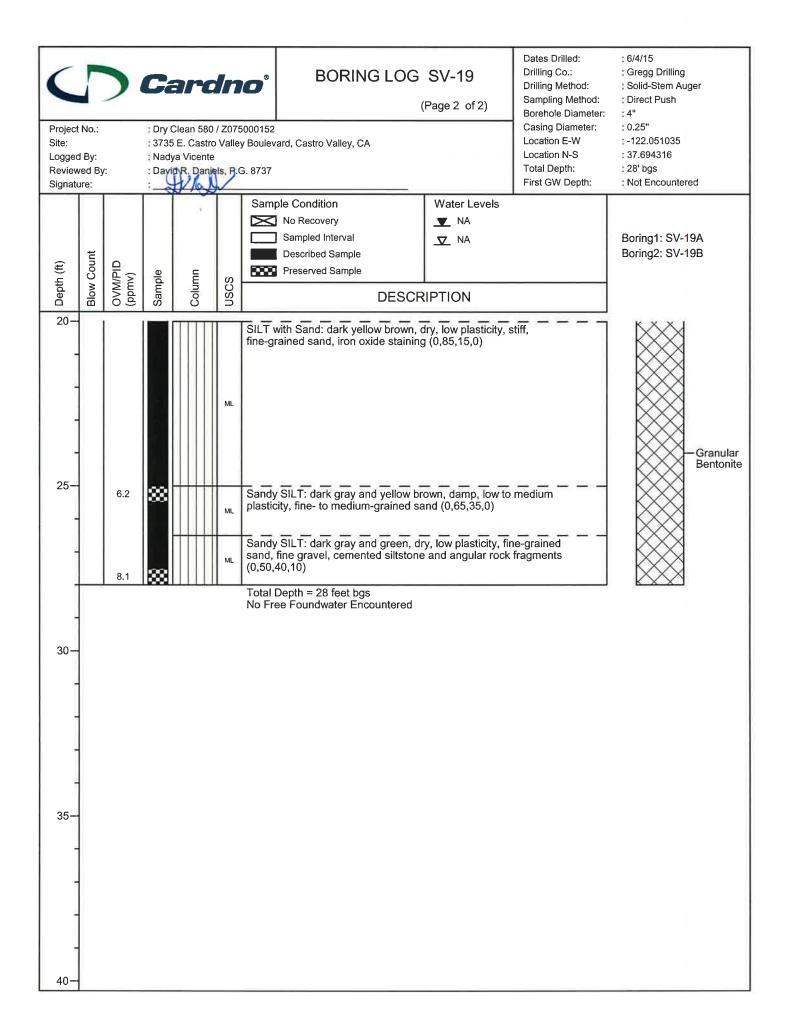




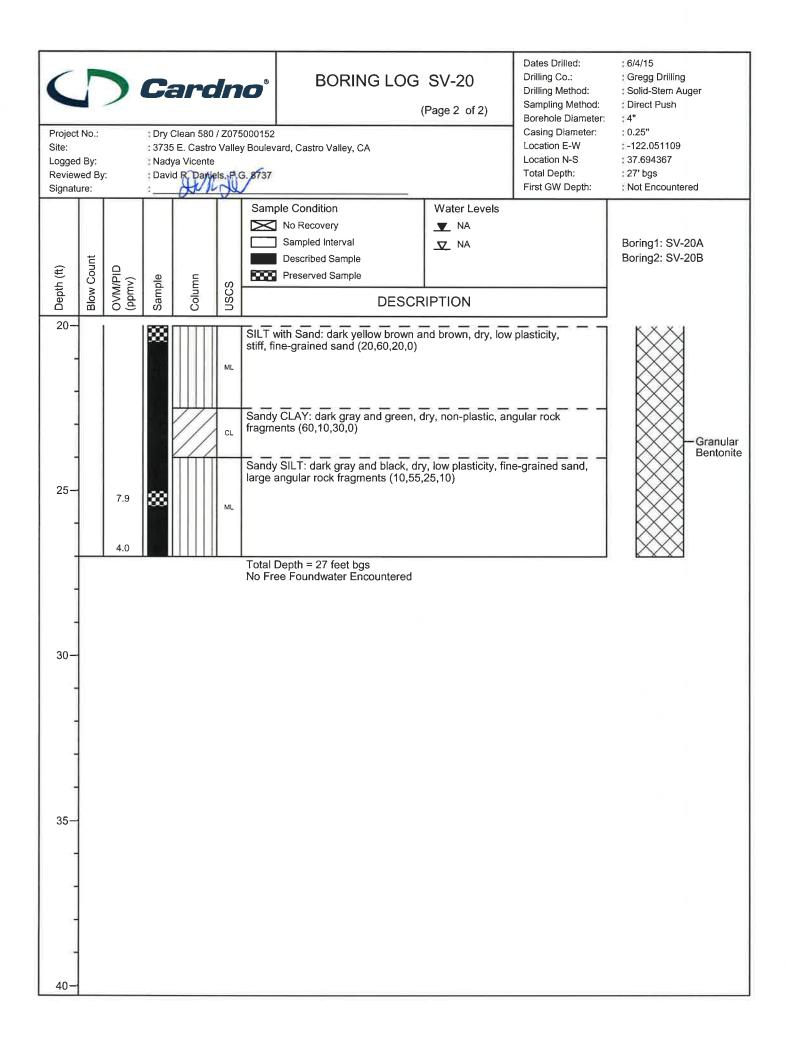
Project Site: Logged Review Signate	d By: ved By		: Dry : 373 : Nad : Dav	Clear 5 E. C Iya Vi	n 580 Castro	/ Z07	5000152 By Boulev G. 8737	ard, Casti				SV-18 Page 1 of		Dates Drilled: Drilling Co.: Drilling Method: Sampling Method: Borehole Diameter: Casing Diameter: Location E-W Location N-S Total Depth: First GW Depth:	: 6/4/15 : Gregg Drilling : Solid-Stem Auger : Direct Push : 4" : 0.25" : -122.050818 : 37.694322 : 28' bgs : Not Encountered
Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample		Column	USCS			overy d Interva	ple ple	DESCR	Water L ▼ NA ▼ NA	evels		Boring1: SV-18A Boring2: SV-18B
0		0.7	∞	0 4 0	14.0% 0.0% 0.0%	BR	10" FI	LL (BAS vith Sand	EROCI	K)	==:	s using ha		ained sand	Surface Casing Bentonite Slurry Granular Bentonite Vapor Screen
10-		0.6	**			CL	plastic (55,20	ity, fine- ,15,10)	grained	d sand,	subroun	 brown and	el up to 0	Iry, low .5" diameter y, medium	0.25" Teflon Tubing
15		3,4	**			ML	SILT	vith Sand	d: dark	yellow	meter at brown, d ck fragme		asticity, fi ,20,5)	ne-grained	— Bentonite Slurry — Granular Bentonite

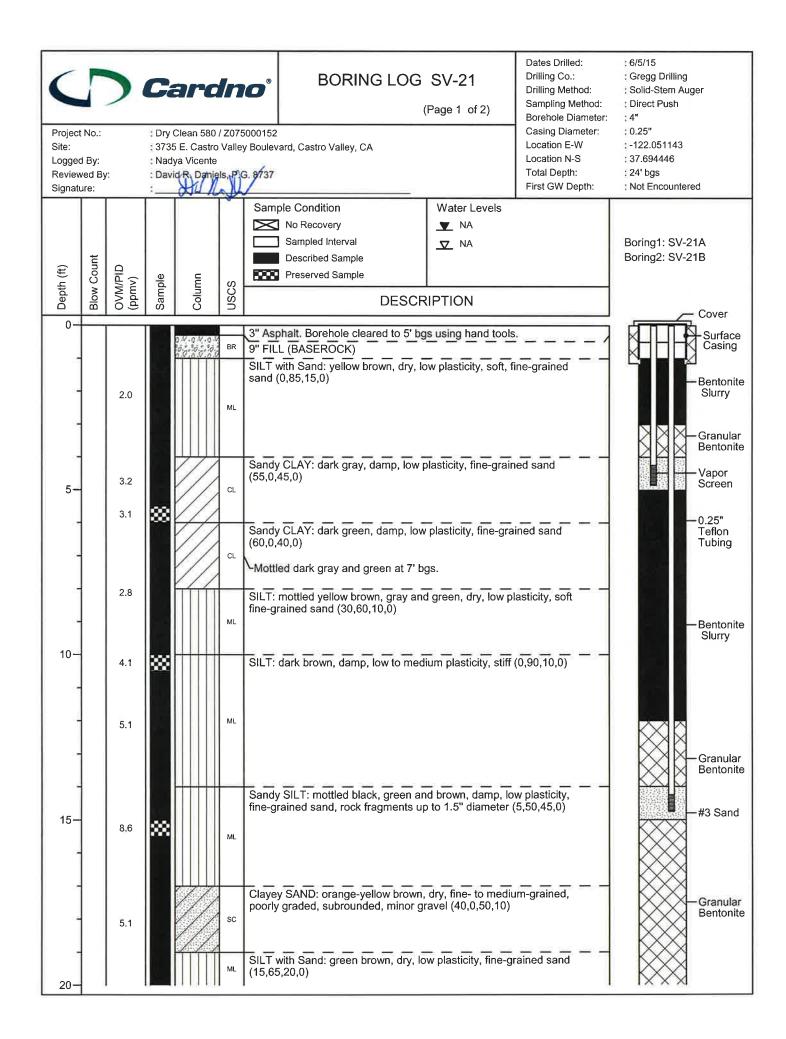


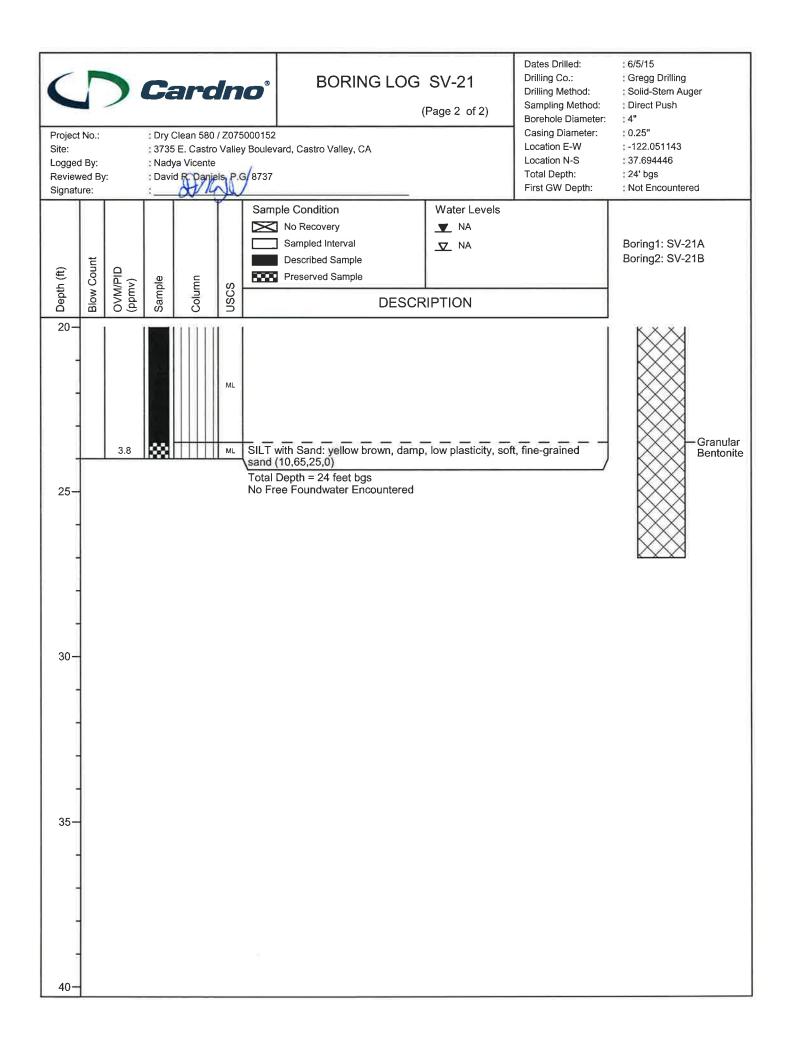


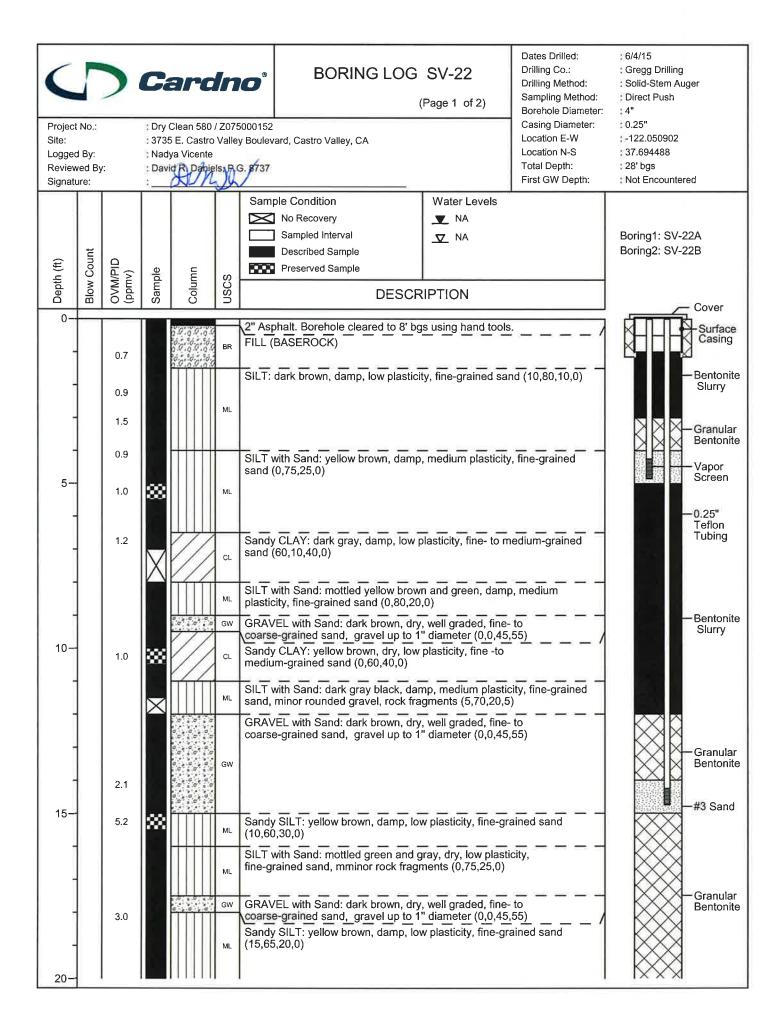


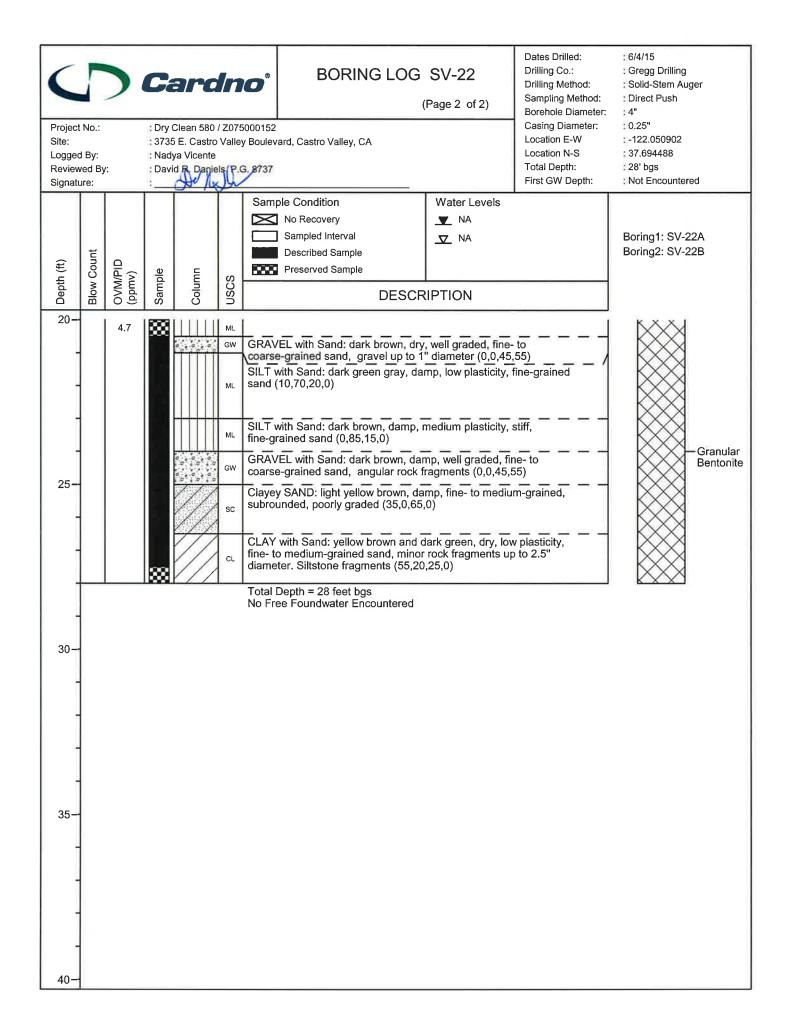
Project No.: Site: Logged By:	Dry Clean 580 / 3735 E. Castro v Nadya Vicente David R. Daniel	Z075000152 Valley Boulev		SV-20 Page 1 of 2)	Dates Drilled: Drilling Co.: Drilling Method: Sampling Method: Borehole Diameter: Casing Diameter: Location E-W Location N-S Total Depth: First GW Depth:	: 6/4/15 : Gregg Drilling : Solid-Stern Auger : Direct Push : 4" : 0.25" : -122.051109 : 37.694367 : 27' bgs : Not Encountered
Depth (ft) Blow Count OVM/PID (ppmv)	Sample		ple Condition No Recovery Sampled Interval Described Sample Preserved Sample	Water Levels ▼ NA ▼ NA		Boring1: SV-20A Boring2: SV-20B
0-	88 00 00 00 00 00 00 00 00 00 00 00 00 0	Sandy Sandy Sandy to me	bhalt. Borehole cleared to 5' bg LL (BASEROCK) with Sand: dark yellow brown, dark (55,15,30,0) with Sand: mottled dark yellow city, fine-grained sand (0,85,15) (CLAY: dark yellow brown and dium-grained sand (55,10,35,0)	green, damp, low play, my)	ine-grained 0,85,15,0) ine-grained nedium plasticity, fine-	Surface Casing Bentonite Slurry Granular Bentonite Vapor Screen -0.25" Teflon Tubing Bentonite Slurry

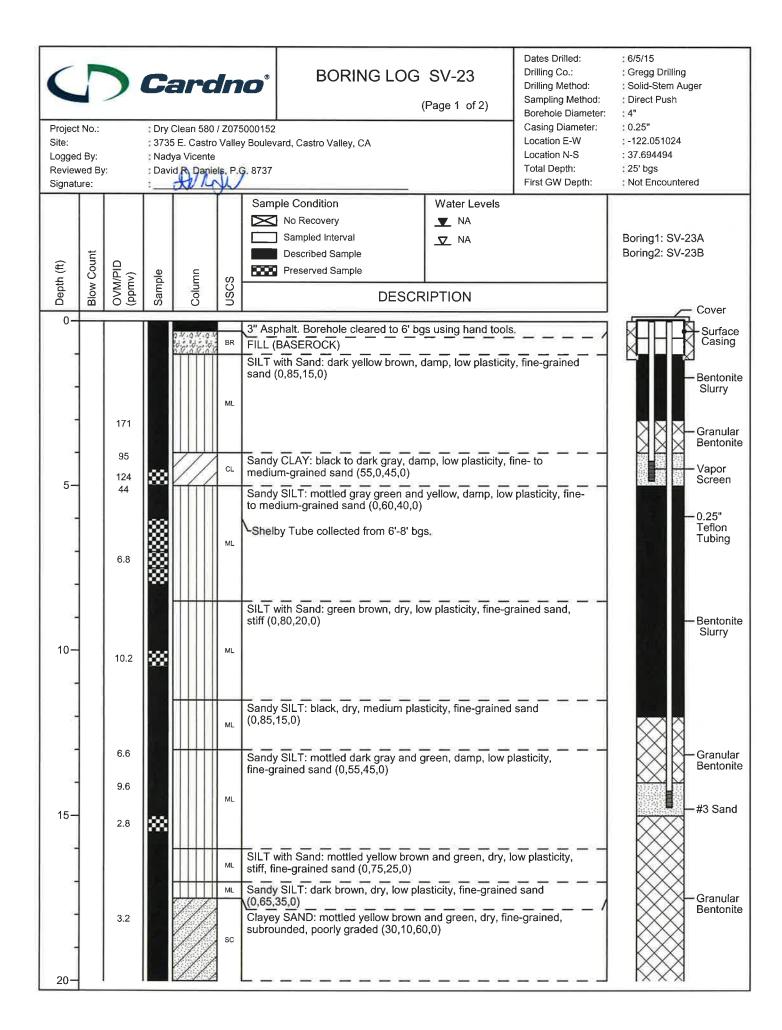


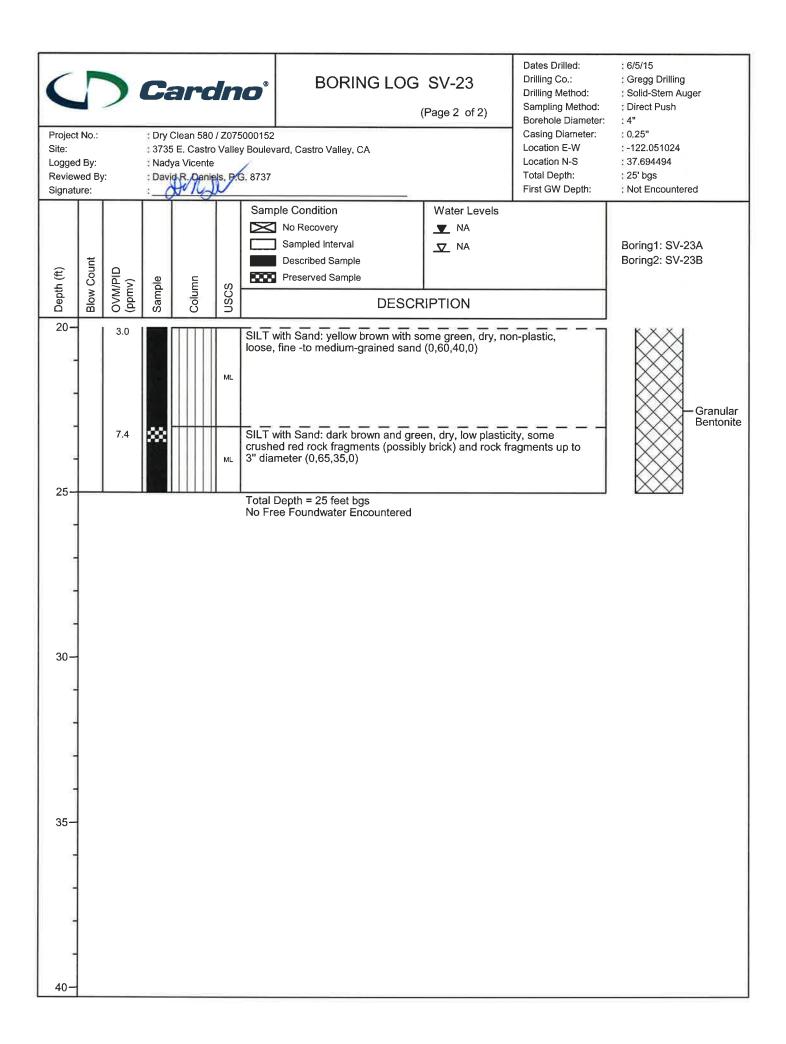




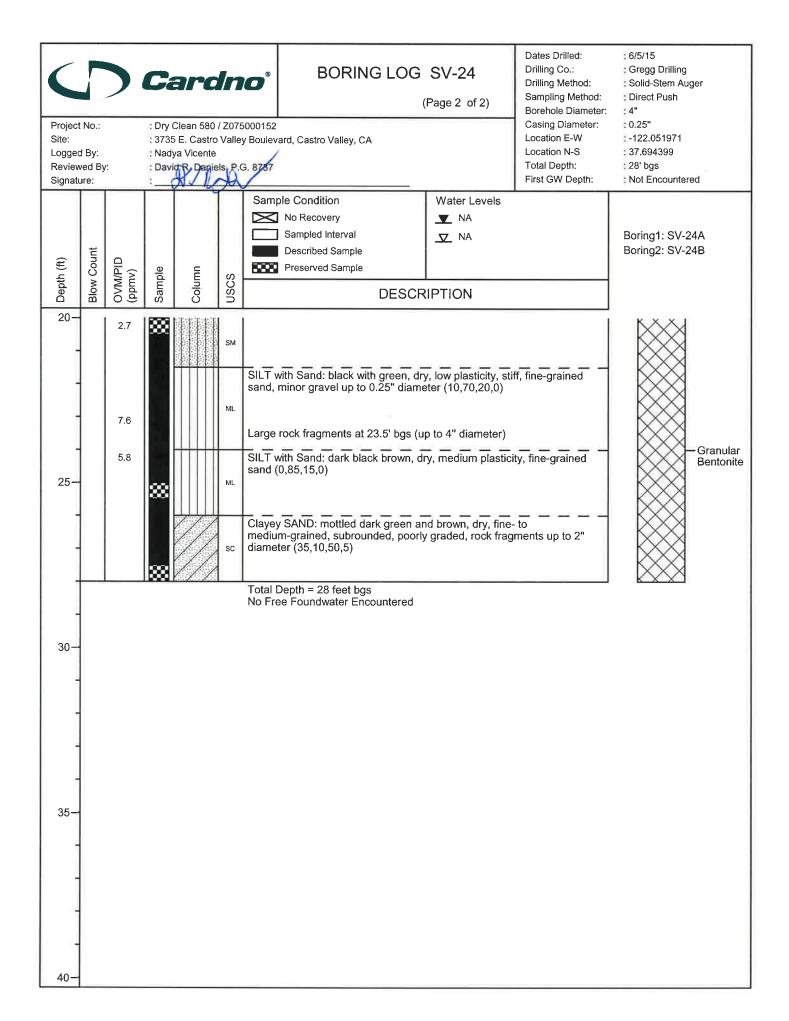








1	Project No.: Dry Clean 580 / Z075000152 Site: 3735 E. Castro Valley Boule			5000152			Dates Drilled: Drilling Co.: Drilling Method: Sampling Method: Borehole Diameter: Casing Diameter: Location E-W	: 6/5/15 : Gregg Drilling : Solid-Stem Auger : Direct Push : 4" : 0.25"		
Site: Logged Review Signat	ved By	r:	Nac	dya Vicente			ard, Castro Valley, CA		Location E-W Location N-S Total Depth: First GW Depth:	: -122.051971 : 37.694399 : 28' bgs : Not Encountered
Depth (ft)	Blow Count	OVM/PID (vmqq)	Sample	Column	nscs		ole Condition No Recovery Sampled Interval Described Sample Preserved Sample DESCR	Water Levels ▼ NA ∇ NA		Boring1: SV-24A Boring2: SV-24B
0-				5.0.5.0.5.0 60.00.00 00.00.00	BR	FILL (phalt. Borehole cleared to 6' bo BASEROCK) with Sand: yellow brown, damp 15,0)			Surface Casing Bentonite Slurry Granular
5-		3.1	**		ML		/ Tube collected from 6'-8' bgs			Bentonite Vapor Screen -0.25" Teflon Tubing
10-		2.7	**** ****		CL	fine- to	CLAY: mottled yellow brown a medium-grained sand, minor	rock fragments (6	0,10,30,0)	— Bentonite Slurry
25-		2.2			CL	to med	CLAY: mottled dark gray and fium-grained sand (55,0,45,0)			
-					ML ML	mediu	SILT: dark yellow brown, dam m-grained sand, minor gravel with Sand: mottled yellow brow 25,0)	(20,45,30,5)		- Granular Bentonite
15-		4.4	*		CL	CLAY plastic	with Sand: mottled dark green ity, fine- to medium-grained sa	and gray, damp to and (50,25,25,0)	o moist, low	#3 Sand
-					ML	SILT w fine-gr	with Sand: mottled yellow brown ained sand (0,75,25,0)	n and green, damp	o, low plasticity,	Granular
20-		2.3			SM	Silty S subrou (15,20	AND: dark orange-yellow brow unded, poorly graded, minor su ,60,5)	n, damp, fine- to nubangular gravel u	nedium-grained, to 2" diameter	Bentonite



APPENDIX E FIELD DATA SHEETS

SV Point Sampling

Date

6-25-15

collection

		_			=
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1329	1334	20/20	Company (Company)	
Purge	1335	1348	_	200 cc/min	He: _/o_ % under shroud, ppm leak
Sample	1355	1404	30/5	150 cc/m in	He: // % maintained during sample collection
Duplicate					He:% maintained during sample

Sample:	Summa ID#	ST# G0189622 @ 14	107
	Flow Regulator ID# PD7 2		
Duplicate:	Summa ID#		
	Flow Regulator ID#		

Purge Volume: 3PV = 13 min

SV-16A (5')

Well ID:

SV Point Sampling

Well ID:	SV-16 B (20')	Date	6-25-15	

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	/329	1334	20/20		
Purge	1335	1350	-	200 ce/min	He: % under shroud, ppm leak
Sample	1355	1406	30/5	150 ce/min	He:% maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID#	ST# GO189345 @ 1357
	Flow Regulator ID# AD 24	
Duplicate:	Summa ID#	
	Flow Regulator ID#	

Purge Volume: 3 PY = 15 min

SV Point Sampling

Well ID:	SV-17A	Date	6-25-15	
	33			

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1428	1433	20/20	-	
Purge	1433	1446	_	200 ce/min	He: // % under shroud,oppm leak
Sample	1453	1500	30/5	150 cofmin	He:_/e% maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID#	<i>ST#</i>	G0150611 C 1510
	Flow Regulator ID# AD 136		
Duplicate:	Summa ID#		41
	Flow Regulator ID#		

Purge Volume: 3PV=13 min

SV Point Sampling

Well ID:	<u> </u>	•	Date		
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1428	1433	20/20	_	
Purge	1433	1448	_	200 cc/min	He: // % under shroud, _/ ppm leak
Sample	1453	1506	30/5	150 cofmin	He:% maintained during sample collection
Duplicate					He:% maintained during sample collection

& ST # 60143005 @ 1455

Sample:	Summa ID# _ 1 6 8 2 0
	Flow Regulator ID# AD 86
Duplicate:	Summa ID#
	Flow Regulator ID#

Purge Volume: 3PV = 15 min

SV Point Sampling

Well	ID:	

SV-18 A (5')

Date 6/25/15

ST# G0189314 @ 1240

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1150	1155	20/20	-	
Purge	1155	1208	-	200 cc/min	He:% under shroud, ppm leak
Sample	1214	/222	30/5	150 ce/min	He: <u>//</u> % maintained during sample collection
Duplicate				14	He:% maintained during sample collection

Sample:	Summa ID# <u>22 372</u>		
	Flow Regulator ID# ADIIZ		
Duplicate:	Summa ID#		

Flow Regulator ID#

Purge Volume: 3 PV - /3 m/n

SV Point Sampling

Well ID:	SV-18B (22')	Date	6	/25	/15	
	· · · · · · · · · · · · · · · · · · ·		7			

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1150	1155	20/20	_	
Purge	1155	1210	-	200 cc/min	He:/o % under shroud, oppm leak
Sample	1214	1232	30/6	150 cc/min	He: // // maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID#	# Vac down hole slowly increasing
	Flow Regulator ID# AD 69	~3 In/hg @ end g purge.
Duplicate:	Summa ID#	ST # G0137937 1220
	Flow Regulator ID#	

Purge Volume: 3PV = 15 min

SV Point Sampling

Well ID:	SV-19A (5')	E	Date	6-25-15	9		
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium		
Shut In Test	1526	1531	20/20	-			
Purge	1532	15 45	_	200 ce/min	He: % under shroud, ppm leak		
Sample	1549	1557	30/5	150 colmin	He:% maintained during sample		

Sample:	Summa ID# <u>SLC 066</u>			
	Flow Regulator ID# AD82			
Duplicate:	Summa ID#			
	Flow Regulator ID#			

Duplicate

Purge Volume: 3PV = 13min

ST# 60189606 @ 1615

% maintained during sample

He:_

collection

SV Point Sampling

6-25-15

150 cc/min

collection He:

collection

% maintained during sample

SV=198 (151)

1549

Sample

Duplicate

Purge Volume: 3PV = 15 Min

Well ID:	<u> </u>		Date	6-25-15	5.	
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium	
Shut In Test	1526	1531	20/20	_		
Purge	1532	1547	_	200 ce foria	He: % under shroud, ppm leak	
			70/	- 1 .	He: // % maintained during sample	

30/16

1630

Summa ID# <u>LC 838</u> ST# G0187201 @ 1543 Sample: Flow Regulator ID# Aboフ * Sample Stopped collecting @ 16 Hg -let sit (x) 30 minutes - still no collection -Summa ID# Duplicate: Flow Regulator ID# abandon sample.

SV Point Sampling

Well ID:	5V-20A	- ,	Date	_	
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1642	1647	20/20	_	
Purge	1647	1700	_	200ce/min	He:% under shroud, ppm leak
Sample	1701	1710	30/5	150 cc fmin	He: 10 % maintained during sample collection
Duplicate					He:% maintained during sample collection

ST # 60/87290 @ 1720

Sample:	Summa ID#
	Flow Regulator ID# AD/84
Duplicate:	Summa ID#
	Flow Regulator ID#

Purge Volume: 3PV = 13 min

SV Point Sampling

Well ID:	5V-20B	_	Date	6-25-15	<u>-</u>
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1642	1647	20/20	_	
Purge	1647	1702	_	200 cc/min	He:/o % under shroud, ppm leak
Sample	1702	1725	30/5	150 celmin	He:% maintained during sample collection
Duplicate					He:% maintained during sample collection
Sample:		Summa ID# Flow Regulator ID			ST# G0184764 @ 17
Duplicate:	<	Summa ID#		-	

Purge Volume: 30V = 15 Min

SV Point Sampling

Well ID:	SV-21A	_	Date	6-26-15	=
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1100	1105	20/20	_	
Purge	1106	1119	_	200 cc/min	He:/c_ % under shroud, ppm leak
Sample	//22	1136	30/5	150 colmin	He:% maintained during sample collection
Duplicate					He:% maintained during sample collection
	r				57# G0137972 C
Sample:		Summa ID#	10912 4 An 23		dup = 60141337

Summa ID# __ Duplicate: Flow Regulator ID# Purge Volume:

SV Point Sampling

Well ID:	SV-218 ((15')	Date	6-26-15	_
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	1100	1105	20/20		
Purge	1106	1121	_	Zooce/min	He:% under shroud,ppm leak
Sample	1/22	1131	30/5	200cc/min	He: //e % maintained during sample collection
Duplicate					He:% maintained during sample collection
Sample:		Summa ID# Flow Regulator ID	LC 913 0# AD16		ST# 60183819 @ 1/25
<u>Duplicate:</u>		Summa ID# Flow Regulator ID			
Purge Volume:					

SV Point Sampling

6-26-15

	<u> </u>	= (
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium	
Shut In Test	0947	0952	20/20	-		
Purge	0953	1006	_	200cc/min	He: // % under shroud,	

Sample | 1011 | 1023 | 30/5 | 150 co/min | He: 10 % maintained during sample collection | He: ____ % maintained during sample collection |

Sample: Summa ID# LC1010 | ST# G0/87/23 © 1078

Duplicate: Summa ID# ______

Flow Regulator ID#

SV-22A

Purge Volume: 3 N = 13 min

Well ID:

SV Point Sampling

Well ID:	5V-22B (15')	Date	6-26-15

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	0947	0952	20/20	<u> </u>	
Purge	0953	1008	_	200cc/min	He: <u>/</u> % under shroud, ppm leak
Sample	1011	1018	30/5	150 cc/min	He: <u>///</u> % maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID#	ST# G0184759	1014
	Flow Regulator ID# AD 163		
Duplicate:	Summa ID#		
	Flow Regulator ID#		

Purge Volume: 3 PV = 15 MIL

SV Point Sampling

384 - 1		
MA		

SV-23A

Date 6-26-15

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	0726	0731	20/20	-	
Purge	0733	0746		200 ce/min	He: % under shroud, ppm leak
Sample	0752	0821	30/5	150 cc/min	He:% maintained during sample collection
Duplicate	0752	0823	30/5	150cc/min	He: // // maintained during sample collection

Samp	ole:	
Carrie	/10.	

Summa ID# LC 0 88

Flow Regulator ID# AD 3 *

* Vac down hole a 5 July e end of purge

ST # G0188617 @ 0828

Duplicate: 23A

Flow Regulator ID# Ab 140

Purge Volume: 3PV = 13min

SV Point Sampling

Well ID:	SV-23B (15	- ')	Date			
	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium	
Shut In Tost	4-1	4	20/			

	,			,	
Shut In Test	0726	0731	20/20	-	
Purge	0733	0748	_	200cc/min	He:_/c_ % under shroud, ppm leak
Sample	0752	0806	30/5	150cc/min	He:% maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID#	ST# GO186955 @ 0757
	Flow Regulator ID# AD 3i	* Vac down hale ~ 5 In/Hy @ end of purpo
Duplicate:	Summa ID# Flow Regulator ID#	

Purge Volume: 3PV=15min

SV Point Sampling

6-26-15

Well ID:	SV-24A		Date	6-26-15	_
Ĩ	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	0847	0852	20/20	****	
Purge	0853	0906	-	200ce/min	He: 10 % under shroud, ppm leak
Sample	0911	0921	30/5	150 ce fasin	He: % maintained during sample

Duplicate collection Summa ID# <u>LC 361</u> Sample: Flow Regulator ID# AD 22

Summa ID#

Flow Regulator ID#

0921

Purge Volume: 3PV = 13 Min.

SV-24A

0911

Sample

Duplicate:

ST# GOI 84789 C

% maintained during sample

collection He:___

SV Point Sampling

Well ID:	SV-24B (15')	Date	6-26-15	L.
) -		

	Start (time)	End (time)	Inches Hg	Flow Setting (cc/min)	Helium
Shut In Test	0847	0852	20/20	-	
Purge	0 853	0908	_	200cc/min	He:% under shroud,ppm leak
Sample	0911	0925	30/6	150 ac/min	He: _/o % maintained during sample collection
Duplicate					He:% maintained during sample collection

Sample:	Summa ID# <u>LC 89.4</u> Flow Regulator ID# <u>AD 175</u>	5T# G0141322 @	0915
Duplicate:	Summa ID#		
	Flow Regulator ID#		

Purge Volume: 3 PV = 15 min

5 feet	
4 inch	
12 inch	
150 cc/min	

* Fill in Yellow Area Only

121.92 10.16 30.48

150

Porocity Volume 0.3333333

3 862.29 cc

Purge Time

5.75 minutes

	1PV (3PV	10PV	
100cc/min	8.62 min	26 min	1 hr 26 min	
150 cc/min	5.75 min	17 min	58 min	
200 cc/min	4.31 min	13 min	43 min	

15	feet
4	inch
12	inch
200	cc/min

1	0.16
3	0.48
	200

426.72

Porocity Volume 0.3333333

3 958.81 cc

* Fill in Yellow Area Only

	1PV	3PV	10PV
100cc/min	9.59 min	29 min	1 hr 36 min
150 cc/min	6.39 min	19 min	1 hr 4 min
200 cc/min	4.79 min	(15 min)	48 min

20 feet	
4 inch	
12 inch	
200 cc/m	in

579.12 10.16 30.48 200 Porocity Volume 0.33333333

3 1007.08 cc

* Fill in Yellow Area Only

Purge Time 5.04 minutes

	1PV	3PV	10PV
100cc/min	10.07 min	30 min	1 hr 40 min
150 cc/min	6.71 min	20 min	1 hr 7 min
200 cc/min	5.04 min	15 min	50 min

22 feet	
4 inch	
12 inch	
100 cc/min	

640.08 10.16 30.48 100 Porocity Volume 0.3333333

3 1026.38 cc

* Fill in Yellow Area Only

Purge Time 10.26 minutes

	1PV	SEV)	10PV
100cc/min	10.26 min	31 min	1 hr 43 min
150 cc/min	6.84 min	21 min	1 hr 8 min
200 cc/min	5.13 min	15 min	51 min

APPENDIX F LABORATORY ANALYTICAL REPORTS



Calscience



WORK ORDER NUMBER: 15-06-0698

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno ERI

Client Project Name: 580 Market Place Shopping Center

Attention: Gabe Stivala

601 North McDowell Blvd. Petaluma, CA 94954-2312

amande Porter

Approved for release on 06/16/2015 by: Amanda Porter

Project Manager



Email your PM)

ResultLink >

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.



Contents

Client Project Name: 5	80 Market Place	Shopping	Center
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Work Order Number: 15-06-0698

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3	Quality Control Sample Data. 3.1 MS/MSD. 3.2 LCS/LCSD.	126 126 135
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6	Chain-of-Custody/Sample Receipt Form	145

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Work Order Narrative

Work Order: 15-06-0698 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/09/15. They were assigned to Work Order 15-06-0698.

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.



Cardno ERI			Date Re	eceived:			06/09/15	
601 North McDowell Blvd.			Work O	rder:			15-06-0698	
Petaluma, CA 94954-2312			Prepara	ition:			EPA 5030C	
			Method	:		EPA 8015B (M)		
			Units:				mg/kg	
Project: 580 Market Place Shopping	g Center					Pa	ge 1 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-5.5-SV16	15-06-0698-1-A	06/03/15 10:35	Solid	GC 24	06/09/15	06/12/15 03:37	150611L041	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>	
TPH as Gasoline		ND		0.52	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		67		42-126				
S-11.5-SV16	15-06-0698-2-A	06/03/15	Solid	GC 24	06/09/15	06/11/15	150611L032	
0-11.5-04 10	13-00-0030-2-A	10:55	Jona			21:57	1300112032	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	<u>Qua</u>	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		73		42-126				
C 44 E CVAC	45 06 0600 2 A	06/02/45	Calid	66.24	06/00/45	06/44/45	4506441 022	
S-14.5-SV16	15-06-0698-3-A	06/03/15 11:00	Solid	GC 24	06/09/15	06/11/15 22:31	150611L032	
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		59		42-126				
S-19.5-SV16	15-06-0698-4-A	06/03/15	Solid	GC 24	06/09/15	06/11/15	150611L032	
		11:25				23:05		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	<u>Qua</u>	<u>llifiers</u>	
TPH as Gasoline		ND		0.51	1.00			
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		72		42-126				
S-25-SV16	15-06-0698-5-A	06/03/15	Solid	GC 24	06/09/15	06/11/15 23:39	150611L032	
		11:30						
Parameter		11:30 Result		RL	DF		alifiers	
Parameter TPH as Gasoline		11:30 Result ND		<u>RL</u> 0.50	<u>DF</u> 1.00		<u>alifiers</u>	
TPH as Gasoline		<u>Result</u> ND		0.50	1.00		lifiers	
		Result					ulifiers	



Cardno ERI			Date Re	eceived:			06/09/15	
601 North McDowell Blvd.		,	Work O	rder:		15-06-069		
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030C	
			Method		EPA 8015B (M)			
			Units:		mg/kg			
Project: 580 Market Place Shoppin	g Center					Pa	ge 2 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-29.5-SV16	15-06-0698-6-A	06/03/15 11:32	Solid	GC 24	06/09/15	06/12/15 00:13	150611L032	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		74		42-126	<u>Quamoro</u>			
·								
S-5-SV17	15-06-0698-7-A	06/03/15 13:40	Solid	GC 24	06/09/15	06/12/15 00:47	150611L032	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		72		42-126	<u> </u>			
S-10-SV17	15-06-0698-8-A	06/03/15 14:15	Solid	GC 24	06/09/15	06/12/15 05:18	150611L041	
Parameter		Result		<u>RL</u>	DF	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		71		42-126				
S-15-SV17	15-06-0698-9-A	06/03/15 14:35	Solid	GC 24	06/09/15	06/12/15 05:52	150611L041	
Parameter		Result		<u>RL</u>	DF	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.49	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		72		42-126				
S-20-SV17	15-06-0698-10-A	06/03/15 14:50	Solid	GC 24	06/09/15	06/12/15 06:26	150611L041	
Parameter		Result		<u>RL</u>	DF	Qua	<u>llifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			



Cardno ERI			Date Re	06/09/15				
601 North McDowell Blvd.		,	Work O		15-06-0698			
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030C	
			Method:	:		EPA 8015B (M)		
			Units:				mg/kg	
Project: 580 Market Place Shop	ping Center					Pa	ge 3 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-5-SV22	15-06-0698-11-A	06/04/15 07:35	Solid	GC 24	06/09/15	06/12/15 18:58	150611L063	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>	
TPH as Gasoline		ND		0.50	1.00			
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		64		42-126				
S-10-SV22	15-06-0698-12-A	06/04/15 07:50	Solid	GC 24	06/09/15	06/12/15 07:00	150611L041	
Parameter		Result		<u>RL</u>	DF	Qua	<u>lifiers</u>	
TPH as Gasoline		ND		0.49	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		73		42-126				
S-15-SV22	15-06-0698-13-A	06/04/15 07:55	Solid	GC 24	06/09/15	06/12/15 07:34	150611L041	
Parameter		Result		RL	DF	Qua	<u>lifiers</u>	
TPH as Gasoline		ND		0.51	1.00			
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		58		42-126				
S-20-SV22	15-06-0698-14-A	06/04/15 08:05	Solid	GC 24	06/09/15	06/12/15 08:08	150611L041	
<u>Parameter</u>							l'C	
		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>	
TPH as Gasoline		<u>Result</u> ND		<u>RL</u> 0.51	<u>DF</u> 1.00	Qua	<u>liffers</u>	
TPH as Gasoline <u>Surrogate</u>						Qua	<u>limers</u>	
		ND		0.51	1.00	Qua	<u>imers</u>	
Surrogate	15-06-0698-15-A	ND Rec. (%)	Solid	0.51 <u>Control Limits</u>	1.00	06/12/15 08:42	150611L041	
Surrogate 1,4-Bromofluorobenzene - FID	15-06-0698-15-A	ND Rec. (%) 69 06/04/15	Solid	0.51 Control Limits 42-126	1.00 Qualifiers	06/12/15 08:42		
Surrogate 1,4-Bromofluorobenzene - FID S-27.5-SV22	15-06-0698-15-A	ND Rec. (%) 69 06/04/15 08:15	Solid	0.51 <u>Control Limits</u> 42-126 GC 24	1.00 Qualifiers 06/09/15	06/12/15 08:42	150611L041	
Surrogate 1,4-Bromofluorobenzene - FID S-27.5-SV22 Parameter	15-06-0698-15-A	ND Rec. (%) 69 06/04/15 08:15 Result	Solid	0.51 Control Limits 42-126 GC 24 RL	1.00 Qualifiers 06/09/15 DF	06/12/15 08:42	150611L041	
Surrogate 1,4-Bromofluorobenzene - FID S-27.5-SV22 Parameter TPH as Gasoline	15-06-0698-15-A	ND Rec. (%) 69 06/04/15 08:15 Result ND	Solid	0.51 Control Limits 42-126 GC 24 RL 0.48	1.00 Qualifiers 06/09/15 DF 1.00	06/12/15 08:42	150611L041	

Qualifiers



<u>Parameter</u>

Surrogate

TPH as Gasoline

1,4-Bromofluorobenzene - FID

1,4-Bromofluorobenzene - FID

Analytical Report

Cardno ERI			Date Re Work O				06/09/15 15-06-0698	
601 North McDowell Blvd.								
Petaluma, CA 94954-2312			Prepara	EPA 50300				
			Method:			E	PA 8015B (M)	
			Units:				mg/kg	
Project: 580 Market Place Shop	ping Center					Pa	age 4 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-5-SV18	15-06-0698-16-A	06/04/15 09:50	Solid	GC 24	06/09/15	06/12/15 09:15	150611L041	
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.48	1.00			
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>			
1,4-Bromofluorobenzene - FID		69		42-126				
S-10-SV18	15-06-0698-17-A	06/04/15 09:55	Solid	GC 24	06/09/15	06/12/15 09:49	150611L041	
<u>Parameter</u>		Result	•	RL	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.52	1.00			
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>			
1,4-Bromofluorobenzene - FID		72		42-126				
S-15-SV18	15-06-0698-18-A	06/04/15 10:21	Solid	GC 24	06/09/15	06/12/15 10:57	150611L041	
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.49	1.00			
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>			
1,4-Bromofluorobenzene - FID		70		42-126				
S-22-SV18	15-06-0698-19-A	06/04/15 10:25	Solid	GC 24	06/09/15	06/12/15 11:31	150611L041	

S-27.5-SV18	15-06-0698-20-A	06/04/15 10:28	Solid	GC 24	06/09/15	06/12/15 12:05	150611L041
<u>Parameter</u>		Result		RL	<u>DF</u>	Qu	alifiers
TPH as Gasoline		ND		0.49	1.00		
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		

<u>RL</u>

0.50

42-126

42-126

Control Limits

<u>DF</u>

1.00

Qualifiers

Result

Rec. (%)

ND

72

72



TPH as Gasoline

1,4-Bromofluorobenzene - FID

Surrogate

S-25-SV19

Analytical Report

Cardno ERI			Date Re	ceived:		06/09/15		
601 North McDowell Blvd.			Work O	rder:			15-06-0698	
Petaluma, CA 94954-2312			Prepara	tion:		EPA 50300		
			Method:		EPA 8015B (M			
			Units:				mg/kg	
Project: 580 Market Place Shop	ping Center					Pa	ige 5 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-5-SV19	15-06-0698-21-A	06/04/15 12:25	Solid	GC 24	06/09/15	06/12/15 12:38	150611L041	
<u>Parameter</u>		Result		RL	DF	Qua	alifiers	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		54		42-126				
S-10-SV19	15-06-0698-22-A	06/04/15 12:35	Solid	GC 24	06/09/15	06/12/15 20:40	150611L063	
<u>Parameter</u>		Result		RL	DF	Qua	alifiers	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		73		42-126				
S-15-SV19	15-06-0698-23-A	06/04/15 12:45	Solid	GC 24	06/09/15	06/12/15 13:46	150611L041	
<u>Parameter</u>		Result		RL	DF	Qua	alifiers	
TPH as Gasoline		ND		0.50	1.00			
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>			
1,4-Bromofluorobenzene - FID		73		42-126				
S-17.5-SV19	15-06-0698-24-A	06/04/15 13:00	Solid	GC 24	06/09/15	06/12/15 14:20	150611L041	
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers	

 Parameter
 Result
 RL
 DF
 Qualifiers

 TPH as Gasoline
 ND
 0.53
 1.00

 Surrogate
 Rec. (%)
 Control Limits
 Qualifiers

 1,4-Bromofluorobenzene - FID
 72
 42-126

Solid

0.48

42-126

Control Limits

GC 24

1.00

06/09/15

Qualifiers

06/12/15 14:54 150611L041

ND

71

Rec. (%)

06/04/15 13:05

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

15-06-0698-25-A



Cardno ERI			06/09/15					
601 North McDowell Blvd.		,	Work O	rder:		15-06-0698		
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030C	
			Method:		Е	EPA 8015B (M)		
			Units:				mg/kg	
Project: 580 Market Place Shoppi	ing Center					Pa	ige 6 of 8	
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
S-27.5-SV19	15-06-0698-26-A	06/04/15 13:10	Solid	GC 24	06/09/15	06/12/15 15:28	150611L041	
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.51	1.00			
Surrogate 1,4-Bromofluorobenzene - FID		<u>Rec. (%)</u> 71		Control Limits 42-126	<u>Qualifiers</u>			
S-5-SV20	15-06-0698-27-A	06/04/15 14:10	Solid	GC 24	06/09/15	06/12/15 16:01	150611L041	
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.50	1.00			
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		74		42-126	<u> </u>			
S-9-SV20	15-06-0698-28-A	06/04/15 14:20	Solid	GC 24	06/09/15	06/12/15 21:14	150611L063	
Parameter	,	Result		RL	DF	Qua	alifiers	
TPH as Gasoline		ND		0.52	1.00			
Surrogate		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		73		42-126				
S-14-SV20	15-06-0698-29-A	06/04/15 14:25	Solid	GC 24	06/09/15	06/12/15 21:48	150611L063	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers	
TPH as Gasoline		ND		0.53	1.00			
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers			
1,4-Bromofluorobenzene - FID		58		42-126				
S-20-SV20	15-06-0698-30-A	06/04/15 14:35	Solid	GC 24	06/09/15	06/12/15 22:22	150611L063	
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	<u>alifiers</u>	
TPH as Gasoline		ND		0.51	1.00			
<u>Surrogate</u> 1,4-Bromofluorobenzene - FID		Rec. (%) 70		Control Limits 42-126	Qualifiers			

06/09/15



Cardno ERI

Analytical Report

Date Received:

Odiano Enti	arano Ern				2 4.10 1 1.00011 0 4.1				
601 North McDowell Blvd.			Work O	rder:			15-06-0698		
Petaluma, CA 94954-2312			Prepara	tion:			EPA 50300		
•			Method:			Е	PA 8015B (M)		
			Units:				mg/kg		
Project: 580 Market Place Shop	ping Center					Pa	age 7 of 8		
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
S-25-SV20	15-06-0698-31-A	06/04/15 14:40	Solid	GC 24	06/09/15	06/12/15 22:56	150611L063		
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
TPH as Gasoline		1.0		0.49	1.00	HD			
Surrogate		Rec. (%)		Control Limits	Qualifiers				
1,4-Bromofluorobenzene - FID		80		42-126					
S-25-SV17	15-06-0698-32-A	06/04/15 15:00	Solid	GC 24	06/09/15	06/12/15 23:30	150611L063		
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers		
TPH as Gasoline		ND		0.48	1.00				
Surrogate		Rec. (%)		Control Limits	Qualifiers				
1,4-Bromofluorobenzene - FID		72		42-126					
S-29.5-SV17	15-06-0698-33-A	06/04/15 15:02	Solid	GC 24	06/09/15	06/13/15 00:03	150611L063		
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers		
TPH as Gasoline		ND		0.51	1.00				
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers				
1,4-Bromofluorobenzene - FID		71		42-126					

Method Blank	099-14-571-2402	N/A	Solid	GC 24	06/11/15	06/11/15 11:12	150611L032
<u>Parameter</u>		<u>Result</u>	<u>R</u>	<u>L</u>	DF	Qua	<u>ifiers</u>
TPH as Gasoline		ND	0	.50	1.00		
Surrogate		Rec. (%)	<u>C</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		70	4	2-126			

Method Blank	099-14-571-2406	N/A	Solid	GC 24	06/11/15	06/12/15 02:29	150611L041
Parameter		Result	<u>R</u>	<u>L</u>	DF	Qua	<u>alifiers</u>
TPH as Gasoline		ND	0.	50	1.00		
Surrogate		Rec. (%)	<u>C</u>	ontrol Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		55	42	2-126			



Project: 580 Market Place Shopping Center

Analytical Report

Cardno ERI Date Received: 06/09/15 601 North McDowell Blvd. Work Order: 15-06-0698 EPA 5030C Petaluma, CA 94954-2312 Preparation: Method: EPA 8015B (M) Units: mg/kg Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-571-2409	N/A	Solid	GC 24	06/11/15	06/12/15 17:50	150611L063
Parameter		Result	<u> </u>	<u> </u>	DF	Qua	lifiers
TPH as Gasoline		ND	(0.50	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		69	4	12-126			





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 1 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5.5-SV16	15-06-0698-1-A	06/03/15 10:35	Solid	GC/MS XX	06/09/15	06/10/15 16:46	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0049	1.00		
Bromobenzene		ND		0.0049	1.00		
Bromochloromethane		ND		0.0049	1.00		
Bromodichloromethane		ND		0.0049	1.00		
Bromoform		ND		0.0049	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.049	1.00		
n-Butylbenzene		ND		0.0049	1.00		
sec-Butylbenzene		ND		0.0049	1.00		
tert-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide		ND		0.049	1.00		
Carbon Tetrachloride		ND		0.0049	1.00		
Chlorobenzene		ND		0.0049	1.00		
Chloroethane		ND		0.0049	1.00		
Chloroform		ND		0.0049	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0049	1.00		
4-Chlorotoluene		ND		0.0049	1.00		
Dibromochloromethane		ND		0.0049	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0099	1.00		
1,2-Dibromoethane		ND		0.0049	1.00		
Dibromomethane		ND		0.0049	1.00		
1,2-Dichlorobenzene		ND		0.0049	1.00		
1,3-Dichlorobenzene		ND		0.0049	1.00		
1,4-Dichlorobenzene		ND		0.0049	1.00		
Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethane		ND		0.0049	1.00		
1,2-Dichloroethane		ND		0.0049	1.00		
1,1-Dichloroethene		ND		0.0049	1.00		
c-1,2-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene		ND		0.0049	1.00		
1,2-Dichloropropane		ND		0.0049	1.00		
1,3-Dichloropropane		ND		0.0049	1.00		
2,2-Dichloropropane		ND		0.0049	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
 Page 2 of 114

Project. 560 Market Place Shopping Center				Page 2 01 114
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0099	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0099	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0099	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0099	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 3 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Page 4 of 114

No.	Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Acetone ND 0.133 1.00 Benzene ND 0.0050 1.00 Bromochitormethane ND 0.0050 1.00 Bromochitormethane ND 0.0050 1.00 Bromofilmomethane ND 0.0050 1.00 Bromofilmomethane ND 0.0050 1.00 Bromofilmomethane ND 0.0050 1.00 Bromofilmomethane ND 0.050 1.00 Bromomethane ND 0.050 1.00 Patranomethane ND 0.050 1.00 Bromomethane ND 0.0050 1.00 Sec-Butylbanzene ND 0.0050 1.00 Carbon Pitzrachloride ND 0.050 1.00 Carbon Pitzrachloride ND 0.050 1.00 Chlorochane ND 0.0050 1.00 Chlorochane ND 0.0050 1.00 Chlorochane ND 0.0050 1.00 Chlorochane ND	S-11.5-SV16	15-06-0698-2-A		Solid	GC/MS XX	06/09/15	06/10/15 19:03	150610L018
Benzene ND 0.0050 1.00 Bromobenzene ND 0.0050 1.00 Bromodichromethane ND 0.0050 1.00 Bromodichloromethane ND 0.0050 1.00 Bromodichloromethane ND 0.0050 1.00 Bromomethane ND 0.0050 1.00 2-Butlanone ND 0.0050 1.00 n-Butylbenzene ND 0.0050 1.00 see-Butylbenzene ND 0.0050 1.00 see-Butylbenzene ND 0.0050 1.00 carbon Tetrachloride ND 0.0050 1.00 Carbon Disulfide ND 0.0050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorocethane ND 0.0050 1.00 Chlorocethane ND 0.0050 1.00 Chlorocethane ND 0.0050 1.00 Chlorocethane ND 0.0050 1.00 Chlorocobluene <td><u>Parameter</u></td> <td></td> <td>Result</td> <td></td> <td>RL</td> <td><u>DF</u></td> <td>Qua</td> <td><u>llifiers</u></td>	<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Bromobenzene ND 0.0050 1.00 Bromochioromethane ND 0.0050 1.00 Bromochioromethane ND 0.0050 1.00 Bromomorman ND 0.0050 1.00 Bromomethane ND 0.025 1.00 2-Butanone ND 0.050 1.00 -Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 Carbon Disulfide ND 0.0050 1.00 Carbon Fietrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorotelane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane <	Acetone		ND		0.13	1.00		
Bromochloromethane ND 0.0050 1.00 Bromodichloromethane ND 0.0050 1.00 Bromoform ND 0.0050 1.00 Bromomethane ND 0.025 1.00 2-Butanone ND 0.050 1.00 n-Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 carbon Disutfide ND 0.050 1.00 Carbon Disutfide ND 0.050 1.00 Carbon Disutfide ND 0.050 1.00 Carbon Tetrachloride ND 0.050 1.00 Chlorobenzene ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromo-4-Chloropropane	Benzene		ND		0.0050	1.00		
Bromodichloromethane ND 0.0050 1.00 Bromoderom ND 0.0050 1.00 Bromomethane ND 0.025 1.00 2-Butlanone ND 0.050 1.00 n-Butylbenzene ND 0.0050 1.00 see-Butylbenzene ND 0.0050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorobrane ND 0.0050 1.00 Chlorobrane ND 0.0050 1.00 Chlorobromethane ND 0.0050 1.00 Chlorobromethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,2-Dichlorobenzene	Bromobenzene		ND		0.0050	1.00		
Bromoform ND 0.0050 1.00 Bromomethane ND 0.025 1.00 2-Butanone ND 0.050 1.00 n-Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 Lett-Butylbenzene ND 0.050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorobethane ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 4-Chlorotholuene ND 0.0050 1.00 4-Chlorotholuene ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dichlorobenzene N	Bromochloromethane		ND		0.0050	1.00		
Bromomethane ND 0.025 1.00 2-Butanone ND 0.050 1.00 n-Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 tert-Butylbenzene ND 0.050 1.00 Carbon Tetrachloride ND 0.050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorotebraene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 <t< td=""><td>Bromodichloromethane</td><td></td><td>ND</td><td></td><td>0.0050</td><td>1.00</td><td></td><td></td></t<>	Bromodichloromethane		ND		0.0050	1.00		
2-Butanone ND 0.050 1.00 n-Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 carbon Disulfide ND 0.050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichloroethane	Bromoform		ND		0.0050	1.00		
n-Butylbenzene ND 0.0050 1.00 sec-Butylbenzene ND 0.0050 1.00 tert-Butylbenzene ND 0.0050 1.00 carbon Disulfide ND 0.050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Disulfide ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloromethane ND 0.0050 1.00 Chlorometh	Bromomethane		ND		0.025	1.00		
sec-Butylbenzene ND 0.0050 1.00 Lert-Butylbenzene ND 0.0050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 Chlorothane ND 0.0050 1.00 Chlorothuene ND 0.025 1.00 Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 1-2-Dibromo-shane ND 0.0050 1.00 1-2-Dibromo-shane ND 0.0050 1.00 1-2-Dichlorobenzene ND 0.0050 1.00 1-2-Dichlorobenzene ND 0.0050 1.00 1-1-Dichlorob	2-Butanone		ND		0.050	1.00		
Iter-Buylbenzene ND 0.0050 1.00 Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorodrame ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane	n-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide ND 0.050 1.00 Carbon Tetrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorobethane ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloromethane ND 0.0050 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,4-Dichloroethane ND 0.0050 1.00 1,4-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00	sec-Butylbenzene		ND		0.0050	1.00		
Carbon Tetrachloride ND 0.0050 1.00 Chlorobenzene ND 0.0050 1.00 Chlorotethane ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chlorotoluene ND 0.025 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 1,2-Dibromo-shane ND 0.0050 1.00 1,2-Dibromo-shane ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,	tert-Butylbenzene		ND		0.0050	1.00		
Chlorobenzene ND 0.0050 1.00 Chloroethane ND 0.0050 1.00 Chloromethane ND 0.0050 1.00 Chloromethane ND 0.025 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotolromethane ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00	Carbon Disulfide		ND		0.050	1.00		
Chloroethane ND 0.0050 1.00 Chloroform ND 0.0050 1.00 Chloromethane ND 0.025 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00	Carbon Tetrachloride		ND		0.0050	1.00		
Chloroform ND 0.0050 1.00 Chloromethane ND 0.025 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,2-Dichloroethene ND 0.0050 1.00	Chlorobenzene		ND		0.0050	1.00		
Chloromethane ND 0.025 1.00 2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,1-Dichlorotethane ND 0.0050 1.00 1,1-Dichlorotethane ND 0.0050 1.00 1,1-Dichlorotethane ND 0.0050 1.00 1,1-Dichlorotethene ND 0.0050 1.00 1,1-Dichlorotethene ND 0.0050 1.00 1,1-Dichlorotethene ND 0.0050 1.00 1,2-Dichlorotethene ND 0.0050 1.0	Chloroethane		ND		0.0050	1.00		
2-Chlorotoluene ND 0.0050 1.00 4-Chlorotoluene ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	Chloroform		ND		0.0050	1.00		
A-Chlorotoluene ND 0.0050 1.00 Dibromochloromethane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.010 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 1,1-Dichlorotentane ND 0.0050 1.00 1,1-Dichlorotethane ND 0.0050 1.00 1,2-Dichlorotethane ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	Chloromethane		ND		0.025	1.00		
Dibromochloromethane ND 0.0050 1.00 1,2-Dibromo-3-Chloropropane ND 0.010 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	2-Chlorotoluene		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane ND 0.010 1.00 1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	4-Chlorotoluene		ND		0.0050	1.00		
1,2-Dibromoethane ND 0.0050 1.00 Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	Dibromochloromethane		ND		0.0050	1.00		
Dibromomethane ND 0.0050 1.00 1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 1-1,2-Dichloroethene ND 0.0050 1.00 1-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dichlorobenzene ND 0.0050 1.00 1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,2-Dibromoethane		ND		0.0050	1.00		
1,3-Dichlorobenzene ND 0.0050 1.00 1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	Dibromomethane		ND		0.0050	1.00		
1,4-Dichlorobenzene ND 0.0050 1.00 Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,2-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane ND 0.0050 1.00 1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,3-Dichlorobenzene		ND		0.0050	1.00		
1,1-Dichloroethane ND 0.0050 1.00 1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,4-Dichlorobenzene		ND		0.0050	1.00		
1,2-Dichloroethane ND 0.0050 1.00 1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethene ND 0.0050 1.00 c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,1-Dichloroethane		ND		0.0050	1.00		
c-1,2-Dichloroethene ND 0.0050 1.00 t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,2-Dichloroethane		ND		0.0050	1.00		
t-1,2-Dichloroethene ND 0.0050 1.00 1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	1,1-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	c-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane ND 0.0050 1.00 1,3-Dichloropropane ND 0.0050 1.00	t-1,2-Dichloroethene		ND		0.0050	1.00		
1,3-Dichloropropane ND 0.0050 1.00	1,2-Dichloropropane		ND		0.0050			
2,2-Dichloropropane ND 0.0050 1.00	1,3-Dichloropropane				0.0050	1.00		
	2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
 Page 5 of 114

Project. 560 Market Place Shopping Center				Page 5 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 6 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	98	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Page 7 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-14.5-SV16	15-06-0698-3-A	06/03/15 11:00	Solid	GC/MS XX	06/09/15	06/10/15 19:31	150610L018
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.13	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 8 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 9 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	108	62-146	
Toluene-d8	97	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-19.5-SV16	15-06-0698-4-A	06/03/15 11:25	Solid	GC/MS XX	06/09/15	06/10/15 19:58	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 11 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 12 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	98	80-120	



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 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-25-SV16	15-06-0698-5-A	06/03/15 11:30	Solid	GC/MS XX	06/09/15	06/10/15 20:26	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0099	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

Project: 580 Market Place Shopping Center Page 14 of 114 Result <u>RL</u> <u>DF</u> Qualifiers <u>Parameter</u> ND 1,1-Dichloropropene 0.0050 1.00 c-1,3-Dichloropropene ND 0.0050 1.00 t-1,3-Dichloropropene ND 0.0050 1.00 Ethylbenzene ND 0.0050 1.00 ND 2-Hexanone 0.050 1.00 Isopropylbenzene ND 0.0050 1.00 p-Isopropyltoluene ND 0.0050 1.00 Methylene Chloride ND 0.050 1.00 4-Methyl-2-Pentanone ND 0.050 1.00 Naphthalene ND 0.050 1.00 n-Propylbenzene ND 0.0050 1.00 Styrene ND 0.0050 1.00 1,1,1,2-Tetrachloroethane ND 0.0050 1.00 ND 1,1,2,2-Tetrachloroethane 0.0050 1.00 Tetrachloroethene ND 0.0050 1.00 Toluene ND 0.0050 1.00 1,2,3-Trichlorobenzene ND 0.0099 1.00 1,2,4-Trichlorobenzene ND 0.0050 1.00 1,1,1-Trichloroethane ND 0.0050 1.00 1,1,2-Trichloroethane ND 0.0050 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 0.050 1.00 Trichloroethene ND 0.0050 1.00 ND 1,2,3-Trichloropropane 0.0050 1.00 1,2,4-Trimethylbenzene ND 0.0050 1.00 Trichlorofluoromethane ND 0.050 1.00 1,3,5-Trimethylbenzene ND 0.0050 1.00 Vinyl Acetate ND 0.050 1.00 Vinyl Chloride ND 0.0050 1.00 p/m-Xylene ND 0.0050 1.00 o-Xylene ND 0.0050 1.00 Methyl-t-Butyl Ether (MTBE) ND 0.0050 1.00 Tert-Butyl Alcohol (TBA) ND 0.050 1.00 Diisopropyl Ether (DIPE) ND 0.0099 1.00 Ethyl-t-Butyl Ether (ETBE) ND 0.0099 1.00 Tert-Amyl-Methyl Ether (TAME) ND 0.0099 1.00 Ethanol ND 0.25 1.00 Surrogate Rec. (%) **Control Limits** Qualifiers 1,4-Bromofluorobenzene 97 60-132



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 15 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	108	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 16 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-29.5-SV16	15-06-0698-6-A	06/03/15 11:32	Solid	GC/MS XX	06/09/15	06/10/15 20:53	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0099	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 17 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.0099	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.0099	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0099	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0099	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 18 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	109	62-146	
Toluene-d8	98	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5-SV17	15-06-0698-7-A	06/03/15 13:40	Solid	GC/MS XX	06/09/15	06/10/15 21:20	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0099	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Shopping Cent	er			Page 20 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.0099	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.0099	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0099	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0099	1.00	
Ethanol	ND	0.25	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 21 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	97	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV17	15-06-0698-8-A	06/03/15 14:15	Solid	GC/MS XX	06/09/15	06/10/15 21:48	150610L018
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	<u>alifiers</u>
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
,							

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

1,3-Dichloropropane

2,2-Dichloropropane

0.0051

0.0051

1.00

1.00

ND

ND



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 23 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 24 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	109	62-146	
Toluene-d8	98	80-120	

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 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV17	15-06-0698-9-A	06/03/15 14:35	Solid	GC/MS XX	06/09/15	06/10/15 22:15	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0099	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 26 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.0099	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.0099	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0099	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0099	1.00	
Ethanol	ND	0.25	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 27 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	97	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 28 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-20-SV17	15-06-0698-10-A	06/03/15 14:50	Solid	GC/MS XX	06/09/15	06/10/15 22:42	150610L018
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
1,3-Dichloropropane		ND		0.0051	1.00		
2,2-Dichloropropane		ND		0.0051	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 29 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 30 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	112	62-146	
Toluene-d8	98	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5-SV22	15-06-0698-11-A	06/04/15 07:35	Solid	GC/MS XX	06/09/15	06/10/15 23:09	150610L018
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 32 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	94	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 33 of 114

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	96	80-120	



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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV22	15-06-0698-12-A	06/04/15 07:50	Solid	GC/MS XX	06/09/15	06/11/15 06:25	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 35 01 114
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 36 of 114

<u>Surrogate</u>	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	98	80-120	



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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV22	15-06-0698-13-A	06/04/15 07:55	Solid	GC/MS XX	06/09/15	06/11/15 06:53	150610L042
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		

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

1,3-Dichloropropane

2,2-Dichloropropane

0.0051

0.0051

1.00

1.00

ND

ND



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 36 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 39 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	98	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-20-SV22	15-06-0698-14-A	06/04/15 08:05	Solid	GC/MS XX	06/09/15	06/11/15 07:20	150610L042
Parameter		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0049	1.00		
Bromobenzene		ND		0.0049	1.00		
Bromochloromethane		ND		0.0049	1.00		
Bromodichloromethane		ND		0.0049	1.00		
Bromoform		ND		0.0049	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.049	1.00		
n-Butylbenzene		ND		0.0049	1.00		
sec-Butylbenzene		ND		0.0049	1.00		
tert-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide		ND		0.049	1.00		
Carbon Tetrachloride		ND		0.0049	1.00		
Chlorobenzene		ND		0.0049	1.00		
Chloroethane		ND		0.0049	1.00		
Chloroform		ND		0.0049	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0049	1.00		
4-Chlorotoluene		ND		0.0049	1.00		
Dibromochloromethane		ND		0.0049	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0098	1.00		
1,2-Dibromoethane		ND		0.0049	1.00		
Dibromomethane		ND		0.0049	1.00		
1,2-Dichlorobenzene		ND		0.0049	1.00		
1,3-Dichlorobenzene		ND		0.0049	1.00		
1,4-Dichlorobenzene		ND		0.0049	1.00		
Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethane		ND		0.0049	1.00		
1,2-Dichloroethane		ND		0.0049	1.00		
1,1-Dichloroethene		ND		0.0049	1.00		
c-1,2-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene		ND		0.0049	1.00		
1,2-Dichloropropane		ND		0.0049	1.00		
1,3-Dichloropropane		ND		0.0049	1.00		
2,2-Dichloropropane		ND		0.0049	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 41 01 114
Parameter	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0098	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0098	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0098	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0098	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	95	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 42 of 114

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	110	62-146	
Toluene-d8	98	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

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Sez 25-5 SV 22 15-06-0698-15-N 06/04/15 Solid GC/MSX XX 06/09/15 01/15 150610L042 Parameter Result RL DE Qualitiers Acetone ND 0.0049 1.00 1.00 Bromochloromethane ND 0.0049 1.00 1.00 1.00 Carbon Disulfide ND 0.0049 1.00 1.00 1.00 1.00 1.00 1.00 <	Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Acetane ND 0.12 1.00 Benzene ND 0.0049 1.00 Bromobenzene ND 0.0049 1.00 Bromochioromethane ND 0.0049 1.00 Bromochichloromethane ND 0.0049 1.00 Bromoform ND 0.0049 1.00 Bromoferhane ND 0.024 1.00 Bromoferhane ND 0.024 1.00 Bromoferhane ND 0.049 1.00 Bromoferhane ND 0.049 1.00 Bromoferhane ND 0.049 1.00 Bromoferbare ND 0.0049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorosethane ND 0.0049 1.00 Chlorosethane ND 0.0049 1.00 Chlorostoluene ND 0.0049 1.00 Chlorostoluene ND 0.0049 1.00 Chlorostoluene ND 0.0049<	S-27.5-SV22	15-06-0698-15-A		Solid	GC/MS XX	06/09/15	06/11/15 07:47	150610L042
Benzene ND 0.0049 1.00 Bromobenzene ND 0.0049 1.00 Bromochiromethane ND 0.0049 1.00 Bromocliromethane ND 0.0049 1.00 Bromodichioromethane ND 0.0049 1.00 Bromomethane ND 0.0049 1.00 2-Butanone ND 0.0049 1.00 n-Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 carbon Tetrachloride ND 0.0049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorochrane ND 0.0049 1.00 Chlorochrane ND 0.0049 1.00 Chlorochrane ND 0.0049 1.00 Chlorochromethane ND 0.0049 1.00 Chlorochromethane ND 0.0049 1.00 1,2-Dibromochtane ND 0.0049 1.00 1,2-Dibromochtane <td><u>Parameter</u></td> <td></td> <td>Result</td> <td></td> <td><u>RL</u></td> <td><u>DF</u></td> <td>Qua</td> <td>alifiers</td>	<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Bromobenzene ND 0.0049 1.00 Bromochloromethane ND 0.0049 1.00 Bromochloromethane ND 0.0049 1.00 Bromochloromethane ND 0.0049 1.00 Bromomethane ND 0.024 1.00 2-Butanone ND 0.049 1.00 neButylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 carbon Disulfide ND 0.0049 1.00 Carbon Disulfide ND 0.0049 1.00 Carbon Disulfide ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorothane ND 0.0049 1.00 Chlorotothane ND 0.0049 1.00 Chlorotothuene ND 0.0049 1.00 Chlorotothuene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromo-3-Chloropro	Acetone		ND		0.12	1.00		
Bromodichloromethane ND 0.0049 1.00 Bromodichloromethane ND 0.0049 1.00 Bromoform ND 0.0049 1.00 Bromomethane ND 0.024 1.00 2-Butanone ND 0.0049 1.00 n-Butylbenzene ND 0.0049 1.00 tert-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorocethane ND 0.0049 1.00 Chlorochloromethane ND 0.0049 1.00 L2-Dibromo-3-Chlorogropane ND 0.0049 1.00 L2-Dibromoethane ND 0.0049 1.00 L3-Dichlor	Benzene		ND		0.0049	1.00		
Bromodichloromethane ND 0.0049 1.00 Bromoform ND 0.0049 1.00 Bromomethane ND 0.024 1.00 2-Butanone ND 0.049 1.00 n-Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorothane ND 0.0049 1.00 Chlorothane ND 0.0049 1.00 Chlorothoune ND 0.0049 1.00 4-Chlorotolune ND 0.0049 1.00 4-Chlorotolune ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibrloroebane	Bromobenzene		ND		0.0049	1.00		
Bromoform ND 0.0049 1.00 Bromomethane ND 0.024 1.00 2-Butanone ND 0.049 1.00 -Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 tert-Butylbenzene ND 0.0049 1.00 Carbon Toisulfide ND 0.0049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorobethane ND 0.0049 1.00 Chlorothune ND 0.0049 1.00 Chlorotoluene ND 0.0049 1.00 2-Chlorotoluene ND 0.0049 1.00 1-2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,3-Dic	Bromochloromethane		ND		0.0049	1.00		
Bromomethane ND 0.024 1.00 2-Butanone ND 0.049 1.00 n-Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 tert-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chlorotofume ND 0.0049 1.00 Chlorotofuene ND 0.0049 1.00 Chlorotofuene ND 0.0049 1.00 Chlorotofuene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,2-Dichlorobenze	Bromodichloromethane		ND		0.0049	1.00		
2-Butanone ND 0.049 1.00 n-Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 Eur-Butylbenzene ND 0.049 1.00 Carbon Disulfide ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chlororothuene ND 0.0049 1.00 Chlororotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 1-Chlorotoluene ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane <td>Bromoform</td> <td></td> <td>ND</td> <td></td> <td>0.0049</td> <td>1.00</td> <td></td> <td></td>	Bromoform		ND		0.0049	1.00		
n-Butylbenzene ND 0.0049 1.00 sec-Butylbenzene ND 0.0049 1.00 tert-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.0049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chlorobethane ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chloroformethane ND 0.0049 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibrlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane ND 0.0049 1.00	Bromomethane		ND		0.024	1.00		
sec-Butylbenzene ND 0.0049 1.00 tert-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane ND 0.0049 1.00	2-Butanone		ND		0.049	1.00		
terl-Butylbenzene ND 0.0049 1.00 Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chloromethane ND 0.0049 1.00 Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00	n-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide ND 0.049 1.00 Carbon Tetrachloride ND 0.0049 1.00 Chlorobenzene ND 0.0049 1.00 Chloroethane ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chloromethane ND 0.024 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 1,2-Dichoromethane ND 0.0049 1.00 1,2-Dichoromethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 <t< td=""><td>sec-Butylbenzene</td><td></td><td>ND</td><td></td><td>0.0049</td><td>1.00</td><td></td><td></td></t<>	sec-Butylbenzene		ND		0.0049	1.00		
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Chlorobenzene ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chloromethane ND 0.024 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1	Carbon Disulfide		ND		0.049	1.00		
Chloroethane ND 0.0049 1.00 Chloroform ND 0.0049 1.00 Chloromethane ND 0.024 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0098 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dibromoethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorothane ND 0.0049 1.00 1,1-Dichlorothane ND 0.0049 1.00 1,1-Dichlorothane ND 0.0049 1.00 1,1-Dichlorothene ND 0.0049 1.00 1,1-Dichlorothene ND 0.0049 1.00 1,1-Dichlorothene ND 0.0049 1.00	Carbon Tetrachloride		ND		0.0049	1.00		
Chloroform ND 0.0049 1.00 Chloromethane ND 0.024 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromora-Chloropropane ND 0.0098 1.00 1,2-Dibromoethane ND 0.0049 1.00 Dibromomethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 <td>Chlorobenzene</td> <td></td> <td>ND</td> <td></td> <td>0.0049</td> <td>1.00</td> <td></td> <td></td>	Chlorobenzene		ND		0.0049	1.00		
Chloromethane ND 0.024 1.00 2-Chlorotoluene ND 0.0049 1.00 4-Chlorotoluene ND 0.0049 1.00 Dibromochloromethane ND 0.0049 1.00 1,2-Dibromo-3-Chloropropane ND 0.0098 1.00 1,2-Dibromoethane ND 0.0049 1.00 Dibromomethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,2-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00	Chloroethane		ND		0.0049	1.00		
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1,2-Dibromo-3-Chloropropane ND 0.0098 1.00 1,2-Dibromoethane ND 0.0049 1.00 Dibromomethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1-1,2-Dichloroethene ND 0.0049 1.00 1-1,2-Dichloroethene ND 0.0049 1.00 1-2-Dichloropropane ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00	4-Chlorotoluene		ND		0.0049	1.00		
1,2-Dibromoethane ND 0.0049 1.00 Dibromomethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorodifluoromethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	Dibromochloromethane		ND		0.0049	1.00		
Dibromomethane ND 0.0049 1.00 1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 Dichlorodifluoromethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 1-2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00	1,2-Dibromo-3-Chloropropane		ND		0.0098	1.00		
1,2-Dichlorobenzene ND 0.0049 1.00 1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 Dichlorodifluoromethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00	1,2-Dibromoethane		ND		0.0049	1.00		
1,3-Dichlorobenzene ND 0.0049 1.00 1,4-Dichlorobenzene ND 0.0049 1.00 Dichlorodifluoromethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	Dibromomethane		ND		0.0049	1.00		
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Dichlorodifluoromethane ND 0.0049 1.00 1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	1,3-Dichlorobenzene		ND		0.0049	1.00		
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1,1-Dichloroethane ND 0.0049 1.00 1,2-Dichloroethane ND 0.0049 1.00 1,1-Dichloroethene ND 0.0049 1.00 c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethene ND 0.0049 1.00 c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	1,1-Dichloroethane		ND		0.0049	1.00		
c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	1,2-Dichloroethane		ND		0.0049	1.00		
c-1,2-Dichloroethene ND 0.0049 1.00 t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	1,1-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene ND 0.0049 1.00 1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00	·							
1,2-Dichloropropane ND 0.0049 1.00 1,3-Dichloropropane ND 0.0049 1.00			ND		0.0049			
1,3-Dichloropropane ND 0.0049 1.00	·							
	· ·							
	2,2-Dichloropropane		ND			1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

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Project. 560 Market Place Shopping Center				Page 44 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0098	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0098	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0098	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0098	1.00	
Ethanol	ND	0.24	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 45 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	98	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 46 of 114

Number Collected	Prepared Analyzed
S-5-SV18 15-06-0698-16-A 06/04/15 Solid 09:50	GC/MS Q 06/09/15 06/12/15 150611L030 05:49
Parameter Result RL	<u>DF</u> <u>Qualifiers</u>
Acetone ND 0.12	1.00
Benzene ND 0.004	49 1.00
Bromobenzene ND 0.004	49 1.00
Bromochloromethane ND 0.004	49 1.00
Bromodichloromethane ND 0.004	49 1.00
Bromoform ND 0.004	49 1.00
Bromomethane ND 0.025	5 1.00
2-Butanone ND 0.049	9 1.00
n-Butylbenzene ND 0.004	49 1.00
sec-Butylbenzene ND 0.004	49 1.00
tert-Butylbenzene ND 0.004	49 1.00
Carbon Disulfide ND 0.049	9 1.00
Carbon Tetrachloride ND 0.004	49 1.00
Chlorobenzene ND 0.004	49 1.00
Chloroethane ND 0.004	49 1.00
Chloroform ND 0.004	49 1.00
Chloromethane ND 0.025	5 1.00
2-Chlorotoluene ND 0.004	49 1.00
4-Chlorotoluene ND 0.004	49 1.00
Dibromochloromethane ND 0.004	49 1.00
1,2-Dibromo-3-Chloropropane ND 0.009	99 1.00
1,2-Dibromoethane ND 0.004	49 1.00
Dibromomethane ND 0.004	49 1.00
1,2-Dichlorobenzene ND 0.004	49 1.00
1,3-Dichlorobenzene ND 0.004	49 1.00
1,4-Dichlorobenzene ND 0.004	49 1.00
Dichlorodifluoromethane ND 0.004	49 1.00
1,1-Dichloroethane ND 0.004	49 1.00
1,2-Dichloroethane ND 0.004	49 1.00
1,1-Dichloroethene ND 0.004	49 1.00
c-1,2-Dichloroethene ND 0.004	
t-1,2-Dichloroethene ND 0.004	
1,2-Dichloropropane ND 0.004	49 1.00
1,3-Dichloropropane ND 0.004	
2,2-Dichloropropane ND 0.004	49 1.00



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
 Page 47 of 114

Project: 580 Market Place Snopping Center				Page 47 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0099	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0099	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0099	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0099	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	95	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 48 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	92	63-141	
1,2-Dichloroethane-d4	89	62-146	
Toluene-d8	100	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV18	15-06-0698-17-A	06/04/15 09:55	Solid	GC/MS XX	06/09/15	06/11/15 08:42	150610L042
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0049	1.00		
Bromobenzene		ND		0.0049	1.00		
Bromochloromethane		ND		0.0049	1.00		
Bromodichloromethane		ND		0.0049	1.00		
Bromoform		ND		0.0049	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.049	1.00		
n-Butylbenzene		ND		0.0049	1.00		
sec-Butylbenzene		ND		0.0049	1.00		
tert-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide		ND		0.049	1.00		
Carbon Tetrachloride		ND		0.0049	1.00		
Chlorobenzene		ND		0.0049	1.00		
Chloroethane		ND		0.0049	1.00		
Chloroform		ND		0.0049	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0049	1.00		
4-Chlorotoluene		ND		0.0049	1.00		
Dibromochloromethane		ND		0.0049	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0098	1.00		
1,2-Dibromoethane		ND		0.0049	1.00		
Dibromomethane		ND		0.0049	1.00		
1,2-Dichlorobenzene		ND		0.0049	1.00		
1,3-Dichlorobenzene		ND		0.0049	1.00		
1,4-Dichlorobenzene		ND		0.0049	1.00		
Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethane		ND		0.0049	1.00		
1,2-Dichloroethane		ND		0.0049	1.00		
1,1-Dichloroethene		ND		0.0049	1.00		
c-1,2-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene		ND		0.0049	1.00		
1,2-Dichloropropane		ND		0.0049	1.00		
1,3-Dichloropropane		ND		0.0049	1.00		
2,2-Dichloropropane		ND		0.0049	1.00		
z,z-bioliolopiopane		ND	,	0.0043	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Cente	er 			Page 50 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0098	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0098	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0098	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0098	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 51 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	99	80-120	



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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV18	15-06-0698-18-A	06/04/15 10:21	Solid	GC/MS XX	06/09/15	06/11/15 09:09	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Result	<u>RL</u>	<u>DF</u>	Qualifiers
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.0050	1.00	
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.050	1.00	
ND	0.050	1.00	
ND	0.0050	1.00	
ND	0.010	1.00	
ND	0.0050	1.00	
ND	0.0050	1.00	
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.0050	1.00	
ND	0.0050	1.00	
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.0050	1.00	
ND	0.050	1.00	
ND	0.010	1.00	
ND	0.010	1.00	
ND	0.010	1.00	
ND	0.25	1.00	
Rec. (%)	Control Limits	<u>Qualifiers</u>	
95	60-132		
	Result ND	Result RL ND	Result RL DF ND 0.0050 1.00 ND 0.050 1.00 ND 0.050 1.00 ND 0.050 1.00 ND 0.050 1.00 ND 0.0050 1.00 ND 0.0050



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 54 of 114

<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	98	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-22-SV18	15-06-0698-19-A	06/04/15 10:25	Solid	GC/MS XX	06/09/15	06/11/15 09:36	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 56 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	95	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 57 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	110	62-146	
Toluene-d8	98	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 58 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-27.5-SV18	15-06-0698-20-A	06/04/15 10:28	Solid	GC/MS XX	06/09/15	06/11/15 10:03	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0052	1.00		
Bromobenzene		ND		0.0052	1.00		
Bromochloromethane		ND		0.0052	1.00		
Bromodichloromethane		ND		0.0052	1.00		
Bromoform		ND		0.0052	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.052	1.00		
n-Butylbenzene		ND		0.0052	1.00		
sec-Butylbenzene		ND		0.0052	1.00		
tert-Butylbenzene		ND		0.0052	1.00		
Carbon Disulfide		ND		0.052	1.00		
Carbon Tetrachloride		ND		0.0052	1.00		
Chlorobenzene		ND		0.0052	1.00		
Chloroethane		ND		0.0052	1.00		
Chloroform		ND		0.0052	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0052	1.00		
4-Chlorotoluene		ND		0.0052	1.00		
Dibromochloromethane		ND		0.0052	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0052	1.00		
Dibromomethane		ND		0.0052	1.00		
1,2-Dichlorobenzene		ND		0.0052	1.00		
1,3-Dichlorobenzene		ND		0.0052	1.00		
1,4-Dichlorobenzene		ND		0.0052	1.00		
Dichlorodifluoromethane		ND		0.0052	1.00		
1,1-Dichloroethane		ND		0.0052	1.00		
1,2-Dichloroethane		ND		0.0052	1.00		
1,1-Dichloroethene		ND		0.0052	1.00		
c-1,2-Dichloroethene		ND		0.0052	1.00		
t-1,2-Dichloroethene		ND		0.0052	1.00		
1,2-Dichloropropane		ND		0.0052	1.00		
1,3-Dichloropropane		ND		0.0052	1.00		
2,2-Dichloropropane		ND		0.0052	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
 Page 59 of 114

Project: 580 Market Place Snopping Center				Page 59 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0052	1.00	
c-1,3-Dichloropropene	ND	0.0052	1.00	
t-1,3-Dichloropropene	ND	0.0052	1.00	
Ethylbenzene	ND	0.0052	1.00	
2-Hexanone	ND	0.052	1.00	
Isopropylbenzene	ND	0.0052	1.00	
p-Isopropyltoluene	ND	0.0052	1.00	
Methylene Chloride	ND	0.052	1.00	
4-Methyl-2-Pentanone	ND	0.052	1.00	
Naphthalene	ND	0.052	1.00	
n-Propylbenzene	ND	0.0052	1.00	
Styrene	ND	0.0052	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0052	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0052	1.00	
Tetrachloroethene	ND	0.0052	1.00	
Toluene	ND	0.0052	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0052	1.00	
1,1,1-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.052	1.00	
Trichloroethene	ND	0.0052	1.00	
1,2,3-Trichloropropane	ND	0.0052	1.00	
1,2,4-Trimethylbenzene	ND	0.0052	1.00	
Trichlorofluoromethane	ND	0.052	1.00	
1,3,5-Trimethylbenzene	ND	0.0052	1.00	
Vinyl Acetate	ND	0.052	1.00	
Vinyl Chloride	ND	0.0052	1.00	
p/m-Xylene	ND	0.0052	1.00	
o-Xylene	ND	0.0052	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0052	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.052	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 60 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	108	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	98	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5-SV19	15-06-0698-21-A	06/04/15 12:25	Solid	GC/MS XX	06/09/15	06/11/15 04:37	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		

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

2,2-Dichloropropane

0.0050

1.00

ND



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 62 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 63 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 64 of 114

Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	06/04/15 12:35	Solid	GC/MS XX	06/09/15	06/11/15 10:30	150610L042
<u>Parameter</u>	Result		RL	<u>DF</u>	Qua	lifiers
Acetone	ND		0.13	1.00		
Benzene	ND		0.0051	1.00		
Bromobenzene	ND		0.0051	1.00		
Bromochloromethane	ND		0.0051	1.00		
Bromodichloromethane	ND		0.0051	1.00		
Bromoform	ND		0.0051	1.00		
Bromomethane	ND		0.025	1.00		
2-Butanone	ND		0.051	1.00		
n-Butylbenzene	ND		0.0051	1.00		
sec-Butylbenzene	ND		0.0051	1.00		
tert-Butylbenzene	ND		0.0051	1.00		
Carbon Disulfide	ND		0.051	1.00		
Carbon Tetrachloride	ND		0.0051	1.00		
Chlorobenzene	ND		0.0051	1.00		
Chloroethane	ND		0.0051	1.00		
Chloroform	ND		0.0051	1.00		
Chloromethane	ND		0.025	1.00		
2-Chlorotoluene	ND		0.0051	1.00		
4-Chlorotoluene	ND		0.0051	1.00		
Dibromochloromethane	ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane	ND		0.010	1.00		
1,2-Dibromoethane	ND		0.0051	1.00		
Dibromomethane	ND		0.0051	1.00		
1,2-Dichlorobenzene	ND		0.0051	1.00		
1,3-Dichlorobenzene	ND		0.0051	1.00		
1,4-Dichlorobenzene	ND		0.0051	1.00		
Dichlorodifluoromethane	ND		0.0051	1.00		
1,1-Dichloroethane	ND		0.0051	1.00		
1,2-Dichloroethane	ND		0.0051	1.00		
1,1-Dichloroethene	ND		0.0051	1.00		
c-1,2-Dichloroethene	ND		0.0051	1.00		
t-1,2-Dichloroethene	ND		0.0051	1.00		
1,2-Dichloropropane	ND		0.0051	1.00		
1,3-Dichloropropane	ND		0.0051	1.00		
2,2-Dichloropropane	ND		0.0051	1.00		



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 65 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 66 of 114

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	115	62-146	
Toluene-d8	98	80-120	



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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV19	15-06-0698-23-A	06/04/15 12:45	Solid	GC/MS BB	06/09/15	06/11/15 09:25	150610L057
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
1,3-Dichloropropane		ND		0.0051	1.00		
2,2-Dichloropropane		ND		0.0051	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 68 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 69 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	108	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-17.5-SV19	15-06-0698-24-A	06/04/15 13:00	Solid	GC/MS BB	06/09/15	06/11/15 09:54	150610L057
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0052	1.00		
Bromobenzene		ND		0.0052	1.00		
Bromochloromethane		ND		0.0052	1.00		
Bromodichloromethane		ND		0.0052	1.00		
Bromoform		ND		0.0052	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.052	1.00		
n-Butylbenzene		ND		0.0052	1.00		
sec-Butylbenzene		ND		0.0052	1.00		
tert-Butylbenzene		ND		0.0052	1.00		
Carbon Disulfide		ND		0.052	1.00		
Carbon Tetrachloride		ND		0.0052	1.00		
Chlorobenzene		ND		0.0052	1.00		
Chloroethane		ND		0.0052	1.00		
Chloroform		ND		0.0052	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0052	1.00		
4-Chlorotoluene		ND		0.0052	1.00		
Dibromochloromethane		ND		0.0052	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0052	1.00		
Dibromomethane		ND		0.0052	1.00		
1,2-Dichlorobenzene		ND		0.0052	1.00		
1,3-Dichlorobenzene		ND		0.0052	1.00		
1,4-Dichlorobenzene		ND		0.0052	1.00		
Dichlorodifluoromethane		ND		0.0052	1.00		
1,1-Dichloroethane		ND		0.0052	1.00		
1,2-Dichloroethane		ND		0.0052	1.00		
1,1-Dichloroethene		ND		0.0052	1.00		
c-1,2-Dichloroethene		ND		0.0052	1.00		
t-1,2-Dichloroethene		ND		0.0052	1.00		
1,2-Dichloropropane		ND		0.0052	1.00		
1,3-Dichloropropane		ND		0.0052	1.00		
2,2-Dichloropropane		ND		0.0052	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Cente	er 			Page 71 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0052	1.00	
c-1,3-Dichloropropene	ND	0.0052	1.00	
t-1,3-Dichloropropene	ND	0.0052	1.00	
Ethylbenzene	ND	0.0052	1.00	
2-Hexanone	ND	0.052	1.00	
Isopropylbenzene	ND	0.0052	1.00	
p-Isopropyltoluene	ND	0.0052	1.00	
Methylene Chloride	ND	0.052	1.00	
4-Methyl-2-Pentanone	ND	0.052	1.00	
Naphthalene	ND	0.052	1.00	
n-Propylbenzene	ND	0.0052	1.00	
Styrene	ND	0.0052	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0052	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0052	1.00	
Tetrachloroethene	ND	0.0052	1.00	
Toluene	ND	0.0052	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0052	1.00	
1,1,1-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.052	1.00	
Trichloroethene	ND	0.0052	1.00	
1,2,3-Trichloropropane	ND	0.0052	1.00	
1,2,4-Trimethylbenzene	ND	0.0052	1.00	
Trichlorofluoromethane	ND	0.052	1.00	
1,3,5-Trimethylbenzene	ND	0.0052	1.00	
Vinyl Acetate	ND	0.052	1.00	
Vinyl Chloride	ND	0.0052	1.00	
p/m-Xylene	ND	0.0052	1.00	
o-Xylene	ND	0.0052	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0052	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.052	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 72 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	97	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-25-SV19	15-06-0698-25-A	06/04/15 13:05	Solid	GC/MS Q	06/09/15	06/12/15 21:05	150612L028
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
1,3-Dichloropropane		ND		0.0051	1.00		
2,2-Dichloropropane		ND		0.0051	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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<u>Qualifiers</u>
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Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 75 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: mg/kg
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Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-27.5-SV19	15-06-0698-26-A	06/04/15 13:10	Solid	GC/MS BB	06/09/15	06/11/15 10:51	150610L057
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0048	1.00		
Bromobenzene		ND		0.0048	1.00		
Bromochloromethane		ND		0.0048	1.00		
Bromodichloromethane		ND		0.0048	1.00		
Bromoform		ND		0.0048	1.00		
Bromomethane		ND		0.024	1.00		
2-Butanone		ND		0.048	1.00		
n-Butylbenzene		ND		0.0048	1.00		
sec-Butylbenzene		ND		0.0048	1.00		
tert-Butylbenzene		ND		0.0048	1.00		
Carbon Disulfide		ND		0.048	1.00		
Carbon Tetrachloride		ND		0.0048	1.00		
Chlorobenzene		ND		0.0048	1.00		
Chloroethane		ND		0.0048	1.00		
Chloroform		ND		0.0048	1.00		
Chloromethane		ND		0.024	1.00		
2-Chlorotoluene		ND		0.0048	1.00		
4-Chlorotoluene		ND		0.0048	1.00		
Dibromochloromethane		ND		0.0048	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0096	1.00		
1,2-Dibromoethane		ND		0.0048	1.00		
Dibromomethane		ND		0.0048	1.00		
1,2-Dichlorobenzene		ND		0.0048	1.00		
1,3-Dichlorobenzene		ND		0.0048	1.00		
1,4-Dichlorobenzene		ND		0.0048	1.00		
Dichlorodifluoromethane		ND		0.0048	1.00		
1,1-Dichloroethane		ND		0.0048	1.00		
1,2-Dichloroethane		ND		0.0048	1.00		
1,1-Dichloroethene		ND		0.0048	1.00		
c-1,2-Dichloroethene		ND		0.0048	1.00		
t-1,2-Dichloroethene		ND		0.0048	1.00		
1,2-Dichloropropane		ND		0.0048	1.00		
1,3-Dichloropropane		ND		0.0048	1.00		
2,2-Dichloropropane		ND		0.0048	1.00		



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 77 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0048	1.00	
c-1,3-Dichloropropene	ND	0.0048	1.00	
t-1,3-Dichloropropene	ND	0.0048	1.00	
Ethylbenzene	ND	0.0048	1.00	
2-Hexanone	ND	0.048	1.00	
Isopropylbenzene	ND	0.0048	1.00	
p-Isopropyltoluene	ND	0.0048	1.00	
Methylene Chloride	ND	0.048	1.00	
4-Methyl-2-Pentanone	ND	0.048	1.00	
Naphthalene	ND	0.048	1.00	
n-Propylbenzene	ND	0.0048	1.00	
Styrene	ND	0.0048	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0048	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0048	1.00	
Tetrachloroethene	ND	0.0048	1.00	
Toluene	ND	0.0048	1.00	
1,2,3-Trichlorobenzene	ND	0.0096	1.00	
1,2,4-Trichlorobenzene	ND	0.0048	1.00	
1,1,1-Trichloroethane	ND	0.0048	1.00	
1,1,2-Trichloroethane	ND	0.0048	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.048	1.00	
Trichloroethene	ND	0.0048	1.00	
1,2,3-Trichloropropane	ND	0.0048	1.00	
1,2,4-Trimethylbenzene	ND	0.0048	1.00	
Trichlorofluoromethane	ND	0.048	1.00	
1,3,5-Trimethylbenzene	ND	0.0048	1.00	
Vinyl Acetate	ND	0.048	1.00	
Vinyl Chloride	ND	0.0048	1.00	
p/m-Xylene	ND	0.0048	1.00	
o-Xylene	ND	0.0048	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0048	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.048	1.00	
Diisopropyl Ether (DIPE)	ND	0.0096	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0096	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0096	1.00	
Ethanol	ND	0.24	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 78 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	98	80-120	



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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

1.00

1.00

1.00

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5-SV20	15-06-0698-27-A	06/04/15 14:10	Solid	GC/MS BB	06/09/15	06/11/15 11:20	150610L057
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	lifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
ert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		

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

1,2-Dichloropropane1,3-Dichloropropane

2,2-Dichloropropane

0.0051

0.0051

0.0051

ND

ND

ND



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Result	<u>RL</u>	<u>DF</u>	Qualifiers
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.0051	1.00	
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.051	1.00	
ND	0.051	1.00	
ND	0.0051	1.00	
ND	0.010	1.00	
ND	0.0051	1.00	
ND	0.0051	1.00	
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.0051	1.00	
ND	0.0051	1.00	
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.0051	1.00	
ND	0.051	1.00	
ND	0.010	1.00	
ND	0.010	1.00	
ND	0.010	1.00	
ND	0.26	1.00	
Rec. (%)	Control Limits	<u>Qualifiers</u>	
98	60-132		
	Result ND	Result RL ND	Result RL DF ND 0.0051 1.00 ND 0.051 1.00 ND 0.051 1.00 ND 0.051 1.00 ND 0.051 1.00 ND 0.0051 1.00 ND 0.0051



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 81 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	98	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-9-SV20	15-06-0698-28-A	06/04/15 14:20	Solid	GC/MS BB	06/09/15	06/11/15 11:48	150610L057
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0049	1.00		
Bromobenzene		ND		0.0049	1.00		
Bromochloromethane		ND		0.0049	1.00		
Bromodichloromethane		ND		0.0049	1.00		
Bromoform		ND		0.0049	1.00		
Bromomethane		ND		0.024	1.00		
2-Butanone		ND		0.049	1.00		
n-Butylbenzene		ND		0.0049	1.00		
sec-Butylbenzene		ND		0.0049	1.00		
tert-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide		ND		0.049	1.00		
Carbon Tetrachloride		ND		0.0049	1.00		
Chlorobenzene		ND		0.0049	1.00		
Chloroethane		ND		0.0049	1.00		
Chloroform		ND		0.0049	1.00		
Chloromethane		ND		0.024	1.00		
2-Chlorotoluene		ND		0.0049	1.00		
4-Chlorotoluene		ND		0.0049	1.00		
Dibromochloromethane		ND		0.0049	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0097	1.00		
1,2-Dibromoethane		ND		0.0049	1.00		
Dibromomethane		ND		0.0049	1.00		
1,2-Dichlorobenzene		ND		0.0049	1.00		
1,3-Dichlorobenzene		ND		0.0049	1.00		
1,4-Dichlorobenzene		ND		0.0049	1.00		
Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethane		ND		0.0049	1.00		
1,2-Dichloroethane		ND		0.0049	1.00		
1,1-Dichloroethene		ND		0.0049	1.00		
c-1,2-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene		ND		0.0049	1.00		
1,2-Dichloropropane		ND		0.0049	1.00		
1,3-Dichloropropane		ND		0.0049	1.00		

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

2,2-Dichloropropane

0.0049

1.00

ND



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Shopping Center				Page 83 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0097	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0097	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0097	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0097	1.00	
Ethanol	ND	0.24	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 84 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: mg/kg
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Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-14-SV20	15-06-0698-29-A	06/04/15 14:25	Solid	GC/MS BB	06/09/15	06/11/15 12:17	150610L057
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.13	1.00		
Benzene		ND		0.0053	1.00		
Bromobenzene		ND		0.0053	1.00		
Bromochloromethane		ND		0.0053	1.00		
Bromodichloromethane		ND		0.0053	1.00		
Bromoform		ND		0.0053	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.053	1.00		
n-Butylbenzene		ND		0.0053	1.00		
sec-Butylbenzene		ND		0.0053	1.00		
tert-Butylbenzene		ND		0.0053	1.00		
Carbon Disulfide		ND		0.053	1.00		
Carbon Tetrachloride		ND		0.0053	1.00		
Chlorobenzene		ND		0.0053	1.00		
Chloroethane		ND		0.0053	1.00		
Chloroform		ND		0.0053	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0053	1.00		
4-Chlorotoluene		ND		0.0053	1.00		
Dibromochloromethane		ND		0.0053	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.011	1.00		
1,2-Dibromoethane		ND		0.0053	1.00		
Dibromomethane		ND		0.0053	1.00		
1,2-Dichlorobenzene		ND		0.0053	1.00		
1,3-Dichlorobenzene		ND		0.0053	1.00		
1,4-Dichlorobenzene		ND		0.0053	1.00		
Dichlorodifluoromethane		ND		0.0053	1.00		
1,1-Dichloroethane		ND		0.0053	1.00		
1,2-Dichloroethane		ND		0.0053	1.00		
1,1-Dichloroethene		ND		0.0053	1.00		
c-1,2-Dichloroethene		ND		0.0053	1.00		
t-1,2-Dichloroethene		ND		0.0053	1.00		
1,2-Dichloropropane		ND		0.0053	1.00		
1,3-Dichloropropane		ND		0.0053	1.00		
2,2-Dichloropropane		ND		0.0053	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 66 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0053	1.00	
c-1,3-Dichloropropene	ND	0.0053	1.00	
t-1,3-Dichloropropene	ND	0.0053	1.00	
Ethylbenzene	ND	0.0053	1.00	
2-Hexanone	ND	0.053	1.00	
Isopropylbenzene	ND	0.0053	1.00	
p-Isopropyltoluene	ND	0.0053	1.00	
Methylene Chloride	ND	0.053	1.00	
4-Methyl-2-Pentanone	ND	0.053	1.00	
Naphthalene	ND	0.053	1.00	
n-Propylbenzene	ND	0.0053	1.00	
Styrene	ND	0.0053	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0053	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0053	1.00	
Tetrachloroethene	ND	0.0053	1.00	
Toluene	ND	0.0053	1.00	
1,2,3-Trichlorobenzene	ND	0.011	1.00	
1,2,4-Trichlorobenzene	ND	0.0053	1.00	
1,1,1-Trichloroethane	ND	0.0053	1.00	
1,1,2-Trichloroethane	ND	0.0053	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.053	1.00	
Trichloroethene	ND	0.0053	1.00	
1,2,3-Trichloropropane	ND	0.0053	1.00	
1,2,4-Trimethylbenzene	ND	0.0053	1.00	
Trichlorofluoromethane	ND	0.053	1.00	
1,3,5-Trimethylbenzene	ND	0.0053	1.00	
Vinyl Acetate	ND	0.053	1.00	
Vinyl Chloride	ND	0.0053	1.00	
p/m-Xylene	ND	0.0053	1.00	
o-Xylene	ND	0.0053	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0053	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.053	1.00	
Diisopropyl Ether (DIPE)	ND	0.011	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.011	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.011	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 87 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 88 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-20-SV20	15-06-0698-30-A	06/04/15 14:35	Solid	GC/MS BB	06/09/15	06/11/15 12:45	150610L057
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.12	1.00		
Benzene		ND		0.0049	1.00		
Bromobenzene		ND		0.0049	1.00		
Bromochloromethane		ND		0.0049	1.00		
Bromodichloromethane		ND		0.0049	1.00		
Bromoform		ND		0.0049	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.049	1.00		
n-Butylbenzene		ND		0.0049	1.00		
sec-Butylbenzene		ND		0.0049	1.00		
tert-Butylbenzene		ND		0.0049	1.00		
Carbon Disulfide		ND		0.049	1.00		
Carbon Tetrachloride		ND		0.0049	1.00		
Chlorobenzene		ND		0.0049	1.00		
Chloroethane		ND		0.0049	1.00		
Chloroform		ND		0.0049	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0049	1.00		
4-Chlorotoluene		ND		0.0049	1.00		
Dibromochloromethane		ND		0.0049	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.0098	1.00		
1,2-Dibromoethane		ND		0.0049	1.00		
Dibromomethane		ND		0.0049	1.00		
1,2-Dichlorobenzene		ND		0.0049	1.00		
1,3-Dichlorobenzene		ND		0.0049	1.00		
1,4-Dichlorobenzene		ND		0.0049	1.00		
Dichlorodifluoromethane		ND		0.0049	1.00		
1,1-Dichloroethane		ND		0.0049	1.00		
1,2-Dichloroethane		ND		0.0049	1.00		
1,1-Dichloroethene		ND		0.0049	1.00		
c-1,2-Dichloroethene		ND		0.0049	1.00		
t-1,2-Dichloroethene		ND		0.0049	1.00		
1,2-Dichloropropane		ND		0.0049	1.00		
1,3-Dichloropropane		ND		0.0049	1.00		
2,2-Dichloropropane		ND		0.0049	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 69 01 114
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0049	1.00	
c-1,3-Dichloropropene	ND	0.0049	1.00	
t-1,3-Dichloropropene	ND	0.0049	1.00	
Ethylbenzene	ND	0.0049	1.00	
2-Hexanone	ND	0.049	1.00	
Isopropylbenzene	ND	0.0049	1.00	
p-Isopropyltoluene	ND	0.0049	1.00	
Methylene Chloride	ND	0.049	1.00	
4-Methyl-2-Pentanone	ND	0.049	1.00	
Naphthalene	ND	0.049	1.00	
n-Propylbenzene	ND	0.0049	1.00	
Styrene	ND	0.0049	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0049	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0049	1.00	
Tetrachloroethene	ND	0.0049	1.00	
Toluene	ND	0.0049	1.00	
1,2,3-Trichlorobenzene	ND	0.0098	1.00	
1,2,4-Trichlorobenzene	ND	0.0049	1.00	
1,1,1-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloroethane	ND	0.0049	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.049	1.00	
Trichloroethene	ND	0.0049	1.00	
1,2,3-Trichloropropane	ND	0.0049	1.00	
1,2,4-Trimethylbenzene	ND	0.0049	1.00	
Trichlorofluoromethane	ND	0.049	1.00	
1,3,5-Trimethylbenzene	ND	0.0049	1.00	
Vinyl Acetate	ND	0.049	1.00	
Vinyl Chloride	ND	0.0049	1.00	
p/m-Xylene	ND	0.0049	1.00	
o-Xylene	ND	0.0049	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0049	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.049	1.00	
Diisopropyl Ether (DIPE)	ND	0.0098	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0098	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0098	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 90 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	99	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-25-SV20	15-06-0698-31-A	06/04/15 14:40	Solid	GC/MS BB	06/09/15	06/11/15 13:13	150610L057
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
1,3-Dichloropropane		ND		0.0051	1.00		
2,2-Dichloropropane		ND		0.0051	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project. 560 Market Place Shopping Center				Page 92 01 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
_				
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	99	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 93 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	99	80-120	

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-25-SV17	15-06-0698-32-A	06/04/15 15:00	Solid	GC/MS Q	06/09/15	06/12/15 06:16	150611L030
Parameter		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Acetone		ND		0.13	1.00		
Benzene		ND		0.0051	1.00		
Bromobenzene		ND		0.0051	1.00		
Bromochloromethane		ND		0.0051	1.00		
Bromodichloromethane		ND		0.0051	1.00		
Bromoform		ND		0.0051	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.051	1.00		
n-Butylbenzene		ND		0.0051	1.00		
sec-Butylbenzene		ND		0.0051	1.00		
tert-Butylbenzene		ND		0.0051	1.00		
Carbon Disulfide		ND		0.051	1.00		
Carbon Tetrachloride		ND		0.0051	1.00		
Chlorobenzene		ND		0.0051	1.00		
Chloroethane		ND		0.0051	1.00		
Chloroform		ND		0.0051	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0051	1.00		
4-Chlorotoluene		ND		0.0051	1.00		
Dibromochloromethane		ND		0.0051	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0051	1.00		
Dibromomethane		ND		0.0051	1.00		
1,2-Dichlorobenzene		ND		0.0051	1.00		
1,3-Dichlorobenzene		ND		0.0051	1.00		
1,4-Dichlorobenzene		ND		0.0051	1.00		
Dichlorodifluoromethane		ND		0.0051	1.00		
1,1-Dichloroethane		ND		0.0051	1.00		
1,2-Dichloroethane		ND		0.0051	1.00		
1,1-Dichloroethene		ND		0.0051	1.00		
c-1,2-Dichloroethene		ND		0.0051	1.00		
t-1,2-Dichloroethene		ND		0.0051	1.00		
1,2-Dichloropropane		ND		0.0051	1.00		
1,3-Dichloropropane		ND		0.0051	1.00		
2,2-Dichloropropane		ND		0.0051	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Cente	? [Page 95 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0051	1.00	
c-1,3-Dichloropropene	ND	0.0051	1.00	
t-1,3-Dichloropropene	ND	0.0051	1.00	
Ethylbenzene	ND	0.0051	1.00	
2-Hexanone	ND	0.051	1.00	
Isopropylbenzene	ND	0.0051	1.00	
p-Isopropyltoluene	ND	0.0051	1.00	
Methylene Chloride	ND	0.051	1.00	
4-Methyl-2-Pentanone	ND	0.051	1.00	
Naphthalene	ND	0.051	1.00	
n-Propylbenzene	ND	0.0051	1.00	
Styrene	ND	0.0051	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0051	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0051	1.00	
Tetrachloroethene	ND	0.0051	1.00	
Toluene	ND	0.0051	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0051	1.00	
1,1,1-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloroethane	ND	0.0051	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.051	1.00	
Trichloroethene	ND	0.0051	1.00	
1,2,3-Trichloropropane	ND	0.0051	1.00	
1,2,4-Trimethylbenzene	ND	0.0051	1.00	
Trichlorofluoromethane	ND	0.051	1.00	
1,3,5-Trimethylbenzene	ND	0.0051	1.00	
Vinyl Acetate	ND	0.051	1.00	
Vinyl Chloride	ND	0.0051	1.00	
p/m-Xylene	ND	0.0051	1.00	
o-Xylene	ND	0.0051	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0051	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.051	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 96 of 114

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	97	80-120	

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Analytical Report

Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-29.5-SV17	15-06-0698-33-A	06/04/15 15:02	Solid	GC/MS Q	06/09/15	06/12/15 06:42	150611L030
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Acetone		ND		0.13	1.00		
Benzene		ND		0.0052	1.00		
Bromobenzene		ND		0.0052	1.00		
Bromochloromethane		ND		0.0052	1.00		
Bromodichloromethane		ND		0.0052	1.00		
Bromoform		ND		0.0052	1.00		
Bromomethane		ND		0.026	1.00		
2-Butanone		ND		0.052	1.00		
n-Butylbenzene		ND		0.0052	1.00		
sec-Butylbenzene		ND		0.0052	1.00		
tert-Butylbenzene		ND		0.0052	1.00		
Carbon Disulfide		ND		0.052	1.00		
Carbon Tetrachloride		ND		0.0052	1.00		
Chlorobenzene		ND		0.0052	1.00		
Chloroethane		ND		0.0052	1.00		
Chloroform		ND		0.0052	1.00		
Chloromethane		ND		0.026	1.00		
2-Chlorotoluene		ND		0.0052	1.00		
4-Chlorotoluene		ND		0.0052	1.00		
Dibromochloromethane		ND		0.0052	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0052	1.00		
Dibromomethane		ND		0.0052	1.00		
1,2-Dichlorobenzene		ND		0.0052	1.00		
1,3-Dichlorobenzene		ND		0.0052	1.00		
1,4-Dichlorobenzene		ND		0.0052	1.00		
Dichlorodifluoromethane		ND		0.0052	1.00		
1,1-Dichloroethane		ND		0.0052	1.00		
1,2-Dichloroethane		ND		0.0052	1.00		
1,1-Dichloroethene		ND		0.0052	1.00		
c-1,2-Dichloroethene		ND		0.0052	1.00		
t-1,2-Dichloroethene		ND		0.0052	1.00		
1,2-Dichloropropane		ND		0.0052	1.00		
1,3-Dichloropropane		ND		0.0052	1.00		
2,2-Dichloropropane		ND		0.0052	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 98 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0052	1.00	
c-1,3-Dichloropropene	ND	0.0052	1.00	
t-1,3-Dichloropropene	ND	0.0052	1.00	
Ethylbenzene	ND	0.0052	1.00	
2-Hexanone	ND	0.052	1.00	
Isopropylbenzene	ND	0.0052	1.00	
p-Isopropyltoluene	ND	0.0052	1.00	
Methylene Chloride	ND	0.052	1.00	
4-Methyl-2-Pentanone	ND	0.052	1.00	
Naphthalene	ND	0.052	1.00	
n-Propylbenzene	ND	0.0052	1.00	
Styrene	ND	0.0052	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0052	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0052	1.00	
Tetrachloroethene	ND	0.0052	1.00	
Toluene	ND	0.0052	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0052	1.00	
1,1,1-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloroethane	ND	0.0052	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.052	1.00	
Trichloroethene	ND	0.0052	1.00	
1,2,3-Trichloropropane	ND	0.0052	1.00	
1,2,4-Trimethylbenzene	ND	0.0052	1.00	
Trichlorofluoromethane	ND	0.052	1.00	
1,3,5-Trimethylbenzene	ND	0.0052	1.00	
Vinyl Acetate	ND	0.052	1.00	
Vinyl Chloride	ND	0.0052	1.00	
p/m-Xylene	ND	0.0052	1.00	
o-Xylene	ND	0.0052	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0052	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.052	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.26	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	95	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 99 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 100 of 114

	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9810	N/A	Solid	GC/MS XX	06/10/15	06/10/15 15:52	150610L018
Parameter		Result		RL	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane							
		ND		0.0050	1.00		

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

Project: 580 Market Place Shopping Center

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 102 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 103 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9817	N/A	Solid	GC/MS XX	06/10/15	06/11/15 04:09	150610L042
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		

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Analytical Report

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

Project: 580 Market Place Shopping Center

1 Toject. 300 Market Flace Gropping Genter				1 agc 10+ 01 11+
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 105 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	97	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 106 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9825	N/A	Solid	GC/MS BB	06/10/15	06/11/15 03:16	150610L057
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qualifiers	
Acetone		ND		0.12	1.00		
Benzene		ND		0.0050	1.00		
Bromobenzene		ND		0.0050	1.00		
Bromochloromethane		ND		0.0050	1.00		
Bromodichloromethane		ND		0.0050	1.00		
Bromoform		ND		0.0050	1.00		
Bromomethane		ND		0.025	1.00		
2-Butanone		ND		0.050	1.00		
n-Butylbenzene		ND		0.0050	1.00		
sec-Butylbenzene		ND		0.0050	1.00		
tert-Butylbenzene		ND		0.0050	1.00		
Carbon Disulfide		ND		0.050	1.00		
Carbon Tetrachloride		ND		0.0050	1.00		
Chlorobenzene		ND		0.0050	1.00		
Chloroethane		ND		0.0050	1.00		
Chloroform		ND		0.0050	1.00		
Chloromethane		ND		0.025	1.00		
2-Chlorotoluene		ND		0.0050	1.00		
4-Chlorotoluene		ND		0.0050	1.00		
Dibromochloromethane		ND		0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND		0.010	1.00		
1,2-Dibromoethane		ND		0.0050	1.00		
Dibromomethane		ND		0.0050	1.00		
1,2-Dichlorobenzene		ND		0.0050	1.00		
1,3-Dichlorobenzene		ND		0.0050	1.00		
1,4-Dichlorobenzene		ND		0.0050	1.00		
Dichlorodifluoromethane		ND		0.0050	1.00		
1,1-Dichloroethane		ND		0.0050	1.00		
1,2-Dichloroethane		ND		0.0050	1.00		
1,1-Dichloroethene		ND		0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND		0.0050	1.00		
1,2-Dichloropropane		ND		0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND		0.0050	1.00		



Cardno ERI Date Received: 06/09/15 601 North McDowell Blvd. Work Order: 15-06-0698 EPA 5030C Petaluma, CA 94954-2312 Preparation: Method: **EPA 8260B** Units: mg/kg Page 107 of 114

Project: 580 Market Place Shopping Center

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<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers		
1,1-Dichloropropene	ND	0.0050	1.00			
c-1,3-Dichloropropene	ND	0.0050	1.00			
t-1,3-Dichloropropene	ND	0.0050	1.00			
Ethylbenzene	ND	0.0050	1.00			
2-Hexanone	ND	0.050	1.00			
Isopropylbenzene	ND	0.0050	1.00			
p-lsopropyltoluene	ND	0.0050	1.00			
Methylene Chloride	ND	0.050	1.00			
4-Methyl-2-Pentanone	ND	0.050	1.00			
Naphthalene	ND	0.050	1.00			
n-Propylbenzene	ND	0.0050	1.00			
Styrene	ND	0.0050	1.00			
1,1,2-Tetrachloroethane	ND	0.0050	1.00			
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00			
Tetrachloroethene	ND	0.0050	1.00			
Toluene	ND	0.0050	1.00			
1,2,3-Trichlorobenzene	ND	0.010	1.00			
1,2,4-Trichlorobenzene	ND	0.0050	1.00			
1,1,1-Trichloroethane	ND	0.0050	1.00			
1,1,2-Trichloroethane	ND	0.0050	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00			
Trichloroethene	ND	0.0050	1.00			
1,2,3-Trichloropropane	ND	0.0050	1.00			
1,2,4-Trimethylbenzene	ND	0.0050	1.00			
Trichlorofluoromethane	ND	0.050	1.00			
1,3,5-Trimethylbenzene	ND	0.0050	1.00			
Vinyl Acetate	ND	0.050	1.00			
Vinyl Chloride	ND	0.0050	1.00			
p/m-Xylene	ND	0.0050	1.00			
o-Xylene	ND	0.0050	1.00			
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00			
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00			
Diisopropyl Ether (DIPE)	ND	0.010	1.00			
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00			
Ethanol	ND	0.25	1.00			
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>			
1,4-Bromofluorobenzene	98	60-132				



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 108 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	99	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 109 of 114

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9830	N/A	Solid	GC/MS Q	06/11/15	06/12/15 00:07	150611L030
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	(0.12	1.00		
Benzene		ND	(0.0050	1.00		
Bromobenzene		ND	(0.0050	1.00		
Bromochloromethane		ND	(0.0050	1.00		
Bromodichloromethane		ND	(0.0050	1.00		
Bromoform		ND	(0.0050	1.00		
Bromomethane		ND	(0.025	1.00		
2-Butanone		ND	(0.050	1.00		
n-Butylbenzene		ND	(0.0050	1.00		
sec-Butylbenzene		ND	(0.0050	1.00		
tert-Butylbenzene		ND	(0.0050	1.00		
Carbon Disulfide		ND	(0.050	1.00		
Carbon Tetrachloride		ND	(0.0050	1.00		
Chlorobenzene		ND	(0.0050	1.00		
Chloroethane		ND	(0.0050	1.00		
Chloroform		ND	(0.0050	1.00		
Chloromethane		ND	(0.025	1.00		
2-Chlorotoluene		ND	(0.0050	1.00		
4-Chlorotoluene		ND	(0.0050	1.00		
Dibromochloromethane		ND	(0.0050	1.00		
1,2-Dibromo-3-Chloropropane		ND	(0.010	1.00		
1,2-Dibromoethane		ND	(0.0050	1.00		
Dibromomethane		ND	(0.0050	1.00		
1,2-Dichlorobenzene		ND	(0.0050	1.00		
1,3-Dichlorobenzene		ND	(0.0050	1.00		
1,4-Dichlorobenzene		ND	(0.0050	1.00		
Dichlorodifluoromethane		ND	(0.0050	1.00		
1,1-Dichloroethane		ND	(0.0050	1.00		
1,2-Dichloroethane		ND	(0.0050	1.00		
1,1-Dichloroethene		ND	(0.0050	1.00		
c-1,2-Dichloroethene		ND		0.0050	1.00		
t-1,2-Dichloroethene		ND	(0.0050	1.00		
1,2-Dichloropropane		ND	(0.0050	1.00		
1,3-Dichloropropane		ND		0.0050	1.00		
2,2-Dichloropropane		ND	(0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

Project: 580 Market Place Shopping Center Page 110 of 114 Result <u>RL</u> <u>DF</u> Qualifiers <u>Parameter</u> ND 1,1-Dichloropropene 0.0050 1.00 c-1,3-Dichloropropene ND 0.0050 1.00 t-1,3-Dichloropropene ND 0.0050 1.00 Ethylbenzene ND 0.0050 1.00 ND 2-Hexanone 0.050 1.00 Isopropylbenzene ND 0.0050 1.00 p-Isopropyltoluene ND 0.0050 1.00 Methylene Chloride ND 0.050 1.00 4-Methyl-2-Pentanone ND 0.050 1.00 Naphthalene ND 0.050 1.00 n-Propylbenzene ND 0.0050 1.00 Styrene ND 0.0050 1.00 1,1,1,2-Tetrachloroethane ND 0.0050 1.00 ND 1,1,2,2-Tetrachloroethane 0.0050 1.00 Tetrachloroethene ND 0.0050 1.00 Toluene ND 0.0050 1.00 1,2,3-Trichlorobenzene ND 0.010 1.00 1,2,4-Trichlorobenzene ND 0.0050 1.00 1,1,1-Trichloroethane ND 0.0050 1.00 1,1,2-Trichloroethane ND 0.0050 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 0.050 1.00 Trichloroethene ND 0.0050 1.00 ND 1,2,3-Trichloropropane 0.0050 1.00 1,2,4-Trimethylbenzene ND 0.0050 1.00 Trichlorofluoromethane ND 0.050 1.00 1,3,5-Trimethylbenzene ND 0.0050 1.00 Vinyl Acetate ND 0.050 1.00 Vinyl Chloride ND 0.0050 1.00 p/m-Xylene ND 0.0050 1.00 o-Xylene ND 0.0050 1.00 Methyl-t-Butyl Ether (MTBE) ND 0.0050 1.00 Tert-Butyl Alcohol (TBA) ND 0.050 1.00 Diisopropyl Ether (DIPE) ND 0.010 1.00 Ethyl-t-Butyl Ether (ETBE) ND 0.010 1.00 Tert-Amyl-Methyl Ether (TAME) ND 0.010 1.00 Ethanol ND 0.25 1.00 Surrogate Rec. (%) **Control Limits** Qualifiers 1,4-Bromofluorobenzene 97 60-132



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 111 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: 580 Market Place Shopping Center Page 112 of 114

Client Sample Number Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank 099-12-796-	9837 N/A	Solid	GC/MS Q	06/12/15	06/12/15 13:01	150612L028
<u>Parameter</u>	Result		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>
Acetone	ND	(0.12	1.00		
Benzene	ND	(0.0050	1.00		
Bromobenzene	ND	(0.0050	1.00		
Bromochloromethane	ND	(0.0050	1.00		
Bromodichloromethane	ND	(0.0050	1.00		
Bromoform	ND	(0.0050	1.00		
Bromomethane	ND	(0.025	1.00		
2-Butanone	ND	(0.050	1.00		
n-Butylbenzene	ND	(0.0050	1.00		
sec-Butylbenzene	ND	(0.0050	1.00		
tert-Butylbenzene	ND	(0.0050	1.00		
Carbon Disulfide	ND	(0.050	1.00		
Carbon Tetrachloride	ND	(0.0050	1.00		
Chlorobenzene	ND	(0.0050	1.00		
Chloroethane	ND	(0.0050	1.00		
Chloroform	ND	(0.0050	1.00		
Chloromethane	ND	(0.025	1.00		
2-Chlorotoluene	ND	(0.0050	1.00		
4-Chlorotoluene	ND	(0.0050	1.00		
Dibromochloromethane	ND	(0.0050	1.00		
1,2-Dibromo-3-Chloropropane	ND	(0.010	1.00		
1,2-Dibromoethane	ND	(0.0050	1.00		
Dibromomethane	ND	(0.0050	1.00		
1,2-Dichlorobenzene	ND	(0.0050	1.00		
1,3-Dichlorobenzene	ND	(0.0050	1.00		
1,4-Dichlorobenzene	ND	(0.0050	1.00		
Dichlorodifluoromethane	ND	(0.0050	1.00		
1,1-Dichloroethane	ND	(0.0050	1.00		
1,2-Dichloroethane	ND	(0.0050	1.00		
1,1-Dichloroethene	ND	(0.0050	1.00		
c-1,2-Dichloroethene	ND		0.0050	1.00		
t-1,2-Dichloroethene	ND	(0.0050	1.00		
1,2-Dichloropropane	ND	(0.0050	1.00		
1,3-Dichloropropane	ND		0.0050	1.00		
2,2-Dichloropropane	ND	(0.0050	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 mg/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Snopping Center				Page 113 of 114
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.0050	1.00	
c-1,3-Dichloropropene	ND	0.0050	1.00	
t-1,3-Dichloropropene	ND	0.0050	1.00	
Ethylbenzene	ND	0.0050	1.00	
2-Hexanone	ND	0.050	1.00	
Isopropylbenzene	ND	0.0050	1.00	
p-Isopropyltoluene	ND	0.0050	1.00	
Methylene Chloride	ND	0.050	1.00	
4-Methyl-2-Pentanone	ND	0.050	1.00	
Naphthalene	ND	0.050	1.00	
n-Propylbenzene	ND	0.0050	1.00	
Styrene	ND	0.0050	1.00	
1,1,1,2-Tetrachloroethane	ND	0.0050	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0050	1.00	
Tetrachloroethene	ND	0.0050	1.00	
Toluene	ND	0.0050	1.00	
1,2,3-Trichlorobenzene	ND	0.010	1.00	
1,2,4-Trichlorobenzene	ND	0.0050	1.00	
1,1,1-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloroethane	ND	0.0050	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1.00	
Trichloroethene	ND	0.0050	1.00	
1,2,3-Trichloropropane	ND	0.0050	1.00	
1,2,4-Trimethylbenzene	ND	0.0050	1.00	
Trichlorofluoromethane	ND	0.050	1.00	
1,3,5-Trimethylbenzene	ND	0.0050	1.00	
Vinyl Acetate	ND	0.050	1.00	
Vinyl Chloride	ND	0.0050	1.00	
p/m-Xylene	ND	0.0050	1.00	
o-Xylene	ND	0.0050	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.050	1.00	
Diisopropyl Ether (DIPE)	ND	0.010	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1.00	
Ethanol	ND	0.25	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0698
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	mg/kg
Project: 580 Market Place Shopping Center		Page 114 of 114

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	97	80-120	



Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0698 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: EPA 8015B (M) Page 1 of 9

Project: 580 Market Place Shopping Center

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bate	ch Number
15-06-0697-1	Sample		Solid	GC	24	06/09/15	06/11/15	12:20	150611S019	
15-06-0697-1	Matrix Spike		Solid	GC	24	06/09/15	06/11/15	12:54	150611S019	
15-06-0697-1	Matrix Spike	Duplicate	Solid	GC	24	06/09/15	06/11/15	13:28	150611S019	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	7.853	79	7.761	78	48-114	1	0-23	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 2 of 9

Quality Control Sample ID	Туре	Туре		Matrix Instrument I		Date Prepared	d Date Analyzed MS/MSD Batch			ch Number
S-5.5-SV16	Sample	Sample		GC 24		06/09/15	06/12/15 03:37		150611S024	
S-5.5-SV16	Matrix Spike	Matrix Spike		GC 24		06/09/15	06/09/15 06/12/15 04:1		150611S024	
S-5.5-SV16	Matrix Spike D	Matrix Spike Duplicate		GC 24		06/09/15	06/12/15	04:44	150611S024	
Parameter	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	5.317	53	5.636	56	48-114	6	0-23	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 3 of 9

Quality Control Sample ID	Туре	Туре		trix Instrument		Date Prepared	Date Analyzed		MS/MSD Bat	ch Number
15-06-0965-1	Sample	Sample		GC 24		06/11/15	06/13/15	01:45	150611S041	
15-06-0965-1	Matrix Spike	Matrix Spike		GC 24		06/11/15	06/13/15	02:19	150611S041	
15-06-0965-1	Matrix Spike D	Matrix Spike Duplicate		GC 24		06/11/15	06/13/15	02:53	150611S041	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	8.695	87	8.784	88	48-114	1	0-23	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 4 of 9

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
15-06-0875-1	Sample	Sample		GC/MS Q		06/11/15	06/12/15 01:00		150611S018	
15-06-0875-1	Matrix Spike		Solid	GC/	MS Q	06/11/15	06/12/15	01:53	150611S018	
15-06-0875-1	Matrix Spike	Duplicate	Solid	GC/	MS Q	06/11/15	06/12/15	02:19	150611S018	
<u>Parameter</u>	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.03945	79	0.03956	79	61-127	0	0-20	
Carbon Tetrachloride	ND	0.05000	0.03719	74	0.03840	77	51-135	3	0-29	
Chlorobenzene	ND	0.05000	0.03473	69	0.03563	71	57-123	3	0-20	
1,2-Dibromoethane	ND	0.05000	0.04157	83	0.04248	85	64-124	2	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.02883	58	0.03028	61	35-131	5	0-25	
1,2-Dichloroethane	ND	0.05000	0.03886	78	0.03859	77	80-120	1	0-20	3
1,1-Dichloroethene	ND	0.05000	0.03618	72	0.03635	73	47-143	0	0-25	
Ethylbenzene	ND	0.05000	0.03563	71	0.03651	73	57-129	2	0-22	
Toluene	ND	0.05000	0.03774	75	0.03832	77	63-123	2	0-20	
Trichloroethene	ND	0.05000	0.04331	87	0.04536	91	44-158	5	0-20	
Vinyl Chloride	ND	0.05000	0.04051	81	0.04071	81	49-139	0	0-47	
p/m-Xylene	ND	0.1000	0.06986	70	0.07141	71	70-130	2	0-30	
o-Xylene	ND	0.05000	0.03439	69	0.03520	70	70-130	2	0-30	3
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.04208	84	0.04138	83	57-123	2	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2319	93	0.2302	92	30-168	1	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.04077	82	0.04037	81	57-129	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.04272	85	0.04227	85	55-127	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.04305	86	0.04202	84	58-124	2	0-20	

73

0.3778

76

17-167

3

0-47

RPD: Relative Percent Difference. CL: Control Limits

ND

0.5000

0.3668

Ethanol



Cardno ERI Date Received: 06/09/15
601 North McDowell Blvd. Work Order: 15-06-0698
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Project: 580 Market Place Shopping Center Page 5 of 9

Quality Control Sample ID	Туре		Matrix	Insti	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
15-06-0873-35	Sample		Solid	GC/	MS Q	06/11/15	06/12/15	13:57	150612S006	
15-06-0873-35	Matrix Spike		Solid	GC/	MS Q	06/11/15	06/12/15	14:24	150612S006	
15-06-0873-35	Matrix Spike	Duplicate	Solid	GC/	MS Q	06/11/15	06/12/15	14:50	150612S006	
<u>Parameter</u>	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	0.05000	0.05392	108	0.04977	100	70-130	8	0-20	
Benzene	ND	0.05000	0.04660	93	0.04489	90	61-127	4	0-20	
Bromobenzene	ND	0.05000	0.04816	96	0.04624	92	70-130	4	0-20	
Bromochloromethane	ND	0.05000	0.04927	99	0.04613	92	70-130	7	0-20	
Bromodichloromethane	ND	0.05000	0.04373	87	0.04190	84	70-130	4	0-20	
Bromoform	ND	0.05000	0.04607	92	0.04402	88	70-130	5	0-20	
Bromomethane	ND	0.05000	0.05640	113	0.04348	87	70-130	26	0-20	4
2-Butanone	ND	0.05000	0.05186	104	0.04769	95	70-130	8	0-20	
n-Butylbenzene	ND	0.05000	0.04805	96	0.04509	90	77-123	6	0-25	
sec-Butylbenzene	ND	0.05000	0.04648	93	0.04403	88	70-130	5	0-20	
tert-Butylbenzene	ND	0.05000	0.04713	94	0.04398	88	70-130	7	0-20	
Carbon Disulfide	ND	0.05000	0.03960	79	0.03862	77	70-130	2	0-20	
Carbon Tetrachloride	ND	0.05000	0.04450	89	0.04243	85	51-135	5	0-29	
Chlorobenzene	ND	0.05000	0.04559	91	0.04413	88	57-123	3	0-20	
Chloroethane	ND	0.05000	0.04225	85	0.03889	78	70-130	8	0-20	
Chloroform	ND	0.05000	0.04422	88	0.04237	85	70-130	4	0-20	
Chloromethane	ND	0.05000	0.04164	83	0.03854	77	70-130	8	0-20	
2-Chlorotoluene	ND	0.05000	0.04376	88	0.04190	84	70-130	4	0-20	
4-Chlorotoluene	ND	0.05000	0.04534	91	0.04336	87	70-130	4	0-20	
Dibromochloromethane	ND	0.05000	0.04770	95	0.04584	92	70-130	4	0-20	
1,2-Dibromo-3-Chloropropane	ND	0.05000	0.04260	85	0.04282	86	70-130	1	0-20	
1,2-Dibromoethane	ND	0.05000	0.05146	103	0.04895	98	64-124	5	0-20	
Dibromomethane	ND	0.05000	0.04816	96	0.04516	90	70-130	6	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.04642	93	0.04337	87	35-131	7	0-25	
1,3-Dichlorobenzene	ND	0.05000	0.04712	94	0.04409	88	70-130	7	0-20	
1,4-Dichlorobenzene	ND	0.05000	0.04617	92	0.04332	87	70-130	6	0-20	
Dichlorodifluoromethane	ND	0.05000	0.04686	94	0.04250	85	70-130	10	0-20	
1,1-Dichloroethane	ND	0.05000	0.04304	86	0.04114	82	70-130	5	0-20	
1,2-Dichloroethane	ND	0.05000	0.04381	88	0.04144	83	70-130	6	0-20	
1,1-Dichloroethene	ND	0.05000	0.04134	83	0.04027	81	47-143	3	0-25	
c-1,2-Dichloroethene	ND	0.05000	0.05028	101	0.04794	96	70-130	5	0-20	
t-1,2-Dichloroethene	ND	0.05000	0.04750	95	0.04577	92	70-130	4	0-20	
1,2-Dichloropropane	ND	0.05000	0.04757	95	0.04571	91	79-115	4	0-25	
1,3-Dichloropropane	ND	0.05000	0.05338	107	0.05068	101	70-130	5	0-20	
2,2-Dichloropropane	ND	0.05000	0.04395	88	0.04260	85	70-130	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center

<u>Parameter</u>	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	<u>Qualifiers</u>
1,1-Dichloropropene	ND	0.05000	0.04295	86	0.04148	83	70-130	3	0-20	
c-1,3-Dichloropropene	ND	0.05000	0.05181	104	0.04894	98	70-130	6	0-20	
t-1,3-Dichloropropene	ND	0.05000	0.04991	100	0.04817	96	70-130	4	0-20	
Ethylbenzene	ND	0.05000	0.04727	95	0.04589	92	57-129	3	0-22	
2-Hexanone	ND	0.05000	0.04480	90	0.04284	86	70-130	4	0-20	
Isopropylbenzene	ND	0.05000	0.04566	91	0.04442	89	70-130	3	0-20	
p-Isopropyltoluene	ND	0.05000	0.04848	97	0.04580	92	70-130	6	0-20	
Methylene Chloride	ND	0.05000	0.04925	98	0.04705	94	70-130	5	0-20	
4-Methyl-2-Pentanone	ND	0.05000	0.05059	101	0.04742	95	70-130	6	0-20	
Naphthalene	ND	0.05000	0.04369	87	0.04230	85	70-130	3	0-20	
n-Propylbenzene	ND	0.05000	0.04457	89	0.04310	86	70-130	3	0-20	
Styrene	ND	0.05000	0.04756	95	0.04568	91	70-130	4	0-20	
1,1,1,2-Tetrachloroethane	ND	0.05000	0.05117	102	0.04927	99	70-130	4	0-20	
1,1,2,2-Tetrachloroethane	ND	0.05000	0.05042	101	0.04506	90	70-130	11	0-20	
Tetrachloroethene	ND	0.05000	0.05339	107	0.05965	119	70-130	11	0-20	
Toluene	ND	0.05000	0.04669	93	0.04503	90	63-123	4	0-20	
1,2,3-Trichlorobenzene	ND	0.05000	0.04615	92	0.04273	85	70-130	8	0-20	
1,2,4-Trichlorobenzene	ND	0.05000	0.04767	95	0.04371	87	70-130	9	0-20	
1,1,1-Trichloroethane	ND	0.05000	0.04347	87	0.04205	84	70-130	3	0-20	
1,1,2-Trichloroethane	ND	0.05000	0.05148	103	0.04956	99	70-130	4	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.05000	0.04436	89	0.04309	86	70-130	3	0-20	
Trichloroethene	ND	0.05000	0.04922	98	0.04860	97	44-158	1	0-20	
1,2,3-Trichloropropane	ND	0.05000	0.04709	94	0.04491	90	70-130	5	0-20	
1,2,4-Trimethylbenzene	ND	0.05000	0.04725	94	0.04537	91	70-130	4	0-20	
Trichlorofluoromethane	ND	0.05000	0.04681	94	0.04207	84	70-130	11	0-20	
1,3,5-Trimethylbenzene	ND	0.05000	0.04828	97	0.04614	92	70-130	5	0-20	
Vinyl Acetate	ND	0.05000	0.05339	107	0.03577	72	70-130	40	0-20	4
Vinyl Chloride	ND	0.05000	0.04526	91	0.04176	84	49-139	8	0-47	
p/m-Xylene	ND	0.1000	0.09472	95	0.09165	92	70-130	3	0-20	
o-Xylene	ND	0.05000	0.04554	91	0.04371	87	70-130	4	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.04586	92	0.04316	86	57-123	6	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2792	112	0.2427	97	30-168	14	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.04308	86	0.04136	83	57-129	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.04604	92	0.04373	87	55-127	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.04652	93	0.04435	89	58-124	5	0-20	
Ethanol	ND	0.5000	0.5327	107	0.4940	99	17-167	8	0-47	

RPD: Relative Percent Difference. CL: Control Limits



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 7 of 9

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
15-06-0680-1	Sample		Solid	GC	MS BB	06/09/15	06/11/15	03:44	150610S033	
15-06-0680-1	Matrix Spike		Solid	GC/	MS BB	06/09/15	06/11/15	04:13	150610S033	
15-06-0680-1	Matrix Spike	Duplicate	Solid	GC/	MS BB	06/09/15	06/11/15	04:41	150610S033	
<u>Parameter</u>	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.04041	81	0.04422	88	61-127	9	0-20	
Carbon Tetrachloride	ND	0.05000	0.04158	83	0.04556	91	51-135	9	0-29	
Chlorobenzene	ND	0.05000	0.03625	72	0.03861	77	57-123	6	0-20	
1,2-Dibromoethane	ND	0.05000	0.04287	86	0.04405	88	64-124	3	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.03188	64	0.03318	66	35-131	4	0-25	
1,2-Dichloroethane	ND	0.05000	0.04260	85	0.04498	90	80-120	5	0-20	
1,1-Dichloroethene	ND	0.05000	0.04062	81	0.04546	91	47-143	11	0-25	
Ethylbenzene	ND	0.05000	0.04030	81	0.04346	87	57-129	8	0-22	
Toluene	ND	0.05000	0.03943	79	0.04260	85	63-123	8	0-20	
Trichloroethene	ND	0.05000	0.04214	84	0.04584	92	44-158	8	0-20	
Vinyl Chloride	ND	0.05000	0.04509	90	0.04646	93	49-139	3	0-47	
p/m-Xylene	ND	0.1000	0.08005	80	0.08529	85	70-130	6	0-30	
o-Xylene	ND	0.05000	0.03687	74	0.03917	78	70-130	6	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.04335	87	0.04505	90	57-123	4	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2304	92	0.2230	89	30-168	3	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.04355	87	0.04639	93	57-129	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.04438	89	0.04733	95	55-127	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.04190	84	0.04382	88	58-124	4	0-20	

38

0.1157

23

17-167

0-47

RPD: Relative Percent Difference. CL: Control Limits

ND

0.5000

0.1904

Ethanol



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 8 of 9

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
S-5.5-SV16	Sample		Solid	GC	MS XX	06/09/15	06/10/15	16:46	150610S005	
S-5.5-SV16	Matrix Spike		Solid	GC/	MS XX	06/09/15	06/10/15	17:14	150610S005	
S-5.5-SV16	Matrix Spike	Duplicate	Solid	GC/	MS XX	06/09/15	06/10/15	17:41	150610S005	
Parameter	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.04579	92	0.04336	87	61-127	5	0-20	
Carbon Tetrachloride	ND	0.05000	0.04306	86	0.04061	81	51-135	6	0-29	
Chlorobenzene	ND	0.05000	0.03905	78	0.03643	73	57-123	7	0-20	
1,2-Dibromoethane	ND	0.05000	0.04596	92	0.04340	87	64-124	6	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.03299	66	0.03014	60	35-131	9	0-25	
1,2-Dichloroethane	ND	0.05000	0.04937	99	0.04629	93	80-120	6	0-20	
1,1-Dichloroethene	ND	0.05000	0.04196	84	0.04010	80	47-143	5	0-25	
Ethylbenzene	ND	0.05000	0.04251	85	0.03911	78	57-129	8	0-22	
Toluene	ND	0.05000	0.04368	87	0.04093	82	63-123	7	0-20	
Trichloroethene	ND	0.05000	0.04455	89	0.04192	84	44-158	6	0-20	
Vinyl Chloride	ND	0.05000	0.04287	86	0.03854	77	49-139	11	0-47	
p/m-Xylene	ND	0.1000	0.08549	85	0.07865	79	70-130	8	0-30	
o-Xylene	ND	0.05000	0.04183	84	0.03881	78	70-130	8	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.04303	86	0.04154	83	57-123	4	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2384	95	0.2268	91	30-168	5	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.04642	93	0.05321	106	57-129	14	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.05454	109	0.05302	106	55-127	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.05143	103	0.04954	99	58-124	4	0-20	
Ethanol	ND	0.5000	0.4793	96	0.4481	90	17-167	7	0-47	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 9 of 9

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
S-5-SV19	Sample		Solid	GC	MS XX	06/09/15	06/11/15	04:37	150610S018	
S-5-SV19	Matrix Spike		Solid	GC	MS XX	06/09/15	06/11/15	05:04	150610S018	
S-5-SV19	Matrix Spike	Duplicate	Solid	GC	MS XX	06/09/15	06/11/15	05:31	150610S018	
Parameter	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.04435	89	0.04169	83	61-127	6	0-20	
Carbon Tetrachloride	ND	0.05000	0.04403	88	0.04192	84	51-135	5	0-29	
Chlorobenzene	ND	0.05000	0.03997	80	0.03756	75	57-123	6	0-20	
1,2-Dibromoethane	ND	0.05000	0.04350	87	0.04166	83	64-124	4	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.03913	78	0.03674	73	35-131	6	0-25	
1,2-Dichloroethane	ND	0.05000	0.04531	91	0.04295	86	80-120	5	0-20	
1,1-Dichloroethene	ND	0.05000	0.04083	82	0.03919	78	47-143	4	0-25	
Ethylbenzene	ND	0.05000	0.04440	89	0.04160	83	57-129	6	0-22	
Toluene	ND	0.05000	0.04404	88	0.04120	82	63-123	7	0-20	
Trichloroethene	ND	0.05000	0.04670	93	0.04406	88	44-158	6	0-20	
Vinyl Chloride	ND	0.05000	0.03921	78	0.03887	78	49-139	1	0-47	
p/m-Xylene	ND	0.1000	0.08972	90	0.08364	84	70-130	7	0-30	
o-Xylene	ND	0.05000	0.04429	89	0.04150	83	70-130	6	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.03831	77	0.03970	79	57-123	4	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2117	85	0.2040	82	30-168	4	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.05126	103	0.04324	86	57-129	17	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.05011	100	0.04666	93	55-127	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.04669	93	0.04471	89	58-124	4	0-20	

85

0.3912

78

17-167

0-47

ND

0.5000

0.4242

Ethanol



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

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Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-2402	LCS	Solid	GC 24	06/11/15	06/11/15 11:46	150611L032
<u>Parameter</u>		Spike Added	Conc. Recovered	ed LCS %Re	ec. %Rec	. CL Qualifiers
TPH as Gasoline		10.00	9.337	93	70-12	4

RPD: Relative Percent Difference. CL: Control Limits



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 2 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number				
099-14-571-2406	LCS	Solid	GC 24	06/11/15	06/12/15 01:55	150611L041				
<u>Parameter</u>		Spike Added	Conc. Recove	red LCS %R	ec. %Rec	. CL Qualifiers				
TPH as Gasoline		10.00	9.518	95	70-12	4				

RPD: Relative Percent Difference. CL: Control Limits

70-124



TPH as Gasoline

Quality Control - LCS

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 3 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-2409	LCS	Solid	GC 24	06/11/15	06/12/15 17:16	150611L063
<u>Parameter</u>		Spike Added	Conc. Recover	red LCS %Re	ec. %Rec	. CL Qualifiers

9.303

10.00



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 4 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	t Date Prepa	ared Date Anal	yzed LCS Batch N	lumber
099-12-796-9830	LCS	Solid	GC/MS Q	06/11/15	06/11/15 2	23:15 150611L030	
Parameter		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	<u>Qualifiers</u>
Benzene		0.05000	0.04690	94	78-120	71-127	
Carbon Tetrachloride		0.05000	0.04490	90	49-139	34-154	
Chlorobenzene		0.05000	0.04695	94	79-120	72-127	
1,2-Dibromoethane		0.05000	0.05343	107	80-120	73-127	
1,2-Dichlorobenzene		0.05000	0.04825	97	75-120	68-128	
1,2-Dichloroethane		0.05000	0.04514	90	80-120	73-127	
1,1-Dichloroethene		0.05000	0.04108	82	74-122	66-130	
Ethylbenzene		0.05000	0.04832	97	76-120	69-127	
Toluene		0.05000	0.04725	95	77-120	70-127	
Trichloroethene		0.05000	0.04809	96	80-120	73-127	
Vinyl Chloride		0.05000	0.04461	89	68-122	59-131	
p/m-Xylene		0.1000	0.09545	95	75-125	67-133	
o-Xylene		0.05000	0.04681	94	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		0.05000	0.04883	98	77-120	70-127	
Tert-Butyl Alcohol (TBA)		0.2500	0.2738	110	68-122	59-131	
Diisopropyl Ether (DIPE)		0.05000	0.04667	93	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)		0.05000	0.04984	100	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)		0.05000	0.05052	101	75-120	68-128	
Ethanol		0.5000	0.5335	107	56-140	42-154	

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



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 5 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	t Date Prepa	ared Date Analy	zed LCS Batch N	umber
099-12-796-9837	LCS	Solid	GC/MS Q	06/12/15	06/12/15 1	2:05 150612L028	
<u>Parameter</u>		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	<u>Qualifiers</u>
Benzene		0.05000	0.04950	99	78-120	71-127	
Carbon Tetrachloride		0.05000	0.04899	98	49-139	34-154	
Chlorobenzene		0.05000	0.04926	99	79-120	72-127	
1,2-Dibromoethane		0.05000	0.05330	107	80-120	73-127	
1,2-Dichlorobenzene		0.05000	0.05052	101	75-120	68-128	
1,2-Dichloroethane		0.05000	0.04621	92	80-120	73-127	
1,1-Dichloroethene		0.05000	0.04348	87	74-122	66-130	
Ethylbenzene		0.05000	0.05084	102	76-120	69-127	
Toluene		0.05000	0.05059	101	77-120	70-127	
Trichloroethene		0.05000	0.05172	103	80-120	73-127	
Vinyl Chloride		0.05000	0.04364	87	68-122	59-131	
p/m-Xylene		0.1000	0.1007	101	75-125	67-133	
o-Xylene		0.05000	0.04918	98	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		0.05000	0.04835	97	77-120	70-127	
Tert-Butyl Alcohol (TBA)		0.2500	0.2731	109	68-122	59-131	
Diisopropyl Ether (DIPE)		0.05000	0.04729	95	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)		0.05000	0.05035	101	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)		0.05000	0.05122	102	75-120	68-128	
Ethanol		0.5000	0.4935	99	56-140	42-154	

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



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrumen	t Date Prep	ared Date Anal	yzed LCS Batch	n Number
099-12-796-9825	LCS	Solid	GC/MS BI	B 06/10/15	06/11/15	02:19 150610L0	57
<u>Parameter</u>		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	<u>Qualifiers</u>
Benzene		0.05000	0.05328	107	78-120	71-127	
Carbon Tetrachloride		0.05000	0.05222	104	49-139	34-154	
Chlorobenzene		0.05000	0.05092	102	79-120	72-127	
1,2-Dibromoethane		0.05000	0.05636	113	80-120	73-127	
1,2-Dichlorobenzene		0.05000	0.05095	102	75-120	68-128	
1,2-Dichloroethane		0.05000	0.05676	114	80-120	73-127	
1,1-Dichloroethene		0.05000	0.05162	103	74-122	66-130	
Ethylbenzene		0.05000	0.05477	110	76-120	69-127	
Toluene		0.05000	0.05276	106	77-120	70-127	
Trichloroethene		0.05000	0.05450	109	80-120	73-127	
Vinyl Chloride		0.05000	0.05000	100	68-122	59-131	
p/m-Xylene		0.1000	0.1100	110	75-125	67-133	
o-Xylene		0.05000	0.05086	102	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		0.05000	0.05375	108	77-120	70-127	
Tert-Butyl Alcohol (TBA)		0.2500	0.2772	111	68-122	59-131	
Diisopropyl Ether (DIPE)		0.05000	0.05533	111	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)		0.05000	0.05595	112	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)		0.05000	0.05377	108	75-120	68-128	
Ethanol		0.5000	0.5030	101	56-140	42-154	

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



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 7 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepa	red Date Analyze	ed LCS Batch N	umber
099-12-796-9810	LCS	Solid	GC/MS XX	06/10/15	06/10/15 14:	50 150610L018	
Parameter	<u>S</u>	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	<u>Qualifiers</u>
Benzene	0	.05000	0.05046	101	78-120	71-127	
Carbon Tetrachloride	0	.05000	0.04869	97	49-139	34-154	
Chlorobenzene	0	.05000	0.04735	95	79-120	72-127	
1,2-Dibromoethane	0	.05000	0.05216	104	80-120	73-127	
1,2-Dichlorobenzene	0	.05000	0.04867	97	75-120	68-128	
1,2-Dichloroethane	0	.05000	0.05183	104	80-120	73-127	
1,1-Dichloroethene	0	.05000	0.04609	92	74-122	66-130	
Ethylbenzene	0	.05000	0.05211	104	76-120	69-127	
Toluene	0	.05000	0.05019	100	77-120	70-127	
Trichloroethene	0	.05000	0.05025	100	80-120	73-127	
Vinyl Chloride	0	.05000	0.04472	89	68-122	59-131	
p/m-Xylene	0	.1000	0.1051	105	75-125	67-133	
o-Xylene	0	.05000	0.05255	105	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	0	.05000	0.04622	92	77-120	70-127	
Tert-Butyl Alcohol (TBA)	0	.2500	0.2584	103	68-122	59-131	
Diisopropyl Ether (DIPE)	0	.05000	0.06003	120	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	0	.05000	0.05993	120	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	0	.05000	0.05575	111	75-120	68-128	
Ethanol	0	.5000	0.5297	106	56-140	42-154	

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





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0698

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 8 of 8

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepa	red Date Analyz	ed LCS Batch N	umber
099-12-796-9817	LCS	Solid	GC/MS XX	06/10/15	06/11/15 03:	15 150610L042	
Parameter		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene		0.05000	0.05143	103	78-120	71-127	
Carbon Tetrachloride		0.05000	0.04848	97	49-139	34-154	
Chlorobenzene		0.05000	0.04732	95	79-120	72-127	
1,2-Dibromoethane		0.05000	0.05286	106	80-120	73-127	
1,2-Dichlorobenzene		0.05000	0.04767	95	75-120	68-128	
1,2-Dichloroethane		0.05000	0.05274	105	80-120	73-127	
1,1-Dichloroethene		0.05000	0.04676	94	74-122	66-130	
Ethylbenzene		0.05000	0.05172	103	76-120	69-127	
Toluene		0.05000	0.05081	102	77-120	70-127	
Trichloroethene		0.05000	0.05117	102	80-120	73-127	
Vinyl Chloride		0.05000	0.04453	89	68-122	59-131	
p/m-Xylene		0.1000	0.1038	104	75-125	67-133	
o-Xylene		0.05000	0.05238	105	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		0.05000	0.04830	97	77-120	70-127	
Tert-Butyl Alcohol (TBA)		0.2500	0.2604	104	68-122	59-131	
Diisopropyl Ether (DIPE)		0.05000	0.05469	109	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)		0.05000	0.06110	122	78-120	71-127	ME
Tert-Amyl-Methyl Ether (TAME)		0.05000	0.05744	115	75-120	68-128	
Ethanol		0.5000	0.5160	103	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass



Sample Analysis Summary Report

Work Order: 15-06-0698				Page 1 of 1
Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 5030C	715	GC 24	2
EPA 8260B	EPA 5030C	905	GC/MS Q	2
EPA 8260B	EPA 5030C	975	GC/MS BB	2
EPA 8260B	EPA 5030C	986	GC/MS XX	2



SG

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Glossary of Terms and Qualifiers

Work Order: 15-06-0698 Page 1 of 1

Qualifiers	<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.
В	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.

- % Recovery and/or RPD out-of-range. Ζ
 - Analyte presence was not confirmed by second column or GC/MS analysis.

The sample extract was subjected to Silica Gel treatment prior to 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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CITY:	Sacramento				STATE:	ZIP:	9582	5		Gal	oe Stiv	/ala							N	adya	a Vi	cente			
916-386-3870 E-MAIL: gabe.stivala@cardno.com												REQ	UES	TEC) AN	ALY	SES	;							
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LAB USE	SAMPLE ID	Field Point Name	SAMI DATE	PLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	区 TPH(g) (8015B)	Full Scan VOCs (8260B)**	BTEX 8260B 🖾	MTBE/TBA 8260B	Oxygenates (8260B)**	Lead EDB)	Napthalene	Pesticides (8081)	PCBs (8082)	PAHs	T22 N	Cr(VI)				
ĬŇ.	INLY:									х	х	х	х	х	х	х									
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18	S-15- SV18	SV-18	6/4/15	1021	S	1	<u> </u>		ļ	メ	Х	×	Х	X	٨	Х									
19	S-22-SV18	SV-18	6/4/15	1025	S	1			<u> </u>	X	×	×	×	×	×	×					<u> </u>				
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	er service / sample drop off inform TORY CLIENT: Cardno AT		26_sales@eurofi	nsus.com or call	us.								AME / NO		: Cente	er / Ca	rdno /	ATC	P.O. N	10.:					
ADDRES	ss: 701 University Avenue S	uite 200									ject# ECT CC		00015	2					SAMF	PLER(S)	: (PRINT)			
CITY: State: C							95825	 5		Ga	be Stiv	/ala							N.	ady	ia l	licen	te		
TEL:	916-386-3870		E-MAIL: gab	e.stivala@e	cardno.co	<u>m</u>							***************************************		REQ	UES	STEC) AN	ALY	SES	;				
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LAB USE ONLY	SAMPLE ID	Field Point Name	SAMF DATE	PLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	区 TPH(g) (8015B)	Full Scan VOCs (8260B)**	BTEX 8260B 🖾	ET#	Oxygenates (8260B)**	Lead Scavengers (1,2-DCA EDB) (8260B)	Nap	Pesticides (8081)	PCBs (8082)	PAHs	T22 N	Cr(VI)				
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29	S-14-SV20	SV20	6/4/15	14 25	S	l	<u> </u>			X	X	メ	×	X	У	Х			<u> </u>	<u> </u>					
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#### 800-322-5555 www.gso.com



Ship From

CAL SCIENCE- CONCORD ALAN KEMP 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To CEL SAMPLE RECEIVING 7440 LINCOLN WAY GARDEN GROVE, CA 92841

COD: \$0.00 Weight: 0 lb(s) Reference: CARDNO ERI **Delivery Instructions:** 

Signature Type: REQUIRED

Tracking #: 528191457



**GARDEN GROVE** 



D92845A



38660565

Print Date: 6/8/2015 3:12 PM

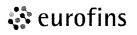
Package 2 of 2

#### LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.





Calscience

WORK ORDER NUMBER: 15-06- 662

# SAMPLE RECEIPT CHECKLIST COOLER / OF /

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CLIENT: CAPANO ATC DAT	E: 00 /		/ 2015
TEMPERATURE: (Criteria: 0.0°C − 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): _2 - 3 _ °C (w/ CF): _2 - ○ °C; ✓ C; ✓ 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	Blank D		
CUSTODY SEAL:  Cooler	Checked Checked		
SAMPLE CONDITION:  Chain-of-Custody (COC) document(s) received with samples  COC document(s) received complete  Sampling date Sampling time Matrix Number of containers		No	N/A
□ 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			ā Ā
☐ 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)			Ø
Tedlar™ bag(s) free of condensation       (Trip Blank Lot Number Manager of Container Type: (Trip Blank Lot Number Number of Container Type: (Trip Blank Lot Number of Container of Conta	r: GB <b>p</b>	25PB GJ <b>s</b>	
Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ Z Sleeve (	ealable Ba	g d by: <u>{</u>	<u> </u>

Calscience

WORK ORDER NUMBER: 15-06- 0698

# **SAMPLE ANOMALY REPORT**

DATE: 06 / 09 / 2015

SAMPLES, CONTAINERS, AND LABELS:	Comments
☐ Sample(s) NOT RECEIVED but listed on COC	LANGUAGO CONTRACTOR CO
☐ 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)	(-32) and (-33) collection date per label
☐ Project information	: 21
☐ Client sample ID	6/3/15
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.	
MISCELLANEOUS: (Describe)	Comments
HEADSPACE:	
(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)	(Containers with bubble for other analysis)
ECI ECI Total ECI ECI Total	ECI ECI Total
Sample ID Container ID Number** Sample ID Container ID Number**	Sample ID Container ID Number** Requested Analysis
Comments:	- at S
	Reported by: 965 Reviewed by: 900
** Record the total number of containers (i.e., vials or bottles) for the affected sample.	Reviewed by:



# **Calscience**



# **WORK ORDER NUMBER: 15-06-0697**

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

Client: Cardno ERI

Client Project Name: 580 Market Place Shopping Center

**Attention:** Gabe Stivala

601 North McDowell Blvd. Petaluma, CA 94954-2312

amande Porter

Approved for release on 06/16/2015 by: Amanda Porter

Amanda Porter 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.



# **Contents**

Client Project Name:	580 Market Place Shopping Center
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Work Order Number: 15-06-0697

1	Work Order Narrative	3
2	Client Sample Data	4 4 8
3	Quality Control Sample Data	53 53 56
4	Sample Analysis Summary	59
5	Glossary of Terms and Qualifiers	60
6	Chain-of-Custody/Sample Receipt Form	61



#### **Work Order Narrative**

Work Order: 15-06-0697 Page 1 of 1

#### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/09/15. They were assigned to Work Order 15-06-0697.

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.



Cardno ERI			Date Re	eceived:			06/09/15
601 North McDowell Blvd.		,	Work O	rder:			15-06-0697
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030C
			Method	:		Е	PA 8015B (M)
			Units:				mg/kg
Project: 580 Market Place Shop	ping Center					Pa	ige 1 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5.5-SV21	15-06-0697-1-A	06/05/15 13:00	Solid	GC 24	06/09/15	06/11/15 12:20	150611L032
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.49	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		70		42-126			
S-10-SV21	15-06-0697-2-A	06/05/15 13:05	Solid	GC 24	06/09/15	06/11/15 14:02	150611L032
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.49	1.00		
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		72		42-126			
S-15-SV21	15-06-0697-3-A	06/05/15 13:10	Solid	GC 24	06/09/15	06/11/15 14:36	150611L032
Parameter	,	Result		RL	DF	Qua	alifiers
TPH as Gasoline		ND		0.51	1.00		
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		71		42-126			
S-23.5-SV21	15-06-0697-4-A	06/05/15 13:45	Solid	GC 24	06/09/15	06/11/15 15:10	150611L032
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline		ND		0.51	1.00		
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		60		42-126	<u> </u>		
S-4.5-SV23	15-06-0697-5-A	06/05/15 10:20	Solid	GC 24	06/09/15	06/11/15 15:44	150611L032
<u>Parameter</u>							
<u>r arametor</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline		<u>Result</u> ND		<u>RL</u> 0.51	<u>DF</u> 1.00	<u>Qua</u>	<u>alifiers</u>
						<u>Qua</u>	<u>alifiers</u>

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

1,4-Bromofluorobenzene - FID

42-126



<u>Parameter</u>

Surrogate

TPH as Gasoline

1,4-Bromofluorobenzene - FID

# **Analytical Report**

Cardno ERI			Date Re	eceived:			06/09/15
601 North McDowell Blvd.			Work O	rder:			15-06-0697
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030C
			Method:			Е	PA 8015B (M)
			Units:				mg/kg
Project: 580 Market Place Shop	ping Center					Pa	ige 2 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV23	15-06-0697-6-A	06/05/15 10:35	Solid	GC 24	06/09/15	06/11/15 16:18	150611L032
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.49	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		69		42-126			
S-15-SV23	15-06-0697-7-A	06/05/15 10:40	Solid	GC 24	06/09/15	06/11/15 16:52	150611L032
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
TPH as Gasoline		ND		0.53	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		72		42-126			
S-23-SV23	15-06-0697-8-A	06/05/15 11:00	Solid	GC 24	06/09/15	06/11/15 17:26	150611L032
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.53	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene - FID		73		42-126	<u> </u>		
S-5-SV24	15-06-0697-9-A	06/05/15 08:00	Solid	GC 24	06/09/15	06/11/15 18:00	150611L032
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.50	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		71		42-126			
S-10-SV24	15-06-0697-10-A	06/05/15 08:20	Solid	GC 24	06/12/15	06/13/15 00:37	150611L063

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

Result

Rec. (%)

ND

73

<u>RL</u>

0.50

42-126

**Control Limits** 

<u>DF</u>

1.00

Qualifiers

Qualifiers

06/09/15



Cardno ERI

<u>Parameter</u>

Surrogate

TPH as Gasoline

1,4-Bromofluorobenzene - FID

# **Analytical Report**

Date Received:

S-27.5-SV24	15-06-0697-14-A	06/05/15 09:20	Solid	GC 24	06/09/15	06/11/15 21:23	150611L032
,		70					
Surrogate 1,4-Bromofluorobenzene - FID		Rec. (%)		Control Limits 42-126	<u>Qualifiers</u>		
TPH as Gasoline		ND		0.48	1.00		
Parameter TRU as Casalina		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
S-25-SV24	15-06-0697-13-A	06/05/15 09:15	Solid	GC 24	06/09/15	06/11/15 20:50	150611L032
1,4-Bromofluorobenzene - FID		70		42-126			
Surrogate		Rec. (%) 70		Control Limits 42-126	<u>Qualifiers</u>		
TTTT do Gasonino		No		0.02	1.00		
Parameter TPH as Gasoline		<u>Result</u> ND		<u>RL</u> 0.52	<u>DF</u> 1.00	Qua	<u>alifiers</u>
	10 00 0037 12 A	08:35				20:16	
S-20-SV24	15-06-0697-12-A	06/05/15	Solid	GC 24	06/09/15	06/11/15	150611L032
1,4-Bromofluorobenzene - FID		72		42-126			
Surrogate		Rec. (%)		Control Limits	Qualifiers		
TPH as Gasoline		ND		0.50	1.00		
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
S-15-SV24	15-06-0697-11-A	06/05/15 08:30	Solid	GC 24	06/09/15	06/11/15 19:42	150611L032
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Project: 580 Market Place Shop	ping Center					Pa	ge 3 of 4
			Units:				mg/k
			Method:	:		Е	PA 8015B (M
Petaluma, CA 94954-2312			Prepara	tion:			EPA 5030
601 North McDowell Blvd.			Work O	rder:			15-06-069
Cardio Livi			<b>D</b> a to . to				00,00,

Method Blank	099-14-571-2402	N/A	Solid	GC 24	06/11/15	06/11/15 11:12	150611L032
<u>Parameter</u>		Result	RI	<u>_</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND	0.	50	1.00		

<u>RL</u>

0.49

42-126

**Control Limits** 

<u>DF</u>

1.00

Qualifiers

Qualifiers

ND

72

Result

Rec. (%)

Surrogate Rec. (%) **Control Limits** Qualifiers 1,4-Bromofluorobenzene - FID 42-126



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Units:
 mg/kg

Project: 580 Market Place Shopping Center Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-571-2409	N/A	Solid	GC 24	06/11/15	06/12/15 17:50	150611L063
Parameter		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
TPH as Gasoline		ND	(	0.50	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		69	4	42-126			





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 1 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5.5-SV21	15-06-0697-1-A	06/05/15 13:00	Solid	GC/MS BB	06/09/15	06/09/15 23:49	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1;	30	1.00		
Benzene		ND	5.	2	1.00		
Bromobenzene		ND	5.	2	1.00		
Bromochloromethane		ND	5.	2	1.00		
Bromodichloromethane		ND	5.	2	1.00		
Bromoform		ND	5.	2	1.00		
Bromomethane		ND	20	6	1.00		
2-Butanone		ND	52	2	1.00		
n-Butylbenzene		ND	5.	2	1.00		
sec-Butylbenzene		ND	5.	2	1.00		
tert-Butylbenzene		ND	5.	2	1.00		
Carbon Disulfide		ND	52	2	1.00		
Carbon Tetrachloride		ND	5.	2	1.00		
Chlorobenzene		ND	5.	2	1.00		
Chloroethane		ND	5.	2	1.00		
Chloroform		ND	5.	2	1.00		
Chloromethane		ND	20	6	1.00		
2-Chlorotoluene		ND	5.	2	1.00		
4-Chlorotoluene		ND	5.	2	1.00		
Dibromochloromethane		ND	5.	2	1.00		
1,2-Dibromo-3-Chloropropane		ND	10	)	1.00		
1,2-Dibromoethane		ND	5.	2	1.00		
Dibromomethane		ND	5.	2	1.00		
1,2-Dichlorobenzene		ND	5.	2	1.00		
1,3-Dichlorobenzene		ND	5.	2	1.00		
1,4-Dichlorobenzene		ND	5.	2	1.00		
Dichlorodifluoromethane		ND	5.	2	1.00		
1,1-Dichloroethane		ND	5.	2	1.00		
1,2-Dichloroethane		ND	5.	2	1.00		
1,1-Dichloroethene		ND	5.	2	1.00		
c-1,2-Dichloroethene		ND	5.		1.00		
t-1,2-Dichloroethene		ND	5.		1.00		
1,2-Dichloropropane		ND	5.		1.00		
1,3-Dichloropropane		ND	5.		1.00		
2,2-Dichloropropane		ND	5.		1.00		



Styrene

Toluene

1,1,1,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane

1,2,3-Trichlorobenzene

1,2,4-Trichlorobenzene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1,2,3-Trichloropropane

1,2,4-Trimethylbenzene

Trichlorofluoromethane

1,3,5-Trimethylbenzene

Methyl-t-Butyl Ether (MTBE)

Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

Trichloroethene

Vinyl Acetate

Vinyl Chloride

p/m-Xylene

o-Xylene

Ethanol

Surrogate

1,1,2-Trichloro-1,2,2-Trifluoroethane

Tetrachloroethene

#### **Analytical Report**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 2 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 5.2 1,1-Dichloropropene 1.00 c-1,3-Dichloropropene ND 5.2 1.00 t-1,3-Dichloropropene ND 5.2 1.00 Ethylbenzene ND 5.2 1.00 2-Hexanone ND 52 1.00 Isopropylbenzene ND 5.2 1.00 p-Isopropyltoluene ND 5.2 1.00 Methylene Chloride ND 52 1.00 4-Methyl-2-Pentanone ND 52 1.00 Naphthalene ND 52 1.00 n-Propylbenzene ND 5.2 1.00

5.2

5.2

5.2

5.2

5.2

10

5.2

5.2

5.2

52

5.2

5.2

5.2

52

5.2

52

5.2

5.2

5.2

5.2

52

10

10

10

260

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

Qualifiers

ND

98

Rec. (%)





Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 3 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 4 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV21	15-06-0697-2-A	06/05/15 13:05	Solid	GC/MS BB	06/09/15	06/10/15 01:43	150609L054
Parameter		Result	RI	<u> </u>	<u>DF</u>	Qua	<u>alifiers</u>
Acetone		ND	12	20	1.00		
Benzene		ND	4.9	9	1.00		
Bromobenzene		ND	4.9	9	1.00		
Bromochloromethane		ND	4.9	9	1.00		
Bromodichloromethane		ND	4.9	9	1.00		
Bromoform		ND	4.9	9	1.00		
Bromomethane		ND	24	ļ	1.00		
2-Butanone		ND	49	)	1.00		
n-Butylbenzene		ND	4.9	9	1.00		
sec-Butylbenzene		ND	4.9	9	1.00		
tert-Butylbenzene		ND	4.9	9	1.00		
Carbon Disulfide		ND	49	)	1.00		
Carbon Tetrachloride		ND	4.9	9	1.00		
Chlorobenzene		ND	4.9	9	1.00		
Chloroethane		ND	4.9	9	1.00		
Chloroform		ND	4.9	9	1.00		
Chloromethane		ND	24	ļ.	1.00		
2-Chlorotoluene		ND	4.9	9	1.00		
4-Chlorotoluene		ND	4.9	9	1.00		
Dibromochloromethane		ND	4.9	9	1.00		
1,2-Dibromo-3-Chloropropane		ND	9.	7	1.00		
1,2-Dibromoethane		ND	4.9	9	1.00		
Dibromomethane		ND	4.9	9	1.00		
1,2-Dichlorobenzene		ND	4.9		1.00		
1,3-Dichlorobenzene		ND	4.9	9	1.00		
1,4-Dichlorobenzene		ND	4.9	9	1.00		
Dichlorodifluoromethane		ND	4.9	9	1.00		
1,1-Dichloroethane		ND	4.9		1.00		
1,2-Dichloroethane		ND	4.9	9	1.00		
1,1-Dichloroethene		ND	4.9		1.00		
c-1,2-Dichloroethene		ND	4.9		1.00		
t-1,2-Dichloroethene		ND	4.9		1.00		
1,2-Dichloropropane							
1 1		ND	4.9	9	1.00		
1,3-Dichloropropane		ND ND	4.9 4.9		1.00 1.00		



Trichlorofluoromethane

1,3,5-Trimethylbenzene

Methyl-t-Butyl Ether (MTBE)

Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

Vinyl Acetate

Vinyl Chloride

p/m-Xylene

o-Xylene

Ethanol

Surrogate

#### **Analytical Report**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 5 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 1,1-Dichloropropene 4.9 1.00 c-1,3-Dichloropropene ND 4.9 1.00 t-1,3-Dichloropropene ND 4.9 1.00 Ethylbenzene ND 4.9 1.00 2-Hexanone ND 49 1.00 Isopropylbenzene ND 4.9 1.00 p-Isopropyltoluene ND 4.9 1.00 Methylene Chloride ND 49 1.00 4-Methyl-2-Pentanone ND 49 1.00 Naphthalene ND 49 1.00 n-Propylbenzene ND 4.9 1.00 Styrene ND 4.9 1.00 1,1,1,2-Tetrachloroethane ND 4.9 1.00 1,1,2,2-Tetrachloroethane ND 4.9 1.00 Tetrachloroethene ND 4.9 1.00 Toluene ND 4.9 1.00 1,2,3-Trichlorobenzene ND 9.7 1.00 1,2,4-Trichlorobenzene ND 4.9 1.00 1,1,1-Trichloroethane ND 4.9 1.00 1,1,2-Trichloroethane ND 4.9 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 49 1.00 Trichloroethene ND 4.9 1.00 ND 1,2,3-Trichloropropane 4.9 1.00 1,2,4-Trimethylbenzene ND 1.00 4.9

ND

98

Rec. (%)

49

4.9

49

4.9

4.9

4.9

4.9

49

9.7

9.7

9.7

240

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

Qualifiers



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 6 of 45

<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	96	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 7 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV21	15-06-0697-3-A	06/05/15 13:10	Solid	GC/MS BB	06/09/15	06/10/15 02:12	150609L054
<u>Parameter</u>		Result	RI	=	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	13	80	1.00		
Benzene		ND	5	2	1.00		
Bromobenzene		ND	5	2	1.00		
Bromochloromethane		ND	5	2	1.00		
Bromodichloromethane		ND	5	2	1.00		
Bromoform		ND	5.:	2	1.00		
Bromomethane		ND	26	5	1.00		
2-Butanone		ND	52	2	1.00		
n-Butylbenzene		ND	5.3	2	1.00		
sec-Butylbenzene		ND	5.3	2	1.00		
tert-Butylbenzene		ND	5.3	2	1.00		
Carbon Disulfide		ND	52	2	1.00		
Carbon Tetrachloride		ND	5.3	2	1.00		
Chlorobenzene		ND	5.3	2	1.00		
Chloroethane		ND	5.3	2	1.00		
Chloroform		ND	5.3	2	1.00		
Chloromethane		ND	26	6	1.00		
2-Chlorotoluene		ND	5.:	2	1.00		
4-Chlorotoluene		ND	5.:	2	1.00		
Dibromochloromethane		ND	5.:	2	1.00		
1,2-Dibromo-3-Chloropropane		ND	10	)	1.00		
1,2-Dibromoethane		ND	5.:	2	1.00		
Dibromomethane		ND	5.:	2	1.00		
1,2-Dichlorobenzene		ND	5.:	2	1.00		
1,3-Dichlorobenzene		ND	5.:	2	1.00		
1,4-Dichlorobenzene		ND	5.:	2	1.00		
Dichlorodifluoromethane		ND	5.:	2	1.00		
1,1-Dichloroethane		ND	5.:	2	1.00		
1,2-Dichloroethane		ND	5.:	2	1.00		
1,1-Dichloroethene		ND	5.:		1.00		
c-1,2-Dichloroethene		ND	5.3		1.00		
t-1,2-Dichloroethene		ND	5.:		1.00		
1,2-Dichloropropane		ND	5.:	2	1.00		
1,3-Dichloropropane		ND	5.:		1.00		
2,2-Dichloropropane		ND	5.3		1.00		



Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethanol

Surrogate

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

# **Analytical Report**

Cardno ERI		Date Received:		06/09/15	
601 North McDowell Blvd.		Work Order:		15-06-0697	
Petaluma, CA 94954-2312		Preparation:	EPA 5030C		
		Method:		EPA 8260B	
		Units:		ug/kg	
Project: 580 Market Place Shopping Center		Offits.		Page 8 of 45	
Troject. 300 Market Flace Gropping Genter				1 age 0 01 40	
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>	
1,1-Dichloropropene	ND	5.2	1.00		
c-1,3-Dichloropropene	ND	5.2	1.00		
t-1,3-Dichloropropene	ND	5.2	1.00		
Ethylbenzene	ND	5.2	1.00		
2-Hexanone	ND	52	1.00		
Isopropylbenzene	ND	5.2	1.00		
p-Isopropyltoluene	ND	5.2	1.00		
Methylene Chloride	ND	52	1.00		
4-Methyl-2-Pentanone	ND	52	1.00		
Naphthalene	ND	52	1.00		
n-Propylbenzene	ND	5.2	1.00		
Styrene	ND	5.2	1.00		
1,1,1,2-Tetrachloroethane	ND	5.2	1.00		
1,1,2,2-Tetrachloroethane	ND	5.2	1.00		
Tetrachloroethene	ND	5.2	1.00		
Toluene	ND	5.2	1.00		
1,2,3-Trichlorobenzene	ND	10	1.00		
1,2,4-Trichlorobenzene	ND	5.2	1.00		
1,1,1-Trichloroethane	ND	5.2	1.00		
1,1,2-Trichloroethane	ND	5.2	1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00		
Trichloroethene	ND	5.2	1.00		
1,2,3-Trichloropropane	ND	5.2	1.00		
1,2,4-Trimethylbenzene	ND	5.2	1.00		
Trichlorofluoromethane	ND	52	1.00		
1,3,5-Trimethylbenzene	ND	5.2	1.00		
Vinyl Acetate	ND	52	1.00		
Vinyl Chloride	ND	5.2	1.00		
p/m-Xylene	ND	5.2	1.00		
o-Xylene	ND	5.2	1.00		
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00		

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

52

10

10

10

260

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

Qualifiers

ND

ND

ND

ND

ND

99

Rec. (%)



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 9 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 10 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-23.5-SV21	15-06-0697-4-A	06/05/15 13:45	Solid	GC/MS BB	06/09/15	06/10/15 02:40	150609L054
Parameter		Result	<u>R</u>	<u>L</u>	DF	Qua	alifiers
Acetone		ND	1	30	1.00		
Benzene		ND	5	.2	1.00		
Bromobenzene		ND	5	.2	1.00		
Bromochloromethane		ND	5	.2	1.00		
Bromodichloromethane		ND	5	.2	1.00		
Bromoform		ND	5	.2	1.00		
Bromomethane		ND	2	6	1.00		
2-Butanone		ND	5	2	1.00		
n-Butylbenzene		ND	5	.2	1.00		
sec-Butylbenzene		ND	5	.2	1.00		
tert-Butylbenzene		ND	5	.2	1.00		
Carbon Disulfide		ND	5	2	1.00		
Carbon Tetrachloride		ND	5	.2	1.00		
Chlorobenzene		ND	5	.2	1.00		
Chloroethane		ND	5	.2	1.00		
Chloroform		ND	5	.2	1.00		
Chloromethane		ND	2	6	1.00		
2-Chlorotoluene		ND	5	.2	1.00		
4-Chlorotoluene		ND	5	.2	1.00		
Dibromochloromethane		ND	5	.2	1.00		
1,2-Dibromo-3-Chloropropane		ND	1		1.00		
1,2-Dibromoethane		ND	5	.2	1.00		
Dibromomethane		ND		.2	1.00		
1,2-Dichlorobenzene		ND		.2	1.00		
1,3-Dichlorobenzene		ND		.2	1.00		
1,4-Dichlorobenzene		ND		.2	1.00		
Dichlorodifluoromethane		ND		.2	1.00		
1,1-Dichloroethane		ND		.2	1.00		
1,2-Dichloroethane		ND		.2	1.00		
1,1-Dichloroethene		ND		.2	1.00		
c-1,2-Dichloroethene		ND		.2	1.00		
t-1,2-Dichloroethene		ND		.2	1.00		
1,2-Dichloropropane		ND		.2	1.00		
1,3-Dichloropropane		ND		.2	1.00		
2,2-Dichloropropane		ND		.2	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
 Page 11 of 45

Project: 580 Market Place Shopping Center	er			Page 11 of 45
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 12 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 13 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4.5-SV23	15-06-0697-5-A	06/05/15 10:20	Solid	GC/MS BB	06/09/15	06/10/15 03:09	150609L054
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1	30	1.00		
Benzene		ND	5	5.3	1.00		
Bromobenzene		ND	5	5.3	1.00		
Bromochloromethane		ND	5	5.3	1.00		
Bromodichloromethane		ND	5	5.3	1.00		
Bromoform		ND	5	5.3	1.00		
Bromomethane		ND	2	26	1.00		
2-Butanone		ND	5	3	1.00		
n-Butylbenzene		ND	5	5.3	1.00		
sec-Butylbenzene		ND	5	5.3	1.00		
tert-Butylbenzene		ND	5	i.3	1.00		
Carbon Disulfide		ND	5	i3	1.00		
Carbon Tetrachloride		ND	5	5.3	1.00		
Chlorobenzene		ND	5	5.3	1.00		
Chloroethane		ND	5	5.3	1.00		
Chloroform		ND	5	5.3	1.00		
Chloromethane		ND	2	26	1.00		
2-Chlorotoluene		ND	5	5.3	1.00		
4-Chlorotoluene		ND	5	5.3	1.00		
Dibromochloromethane		ND	5	5.3	1.00		
1,2-Dibromo-3-Chloropropane		ND	1	1	1.00		
1,2-Dibromoethane		ND	5	5.3	1.00		
Dibromomethane		ND	5	5.3	1.00		
1,2-Dichlorobenzene		ND	5	i.3	1.00		
1,3-Dichlorobenzene		ND	5	5.3	1.00		
1,4-Dichlorobenzene		ND	5	5.3	1.00		
Dichlorodifluoromethane		ND		i.3	1.00		
1,1-Dichloroethane		ND	5	5.3	1.00		
1,2-Dichloroethane		ND		5.3	1.00		
1,1-Dichloroethene		ND	5	5.3	1.00		
c-1,2-Dichloroethene		83		5.3	1.00		
t-1,2-Dichloroethene		ND		5.3	1.00		
1,2-Dichloropropane		ND		5.3	1.00		
1,3-Dichloropropane		ND		5.3	1.00		
2,2-Dichloropropane		ND		5.3	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
 Page 14 of 45

CI			1 age 14 01 40
Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
ND	5.3	1.00	
ND	53	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND	53	1.00	
ND	53	1.00	
ND	53	1.00	
ND	5.3	1.00	
ND	11	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND	53	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND	53	1.00	
ND	5.3	1.00	
ND	53	1.00	
ND	5.3	1.00	
ND	5.3	1.00	
ND		1.00	
ND		1.00	
		1.00	
ND	11		
		1.00	
ND	260	1.00	
Rec. (%)	Control Limits	<u>Qualifiers</u>	
97	60-132		
	Result   ND   ND   ND   ND   ND   ND   ND   N	Result       RL         ND       5.3         ND       5.3	Result         RL         DF           ND         5.3         1.00           ND         5.3         1.00



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 15 of 45

Surrogate	Rec. (%)	Control Limits	<b>Qualifiers</b>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	97	80-120	



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#### **Analytical Report**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: ug/kg

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV23	15-06-0697-6-A	06/05/15 10:35	Solid	GC/MS BB	06/09/15	06/10/15 03:37	150609L054
<u>Parameter</u>		Result	RI	<u></u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	13	30	1.00		
Benzene		ND	5.	0	1.00		
Bromobenzene		ND	5.	0	1.00		
Bromochloromethane		ND	5.	0	1.00		
Bromodichloromethane		ND	5.	0	1.00		
Bromoform		ND	5.	0	1.00		
Bromomethane		ND	25	5	1.00		
2-Butanone		ND	50	)	1.00		
n-Butylbenzene		ND	5.	0	1.00		
sec-Butylbenzene		ND	5.	0	1.00		
tert-Butylbenzene		ND	5.	0	1.00		
Carbon Disulfide		ND	50	)	1.00		
Carbon Tetrachloride		ND	5.	0	1.00		
Chlorobenzene		ND	5.	0	1.00		
Chloroethane		ND	5.	0	1.00		
Chloroform		ND	5.	0	1.00		
Chloromethane		ND	25	5	1.00		
2-Chlorotoluene		ND	5.	0	1.00		
4-Chlorotoluene		ND	5.	0	1.00		
Dibromochloromethane		ND	5.	0	1.00		
1,2-Dibromo-3-Chloropropane		ND	10	)	1.00		
1,2-Dibromoethane		ND	5.	0	1.00		
Dibromomethane		ND	5.	0	1.00		
1,2-Dichlorobenzene		ND	5.		1.00		
1,3-Dichlorobenzene		ND	5.	0	1.00		
1,4-Dichlorobenzene		ND	5.	0	1.00		
Dichlorodifluoromethane		ND	5.	0	1.00		
1,1-Dichloroethane		ND	5.	0	1.00		
1,2-Dichloroethane		ND	5.	0	1.00		
1,1-Dichloroethene		ND	5.		1.00		
c-1,2-Dichloroethene		ND	5.		1.00		
t-1,2-Dichloroethene		ND	5.	0	1.00		
1,2-Dichloropropane		ND	5.		1.00		
1,3-Dichloropropane		ND	5.		1.00		
2,2-Dichloropropane		ND	5.	0	1.00		



Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 17 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 1,1-Dichloropropene 5.0 1.00 c-1,3-Dichloropropene ND 5.0 1.00 t-1,3-Dichloropropene ND 5.0 1.00

Ethylbenzene ND 5.0 1.00 2-Hexanone ND 50 1.00 Isopropylbenzene ND 5.0 1.00 p-Isopropyltoluene ND 5.0 1.00 Methylene Chloride ND 50 1.00 4-Methyl-2-Pentanone ND 50 1.00 Naphthalene ND 50 1.00 n-Propylbenzene ND 5.0 1.00 Styrene ND 5.0 1.00 1,1,1,2-Tetrachloroethane ND 5.0 1.00 1,1,2,2-Tetrachloroethane ND 5.0 1.00 Tetrachloroethene ND 5.0 1.00 Toluene ND 5.0 1.00 1,2,3-Trichlorobenzene ND 10 1.00 1,2,4-Trichlorobenzene ND 5.0 1.00 1,1,1-Trichloroethane ND 5.0 1.00 1,1,2-Trichloroethane ND 5.0 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 50 1.00 Trichloroethene ND 5.0 1.00 ND 1,2,3-Trichloropropane 5.0 1.00 1,2,4-Trimethylbenzene ND 5.0 1.00 Trichlorofluoromethane ND 50 1.00 1,3,5-Trimethylbenzene ND 5.0 1.00 Vinyl Acetate ND 50 1.00 Vinyl Chloride ND 5.0 1.00 p/m-Xylene ND 5.0 1.00 o-Xylene ND 5.0 1.00 Methyl-t-Butyl Ether (MTBE) ND 5.0 1.00 Tert-Butyl Alcohol (TBA) ND 50 1.00 Diisopropyl Ether (DIPE) ND 10 1.00 Ethyl-t-Butyl Ether (ETBE) ND 10 1.00 Tert-Amyl-Methyl Ether (TAME) ND 10 1.00 Ethanol ND 250 1.00 Surrogate Rec. (%) **Control Limits** Qualifiers 1,4-Bromofluorobenzene 97 60-132



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 18 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 19 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV23	15-06-0697-7-A	06/05/15 10:40	Solid	GC/MS BB	06/09/15	06/10/15 04:05	150609L054
<u>Parameter</u>		Result	R	<u>L</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	1	30	1.00		
Benzene		ND	5	.1	1.00		
Bromobenzene		ND	5	.1	1.00		
Bromochloromethane		ND	5	.1	1.00		
Bromodichloromethane		ND	5	.1	1.00		
Bromoform		ND	5	.1	1.00		
Bromomethane		ND	2	6	1.00		
2-Butanone		ND	5	1	1.00		
n-Butylbenzene		ND	5	.1	1.00		
sec-Butylbenzene		ND	5	.1	1.00		
tert-Butylbenzene		ND	5	.1	1.00		
Carbon Disulfide		ND	5	1	1.00		
Carbon Tetrachloride		ND	5	.1	1.00		
Chlorobenzene		ND	5	.1	1.00		
Chloroethane		ND	5	.1	1.00		
Chloroform		ND	5	.1	1.00		
Chloromethane		ND	2	6	1.00		
2-Chlorotoluene		ND	5	.1	1.00		
4-Chlorotoluene		ND	5	.1	1.00		
Dibromochloromethane		ND	5	.1	1.00		
1,2-Dibromo-3-Chloropropane		ND	1	0	1.00		
1,2-Dibromoethane		ND	5	.1	1.00		
Dibromomethane		ND	5	.1	1.00		
1,2-Dichlorobenzene		ND	5	.1	1.00		
1,3-Dichlorobenzene		ND	5	.1	1.00		
1,4-Dichlorobenzene		ND	5	.1	1.00		
Dichlorodifluoromethane		ND	5	.1	1.00		
1,1-Dichloroethane		ND	5	.1	1.00		
1,2-Dichloroethane		ND	5	.1	1.00		
1,1-Dichloroethene		ND	5	.1	1.00		
c-1,2-Dichloroethene		ND	5	.1	1.00		
t-1,2-Dichloroethene		ND	5	.1	1.00		
1,2-Dichloropropane		ND	5	.1	1.00		
1,3-Dichloropropane		ND	5	.1	1.00		
2,2-Dichloropropane		ND	5	.1	1.00		



o-Xylene

Ethanol

Surrogate

Methyl-t-Butyl Ether (MTBE)

Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

#### **Analytical Report**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 20 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 5.1 1.00 1,1-Dichloropropene c-1,3-Dichloropropene ND 5.1 1.00 t-1,3-Dichloropropene ND 5.1 1.00 Ethylbenzene ND 5.1 1.00 2-Hexanone ND 51 1.00 Isopropylbenzene ND 5.1 1.00 p-Isopropyltoluene ND 5.1 1.00 Methylene Chloride ND 51 1.00 4-Methyl-2-Pentanone ND 51 1.00 Naphthalene ND 51 1.00 n-Propylbenzene ND 5.1 1.00 Styrene ND 5.1 1.00 1,1,1,2-Tetrachloroethane ND 5.1 1.00 1,1,2,2-Tetrachloroethane ND 5.1 1.00 Tetrachloroethene ND 5.1 1.00 Toluene ND 5.1 1.00 1,2,3-Trichlorobenzene ND 10 1.00 1,2,4-Trichlorobenzene ND 5.1 1.00 1,1,1-Trichloroethane ND 5.1 1.00 1,1,2-Trichloroethane ND 5.1 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 51 1.00 Trichloroethene ND 5.1 1.00 ND 1,2,3-Trichloropropane 5.1 1.00 1,2,4-Trimethylbenzene ND 5.1 1.00 Trichlorofluoromethane ND 51 1.00 1,3,5-Trimethylbenzene ND 5.1 1.00 Vinyl Acetate ND 51 1.00 Vinyl Chloride ND 5.1 1.00 p/m-Xylene ND 5.1 1.00

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

ND

ND

ND

ND

ND

ND

ND

98

Rec. (%)

5.1

5.1

51

10

10

10

260

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

1.00

1.00

Qualifiers



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 21 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: ug/kg

Project: 580 Market Place Shopping Center

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-23-SV23	15-06-0697-8-A	06/05/15 11:00	Solid	GC/MS BB	06/09/15	06/10/15 04:34	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1.	20	1.00		
Benzene		ND	4	.9	1.00		
Bromobenzene		ND	4	.9	1.00		
Bromochloromethane		ND	4	.9	1.00		
Bromodichloromethane		ND	4	.9	1.00		
Bromoform		ND	4	.9	1.00		
Bromomethane		ND	2	5	1.00		
2-Butanone		ND	4	9	1.00		
n-Butylbenzene		ND	4	.9	1.00		
sec-Butylbenzene		ND	4	.9	1.00		
tert-Butylbenzene		ND	4	.9	1.00		
Carbon Disulfide		ND	4	9	1.00		
Carbon Tetrachloride		ND	4	.9	1.00		
Chlorobenzene		ND	4	.9	1.00		
Chloroethane		ND	4	.9	1.00		
Chloroform		ND	4	.9	1.00		
Chloromethane		ND	2	5	1.00		
2-Chlorotoluene		ND	4	.9	1.00		
4-Chlorotoluene		ND	4	.9	1.00		
Dibromochloromethane		ND	4	.9	1.00		
1,2-Dibromo-3-Chloropropane		ND	9	.8	1.00		
1,2-Dibromoethane		ND	4	.9	1.00		
Dibromomethane		ND	4	.9	1.00		
1,2-Dichlorobenzene		ND	4	.9	1.00		
1,3-Dichlorobenzene		ND	4	.9	1.00		
1,4-Dichlorobenzene		ND	4	.9	1.00		
Dichlorodifluoromethane		ND	4	.9	1.00		
1,1-Dichloroethane		ND	4	.9	1.00		
1,2-Dichloroethane		ND	4	.9	1.00		
1,1-Dichloroethene		ND	4	.9	1.00		
c-1,2-Dichloroethene		ND	4	.9	1.00		
t-1,2-Dichloroethene		ND	4	.9	1.00		
1,2-Dichloropropane		ND	4	.9	1.00		
1,3-Dichloropropane		ND	4	.9	1.00		
2,2-Dichloropropane		ND	4	.9	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
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, , , , , , , , , , , , , , , , , , , ,				
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.8	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.8	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.8	1.00	
Ethanol	ND	250	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 24 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	98	80-120	



Cardno ERIDate Received:06/09/15601 North McDowell Blvd.Work Order:15-06-0697Petaluma, CA 94954-2312Preparation:EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 25 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5-SV24	15-06-0697-9-A	06/05/15 08:00	Solid	GC/MS BB	06/09/15	06/10/15 05:02	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1	30	1.00		
Benzene		ND	5	.3	1.00		
Bromobenzene		ND	5	.3	1.00		
Bromochloromethane		ND	5	.3	1.00		
Bromodichloromethane		ND	5	.3	1.00		
Bromoform		ND	5	.3	1.00		
Bromomethane		ND	2	6	1.00		
2-Butanone		ND	5	3	1.00		
n-Butylbenzene		ND	5	.3	1.00		
sec-Butylbenzene		ND	5	.3	1.00		
tert-Butylbenzene		ND	5	.3	1.00		
Carbon Disulfide		ND	5	3	1.00		
Carbon Tetrachloride		ND	5	.3	1.00		
Chlorobenzene		ND	5	.3	1.00		
Chloroethane		ND	5	.3	1.00		
Chloroform		ND	5	.3	1.00		
Chloromethane		ND	2	6	1.00		
2-Chlorotoluene		ND	5	.3	1.00		
4-Chlorotoluene		ND	5	.3	1.00		
Dibromochloromethane		ND	5	.3	1.00		
1,2-Dibromo-3-Chloropropane		ND	1	1	1.00		
1,2-Dibromoethane		ND	5	.3	1.00		
Dibromomethane		ND	5	.3	1.00		
1,2-Dichlorobenzene		ND	5	.3	1.00		
1,3-Dichlorobenzene		ND	5	.3	1.00		
1,4-Dichlorobenzene		ND	5	.3	1.00		
Dichlorodifluoromethane		ND		.3	1.00		
1,1-Dichloroethane		ND		.3	1.00		
1,2-Dichloroethane		ND		.3	1.00		
1,1-Dichloroethene		ND	5	.3	1.00		
c-1,2-Dichloroethene		ND		.3	1.00		
t-1,2-Dichloroethene		ND		.3	1.00		
1,2-Dichloropropane		ND		.3	1.00		
1,3-Dichloropropane		ND		.3	1.00		
2,2-Dichloropropane		ND		.3	1.00		



Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 26 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 5.3 1.00 1,1-Dichloropropene c-1,3-Dichloropropene ND 5.3 1.00 t-1,3-Dichloropropene ND 5.3 1.00 Ethylbenzene ND 5.3 1.00 2-Hexanone ND 53 1.00 Isopropylbenzene ND 5.3 1.00 p-Isopropyltoluene ND 5.3 1.00 Methylene Chloride ND 53 1.00 4-Methyl-2-Pentanone ND 53 1.00 Naphthalene ND 53 1.00 n-Propylbenzene ND 5.3 1.00 Styrene ND 5.3 1.00 1,1,1,2-Tetrachloroethane ND 5.3 1.00 1,1,2,2-Tetrachloroethane ND 5.3 1.00 Tetrachloroethene ND 5.3 1.00 Toluene ND 5.3 1.00 1,2,3-Trichlorobenzene ND 11 1.00 1,2,4-Trichlorobenzene ND 5.3 1.00 1,1,1-Trichloroethane ND 5.3 1.00 1,1,2-Trichloroethane ND 5.3 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 53 1.00 Trichloroethene ND 5.3 1.00 ND 1,2,3-Trichloropropane 5.3 1.00 1,2,4-Trimethylbenzene ND 5.3 1.00 Trichlorofluoromethane ND 53 1.00 1,3,5-Trimethylbenzene ND 5.3 1.00 Vinyl Acetate ND 53 1.00 Vinyl Chloride ND 5.3 1.00 p/m-Xylene ND 5.3 1.00 o-Xylene ND 5.3 1.00 Methyl-t-Butyl Ether (MTBE) ND 5.3 1.00 Tert-Butyl Alcohol (TBA) ND 53 1.00 Diisopropyl Ether (DIPE) ND 11 1.00 Ethyl-t-Butyl Ether (ETBE) ND 11 1.00 Tert-Amyl-Methyl Ether (TAME) ND 11 1.00 Ethanol ND 260 1.00 Surrogate Rec. (%) **Control Limits** Qualifiers

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

1,4-Bromofluorobenzene

60-132

97



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 27 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 28 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10-SV24	15-06-0697-10-A	06/05/15 08:20	Solid	GC/MS BB	06/09/15	06/10/15 05:31	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	1:	20	1.00		
Benzene		ND	5.	.0	1.00		
Bromobenzene		ND	5.	.0	1.00		
Bromochloromethane		ND	5.	.0	1.00		
Bromodichloromethane		ND	5.	.0	1.00		
Bromoform		ND	5.	.0	1.00		
Bromomethane		ND	2	5	1.00		
2-Butanone		ND	50	0	1.00		
n-Butylbenzene		ND	5.	.0	1.00		
sec-Butylbenzene		ND	5.	.0	1.00		
tert-Butylbenzene		ND	5.	.0	1.00		
Carbon Disulfide		ND	50	0	1.00		
Carbon Tetrachloride		ND	5.	.0	1.00		
Chlorobenzene		ND	5.	.0	1.00		
Chloroethane		ND	5.	.0	1.00		
Chloroform		ND	5.	.0	1.00		
Chloromethane		ND	2	5	1.00		
2-Chlorotoluene		ND	5.	.0	1.00		
4-Chlorotoluene		ND	5.	.0	1.00		
Dibromochloromethane		ND	5.	.0	1.00		
1,2-Dibromo-3-Chloropropane		ND	10	0	1.00		
1,2-Dibromoethane		ND	5.	.0	1.00		
Dibromomethane		ND	5.	.0	1.00		
1,2-Dichlorobenzene		ND	5.	.0	1.00		
1,3-Dichlorobenzene		ND	5.	.0	1.00		
1,4-Dichlorobenzene		ND	5.	.0	1.00		
Dichlorodifluoromethane		ND	5.	.0	1.00		
1,1-Dichloroethane		ND	5.	.0	1.00		
1,2-Dichloroethane		ND	5.	.0	1.00		
1,1-Dichloroethene		ND	5.	.0	1.00		
c-1,2-Dichloroethene		ND		.0	1.00		
t-1,2-Dichloroethene		ND	5.	.0	1.00		
1,2-Dichloropropane		ND	5.	.0	1.00		
1,3-Dichloropropane		ND	5.		1.00		
2,2-Dichloropropane		ND	5.	.0	1.00		



1,3,5-Trimethylbenzene

Methyl-t-Butyl Ether (MTBE)

Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

Vinyl Acetate

Vinyl Chloride

p/m-Xylene

o-Xylene

Ethanol

Surrogate

#### **Analytical Report**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 29 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 1.00 1,1-Dichloropropene 5.0 c-1,3-Dichloropropene ND 5.0 1.00 t-1,3-Dichloropropene ND 5.0 1.00 Ethylbenzene ND 5.0 1.00 2-Hexanone ND 50 1.00 Isopropylbenzene ND 5.0 1.00 p-Isopropyltoluene ND 5.0 1.00 Methylene Chloride ND 50 1.00 4-Methyl-2-Pentanone ND 50 1.00 Naphthalene ND 50 1.00 n-Propylbenzene ND 5.0 1.00 Styrene ND 5.0 1.00 1,1,1,2-Tetrachloroethane ND 5.0 1.00 1,1,2,2-Tetrachloroethane ND 5.0 1.00 Tetrachloroethene ND 5.0 1.00 Toluene ND 5.0 1.00 1,2,3-Trichlorobenzene ND 10 1.00 1,2,4-Trichlorobenzene ND 5.0 1.00 1,1,1-Trichloroethane ND 5.0 1.00 1,1,2-Trichloroethane ND 5.0 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 50 1.00 Trichloroethene ND 5.0 1.00 ND 1,2,3-Trichloropropane 5.0 1.00 1,2,4-Trimethylbenzene ND 5.0 1.00 Trichlorofluoromethane ND 50 1.00

ND

97

Rec. (%)

5.0

50

5.0

5.0

5.0

5.0

50

10

10

10

250

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

Qualifiers



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 30 of 45

<u>Surrogate</u>	Rec. (%)	Control Limits	<b>Qualifiers</b>
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	97	80-120	





 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 31 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-15-SV24	15-06-0697-11-A	06/05/15 08:30	Solid	GC/MS BB	06/09/15	06/10/15 05:59	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1	20	1.00		
Benzene		ND	4	.9	1.00		
Bromobenzene		ND	4	.9	1.00		
Bromochloromethane		ND	4	.9	1.00		
Bromodichloromethane		ND	4	.9	1.00		
Bromoform		ND	4	.9	1.00		
Bromomethane		ND	2	5	1.00		
2-Butanone		ND	4	9	1.00		
n-Butylbenzene		ND	4	.9	1.00		
sec-Butylbenzene		ND	4	.9	1.00		
tert-Butylbenzene		ND	4	.9	1.00		
Carbon Disulfide		ND	4	9	1.00		
Carbon Tetrachloride		ND	4	.9	1.00		
Chlorobenzene		ND	4	.9	1.00		
Chloroethane		ND	4	.9	1.00		
Chloroform		ND	4	.9	1.00		
Chloromethane		ND	2	5	1.00		
2-Chlorotoluene		ND	4	.9	1.00		
4-Chlorotoluene		ND	4	.9	1.00		
Dibromochloromethane		ND	4	.9	1.00		
1,2-Dibromo-3-Chloropropane		ND	9	.9	1.00		
1,2-Dibromoethane		ND	4	.9	1.00		
Dibromomethane		ND	4	.9	1.00		
1,2-Dichlorobenzene		ND	4	.9	1.00		
1,3-Dichlorobenzene		ND	4	.9	1.00		
1,4-Dichlorobenzene		ND	4	.9	1.00		
Dichlorodifluoromethane		ND	4	.9	1.00		
1,1-Dichloroethane		ND	4	.9	1.00		
1,2-Dichloroethane		ND	4	.9	1.00		
1,1-Dichloroethene		ND	4	.9	1.00		
c-1,2-Dichloroethene		ND		.9	1.00		
t-1,2-Dichloroethene		ND		.9	1.00		
1,2-Dichloropropane		ND		.9	1.00		
1,3-Dichloropropane		ND		.9	1.00		
2,2-Dichloropropane		ND		.9	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
 Page 32 of 45

Project: 580 Market Place Snopping Cent	er —————			Page 32 of 45
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.9	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.9	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.9	1.00	
Ethanol	ND	250	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	99	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 33 of 45

<u>Surrogate</u>	Rec. (%)	Control Limits	<b>Qualifiers</b>
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 34 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-20-SV24	15-06-0697-12-A	06/05/15 08:35	Solid	GC/MS BB	06/09/15	06/10/15 06:28	150609L054
<u>Parameter</u>		Result	<u>F</u>	<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	1	30	1.00		
Benzene		ND	5	5.1	1.00		
Bromobenzene		ND	5	.1	1.00		
Bromochloromethane		ND	5	.1	1.00		
Bromodichloromethane		ND	5	.1	1.00		
Bromoform		ND	5	.1	1.00		
Bromomethane		ND	2	5	1.00		
2-Butanone		ND	5	1	1.00		
n-Butylbenzene		ND	5	.1	1.00		
sec-Butylbenzene		ND	5	.1	1.00		
tert-Butylbenzene		ND	5	5.1	1.00		
Carbon Disulfide		ND	5	1	1.00		
Carbon Tetrachloride		ND	5	.1	1.00		
Chlorobenzene		ND	5	5.1	1.00		
Chloroethane		ND	5	5.1	1.00		
Chloroform		ND	5	5.1	1.00		
Chloromethane		ND	2	5	1.00		
2-Chlorotoluene		ND	5	5.1	1.00		
4-Chlorotoluene		ND	5	5.1	1.00		
Dibromochloromethane		ND	5	5.1	1.00		
1,2-Dibromo-3-Chloropropane		ND	1	0	1.00		
1,2-Dibromoethane		ND	5	5.1	1.00		
Dibromomethane		ND	5	5.1	1.00		
1,2-Dichlorobenzene		ND	5	5.1	1.00		
1,3-Dichlorobenzene		ND	5	5.1	1.00		
1,4-Dichlorobenzene		ND	5	5.1	1.00		
Dichlorodifluoromethane		ND	5	.1	1.00		
1,1-Dichloroethane		ND	5	5.1	1.00		
1,2-Dichloroethane		ND		5.1	1.00		
1,1-Dichloroethene		ND	5	5.1	1.00		
c-1,2-Dichloroethene		ND		5.1	1.00		
t-1,2-Dichloroethene		ND		.1	1.00		
1,2-Dichloropropane		ND		.1	1.00		
1,3-Dichloropropane		ND		5.1	1.00		
2,2-Dichloropropane		ND		 .1	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
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Project: 580 Market Place Shopping Center	er			Page 35 of 45
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 36 of 45

<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	97	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 37 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-25-SV24	15-06-0697-13-A	06/05/15 09:15	Solid	GC/MS BB	06/09/15	06/10/15 06:56	150609L054
<u>Parameter</u>		Result	RL	=	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	12	0	1.00		
Benzene		ND	5.0	)	1.00		
Bromobenzene		ND	5.0	)	1.00		
Bromochloromethane		ND	5.0	)	1.00		
Bromodichloromethane		ND	5.0	)	1.00		
Bromoform		ND	5.0	)	1.00		
Bromomethane		ND	25	i	1.00		
2-Butanone		ND	50	1	1.00		
n-Butylbenzene		ND	5.0	)	1.00		
sec-Butylbenzene		ND	5.0	)	1.00		
tert-Butylbenzene		ND	5.0	)	1.00		
Carbon Disulfide		ND	50	1	1.00		
Carbon Tetrachloride		ND	5.0	)	1.00		
Chlorobenzene		ND	5.0	)	1.00		
Chloroethane		ND	5.0	)	1.00		
Chloroform		ND	5.0	)	1.00		
Chloromethane		ND	25	i	1.00		
2-Chlorotoluene		ND	5.0	)	1.00		
4-Chlorotoluene		ND	5.0	)	1.00		
Dibromochloromethane		ND	5.0	)	1.00		
1,2-Dibromo-3-Chloropropane		ND	9.9	9	1.00		
1,2-Dibromoethane		ND	5.0	)	1.00		
Dibromomethane		ND	5.0	)	1.00		
1,2-Dichlorobenzene		ND	5.0	)	1.00		
1,3-Dichlorobenzene		ND	5.0	)	1.00		
1,4-Dichlorobenzene		ND	5.0	)	1.00		
Dichlorodifluoromethane		ND	5.0	)	1.00		
1,1-Dichloroethane		ND	5.0	)	1.00		
1,2-Dichloroethane		ND	5.0	)	1.00		
1,1-Dichloroethene		ND	5.0		1.00		
c-1,2-Dichloroethene		ND	5.0	)	1.00		
t-1,2-Dichloroethene		ND	5.0		1.00		
1,2-Dichloropropane		ND	5.0		1.00		
1,3-Dichloropropane		ND	5.0		1.00		
2,2-Dichloropropane		ND	5.0	)	1.00		



o-Xylene

Ethanol

Surrogate

Methyl-t-Butyl Ether (MTBE)

Tert-Butyl Alcohol (TBA)

Diisopropyl Ether (DIPE)

Ethyl-t-Butyl Ether (ETBE)

1,4-Bromofluorobenzene

Tert-Amyl-Methyl Ether (TAME)

#### **Analytical Report**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: **EPA 8260B** Units: ug/kg Project: 580 Market Place Shopping Center Page 38 of 45 **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers ND 1.00 1,1-Dichloropropene 5.0 c-1,3-Dichloropropene ND 5.0 1.00 t-1,3-Dichloropropene ND 5.0 1.00 Ethylbenzene ND 5.0 1.00 2-Hexanone ND 50 1.00 Isopropylbenzene ND 5.0 1.00 p-Isopropyltoluene ND 5.0 1.00 Methylene Chloride ND 50 1.00 4-Methyl-2-Pentanone ND 50 1.00 Naphthalene ND 50 1.00 n-Propylbenzene ND 5.0 1.00 Styrene ND 5.0 1.00 1,1,1,2-Tetrachloroethane ND 5.0 1.00 1,1,2,2-Tetrachloroethane ND 5.0 1.00 Tetrachloroethene ND 5.0 1.00 Toluene ND 5.0 1.00 1,2,3-Trichlorobenzene ND 9.9 1.00 1,2,4-Trichlorobenzene ND 5.0 1.00 1,1,1-Trichloroethane ND 5.0 1.00 1,1,2-Trichloroethane ND 5.0 1.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 50 1.00 Trichloroethene ND 5.0 1.00 ND 1,2,3-Trichloropropane 5.0 1.00 1,2,4-Trimethylbenzene ND 5.0 1.00 Trichlorofluoromethane ND 50 1.00 1,3,5-Trimethylbenzene ND 5.0 1.00 Vinyl Acetate ND 50 1.00 Vinyl Chloride ND 5.0 1.00 p/m-Xylene ND 5.0 1.00

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

ND

ND

ND

ND

ND

ND

ND

97

Rec. (%)

5.0

5.0

50

9.9

9.9

9.9

250

60-132

**Control Limits** 

1.00

1.00

1.00

1.00

1.00

1.00

1.00

Qualifiers



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 39 of 45

<u>Surrogate</u>	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 40 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-27.5-SV24	15-06-0697-14-A	06/05/15 09:20	Solid	GC/MS BB	06/09/15	06/10/15 07:24	150609L054
<u>Parameter</u>		Result	<u>R</u>	<u>RL</u>	<u>DF</u>	Qua	lifiers
Acetone		ND	1	30	1.00		
Benzene		ND	5	.2	1.00		
Bromobenzene		ND	5	.2	1.00		
Bromochloromethane		ND	5	.2	1.00		
Bromodichloromethane		ND	5	.2	1.00		
Bromoform		ND	5	.2	1.00		
Bromomethane		ND	2	6	1.00		
2-Butanone		ND	5	2	1.00		
n-Butylbenzene		ND	5	.2	1.00		
sec-Butylbenzene		ND	5	.2	1.00		
tert-Butylbenzene		ND	5	.2	1.00		
Carbon Disulfide		ND	5	2	1.00		
Carbon Tetrachloride		ND	5	.2	1.00		
Chlorobenzene		ND	5	.2	1.00		
Chloroethane		ND	5	.2	1.00		
Chloroform		ND	5	.2	1.00		
Chloromethane		ND	2	6	1.00		
2-Chlorotoluene		ND	5	.2	1.00		
4-Chlorotoluene		ND	5	.2	1.00		
Dibromochloromethane		ND	5	.2	1.00		
1,2-Dibromo-3-Chloropropane		ND	1	0	1.00		
1,2-Dibromoethane		ND	5	.2	1.00		
Dibromomethane		ND	5	.2	1.00		
1,2-Dichlorobenzene		ND	5	.2	1.00		
1,3-Dichlorobenzene		ND	5	.2	1.00		
1,4-Dichlorobenzene		ND	5	.2	1.00		
Dichlorodifluoromethane		ND	5	.2	1.00		
1,1-Dichloroethane		ND	5	.2	1.00		
1,2-Dichloroethane		ND	5	.2	1.00		
1,1-Dichloroethene		ND	5	.2	1.00		
c-1,2-Dichloroethene		ND	5	.2	1.00		
t-1,2-Dichloroethene		ND	5	.2	1.00		
1,2-Dichloropropane		ND	5	.2	1.00		
1,3-Dichloropropane		ND	5	.2	1.00		
2,2-Dichloropropane		ND	5	.2	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
 Page 41 of 45

Project: 580 Market Place Shopping Center	<u> </u>			Page 41 of 45
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 42 of 45

Surrogate	Rec. (%)	Control Limits	<b>Qualifiers</b>
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	98	80-120	



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: ug/kg

Project: 580 Market Place Shopping Center Page 43 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-9811	N/A	Solid	GC/MS BB	06/09/15	06/09/15 23:21	150609L054
<u>Parameter</u>		Result	R	<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	1	20	1.00		
Benzene		ND	5	5.0	1.00		
Bromobenzene		ND	5	5.0	1.00		
Bromochloromethane		ND	5	5.0	1.00		
Bromodichloromethane		ND	5	5.0	1.00		
Bromoform		ND	5	5.0	1.00		
Bromomethane		ND	2	5	1.00		
2-Butanone		ND	5	0	1.00		
n-Butylbenzene		ND	5	5.0	1.00		
sec-Butylbenzene		ND	5	5.0	1.00		
tert-Butylbenzene		ND	5	5.0	1.00		
Carbon Disulfide		ND	5	0	1.00		
Carbon Tetrachloride		ND	5	5.0	1.00		
Chlorobenzene		ND	5	5.0	1.00		
Chloroethane		ND	5	5.0	1.00		
Chloroform		ND	5	5.0	1.00		
Chloromethane		ND	2	5	1.00		
2-Chlorotoluene		ND	5	5.0	1.00		
4-Chlorotoluene		ND	5	5.0	1.00		
Dibromochloromethane		ND	5	5.0	1.00		
1,2-Dibromo-3-Chloropropane		ND	9	.9	1.00		
1,2-Dibromoethane		ND	5	5.0	1.00		
Dibromomethane		ND	5	5.0	1.00		
1,2-Dichlorobenzene		ND	5	5.0	1.00		
1,3-Dichlorobenzene		ND	5	5.0	1.00		
1,4-Dichlorobenzene		ND	5	5.0	1.00		
Dichlorodifluoromethane		ND	5	5.0	1.00		
1,1-Dichloroethane		ND	5	5.0	1.00		
1,2-Dichloroethane		ND	5	5.0	1.00		
1,1-Dichloroethene		ND	5	5.0	1.00		
c-1,2-Dichloroethene		ND		5.0	1.00		
t-1,2-Dichloroethene		ND		5.0	1.00		
1,2-Dichloropropane		ND		5.0	1.00		
1,3-Dichloropropane		ND		5.0	1.00		
2,2-Dichloropropane		ND		5.0	1.00		



 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/kg

 Project: 580 Market Place Shopping Center
 Page 44 of 45

 Parameter
 Result
 RL
 DF
 Qualifiers

 1,1-Dichloropropene
 ND
 5.0
 1.00

 c-1,3-Dichloropropene
 ND
 5.0
 1.00

<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<b>Qualifiers</b>
1,1-Dichloropropene	ND	5.0	1.00	
:-1,3-Dichloropropene	ND	5.0	1.00	
-1,3-Dichloropropene	ND	5.0	1.00	
thylbenzene	ND	5.0	1.00	
-Hexanone	ND	50	1.00	
sopropylbenzene	ND	5.0	1.00	
-Isopropyltoluene	ND	5.0	1.00	
lethylene Chloride	ND	50	1.00	
-Methyl-2-Pentanone	ND	50	1.00	
aphthalene	ND	50	1.00	
Propylbenzene	ND	5.0	1.00	
tyrene	ND	5.0	1.00	
,1,1,2-Tetrachloroethane	ND	5.0	1.00	
,1,2,2-Tetrachloroethane	ND	5.0	1.00	
etrachloroethene	ND	5.0	1.00	
oluene	ND	5.0	1.00	
2,3-Trichlorobenzene	ND	9.9	1.00	
2,4-Trichlorobenzene	ND	5.0	1.00	
1,1-Trichloroethane	ND	5.0	1.00	
1,2-Trichloroethane	ND	5.0	1.00	
1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
richloroethene	ND	5.0	1.00	
,2,3-Trichloropropane	ND	5.0	1.00	
,2,4-Trimethylbenzene	ND	5.0	1.00	
richlorofluoromethane	ND	50	1.00	
3,5-Trimethylbenzene	ND	5.0	1.00	
inyl Acetate	ND	50	1.00	
inyl Chloride	ND	5.0	1.00	
/m-Xylene	ND	5.0	1.00	
-Xylene	ND	5.0	1.00	
lethyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
ert-Butyl Alcohol (TBA)	ND	50	1.00	
iisopropyl Ether (DIPE)	ND	9.9	1.00	
thyl-t-Butyl Ether (ETBE)	ND	9.9	1.00	
ert-Amyl-Methyl Ether (TAME)	ND	9.9	1.00	
ithanol	ND	250	1.00	
<u>Surrogate</u>	Rec. (%)	Control Limits	Qualifiers	
,4-Bromofluorobenzene	97	60-132		



Cardno ERI	Date Received:	06/09/15
601 North McDowell Blvd.	Work Order:	15-06-0697
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 580 Market Place Shopping Center		Page 45 of 45

Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	99	80-120	

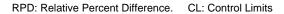


#### **Quality Control - Spike/Spike Duplicate**

Cardno ERI Date Received: 06/09/15 Work Order: 601 North McDowell Blvd. 15-06-0697 Preparation: **EPA 5030C** Petaluma, CA 94954-2312 Method: EPA 8015B (M) Page 1 of 3

Project: 580 Market Place Shopping Center

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
S-5.5-SV21	Sample		Solid	GC	24	06/09/15	06/11/15	12:20	150611S019	
S-5.5-SV21	Matrix Spike		Solid	GC	24	06/09/15	06/11/15	12:54	150611S019	
S-5.5-SV21	Matrix Spike	Duplicate	Solid	GC	24	06/09/15	06/11/15	13:28	150611S019	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	7.853	79	7.761	78	48-114	1	0-23	





#### **Quality Control - Spike/Spike Duplicate**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

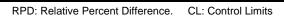
 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 2 of 3

ı	15-06-0965-1	Sample	Solid	GC 24	06/11/15	06/13/15 01:45	150611S041
	Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number

15-06-0965-1	Sample		Solid	GC :	24	06/11/15	06/13/15	01:45	150611S041	
15-06-0965-1	Matrix Spike		Solid	GC :	24	06/11/15	06/13/15	02:19	150611S041	
15-06-0965-1	Matrix Spike	Duplicate	Solid	GC :	24	06/11/15	06/13/15	02:53	150611S041	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	8.695	87	8.784	88	48-114	1	0-23	





## **Quality Control - Spike/Spike Duplicate**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 3 of 3

Quality Control Sample ID	Туре		Matrix		trument	Date Prepare	•			ch Number
S-5.5-SV21	Sample		Solid	GC	MS BB	06/09/15	06/09/15	23:49	150609S031	
S-5.5-SV21	Matrix Spike		Solid	GC	/MS BB	06/09/15	06/10/15	00:18	150609S031	
S-5.5-SV21	Matrix Spike	Duplicate	Solid	GC	/MS BB	06/09/15	06/10/15	00:46	150609S031	
Parameter	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	38.94	78	39.20	78	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	36.96	74	37.22	74	51-135	1	0-29	
Chlorobenzene	ND	50.00	37.08	74	37.32	75	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	42.27	85	42.32	85	64-124	0	0-20	
1,2-Dichlorobenzene	ND	50.00	36.79	74	35.70	71	35-131	3	0-25	
1,2-Dichloroethane	ND	50.00	41.52	83	42.12	84	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	35.03	70	36.43	73	47-143	4	0-25	
Ethylbenzene	ND	50.00	39.71	79	39.86	80	57-129	0	0-22	
Toluene	ND	50.00	38.10	76	38.19	76	63-123	0	0-20	
Trichloroethene	ND	50.00	41.05	82	40.56	81	44-158	1	0-20	
Vinyl Chloride	ND	50.00	41.44	83	40.15	80	49-139	3	0-47	
p/m-Xylene	ND	100.0	78.78	79	78.64	79	70-130	0	0-30	
o-Xylene	ND	50.00	37.29	75	37.08	74	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	41.64	83	43.57	87	57-123	5	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	235.7	94	258.0	103	30-168	9	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	41.59	83	42.85	86	57-129	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	43.17	86	44.39	89	55-127	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	42.49	85	42.77	86	58-124	1	0-20	
Ethanol	ND	500.0	413.5	83	446.5	89	17-167	8	0-47	

RPD: Relative Percent Difference. CL: Control Limits



# **Quality Control - LCS**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 1 of 3

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-2402	LCS	Solid	GC 24	06/11/15	06/11/15 11:46	150611L032
Parameter		Spike Added	Conc. Recover	ed LCS %Re	ec. %Rec	. CL Qualifiers
TPH as Gasoline		10.00	9.337	93	70-12	4



# **Quality Control - LCS**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: 580 Market Place Shopping Center
 Page 2 of 3

Quality Control Sample ID	Туре	Matrix	Instrument	Date	e Prepared	Date Analyzed	LCS	Batch Number
099-14-571-2409	LCS	Solid	GC 24	06/1	1/15	06/12/15 17:1	1506	311L063
<u>Parameter</u>		Spike Added	Conc. Recove	ered	LCS %Re	ec. <u>%Re</u>	c. CL	<b>Qualifiers</b>
TPH as Gasoline		10.00	9.303		93	70-1	24	



### **Quality Control - LCS**

 Cardno ERI
 Date Received:
 06/09/15

 601 North McDowell Blvd.
 Work Order:
 15-06-0697

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: 580 Market Place Shopping Center Page 3 of 3

Quality Control Sample ID	Туре	Matrix	Instrumer	nt Date Prep	ared Date Ana	lyzed LCS Batch N	lumber
099-12-796-9811	LCS	Solid	GC/MS B	B 06/09/15	06/09/15	22:23 150609L054	
<u>Parameter</u>		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	<u>Qualifiers</u>
Benzene		50.00	46.24	92	78-120	71-127	
Carbon Tetrachloride		50.00	44.27	89	49-139	34-154	
Chlorobenzene		50.00	46.35	93	79-120	72-127	
1,2-Dibromoethane		50.00	51.86	104	80-120	73-127	
1,2-Dichlorobenzene		50.00	48.02	96	75-120	68-128	
1,2-Dichloroethane		50.00	49.60	99	80-120	73-127	
1,1-Dichloroethene		50.00	41.55	83	74-122	66-130	
Ethylbenzene		50.00	49.24	98	76-120	69-127	
Toluene		50.00	46.13	92	77-120	70-127	
Trichloroethene		50.00	47.96	96	80-120	73-127	
Vinyl Chloride		50.00	47.40	95	68-122	59-131	
p/m-Xylene		100.0	97.19	97	75-125	67-133	
o-Xylene		50.00	46.09	92	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)		50.00	49.48	99	77-120	70-127	
Tert-Butyl Alcohol (TBA)		250.0	276.6	111	68-122	59-131	
Diisopropyl Ether (DIPE)		50.00	50.41	101	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)		50.00	51.86	104	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)		50.00	50.50	101	75-120	68-128	
Ethanol		500.0	473.4	95	56-140	42-154	

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



# **Sample Analysis Summary Report**

Work Order: 15-06-0697				Page 1 of 1
<u>Method</u>	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 5030C	715	GC 24	2
EPA 8260B	EPA 5030C	975	GC/MS BB	2



# **Glossary of Terms and Qualifiers**

Work Order: 15-06-0697 Page 1 of 1

Qualifiers	<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 furthe 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.
В	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.
Χ	% 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.



# **CHAIN OF CUSTODY RECORD**

		Calscie	nce									JSE ON				ATE:	···		6/5	5/15	-				
	coln Way, Garden Grove, CA 92 er service / sample drop off info	,	,	insus.com or ca	ill us.				,		Į	<b>)</b> 6-	U	54	P	AGE:					OF	·	Z		<u> </u>
	TORY CLIENT: Cardno A										-	JECT N			t: g Cent	er / Ca	ardno	ATC	P.O.	NO.:					
ADDRES	s: 701 University Avenue	Suite 200								Pro	oject#	Z075	00015				.,	.,,,	SAM	PLER(S)	): (PRINT	Г)			
CITY:	Sacramento				STATE:	CA ZIP:	9582	5		Ga	be Sti	ivala							1	Jael	yo	VILLE	nt		I
TEL: 9	16-386-3870		E-MAIL: gat	e.stivala@	cardno.co	<u>om</u>									REC	UES	STE	) AN							
TURNAF	OUND TIME (Rush surcharges may	apply to any TAT not	"STANDARD"):	*** 1								P	lease (	heck i	oox or f	ill in bl	ank as	neede	ed.						
□SA		□ 48 HR □	72 HR □ 5	DAYS 🗵	STANDA	RD														Ę.					
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4	S-23.5-SV21	SV-21	6/5/2015	1345	S	1				х	x	х	х	х	х	х									
5	S-4.5-SV23	SV-23	6/5/2015	1020	S	1				х	х	х	х	×	х	х									
G	S-10-SV23	SV-23	6/5/2015	1035	S	1				х	х	х	х	х	х	х									
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9	S-5-SV24	SV-24	6/5/2015	0800	S	1				х	х	х	х	х	×	х									
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### **CHAIN OF CUSTODY RECORD**

Calscience										DATE: 6/5/15-												
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• n ) T : 18 = 0 P n - 2 - 2 - 2 - 2	E-MAIL:   G    T1000000-   T100000-   T100000-	F-MAIL:   gabe.stivala@	* (714) 895-5494 ntact us26_sales@eurofinsus.com or call us.    STATE:	(714) 895-5494	(714) 895-5494	* (714) 895-5494  ntact us26_sales@eurofinsus.com or call us.    STATE: CA	CT14) 895-5494	College	CLIENT PRO   STATE:   CA   ZIP:   S80 Mark   Project # PROJECT CC	STATE:   CA   ZIP:   S80 Market Pla   Project # Z075f   PROJECT NOT S80 Market Pla   Project # Z075f   PROJECT CONTACT   Gabe Stivala   Gabe Stiva	STATE: CA   ZIP: SS825   Sales@eurofinsus.com or call us.   CLIENT PROJECT NAME: NO.   Project # 207500015;   PROJECT CONTACT:   Gabe Stivala   STATE: CA   ZIP:   S5825   Gabe Stivala   STANDARD   T10000004345   CORD.   T10000004345   CORD.   T10000004345   CORD.   T10000004345   CORD.   T10000004345   CORD.   CORD	15 - 06   7   7   7   7   7   7   7   7   7	Collence   15 - 06   7   7   7   7   7   7   7   7   7	ATTE:   CA   ZIP   95825   Gabe Stivala   CLIENT PROJECT NAME / NUMBER:   S80 Market Place Shopping Center / CE   PROJECT VAME / NUMBER:   S80 Market Place Shopping Center / CE   PROJECT VAME / NUMBER:   S80 Market Place Shopping Center / CE   PROJECT CONTACT:   Gabe Stivala   Gabe Stival	STATE   CA   ZIP   S805-5494   S80 Market Place Shopping Center / Cardno Project # 2075000152   PROJECT CONTACT: Gabe Stivala   STATE   CA   ZIP   Gabe Stivala   Gab Stivala   Gabe Stivala   Gabe Stivala   Gab Stivala   Gab Stiva	PAGE   PAGE	Page   Page	Policy   P	CLERN PROJECT NAME   FAUNDAMEN   PAGE   Z OF	PAGE   C   C   C   C   C   C   C   C   C	Companies   Comp	CLEAN PROJECT NAME NUMBER:   DATE   CA   SP   SS25   SAMPLING   Point   DATE   TIME   DATE   TIME   DATE   TIME   DATE   DATE



### 800-322-5555 www.gso.com



Ship From

CAL SCIENCE- CONCORD ALAN KEMP 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To
CEL
SAMPLE RECEIVING
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD: \$0.00 Weight: 0 lb(s) Reference: CARDNO ERI Delivery Instructions:

Signature Type: REQUIRED

Tracking #: 528191457

ORC GARDEN GROVE A

**NPS** 

D92845A



38660565

Print Date: 6/8/2015 3:12 PM

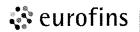
Package 2 of 2

### LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.





Calscience

WORK ORDER NUMBER: 15-06- 0697

# SAMPLE RECEIPT CHECKLIST

COOLER / OF /

CLIENT: Cardno ATC	DATE: 06 /	9	/ 2015
TEMPERATURE: (Criteria: 0.0°C − 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): 2 °C (w/ CF): 3 °C (w/ CF): 2 °C (w/ CF): 3 °C (w/ CF	`	∣Sam	ple
☐ Sample(s) received at ambient temperature; placed on ice for transport by courier  Ambient Temperature: ☐ Air ☐ Filter	Checked	d by: _	836
CUSTODY SEAL:  Cooler Present and Intact Present but Not Intact Not Present N/A  Sample(s) Present and Intact Present but Not Intact Not Present N/A			
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	l 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 N	umber:		)
Aqueous: □ VOA □ VOAh □ VOAna₂ □ 100PJ □ 100PJna₂ □ 125AGB □ 125AGBh □	***************************************		
☐ 125PB <b>znna</b> ☐ 250AGB ☐ 250CGB ☐ 250CGB <b>s</b> ☐ 250PB ☐ 250PB <b>n</b> ☐ 500AGB ☐ 50	-		
□ 500PB □ 1AGB □ 1AGBna₂ □ 1AGBs □ 1PB □ 1PBna □ □	ı <b>_</b> _		
Solid:   4ozCGJ   8ozCGJ   16ozCGJ   Sleeve (M/P)   EnCores® ()   TerraCo			
Air: □ Tedlar™ □ Canister □ Sorbent Tube □ PUF □ Other Matrix (			
Container: <b>A</b> = Amber, <b>B</b> = Bottle, <b>C</b> = Clear, <b>E</b> = Envelope, <b>G</b> = Glass, <b>J</b> = Jar, <b>P</b> = Plastic, and <b>Z</b> = Ziplo	oc/Resealable Ba	ıg	
Preservative: $\mathbf{b} = \text{buffered}$ , $\mathbf{f} = \text{filtered}$ , $\mathbf{h} = \text{HCI}$ , $\mathbf{n} = \text{HNO}_3$ , $\mathbf{na} = \text{NaOH}$ , $\mathbf{na_2} = \text{Na}_2\text{S}_2\text{O}_3$ , $\mathbf{p} = \text{H}_3\text{PO}_4$ ,			1913
$\mathbf{s} = H_2SO_4$ , $\mathbf{u} = \text{ultra-pure}$ , $\mathbf{znna} = \text{Zn}(CH_3CO_2)_2 + \text{NaOH}$	Reviewe		•



# Calscience



# **WORK ORDER NUMBER: 15-06-1170**

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

Client: Cardno ERI

Client Project Name: 580 Market Place Shopping Center

**Attention:** Gabe Stivala

601 North McDowell Blvd. Petaluma, CA 94954-2312

amande Porter

Approved for release on 07/08/2015 by: Amanda Porter

Project Manager



Email your PM )

ResultLink >

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.



2

3

# **Contents**

4

5

Client Proje Work Orde		580 Market Place Shopping Center 15-06-1170	
1	Work Ord	ler Narrative	3



### **Work Order Narrative**

Work Order: 15-06-1170 Page 1 of 1

### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/16/15. They were assigned to Work Order 15-06-1170.

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.



### **Subcontractor Analysis Report**

Work Order: 15-06-1170 Page 1 of 1

One or more samples in this work order have tests that were subcontracted. The subcontract report(s) follows.

For subcontracted tests, please reference the laboratory information noted below.

 Core Laboratories - Bakersfield, CA ISO 9001:2000, CERT-0014993, CA ELAP 1247 Geotechnical Testing





Petroleum Services Division 3437 Landco Dr. Bakersfield, California 93308 Tel: 661-325-5657 Fax: 661-325-5808 www.corelab.com

July 2, 2015

Amanda Porter Eurofins Calscience, Inc. 7440 Lincoln Way Garden Grove, CA 92841-1427

Subject: Vapor Transport / Intrusion Analysis

Project:15-06-1170 CL File No: 415028EN

Dear Ms Porter:

The attached file presents the final vapor transport/intrusion results for two soil samples submitted from your Project #15-06-1170.

Appropriate ASTM, EPA or API methodologies were used for this project and SOP's are available on request. The sample for this project is currently in storage and will be retained for thirty days past completion of testing at no charge. At the end of thirty days, the sample will be disposed. This electronic version of the report will constitute the final report unless otherwise instructed. You may contact me regarding continued storage, disoposal, or return of the sample.

Thank you for this opportunity to be of service to Eurofins Calscience, Inc. Please do not hesitate to contact us at (661-325-5657) if you have any questions regarding these results or if we can be of any additional service.

Sincerely, Core Laboratories

Stephen Carter Senior Core Analyst

The analyses, opinions or interpretations contained in this report are based upon observations and material supplied by the client for whose exclusive and confidential use this report has been made. The interpretations or opinions expressed represent the best judgment of Core Laboratories. Core Laboratories assumes no responsibility and makes no warranty or representations, expressed or implied, as to the productivity, proper operations or profitableness, however, of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever.





### PHYSICAL PROPERTIES DATA - VAPOR TRANSPORT PACKAGE

**Petroleum Services** 

Core Lab File No: 415028EN

**Eurofins Calscience, Inc.** 

Project Name: CATC #Z075000152

Project No: 15-06-1170

		METHODS:	ASTM [	02216	API R	P40	API RP40	API I	RP40	ASTM D425M	API RP40	WALKLE	Y-BLACK
								Porosi	ty, cc/cc ²		Total	Total	Fraction
			Mois	ture	Density	/, g/cc		Air	Water		Pore Fluid ³	Organic	Organic
Sample	Depth,	Sample	Cont	ntent Bulk (Dry)		Grain	Total	Filled	Filled	Effective	Saturations,	Carbon,	Carbon,
ID	ft.	Orientation ¹	% weight	cc/cc	Duik (Diy)	Gair		i illeu	Tilled		% Pv	mg/kg	g/g
S-6-Shelby23	N/A	V	16.66	0.288	1.73	2.67	0.352	0.064	0.288	0.014	81.8	7600	7.60E-03
S-6-Shelby24	N/A	V	11.79	0.237	2.01	2.65	0.242	0.005	0.237	0.058	97.9	9100	9.10E-03

⁽¹⁾ Sample Orientation: H = horizontal; V = vertical

⁽²⁾ Total Porosity = no pore fluids in place; all interconnected pore channels; Air Filled = pore channels not occupied by pore fluids, native sample; Effective = drainage porosity

⁽³⁾ As-received water+ NAPL; Water = 0.9996 g/cc, NAPL= 0.800 g/cc

Vb = Bulk Volume, cc; Pv = Pore Volume, cc; ND = Not Detected





# PERMEABILITY DATA

PETROLEUM SERVICES

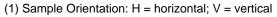
Core Lab File No: 415028EN

Eurofins Calscience, Inc.

Project Name: CATC #Z075000152

Project No: 15-06-1170

		METHODS:	DS: API RP 40 API RP 40 API RP 40; ASTM D5084; EPA 9100							
				100 psi (	0 psi Confining Stress					
			Effective ²	Specific 3	Effective ⁴	Saturated				
			Permeability	Permeability	Permeability	Hydraulic				
Sample	Depth,	Sample	to Air,	to Air,	to Water,	Conductivity, 4				
ID.	ft.	Orientation ¹	millidarcy	millidarcy	millidarcy	cm/s				
S-6-Shelby23	N/A	V	6.27	3689	0.0103	1.02E-08				
S-6-Shelby24	N/A	V	85.0	3281	0.192	1.90E-07				



⁽²⁾ Native State or Effective = With as-received pore fluids in place

- (3) Specific = all pore fluids removed
- (4) Permeability to water and hydraulic conductivity measured at saturated conditions



### ATTERBERG LIMITS AND SOIL CLASSIFICATION DATA

PETROLEUM SERVICES

**Eurofins Calscience, Inc.**Core Lab File No: 415028EN

Project Name: CATC #Z075000152

Project No: 15-06-1170

		METHODS:		ASTM D4318		ASTM D4318	ASTM D2487	USDA
			A	Atterberg Limits	1	USCS / Plasticity	USCS	USDA/SCS ²
	Sample	Depth,	Liquid	Plastic	Plasticity	Chart Symbol	Classification	Soil Texture
ID		ft.	Limit	Limit	index	(Fines: <#40 Sieve)	Group Symbol: Name	Scheme
	S-6-Shelby23	N/A	37	17	20	CL	Lean Clay with Sand	Loam
S-6-Shelby24		N/A	23	15	8	CL	Sandy Lean Clay	Loam

USCS: Unified Soil Classification System USDA: US Department of Agriculture SCS: Soil Conservation Service

(1) Silt assumed as fine fraction for NON-PLASTIC (NP) samples.

(2) Sand considered to be >No. 200 sieve for USDA SOIL TEXTURE SCHEME.







# **SIEVE and LASER PARTICLE SIZE SUMMARY**

(METHODOLOGY: ASTM D422/D4464M)

**Petroleum Services** 

**Eurofins Calscience, Inc.** 

Core Lab File No: 415028EN

Project Name: CATC #Z075000152

Project No: 15-06-1170

	Grain Size	Median		Component Percentages								
	Description	Grain Size,				Sand Size					&	
Sample ID	(Mean from Folk)	mm	Gravel	VCoarse	Coarse	Medium	Fine	VFine	Silt	Clay	Clay	
S-6-Shelby23	silt	0.019	0.00	0.00	0.00	3.62	10.92	13.78	48.77	22.90	71.7	
S-6-Shelbv24	silt	0.033	0.00	0.00	1.36	8.97	12.43	15.26	43.51	18.46	62.0	



Company: Eurofins Calscience
Project Name: CATC #Z075000152

Project Number : 15-06-1170

### C.L. File No.: 57111-415028EN

Date: 6/22/2015

# **Sieve and Laser Particle Size Analysis**

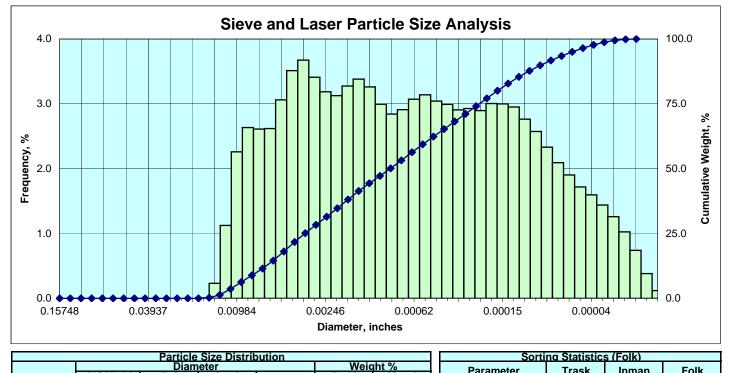
Sample			Comp	onent F	Percent	tages			Percentiles						Sorting Statistics (Folk)								
ID	Gravel			Sand			Fir	ies				Pa	rticle Di	ameter	(in)				Median	Mean	Sorting	Skew.	Kurt.
		vcgr	cgr	mgr	fgr	vfgr	silt	clay	5	10	16	25	40	50	75	84	90	95	in	in	ф		
S-6-Shelby23	0.00	0.00	0.00	3.62	10.92	13.78	48.77	22.90	0.0090	0.0064	0.0046	0.0029	0.0013	0.0007	0.0002	0.0001	0.0001	0.0000	0.001	0.001	2.567	0.062	0.789
									fgr	fgr	vfgr	vfgr	silt	silt	clay	clay	clay	clay	silt	silt	v. Poor	near sym.	platykurtic
S-6-Shelby24	0.00	0.00	1.36	8.97	12.43	15.26	43.51	18.46	0.0130	0.0100	0.0070	0.0045	0.0022	0.0013	0.0002	0.0001	0.0001	0.0000	0.001	0.001	2.681	0.173	0.800
									mgr	fgr	fgr	vfgr	silt	silt	silt	clay	clay	clay	silt	silt	v. Poor	fine	platykurtic



**Company: Eurofins Calscience** Project Name: CATC #Z075000152

Project Number : 15-06-1170

CL File No.: 57111-415028EN Sample ID: S-6-Shelby23



Particle Size Distribution Diameter Weight %												
	IIIO Maaba											
	[US Mesh]	[in.]	[mm]	[6]	[Incl.]	[Cum.]						
	5	0.157480	4.00000	-2.00	0.000	0.00						
	6	0.132425	3.36359	-1.75	0.000	0.00						
Granule	7	0.111355	2.82843	-1.50	0.000	0.00						
	8	0.093638	2.37841	-1.25	0.000	0.00						
	10	0.078740	2.00000	-1.00	0.000	0.00						
V 0	12	0.066212	1.68179	-0.75	0.000	0.00						
V Crse	14	0.055678	1.41421	-0.50	0.000	0.00						
Sand	16	0.046819	1.18921	-0.25	0.000	0.00						
	18 20	0.039370	1.00000	0.00	0.000	0.00						
Caaraa	20 25	0.033106 0.027839	0.84090 0.70711	0.25 0.50	0.000 0.000	0.00 0.00						
Coarse Sand	30	0.027639	0.70711	0.30	0.000	0.00						
Sanu	35	0.023410	0.59460	1.00	0.000	0.00						
	40	0.016553	0.42045	1.25	0.008	0.00						
Medium	45	0.013919	0.35355	1.50	0.232	0.24						
Sand	50	0.013919	0.33333	1.75	1.125	1.36						
Janu	60	0.009843	0.25000	2.00	2.260	3.62						
	70	0.008277	0.21022	2.25	2.634	6.26						
Fine	80	0.006960	0.17678	2.50	2.610	8.87						
Sand	100	0.005852	0.14865	2.75	2.619	11.49						
	120	0.004921	0.12500	3.00	3.061	14.55						
	140	0.004138	0.10511	3.25	3.512	18.06						
V. Fine	170	0.003480	0.08839	3.50	3.674	21.73						
Sand	200	0.002926	0.07433	3.75	3.410	25.14						
	230	0.002461	0.06250	4.00	3.186	28.33						
	270	0.002069	0.05256	4.25	3.127	31.46						
	325	0.001740	0.04419	4.50	3.275	34.73						
	400	0.001463	0.03716	4.75	3.381	38.11						
Silt	450 500	0.001230 0.001035	0.03125 0.02628	5.00 5.25	3.261 2.994	41.37 44.37						
""	635	0.001033	0.02020	5.50	2.842	47.21						
	000	0.000732	0.01858	5.75	2.910	50.12						
		0.000615	0.01562	6.00	3.072	53.19						
		0.000517	0.01314	6.25	3.140	56.33						
		0.000435	0.01105	6.50	3.043	59.37						
		0.000366	0.00929	6.75	2.992	62.37						
1		0.000308	0.00781	7.00	2.907	65.27						
		0.000259 0.000217	0.00657 0.00552	7.25 7.50	2.928 2.896	68.20 71.10						
1		0.000217	0.00332	7.30 7.75	3.005	71.10 74.10						
		0.000154	0.00391	8.00	3.000	77.10						
		0.000129	0.00328	8.25	2.951	80.05						
		0.000109	0.00276	8.50	2.764	82.82						
		0.000091	0.00232	8.75	2.574	85.39						
Clay		0.000077	0.00195	9.00	2.332	87.72						
1		0.000065 0.000054	0.00164 0.00138	9.25	2.093 1.903	89.82 91.72						
		0.000034	0.00136	9.50 9.75	1.718	93.44						
1		0.000038	0.00098	10.00	1.597	95.03						
1		0.000032	0.00082	10.25	1.439	96.47						
1		0.000027	0.00069	10.50	1.260	97.73						
1		0.000023	0.00058	10.75	1.025	98.76						
1		0.000019	0.00049	11.00	0.741	99.50						
		0.000016	0.00041	11.25	0.382	99.88						
		0.000015	0.00038	11.50	0.120	100.00						

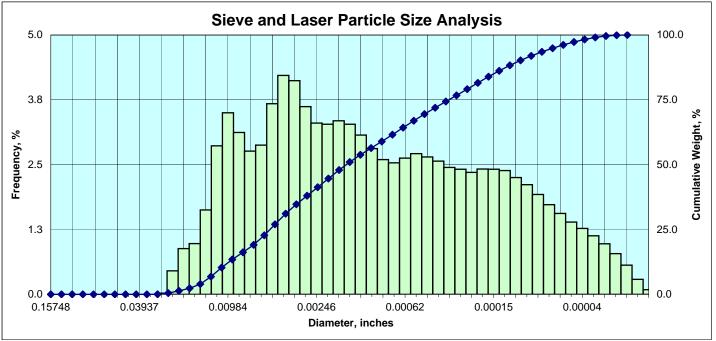
	Sorti	ing Statistics (Folk)								
Para	meter	Trask	Inman	Folk						
Me	dian		Silt sized							
	(in)	0.0007	0.0007	0.0007						
	(mm)	0.0187	0.0187	0.0187						
Me	ean		Silt sized							
	(in)	0.0016	0.0016 0.0007 0.00							
	(mm)	0.0396	0.0172	0.0177						
Sor	rting		V. Poor							
		4.117	0.148	2.567						
Skev	vness	Ne	ear symmetric	cal						
		0.975	0.116	0.062						
Kur	tosis		Platykurtic							
		0.218	0.218 0.428 0.789							
0		ponent Perce		0:14 - 01						
Gravel	Sand	Silt	Clav	Silt + Clav						
0.00	28.33	48.77	22.90	71.67						
	entile	Particle Diameter								
IWeic	aht. %1	[in.]	[mm]	[idq]						
:	5	0.0090	0.2277	2.1347						
1	10	0.0064	0.1635	2.6129						
1	16	0.0046	0.1161	3.1069						
2	25	0.0029	0.0748	3.7401						
4	40	0.0013	0.0336	4.8936						
5	50	0.0007	0.0187	5.7445						
7	75	0.0002	0.0044	7.8232						
8	34	0.0001	0.0026	8.6122						
9	90	0.0001	0.0016	9.2731						
9	95	0.0000 0.0010 9.995								
** Distribution	on pattern precl	udes calculation	of these statistic	al parameters.						





**Company: Eurofins Calscience** Project Name: CATC #Z075000152

Sample ID: S-6-Shelby24 Project Number : 15-06-1170



		Diam	eter		Weig	ıht %
	[US Mesh]	[in.]	[mm]	[4]	[Incl.]	[Cum.]
	5	0.157480	4.00000	-2.00	0.000	0.00
	6	0.132425	3.36359	-1.75	0.000	0.00
Granule	7	0.111355	2.82843	-1.50	0.000	0.00
	8	0.093638	2.37841	-1.25	0.000	0.00
	10	0.078740	2.00000	-1.00	0.000	0.00
	12	0.066212	1.68179	-0.75	0.000	0.00
V Crse	14	0.055678	1.41421	-0.50	0.000	0.00
Sand	16	0.046819	1.18921	-0.25	0.000	0.00
	18	0.039370	1.00000	0.00	0.000	0.00
0	20 25	0.033106	0.84090	0.25	0.000	0.00
Coarse Sand	30	0.027839 0.023410	0.70711 0.59460	0.50 0.75	0.023 0.454	0.02 0.48
Sano	35	0.023410	0.59460	1.00	0.454	1.36
	40	0.019663	0.42045	1.25	0.002	2.34
Medium	45	0.013919	0.35355	1.50	1.627	3.96
Sand	50	0.013919	0.33333	1.75	2.863	6.83
Garia	60	0.009843	0.25000	2.00	3.500	10.33
	70	0.008277	0.21022	2.25	3.121	13.45
Fine	80	0.006960	0.17678	2.50	2.761	16.21
Sand	100	0.005852	0.14865	2.75	2.877	19.09
	120	0.004921	0.12500	3.00	3.675	22.76
	140	0.004138	0.10511	3.25	4.221	26.98
V. Fine	170	0.003480	0.08839	3.50	4.119	31.10
Sand	200	0.002926	0.07433	3.75	3.619	34.72
	230	0.002461	0.06250	4.00	3.302	38.02
	270	0.002069	0.05256	4.25	3.279	41.30
	325	0.001740	0.04419	4.50	3.346	44.65
	400 450	0.001463	0.03716	4.75	3.280	47.93 51.00
Silt	500	0.001230 0.001035	0.03125 0.02628	5.00 5.25	3.070 2.810	53.81
•	635	0.001033	0.02020	5.50	2.598	56.41
	000	0.000732	0.01858	5.75	2.535	58.94
		0.000615	0.01562	6.00	2.626	61.57
		0.000517	0.01314	6.25	2.713	64.28
		0.000435	0.01105	6.50	2.649	66.93
		0.000366	0.00929	6.75	2.569	69.50
		0.000308	0.00781	7.00	2.446	71.95
		0.000259 0.000217	0.00657 0.00552	7.25 7.50	2.412 2.351	74.36 76.71
		0.000217	0.00552	7.50 7.75	2.351	76.71 79.12
		0.000154	0.00391	8.00	2.412	81.54
		0.000129	0.00328	8.25	2.387	83.92
		0.000109	0.00276	8.50	2.252	86.18
		0.000091	0.00232	8.75	2.115	88.29
Clay		0.000077	0.00195	9.00	1.926	90.22
,		0.000065	0.00164	9.25	1.729	91.94
		0.000054 0.000046	0.00138 0.00116	9.50 9.75	1.560 1.393	93.50 94.90
		0.000046	0.000116	9.75 10.00	1.393	94.90 96.17
		0.000038	0.00082	10.25	1.129	97.30
		0.000032	0.00069	10.50	0.974	98.27
		0.000027	0.00058	10.75	0.785	99.06
		0.000019	0.00049	11.00	0.563	99.62
		0.000016	0.00041	11.25	0.289	99.91
		0.000015	0.00038	11.50	0.091	100.00
	I					

Particle Size Distribution

	Sorti	na Statistic	s (Folk)						
Paran	neter	Trask	Inman	Folk					
Med	ian		Silt sized						
	(in)	0.0013	0.0013	0.0013					
	(mm)	0.0331	0.0331	0.0331					
Me	an		Silt sized						
	(in)	0.0024	0.0009	0.0011					
	(mm)	0.0600	0.0268						
Sort	ing		V. Poor						
		4.264	0.135	2.681					
Skew	ness		Finely skewed	d					
		0.807	0.266	0.173					
Kurte	osis	Platykurtic							
		0.213	0.414	0.800					
Gravel	Com Sand	ponent Perce Silt	entages Clav	Silt + Clav					
-	•		-	-					
0.00	38.02	43.51	18.46	61.98					
Perce (Weigl		Particle Diameter							
		[in.]	[mm]						
5		0.0130	0.3291	1.6035					
10		0.0100	0.2540	1.9774					
16		0.0070	0.1785	2.4862					
25		0.0045	0.1138	3.1351					
40	0	0.0022	0.0561	4.1549					
50	)	0.0013	0.0331	4.9180					
75	5	0.0002	0.0063	7.3196					
84	4	0.0001	0.0033	8.2603					
90	)	0.0001	0.0020	8.9710					
98	5	0.0000	0.0011	9.7694					
** Distribution	n pattern precli	udes calculation	of these statistic	al parameters.					





# 415028 EN

	CHAIN	OF	CUSTODY	RECORD
DATE:			06/15/15	

440 Lin or couri	coln Way, Garden Grove, CA 92 er service / sample drop off infor	841-1427 • (714 mation, contact t	1) 695-5494 us26 isales@eur	rofinaus com	or call us										PAGE	i:		1		of		 1	
ADDRES	Eurofins (	Calscience	2 of American Tax of Heights have been advanced and	PET THE ENTER A SECURITY AND ADDRESS AND A	etti Pened 64°16's proj autom	-t-t-an-hall-specific jacons for man		Friedrich (15)	CATC	#ZC		0152		15-0	16-1	170	)	POI				 	
CITY	Garden Grove	,		STATE	CA	928	341		Amano									SAMI	PLER(S)	PRIMI	)		
	714-895-5494		nandaporte	er@eurof	insus.co	<u>om</u>		-					F	REQUI	ESTE	D AI	VALY	/SES	—— 3	-		 	
	ROUND TIME (Rush surcharges may a										Ple	ease ch	eck bo	x or fill ir	blank a	as need	ied.						
□SA	ME DAY 24 HR	☐ 48 HR ☐	72 HR 5 D	AYS &	STANDA																		
	DELT EDF GLOBAL ID:					LOG	CODE:		iroup s)														
LAB USE	SAMPLE ID		PLING	MATRIX	NO. OF	Unpreserved	Preserved	Field Filtered	Vapor Transport / Intrusion Group (Johnson-Ettinger Parameters)														
ONLY	0.0.01    00	DATE	TIME		CONT.	_	<u>a</u>	证		<u> </u>							<u> </u>						
	S-6-Shelby23	6/5/15	10:30	S	1	X			Х														
_	S-6-Shelby24	6/5/15	8:10	S	1	Х			Х														
_																							
-													_										
-																							
-																							
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0		to 651	) 4/15/	15 17	30 (	up	tal,	Ain	Affiliation)	Core	Lab	61	15/1	5	1500	)	Date:				Time:		ige 1
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				***		-		-															



# Calscience



# WORK ORDER NUMBER: 15-06-2265

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

Client: Cardno ERI

Client Project Name: 580 Market Place Shopping Center

Attention: Gabe Stivala

601 North McDowell Blvd. Petaluma, CA 94954-2312

amande Porter

Approved for release on 07/15/2015 by: Amanda Porter

Project Manager



Email your PM >

ResultLink >

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.



# **Contents**

Cheffic Folder Name. Soo Market Flace Shopping Cente	Client Project Name:	580 Market Place Shopping Cente
------------------------------------------------------	----------------------	---------------------------------

Work Order Number: 15-06-2265

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2	Client Sample Data.  2.1 ASTM D-1946 (M) Fixed Gases (H2 and/or He) (Air).  2.2 EPA TO-15 Full List (Air).  2.3 GC/MS C6-C12 AS GASOLINE (Air).  2.4 SCAQMD 25.1 TGNMO + Fixed Gases (Air).  2.5 SCAQMD 25.1 TGNMO + Fixed Gases (Air).	4 4 7 52 58 62
3	Quality Control Sample Data.     3.1 LCS/LCSD.	65 65
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#### **Work Order Narrative**

Work Order: 15-06-2265 Page 1 of 1

### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/30/15. They were assigned to Work Order 15-06-2265.

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.



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
			Method:			AST	TM D-1946 (M)
			Units:				%v
Project: 580 Market Place Shop	ping Center					Pa	age 1 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC 55	N/A	06/30/15 13:35	150630L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0687		0.0100	1.00		
SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC 55	N/A	06/30/15 14:38	150630L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Helium		0.0215		0.0100	1.00		
SV-17A	15-06-2265-3-A	06/25/15 15:00	Air	GC 55	N/A	06/30/15 15:26	150630L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0286		0.0100	1.00		
SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC 55	N/A	06/30/15 16:33	150630L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0301		0.0100	1.00		
SV-18A	15-06-2265-5-A	06/25/15 12:22	Air	GC 55	N/A	06/30/15 18:25	150630L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0137		0.0100	1.00		
SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC 55	N/A	06/30/15 20:20	150630L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0219		0.0100	1.00		
SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC 55	N/A	07/01/15 11:16	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0717		0.0100	1.00		
SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC 55	N/A	07/01/15 12:07	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0355		0.0100	1.00		



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work Or	der:			15-06-2265
Petaluma, CA 94954-2312			Preparat	tion:			N/A
			Method:			AST	M D-1946 (M)
			Units:				%v
Project: 580 Market Place Shoppin	ng Center					Pa	age 2 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-20A	15-06-2265-9-A	06/25/15 17:10	Air	GC 55	N/A	07/01/15 12:54	150701L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Helium		0.0241		0.0100	1.00		
SV-20B	15-06-2265-10-A	06/25/15 17:25	Air	GC 55	N/A	07/01/15 13:40	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0297		0.0100	1.00		
SV-21A	15-06-2265-11-A	06/25/15 11:36	Air	GC 55	N/A	07/01/15 14:24	150701L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Helium		0.0316		0.0100	1.00		
SV-21B	15-06-2265-12-A	06/25/15 11:31	Air	GC 55	N/A	07/01/15 15:18	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0220		0.0100	1.00		
SV-22A	15-06-2265-13-A	06/25/15 10:23	Air	GC 55	N/A	07/01/15 16:11	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0279		0.0100	1.00		
SV-22B	15-06-2265-14-A	06/25/15 10:18	Air	GC 55	N/A	07/01/15 16:59	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0187		0.0100	1.00		
SV-23A	15-06-2265-15-A	06/25/15 08:21	Air	GC 55	N/A	07/01/15 17:54	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		0.0159		0.0100	1.00		
SV-23B	15-06-2265-16-A	06/25/15 08:06	Air	GC 55	N/A	07/01/15 18:35	150701L01
<u>Parameter</u>		Result	_	<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0140		0.0100	1.00		

06/30/15

Qualifiers



Cardno ERI

Parameter

Helium

# **Analytical Report**

Date Received:

carane z. a							
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312				N/A			
,			Method:	<u>.</u>		AST	TM D-1946 (M)
			Units:				%v
Project: 580 Market Place Shop	pping Center					Pa	age 3 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC 55	N/A	07/01/15 19:21	150701L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	<u>alifiers</u>
Helium		0.0139		0.0100	1.00		
SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC 55	N/A	07/01/15 20:05	150701L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0169		0.0100	1.00		
SV-24B	15-06-2265-19-A	06/25/15 09:25	Air	GC 55	N/A	07/02/15 11:34	150702L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Helium		0.0186		0.0100	1.00		
Method Blank	099-12-872-818	N/A	Air	GC 55	N/A	06/30/15 11:51	150630L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Helium		ND		0.0100	1.00		
Method Blank	099-12-872-819	N/A	Air	GC 55	N/A	07/01/15 10:47	150701L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	alifiers
Helium		ND		0.0100	1.00		
Method Blank	099-12-872-820	N/A	Air	GC 55	N/A	07/02/15 11:08	150702L01

Result

ND

<u>RL</u>

0.0100

<u>DF</u>

1.00



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3 Page 1 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC/MS K	N/A	07/02/15 22:27	150702L02
<u>Parameter</u>		Result	<u>RI</u>	<u> </u>	<u>DF</u>	Qua	alifiers
Acetone		50	7.	1	1.50		
Benzene		74	2.	4	1.50		
Benzyl Chloride		ND	12	2	1.50		
Bromodichloromethane		ND	5.	0	1.50		
Bromoform		ND	7.	8	1.50		
Bromomethane		ND	2.9	9	1.50		
2-Butanone		ND	6.	6	1.50		
Carbon Tetrachloride		ND	4.	7	1.50		
Chlorobenzene		4.4	3.	5	1.50		
Chloroethane		ND	2.	0	1.50		
Chloroform		16	3.	7	1.50		
Chloromethane		ND	1.	5	1.50		
Dibromochloromethane		ND	6.	4	1.50		
Dichlorodifluoromethane		5.3	3.	7	1.50		
Diisopropyl Ether (DIPE)		ND	13	3	1.50		
1,1-Dichloroethane		ND	3.	0	1.50		
1,1-Dichloroethene		ND	3.	0	1.50		
1,2-Dibromoethane		ND	5.	8	1.50		
Dichlorotetrafluoroethane		ND	21	Ī	1.50		
1,2-Dichlorobenzene		ND	4.	5	1.50		
1,2-Dichloroethane		ND	3.	0	1.50		
1,2-Dichloropropane		ND	3.	5	1.50		
1,3-Dichlorobenzene		ND	4.	5	1.50		
1,4-Dichlorobenzene		ND	4.	5	1.50		
c-1,3-Dichloropropene		ND	3.	4	1.50		
c-1,2-Dichloroethene		ND	3.	0	1.50		
t-1,2-Dichloroethene		ND	3.	0	1.50		
t-1,3-Dichloropropene		ND	6.	8	1.50		
Ethanol		ND	14	1	1.50		
Ethyl-t-Butyl Ether (ETBE)		ND	13	3	1.50		
Ethylbenzene		13	3.	3	1.50		
4-Ethyltoluene		ND	3.	7	1.50		
Hexachloro-1,3-Butadiene		ND	24		1.50		
2-Hexanone		ND	9.:		1.50		
Methyl-t-Butyl Ether (MTBE)		ND	11		1.50		



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
*			Method:				EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shopping	g Center					Pa	age 2 of 45
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		26	1.50		
4-Methyl-2-Pentanone		ND		9.2	1.50		
Naphthalene		ND		39	1.50		
o-Xylene		12		3.3	1.50		
p/m-Xylene		36		13	1.50		
Styrene		ND		9.6	1.50		
Tert-Amyl-Methyl Ether (TAME)		ND		13	1.50		
Tert-Butyl Alcohol (TBA)		ND		9.1	1.50		
Tetrachloroethene		ND		5.1	1.50		
Toluene		63		2.8	1.50		
Trichloroethene		ND		4.0	1.50		
Trichlorofluoromethane		ND		8.4	1.50		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		17	1.50		
1,1,1-Trichloroethane		ND		4.1	1.50		
1,1,2-Trichloroethane		ND		4.1	1.50		
1,3,5-Trimethylbenzene		ND		3.7	1.50		
1,1,2,2-Tetrachloroethane		ND		10	1.50		
1,2,4-Trimethylbenzene		ND		11	1.50		
1,2,4-Trichlorobenzene		ND		22	1.50		
Vinyl Acetate		ND		11	1.50		
Vinyl Chloride		ND		1.9	1.50		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		99		68-134			
1,2-Dichloroethane-d4		98		67-133			
Toluene-d8		95		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC/MS K	N/A	07/06/15 23:08	150706L02
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Carbon Disulfide		580		17	2.76		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		102		68-134			
1,2-Dichloroethane-d4		109		67-133			
Toluene-d8		97		70-130			



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3 Page 3 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC/MS K	N/A	07/02/15 23:22	150702L02
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	6.	.2	1.30		
Benzene		56	2.	.1	1.30		
Benzyl Chloride		ND	10	0	1.30		
Bromodichloromethane		ND	4.	.4	1.30		
Bromoform		ND	6.	.7	1.30		
Bromomethane		ND	2.	.5	1.30		
2-Butanone		ND	5.	.8	1.30		
Carbon Tetrachloride		ND	4.	.1	1.30		
Chlorobenzene		4.0	3.	.0	1.30		
Chloroethane		ND	1.	.7	1.30		
Chloroform		11	3.	.2	1.30		
Chloromethane		ND	1.	.3	1.30		
Dibromochloromethane		ND	5.	.5	1.30		
Dichlorodifluoromethane		ND	3.	.2	1.30		
Diisopropyl Ether (DIPE)		ND	1	1	1.30		
1,1-Dichloroethane		ND	2.	.6	1.30		
1,1-Dichloroethene		ND	2.	.6	1.30		
1,2-Dibromoethane		ND	5.	.0	1.30		
Dichlorotetrafluoroethane		ND	18	8	1.30		
1,2-Dichlorobenzene		ND	3.	.9	1.30		
1,2-Dichloroethane		3.0	2.	.6	1.30		
1,2-Dichloropropane		ND	3.	.0	1.30		
1,3-Dichlorobenzene		ND	3.	.9	1.30		
1,4-Dichlorobenzene		ND	3.	.9	1.30		
c-1,3-Dichloropropene		ND	3.	.0	1.30		
c-1,2-Dichloroethene		ND	2.	.6	1.30		
t-1,2-Dichloroethene		ND	2.	.6	1.30		
t-1,3-Dichloropropene		ND	5.	.9	1.30		
Ethanol		ND	1:	2	1.30		
Ethyl-t-Butyl Ether (ETBE)		ND	1	1	1.30		
Ethylbenzene		12	2.	.8	1.30		
4-Ethyltoluene		ND	3.	.2	1.30		
Hexachloro-1,3-Butadiene		ND	2	1	1.30		
2-Hexanone		ND	8.	.0	1.30		
Methyl-t-Butyl Ether (MTBE)		ND	9.	.4	1.30		



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
,			Method:				EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shopping	Center					Pa	ige 4 of 45
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		23	1.30		
4-Methyl-2-Pentanone		ND		8.0	1.30		
Naphthalene		ND		34	1.30		
o-Xylene		9.0		2.8	1.30		
p/m-Xylene		22		11	1.30		
Styrene		ND		8.3	1.30		
Tert-Amyl-Methyl Ether (TAME)		ND		11	1.30		
Tert-Butyl Alcohol (TBA)		ND		7.9	1.30		
Tetrachloroethene		ND		4.4	1.30		
Toluene		40		2.4	1.30		
Trichloroethene		ND		3.5	1.30		
Trichlorofluoromethane		ND		7.3	1.30		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		15	1.30		
1,1,1-Trichloroethane		ND		3.5	1.30		
1,1,2-Trichloroethane		ND		3.5	1.30		
1,3,5-Trimethylbenzene		ND		3.2	1.30		
1,1,2,2-Tetrachloroethane		ND		8.9	1.30		
1,2,4-Trimethylbenzene		ND		9.6	1.30		
1,2,4-Trichlorobenzene		ND		19	1.30		
Vinyl Acetate		ND		9.2	1.30		
Vinyl Chloride		ND		1.7	1.30		
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		106		68-134			
1,2-Dichloroethane-d4		98		67-133			
Toluene-d8		96		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC/MS K	N/A	07/03/15 20:24	150703L02
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Carbon Disulfide		690		41	6.54		
<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		103		68-134			
1,2-Dichloroethane-d4		108		67-133			
Toluene-d8		97		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 5 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-17A	15-06-2265-3-A	06/25/15 15:00	Air	GC/MS K	N/A	07/03/15 21:17	150703L02
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	lifiers
Acetone		56	4.	8	1.00		
Benzene		12	1.	6	1.00		
Benzyl Chloride		ND	7.	8	1.00		
Bromodichloromethane		4.0	3.	4	1.00		
Bromoform		ND	5.	2	1.00		
Bromomethane		ND	1.	9	1.00		
2-Butanone		ND	4.	4	1.00		
Carbon Disulfide		55	6.	2	1.00		
Carbon Tetrachloride		ND	3.	1	1.00		
Chlorobenzene		3.6	2.	3	1.00		
Chloroethane		ND	1.	3	1.00		
Chloroform		12	2.	4	1.00		
Chloromethane		3.2	1.	0	1.00		
Dibromochloromethane		ND	4.	3	1.00		
Dichlorodifluoromethane		3.3	2.	5	1.00		
Diisopropyl Ether (DIPE)		ND	8.	4	1.00		
1,1-Dichloroethane		ND	2.	0	1.00		
1,1-Dichloroethene		ND	2.	0	1.00		
1,2-Dibromoethane		ND	3.	8	1.00		
Dichlorotetrafluoroethane		ND	14	1	1.00		
1,2-Dichlorobenzene		ND	3.	0	1.00		
1,2-Dichloroethane		ND	2.	0	1.00		
1,2-Dichloropropane		ND	2.	3	1.00		
1,3-Dichlorobenzene		ND	3.	0	1.00		
1,4-Dichlorobenzene		ND	3.	0	1.00		
c-1,3-Dichloropropene		ND	2.	3	1.00		
c-1,2-Dichloroethene		ND	2.	0	1.00		
t-1,2-Dichloroethene		ND	2.	0	1.00		
t-1,3-Dichloropropene		ND	4.	5	1.00		
Ethanol		ND	9.	4	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	8.	4	1.00		
Ethylbenzene		4.0	2.	2	1.00		
4-Ethyltoluene		ND	2.	5	1.00		
Hexachloro-1,3-Butadiene		ND	16	5	1.00		
2-Hexanone		ND	6.	1	1.00		



Cardno ERI	Da	ite Received:		06/30/15		
601 North McDowell Blvd.	Wo	ork Order:	15-06-2265			
Petaluma, CA 94954-2312	Pro	eparation:		N/A		
		ethod:		EPA TO-15		
		nits:		ug/m3		
Project: 580 Market Place Shopping Center	OI.	iito.		Page 6 of 45		
Parameter	Result	<u>RL</u>	<u>DF</u>	Qualifiers		
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00			
Methylene Chloride	ND	17	1.00			
4-Methyl-2-Pentanone	ND	6.1	1.00			
Naphthalene	ND	26	1.00			
o-Xylene	4.4	2.2	1.00			
p/m-Xylene	13	8.7	1.00			
Styrene	ND	6.4	1.00			
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00			
Tert-Butyl Alcohol (TBA)	43	6.1	1.00			
Tetrachloroethene	ND	3.4	1.00			
Toluene	18	1.9	1.00			
Trichloroethene	ND	2.7	1.00			
Trichlorofluoromethane	ND	5.6	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00			
1,1,1-Trichloroethane	ND	2.7	1.00			
1,1,2-Trichloroethane	ND	2.7	1.00			
1,3,5-Trimethylbenzene	ND	2.5	1.00			
1,1,2,2-Tetrachloroethane	ND	6.9	1.00			
1,2,4-Trimethylbenzene	ND	7.4	1.00			
1,2,4-Trichlorobenzene	ND	15	1.00			
Vinyl Acetate	ND	7.0	1.00			
Vinyl Chloride	ND	1.3	1.00			
Surrogate	Rec. (%)	Control Limits	Qualifiers			
1,4-Bromofluorobenzene	102	68-134				
1,2-Dichloroethane-d4	98	67-133				
Toluene-d8	96	70-130				

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### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC/MS K	N/A	07/03/15 01:10	150702L02
Parameter		Result	RL	=	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		180	6.4	4	1.35		
Benzene		63	2.2	2	1.35		
Benzyl Chloride		ND	10	)	1.35		
Bromodichloromethane		ND	4.5	5	1.35		
Bromoform		ND	7.0	0	1.35		
Bromomethane		ND	2.6	6	1.35		
2-Butanone		8.2	6.0	0	1.35		
Carbon Tetrachloride		ND	4.2	2	1.35		
Chlorobenzene		8.0	3.	1	1.35		
Chloroethane		ND	1.8	8	1.35		
Chloroform		3.9	3.3	3	1.35		
Chloromethane		2.3	1.4	4	1.35		
Dibromochloromethane		ND	5.8	8	1.35		
Dichlorodifluoromethane		6.6	3.3	3	1.35		
Diisopropyl Ether (DIPE)		ND	11		1.35		
1,1-Dichloroethane		ND	2.7	7	1.35		
1,1-Dichloroethene		ND	2.7	7	1.35		
1,2-Dibromoethane		ND	5.2	2	1.35		
Dichlorotetrafluoroethane		ND	19	)	1.35		
1,2-Dichlorobenzene		ND	4.	1	1.35		
1,2-Dichloroethane		ND	2.7	7	1.35		
1,2-Dichloropropane		ND	3.	1	1.35		
1,3-Dichlorobenzene		ND	4.	1	1.35		
1,4-Dichlorobenzene		ND	4.	1	1.35		
c-1,3-Dichloropropene		ND	3.	1	1.35		
c-1,2-Dichloroethene		ND	2.7	7	1.35		
t-1,2-Dichloroethene		ND	2.7	7	1.35		
t-1,3-Dichloropropene		ND	6.	1	1.35		
Ethanol		ND	13	<b>;</b>	1.35		
Ethyl-t-Butyl Ether (ETBE)		ND	11		1.35		
Ethylbenzene		13	2.9	9	1.35		
4-Ethyltoluene		ND	3.3	3	1.35		
Hexachloro-1,3-Butadiene		ND	22		1.35		
2-Hexanone		ND	8.3		1.35		
Methyl-t-Butyl Ether (MTBE)		14	9.7	7	1.35		



Cardno ERI			Date Re	ceived:			06/30/15		
601 North McDowell Blvd.		Work O	15-06-2265						
Petaluma, CA 94954-2312		Preparation:					N/		
			Method:				EPA TO-15		
			Units:				ug/m3		
Project: 580 Market Place Shopp					Pa	nge 8 of 45			
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers		
Methylene Chloride		ND		23	1.35				
4-Methyl-2-Pentanone		ND		8.3	1.35				
Naphthalene		ND		35	1.35				
o-Xylene		12		2.9	1.35				
p/m-Xylene		24		12	1.35				
Styrene		ND		8.6	1.35				
Tert-Amyl-Methyl Ether (TAME)		ND		11	1.35				
Tert-Butyl Alcohol (TBA)		160		8.2	1.35				
Tetrachloroethene		ND		4.6	1.35				
Toluene		34		2.5	1.35				
Trichloroethene		ND		3.6	1.35				
Trichlorofluoromethane		ND		7.6	1.35				
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		16	1.35				
1,1,1-Trichloroethane		ND		3.7	1.35				
1,1,2-Trichloroethane		ND		3.7	1.35				
1,3,5-Trimethylbenzene		4.7		3.3	1.35				
1,1,2,2-Tetrachloroethane		ND		9.3	1.35				
1,2,4-Trimethylbenzene		13		10	1.35				
1,2,4-Trichlorobenzene		ND		20	1.35				
Vinyl Acetate		ND		9.5	1.35				
Vinyl Chloride		ND		1.7	1.35				
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>				
1,4-Bromofluorobenzene		123		68-134					
1,2-Dichloroethane-d4		103		67-133					
Toluene-d8		93		70-130					
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC/MS K	N/A	07/03/15 22:06	150703L02		
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers		
Carbon Disulfide		510		39	6.24				
Surrogate		Rec. (%)		Control Limits	Qualifiers				
1,4-Bromofluorobenzene		101		68-134					
1,2-Dichloroethane-d4		108		67-133					
Toluene-d8		97		70-130					



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3 Page 9 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-18A	15-06-2265-5-A	06/25/15 12:22	Air	GC/MS K	N/A	07/03/15 02:05	150702L02
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	lifiers
Acetone		ND	5.	.7	1.21		
Benzene		6.1	1.	.9	1.21		
Benzyl Chloride		ND	9.	.4	1.21		
Bromodichloromethane		15	4.	.0	1.21		
Bromoform		ND	6.	.2	1.21		
Bromomethane		ND	2.	.3	1.21		
2-Butanone		ND	5.	.3	1.21		
Carbon Disulfide		170	7.	.5	1.21		
Carbon Tetrachloride		ND	3.	.8	1.21		
Chlorobenzene		5.2	2.	.8	1.21		
Chloroethane		ND	1.	.6	1.21		
Chloroform		45	2.	.9	1.21		
Chloromethane		2.1	1.	.2	1.21		
Dibromochloromethane		ND	5.	.1	1.21		
Dichlorodifluoromethane		4.8	3.	.0	1.21		
Diisopropyl Ether (DIPE)		ND	10	0	1.21		
1,1-Dichloroethane		ND	2.	.4	1.21		
1,1-Dichloroethene		ND	2.	.4	1.21		
1,2-Dibromoethane		ND	4.	.6	1.21		
Dichlorotetrafluoroethane		ND	17	7	1.21		
1,2-Dichlorobenzene		ND	3.	.6	1.21		
1,2-Dichloroethane		ND	2.	.4	1.21		
1,2-Dichloropropane		ND	2.	.8	1.21		
1,3-Dichlorobenzene		ND	3.	.6	1.21		
1,4-Dichlorobenzene		ND	3.	.6	1.21		
c-1,3-Dichloropropene		ND	2.	.7	1.21		
c-1,2-Dichloroethene		ND	2.	.4	1.21		
t-1,2-Dichloroethene		ND	2.	.4	1.21		
t-1,3-Dichloropropene		ND	5.	.5	1.21		
Ethanol		ND	1	1	1.21		
Ethyl-t-Butyl Ether (ETBE)		ND	10	0	1.21		
Ethylbenzene		3.7	2.		1.21		
4-Ethyltoluene		4.8	3.	.0	1.21		
Hexachloro-1,3-Butadiene		ND	19		1.21		
2-Hexanone		ND	7.	.4	1.21		



Cardno ERI	Da	te Received:		06/30/15	
601 North McDowell Blvd.	We	ork Order:		15-06-2265	
Petaluma, CA 94954-2312	Pr	eparation:		N/A	
		ethod:		EPA TO-15	
		nits:		ug/m3	
Project: 580 Market Place Shopping Center	Oi	iits.		Page 10 of 45	
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>	
Methyl-t-Butyl Ether (MTBE)	ND	8.7	1.21		
Methylene Chloride	ND	21	1.21		
4-Methyl-2-Pentanone	ND	7.4	1.21		
Naphthalene	ND	32	1.21		
o-Xylene	17	2.6	1.21		
p/m-Xylene	29	10	1.21		
Styrene	ND	7.7	1.21		
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.21		
Tert-Butyl Alcohol (TBA)	22	7.3	1.21		
Tetrachloroethene	ND	4.1	1.21		
Toluene	8.3	2.3	1.21		
Trichloroethene	ND	3.2	1.21		
Trichlorofluoromethane	ND	6.8	1.21		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	14	1.21		
1,1,1-Trichloroethane	ND	3.3	1.21		
1,1,2-Trichloroethane	ND	3.3	1.21		
1,3,5-Trimethylbenzene	11	3.0	1.21		
1,1,2,2-Tetrachloroethane	ND	8.3	1.21		
1,2,4-Trimethylbenzene	24	8.9	1.21		
1,2,4-Trichlorobenzene	ND	18	1.21		
Vinyl Acetate	ND	8.5	1.21		
Vinyl Chloride	ND	1.5	1.21		
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	101	68-134			
1,2-Dichloroethane-d4	95	67-133			
Toluene-d8	96	70-130			

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Petaluma, CA 94954-2312

#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Preparation: N/A
Method: EPA TO-15

Units: ug/m3

Project: 580 Market Place Shopping Center

15-06-2265-6-A   12-30	Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Acetone         ND         5.0         1.06           Benzene         65         1.7         1.06           Benzyl Chloride         ND         8.2         1.06           Bromodichloromethane         ND         3.6         1.06           Bromoder         ND         5.5         1.06           Bromomethane         ND         4.7         1.06           2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chlorodorezene         10         2.4         1.06           Chlorodorezene         10         2.4         1.06           Chloromethane         ND         1.4         1.06           Discorporomethane         1.2         1.1         1.06           Discorporyl Ether (DIPE)         ND         2.6         1.06           Discorporyl Ether (DIPE)         ND         2.1         1.06           Discorporyl Ether (DIPE)         ND         2.1         1.06           L1,2-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND	SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC/MS K	N/A	07/03/15 03:00	150702L02
Benzene         65         1.7         1.06           Benzy Chloride         ND         8.2         1.06           Bromodichloromethane         ND         3.6         1.06           Bromomethane         ND         5.5         1.06           Bromomethane         ND         2.1         1.06           2-Butanone         ND         3.3         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chlorobenzene         10         2.4         1.06           Chlorobenzene         10         2.4         1.06           Chloroform         5.1         2.6         1.06           Chloromethane         ND         1.4         1.06           Chloromethane         ND         2.6         1.06           Dichlorodifloromethane         ND         2.6         1.06           Disloromoethane         ND         2.1         1.06           1,1-Dichlorotethane         ND         2.1         1.06           1,2-Dichlorotetrafluoroethane         ND         2.1         1.06           1,2-Dichlorotetrafluoroethane         ND         2.1         1.06           1,2-Dichlorotetrafluoroethane         ND </td <td>Parameter</td> <td></td> <td>Result</td> <td>R</td> <td><u>RL</u></td> <td><u>DF</u></td> <td>Qua</td> <td>alifiers</td>	Parameter		Result	R	<u>RL</u>	<u>DF</u>	Qua	alifiers
Benzyl Chloride         ND         8.2         1.06           Bromodichloromethane         ND         3.6         1.06           Bromoform         ND         5.5         1.06           Bromomethane         ND         2.1         1.06           2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chloroethane         10         2.4         1.06           Chloroethane         ND         1.4         1.06           Chloroform         5.1         2.6         1.06           Chloromethane         ND         4.5         1.06           Dibromochloromethane         ND         4.5         1.06           Dichlorodiffuoromethane         ND         2.6         1.06           Dichlorodiffuoromethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloropropane         ND         2.1         1.06           1,2-Dichloropropane         ND	Acetone		ND	5	5.0	1.06		
Bromodichloromethane         ND         3.6         1.06           Bromoform         ND         5.5         1.06           Bromomethane         ND         2.1         1.06           2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chlorobenzene         10         2.4         1.06           Chlorothane         ND         1.4         1.06           Chlorothane         5.1         2.6         1.06           Chlorothane         ND         4.5         1.06           Chloromethane         ND         4.5         1.06           Dibromochloromethane         ND         4.5         1.06           Dichlorodifluoromethane         ND         2.6         1.06           Dichlorothane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         3.2	Benzene		65	1	.7	1.06		
Bromotorm         ND         5.5         1.06           Bromomethane         ND         2.1         1.06           2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chlorobenzene         10         2.4         1.06           Chlorotethane         ND         1.4         1.06           Chloromethane         1.2         1.1         1.06           Chloromethane         ND         4.5         1.06           Dibromochloromethane         ND         2.6         1.06           Dichlorodifluoromethane         ND         2.6         1.06           Dichlorodethane         ND         2.6         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,3-Dichloroethane         ND         <	Benzyl Chloride		ND	8	5.2	1.06		
Bromomethane         ND         2.1         1.06           2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chloroethane         10         2.4         1.06           Chloroethane         ND         1.4         1.06           Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dibromochloromethane         ND         4.5         1.06           Disopropyl Ether (DIPE)         ND         2.6         1.06           Disopropyl Ether (DIPE)         ND         2.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dibromoethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,3-Dichloroethane         ND         2.1         1.06           1,3-Dichloroethane         ND         2.1         1.06           -1,4-Dichloroethane	Bromodichloromethane		ND	3	.6	1.06		
2-Butanone         ND         4.7         1.06           Carbon Tetrachloride         ND         3.3         1.06           Chlorobenzene         10         2.4         1.06           Chloroform         ND         1.4         1.06           Chloroform         5.1         2.6         1.06           Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dichlorodifluoromethane         ND         2.6         1.06           Dichlorodifluoromethane         ND         2.6         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroptopane         ND         2.4         1.06           1,2-Dichloroptopane         ND         2.4         1.06           1,3-Dichloroptopene         ND         2.4         1.06           -1,3-Dichloroptopene	Bromoform		ND	5	5.5	1.06		
Carbon Tetrachloride         ND         3.3         1.06           Chlorobenzene         10         2.4         1.06           Chlorotethane         ND         1.4         1.06           Chloromethane         5.1         2.6         1.06           Chloromethane         1.2         1.1         1.06           Dishorodiffluoromethane         ND         4.5         1.06           Dishorodiffluoromethane         ND         2.6         1.06           Dishorodiffluoromethane         ND         2.6         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dishorobenzene         ND         4.1         1.06           1,2-Dichlorobenzene         ND         3.2         1.06           1,2-Dichlorobenzene         ND         2.4         1.06           1,2-Dichloroptopane         ND         2.4         1.06           1,2-Dichloroptopane         ND         3.2         1.06           -1,2-Dichloroptopene         ND         2.1         1.06           -1,2-Dichloroptopene         ND         2.1         1.06           -1,3-Dichl	Bromomethane		ND	2	1	1.06		
Chlorobenzene         10         2.4         1.06           Chloroethane         ND         1.4         1.06           Chloroform         5.1         2.6         1.06           Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dicklorodifluoromethane         ND         2.6         1.06           Disopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         2.4         1.06           1,2-Dichloroethane         ND         2.4         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,3-Dichloropropane         ND         3.2         1.06           1,3-Dichloropropane         ND         2.4         1.06           -1,3-Dichloropropane         ND         2.4         1.06           -1,2-Dichloropropane <td>2-Butanone</td> <td></td> <td>ND</td> <td>4</td> <td>7</td> <td>1.06</td> <td></td> <td></td>	2-Butanone		ND	4	7	1.06		
Chloroethane         ND         1.4         1.06           Chloroform         5.1         2.6         1.06           Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dichorodifluoromethane         ND         2.6         1.06           Disopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           1,2-Dichloroethane         ND         1.5         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         2.4         1.06           1,3-Dichloropropane         ND         3.2         1.06           1,4-Dichloroethane         ND         2.4         1.06           -1,2-Dichloroethane         ND         2.1         1.06           -1,2-Dichloroethane         ND         2.1         1.06           -1,2-Dichloroethane<	Carbon Tetrachloride		ND	3	.3	1.06		
Chloroform         5.1         2.6         1.06           Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dichlorodiffluoromethane         ND         2.6         1.06           Dichlorodiffluoromethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         4.1         1.06           1,2-Dibromoethane         ND         1.5         1.06           Dichlorotetrafluoroethane         ND         1.5         1.06           1,2-Dichlorobenzene         ND         2.1         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloropropane         ND         2.4         1.06           1,3-Dichloropropane         ND         3.2         1.06           1,4-Dichlorobenzene         ND         2.4         1.06           -1,3-Dichloropropene         ND         2.1         1.06           -1,2-Dichloroethene         ND         2.1         1.06           -1,3-Dichloropropene         ND         4.8         1.06 <th< td=""><td>Chlorobenzene</td><td></td><td>10</td><td>2</td><td>4</td><td>1.06</td><td></td><td></td></th<>	Chlorobenzene		10	2	4	1.06		
Chloromethane         1.2         1.1         1.06           Dibromochloromethane         ND         4.5         1.06           Dichlorodifluoromethane         ND         2.6         1.06           Diisopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         4.1         1.06           1,2-Dibromoethane         ND         4.1         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         3.2         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloropropane         ND         2.4         1.06           1,2-Dichloropropane         ND         3.2         1.06           1,4-Dichlorobenzene         ND         3.2         1.06           -1,4-Dichloropropane         ND         2.4         1.06           -1,2-Dichloroethane         ND         2.1         1.06           -1,3-Dichloropropane         ND         2.1         1.06           -1,2-Dichloroethane         ND         2.1         1.06	Chloroethane		ND	1	.4	1.06		
Dibromochloromethane         ND         4.5         1.06           Dichlorodifluoromethane         ND         2.6         1.06           Diisopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dibromoethane         ND         4.1         1.06           1,2-Dichloroethane         ND         1.5         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloropropane         ND         2.4         1.06           1,3-Dichlorobenzene         ND         3.2         1.06           1,4-Dichlorobenzene         ND         3.2         1.06           1,4-Dichloropropane         ND         3.2         1.06           -1,3-Dichloropropane         ND         2.4         1.06           -1,2-Dichloroethane         ND         2.1         1.06           -1,2-Dichloropropane         ND         2.1         1.06           -1,3-Dichloropropane         ND         2.1         1.06           -1,2-Dichloroethane         ND         2.1         1.06	Chloroform		5.1	2	2.6	1.06		
Dichlorodifluoromethane         ND         2.6         1.06           Diisopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dichloroethane         ND         4.1         1.06           Dichlorotetrafluoroethane         ND         15         1.06           1,2-Dichlorobenzene         ND         2.1         1.06           1,2-Dichloroptrapane         ND         2.4         1.06           1,2-Dichloroptrapane         ND         2.4         1.06           1,3-Dichlorobenzene         ND         3.2         1.06           1,4-Dichlorobenzene         ND         3.2         1.06           -1,3-Dichloropropene         ND         2.4         1.06           -1,2-Dichloroethene         ND         2.1         1.06           -1,2-Dichloroethene         ND         2.1         1.06           -1,2-Dichloroethene         ND         4.8         1.06           -1,3-Dichloropropene         ND         4.8         1.06           Ethyl-t-Butyl Ether (ETBE)         ND         8.9         1.06	Chloromethane		1.2	1	.1	1.06		
Diisopropyl Ether (DIPE)         ND         8.9         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,1-Dichloroethane         ND         2.1         1.06           1,2-Dibromoethane         ND         4.1         1.06           Dichlorotetrafluoroethane         ND         1.5         1.06           1,2-Dichlorobenzene         ND         3.2         1.06           1,2-Dichloroptopana         ND         2.4         1.06           1,3-Dichloroptopane         ND         3.2         1.06           1,4-Dichlorobenzene         ND         3.2         1.06           1,4-Dichloroptopane         ND         3.2         1.06           -1,3-Dichloroptopene         ND         2.4         1.06           c-1,2-Dichloroethene         ND         2.1         1.06           c-1,2-Dichloroptopene         ND         2.1         1.06           t-1,2-Dichloroptopene         ND         4.8         1.06           t-1,4-Dichloroptopene         ND         8.9         1.06           t-thyt-Eutyl Ether (ETBE)         ND         8.9         1.06           Ethyl-Eutyl Ether (ETBE)         ND         2.6         1.06     <	Dibromochloromethane		ND	4	.5	1.06		
1,1-Dichloroethane       ND       2.1       1.06         1,1-Dichloroethane       ND       2.1       1.06         1,2-Dibromoethane       ND       4.1       1.06         Dichlorotetrafluoroethane       ND       15       1.06         1,2-Dichloroethane       ND       3.2       1.06         1,2-Dichloroethane       ND       2.1       1.06         1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichlorobenzene       ND       3.2       1.06         -1,3-Dichloropropene       ND       2.4       1.06         c-1,3-Dichloropropene       ND       2.1       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       4.8       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       4.8       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexa	Dichlorodifluoromethane		ND	2	2.6	1.06		
1,1-Dichloroethene       ND       2.1       1.06         1,2-Dibromoethane       ND       4.1       1.06         Dichlorotetrafluoroethane       ND       15       1.06         1,2-Dichlorobenzene       ND       3.2       1.06         1,2-Dichloroethane       ND       2.1       1.06         1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichlorobenzene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloroethene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       4.8       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	Diisopropyl Ether (DIPE)		ND	8	.9	1.06		
1,2-Dibromoethane       ND       4.1       1.06         Dichlorotetrafluoroethane       ND       15       1.06         1,2-Dichlorobenzene       ND       3.2       1.06         1,2-Dichloroethane       ND       2.1       1.06         1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichloropropane       ND       3.2       1.06         1,4-Dichloropropene       ND       2.4       1.06         c-1,3-Dichloropthene       ND       2.1       1.06         t-1,2-Dichloroethene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       4.8       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,1-Dichloroethane		ND	2	.1	1.06		
Dichlorotetrafluoroethane         ND         15         1.06           1,2-Dichlorobenzene         ND         3.2         1.06           1,2-Dichloroethane         ND         2.1         1.06           1,2-Dichloropropane         ND         2.4         1.06           1,3-Dichlorobenzene         ND         3.2         1.06           1,4-Dichloropropene         ND         2.4         1.06           c-1,3-Dichloropropene         ND         2.4         1.06           c-1,2-Dichloroethene         ND         2.1         1.06           t-1,2-Dichloropropene         ND         2.1         1.06           t-1,3-Dichloropropene         ND         4.8         1.06           t-1,3-Dichloropropene         ND         4.8         1.06           Ethyl-t-Butyl Ether (ETBE)         ND         8.9         1.06           Ethyl-t-Butyl Ether (ETBE)         ND         8.9         1.06           4-Ethyltoluene         ND         2.6         1.06           4-Ethyltoluene         ND         2.6         1.06           Hexachloro-1,3-Butadiene         ND         17         1.06           2-Hexanone         ND         6.5         1.06	1,1-Dichloroethene		ND	2	.1	1.06		
1,2-Dichlorobenzene       ND       3.2       1.06         1,2-Dichloroethane       ND       2.1       1.06         1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichloropropene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       4.8       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,2-Dibromoethane		ND	4	.1	1.06		
1,2-Dichloroethane       ND       2.1       1.06         1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichloropropene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       4.8       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	Dichlorotetrafluoroethane		ND	1	5	1.06		
1,2-Dichloropropane       ND       2.4       1.06         1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichlorobenzene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       4.8       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,2-Dichlorobenzene		ND	3	.2	1.06		
1,3-Dichlorobenzene       ND       3.2       1.06         1,4-Dichlorobenzene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       4.8       1.06         t-1,3-Dichloropropene       ND       10       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,2-Dichloroethane		ND	2	1	1.06		
1,4-Dichlorobenzene       ND       3.2       1.06         c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,2-Dichloropropane		ND	2	.4	1.06		
c-1,3-Dichloropropene       ND       2.4       1.06         c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloropropene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,3-Dichlorobenzene		ND	3	5.2	1.06		
c-1,2-Dichloroethene       ND       2.1       1.06         t-1,2-Dichloroethene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	1,4-Dichlorobenzene		ND	3	5.2	1.06		
t-1,2-Dichloroethene       ND       2.1       1.06         t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	c-1,3-Dichloropropene		ND	2	.4	1.06		
t-1,3-Dichloropropene       ND       4.8       1.06         Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	c-1,2-Dichloroethene		ND	2	1	1.06		
Ethanol       ND       10       1.06         Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	t-1,2-Dichloroethene		ND	2	1	1.06		
Ethyl-t-Butyl Ether (ETBE)       ND       8.9       1.06         Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	t-1,3-Dichloropropene		ND	4	8	1.06		
Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	Ethanol		ND	1	0	1.06		
Ethylbenzene       11       2.3       1.06         4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	Ethyl-t-Butyl Ether (ETBE)			8	3.9			
4-Ethyltoluene       ND       2.6       1.06         Hexachloro-1,3-Butadiene       ND       17       1.06         2-Hexanone       ND       6.5       1.06	, , ,							
Hexachloro-1,3-Butadiene         ND         17         1.06           2-Hexanone         ND         6.5         1.06								
2-Hexanone ND 6.5 1.06	•							
	Methyl-t-Butyl Ether (MTBE)					1.06		



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
			Method:				EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shopping	g Center					Pag	je 12 of 45
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		18	1.06		
4-Methyl-2-Pentanone		ND		6.5	1.06		
Naphthalene		ND		28	1.06		
o-Xylene		9.3		2.3	1.06		
p/m-Xylene		21		9.2	1.06		
Styrene		ND		6.8	1.06		
Tert-Amyl-Methyl Ether (TAME)		ND		8.9	1.06		
Tert-Butyl Alcohol (TBA)		ND		6.4	1.06		
Tetrachloroethene		ND		3.6	1.06		
Toluene		17		2.0	1.06		
Trichloroethene		ND		2.8	1.06		
Trichlorofluoromethane		ND		6.0	1.06		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		12	1.06		
1,1,1-Trichloroethane		ND		2.9	1.06		
1,1,2-Trichloroethane		ND		2.9	1.06		
1,3,5-Trimethylbenzene		ND		2.6	1.06		
1,1,2,2-Tetrachloroethane		ND		7.3	1.06		
1,2,4-Trimethylbenzene		ND		7.8	1.06		
1,2,4-Trichlorobenzene		ND		16	1.06		
Vinyl Acetate		ND		7.5	1.06		
Vinyl Chloride		ND		1.4	1.06		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		99		68-134			
1,2-Dichloroethane-d4		102		67-133			
Toluene-d8		110		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC/MS K	N/A	07/06/15 23:55	150706L02
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Carbon Disulfide		380		16	2.50		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		104		68-134			
1,2-Dichloroethane-d4		110		67-133			
Toluene-d8		98		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 13 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC/MS K	N/A	07/03/15 03:54	150702L02
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	lifiers
Acetone		ND	6.	4	1.34		
Benzene		270	2.	1	1.34		
Benzyl Chloride		ND	10	)	1.34		
Bromodichloromethane		22	4.	5	1.34		
Bromoform		ND	6.	9	1.34		
Bromomethane		ND	2.	6	1.34		
2-Butanone		9.2	5.	9	1.34		
Carbon Disulfide		190	8.	3	1.34		
Carbon Tetrachloride		ND	4.	2	1.34		
Chlorobenzene		4.6	3.	1	1.34		
Chloroethane		ND	1.	8	1.34		
Chloroform		57	3.	3	1.34		
Chloromethane		3.3	1.	4	1.34		
Dibromochloromethane		ND	5.	7	1.34		
Dichlorodifluoromethane		5.1	3.	3	1.34		
Diisopropyl Ether (DIPE)		ND	11	1	1.34		
1,1-Dichloroethane		ND	2.	7	1.34		
1,1-Dichloroethene		ND	2.	7	1.34		
1,2-Dibromoethane		ND	5.	1	1.34		
Dichlorotetrafluoroethane		ND	19	9	1.34		
1,2-Dichlorobenzene		ND	4.	0	1.34		
1,2-Dichloroethane		ND	2.	7	1.34		
1,2-Dichloropropane		ND	3.	1	1.34		
1,3-Dichlorobenzene		ND	4.	0	1.34		
1,4-Dichlorobenzene		ND	4.	0	1.34		
c-1,3-Dichloropropene		ND	3.	0	1.34		
c-1,2-Dichloroethene		ND	2.	7	1.34		
t-1,2-Dichloroethene		ND	2.	7	1.34		
t-1,3-Dichloropropene		ND	6.	1	1.34		
Ethanol		ND	13	3	1.34		
Ethyl-t-Butyl Ether (ETBE)		ND	11	1	1.34		
Ethylbenzene		130	2.	9	1.34		
4-Ethyltoluene		ND	3.	3	1.34		
Hexachloro-1,3-Butadiene		ND	2′		1.34		
2-Hexanone		ND	8.	2	1.34		



Cardno ERI	D	ate Received:		06/30/15	
601 North McDowell Blvd.	W	ork Order:		15-06-2265	
Petaluma, CA 94954-2312	Pi	eparation:		N/A	
		ethod:		EPA TO-15	
		nits:		ug/m3	
Project: 580 Market Place Shopping Center	O.	1110.		Page 14 of 45	
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>	
Methyl-t-Butyl Ether (MTBE)	ND	9.7	1.34		
Methylene Chloride	ND	23	1.34		
4-Methyl-2-Pentanone	ND	8.2	1.34		
Naphthalene	ND	35	1.34		
o-Xylene	3.8	2.9	1.34		
p/m-Xylene	ND	12	1.34		
Styrene	ND	8.6	1.34		
Tert-Amyl-Methyl Ether (TAME)	ND	11	1.34		
Tert-Butyl Alcohol (TBA)	24	8.1	1.34		
Tetrachloroethene	25	4.5	1.34		
Toluene	15	2.5	1.34		
Trichloroethene	ND	3.6	1.34		
Trichlorofluoromethane	ND	7.5	1.34		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	15	1.34		
1,1,1-Trichloroethane	ND	3.7	1.34		
1,1,2-Trichloroethane	ND	3.7	1.34		
1,3,5-Trimethylbenzene	ND	3.3	1.34		
1,1,2,2-Tetrachloroethane	ND	9.2	1.34		
1,2,4-Trimethylbenzene	ND	9.9	1.34		
1,2,4-Trichlorobenzene	ND	20	1.34		
Vinyl Acetate	ND	9.4	1.34		
Vinyl Chloride	ND	1.7	1.34		
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	97	68-134			
1,2-Dichloroethane-d4	100	67-133			
Toluene-d8	109	70-130			



Petaluma, CA 94954-2312

#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 15 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC/MS K	N/A	07/03/15 04:44	150702L02
Parameter		Result	RL	=	<u>DF</u>	Qua	alifiers
Acetone		150	4.8	3	1.00		
Benzene		25	1.6	6	1.00		
Benzyl Chloride		ND	7.8	3	1.00		
Bromodichloromethane		7.4	3.4	4	1.00		
Bromoform		ND	5.2	2	1.00		
Bromomethane		ND	1.9	9	1.00		
2-Butanone		5.3	4.4	4	1.00		
Carbon Tetrachloride		ND	3.1	1	1.00		
Chlorobenzene		7.9	2.3	3	1.00		
Chloroethane		ND	1.3	3	1.00		
Chloroform		11	2.4	4	1.00		
Chloromethane		ND	1.0	)	1.00		
Dibromochloromethane		ND	4.3	3	1.00		
Dichlorodifluoromethane		ND	2.5	5	1.00		
Diisopropyl Ether (DIPE)		ND	8.4	4	1.00		
1,1-Dichloroethane		ND	2.0	)	1.00		
1,1-Dichloroethene		ND	2.0	)	1.00		
1,2-Dibromoethane		ND	3.8	3	1.00		
Dichlorotetrafluoroethane		ND	14		1.00		
1,2-Dichlorobenzene		ND	3.0	)	1.00		
1,2-Dichloroethane		ND	2.0	)	1.00		
1,2-Dichloropropane		ND	2.3	3	1.00		
1,3-Dichlorobenzene		ND	3.0	)	1.00		
1,4-Dichlorobenzene		ND	3.0	)	1.00		
c-1,3-Dichloropropene		ND	2.3	3	1.00		
c-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,3-Dichloropropene		ND	4.5	5	1.00		
Ethanol		14	9.4	4	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	8.4	4	1.00		
Ethylbenzene		ND	2.2	2	1.00		
4-Ethyltoluene		ND	2.5	5	1.00		
Hexachloro-1,3-Butadiene		ND	16		1.00		
2-Hexanone		ND	6.′	1	1.00		
Methyl-t-Butyl Ether (MTBE)		ND	7.2	2	1.00		



Cardno ERI			Date Re	ceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
			Method:				EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shopp	ing Center					Pag	je 16 of 45
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		17	1.00		
4-Methyl-2-Pentanone		ND		6.1	1.00		
Naphthalene		ND		26	1.00		
o-Xylene		ND		2.2	1.00		
p/m-Xylene		ND		8.7	1.00		
Styrene		ND		6.4	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND		8.4	1.00		
Tert-Butyl Alcohol (TBA)		74		6.1	1.00		
Tetrachloroethene		ND		3.4	1.00		
Toluene		11		1.9	1.00		
Trichloroethene		ND		2.7	1.00		
Trichlorofluoromethane		ND		5.6	1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		11	1.00		
1,1,1-Trichloroethane		ND		2.7	1.00		
1,1,2-Trichloroethane		ND		2.7	1.00		
1,3,5-Trimethylbenzene		ND		2.5	1.00		
1,1,2,2-Tetrachloroethane		ND		6.9	1.00		
1,2,4-Trimethylbenzene		ND		7.4	1.00		
1,2,4-Trichlorobenzene		ND		15	1.00		
Vinyl Acetate		ND		7.0	1.00		
Vinyl Chloride		ND		1.3	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		100		68-134			
1,2-Dichloroethane-d4		104		67-133			
Toluene-d8		97		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC/MS K	N/A	07/07/15 00:45	150706L02
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Carbon Disulfide		710		31	5.00		
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		101		68-134			
1,2-Dichloroethane-d4		109		67-133			
Toluene-d8		96		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15 Units: ug/m3

Project: 580 Market Place Shopping Center Page 17 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-20A	15-06-2265-9-A	06/25/15 17:10	Air	GC/MS K	N/A	07/03/15 05:37	150702L02
Parameter		Result	R	<u>RL</u>	<u>DF</u>	Qua	alifiers
Acetone		ND	6	5.7	1.42		
Benzene		11	2	3	1.42		
Benzyl Chloride		ND	1	1	1.42		
Bromodichloromethane		6.0	4	.8	1.42		
Bromoform		ND	7	.3	1.42		
Bromomethane		ND	2	2.8	1.42		
2-Butanone		10	6	5.3	1.42		
Carbon Disulfide		100	8	8.8	1.42		
Carbon Tetrachloride		ND	4	.5	1.42		
Chlorobenzene		5.0	3	3.3	1.42		
Chloroethane		ND	1	.9	1.42		
Chloroform		19	3	.5	1.42		
Chloromethane		3.2	1	.5	1.42		
Dibromochloromethane		ND	6	5.0	1.42		
Dichlorodifluoromethane		ND	3	.5	1.42		
Diisopropyl Ether (DIPE)		ND	1	2	1.42		
1,1-Dichloroethane		ND	2	9	1.42		
1,1-Dichloroethene		ND	2	8	1.42		
1,2-Dibromoethane		ND	5	.5	1.42		
Dichlorotetrafluoroethane		ND	2	0	1.42		
1,2-Dichlorobenzene		ND	4	.3	1.42		
1,2-Dichloroethane		ND	2	9	1.42		
1,2-Dichloropropane		ND	3	.3	1.42		
1,3-Dichlorobenzene		ND	4	.3	1.42		
1,4-Dichlorobenzene		ND	4	.3	1.42		
c-1,3-Dichloropropene		ND	3	.2	1.42		
c-1,2-Dichloroethene		ND	2	8	1.42		
t-1,2-Dichloroethene		ND	2	8	1.42		
t-1,3-Dichloropropene		ND	6	5.4	1.42		
Ethanol		ND	1	3	1.42		
Ethyl-t-Butyl Ether (ETBE)		ND		2	1.42		
Ethylbenzene		3.5	3	.1	1.42		
4-Ethyltoluene		ND		5.5	1.42		
Hexachloro-1,3-Butadiene		ND		3	1.42		
2-Hexanone		ND		5.7	1.42		



Cardno ERI	]	Date Received:		06/30/15
601 North McDowell Blvd.	\	Nork Order:		15-06-2265
Petaluma, CA 94954-2312	F	Preparation:		N/A
		Method:		EPA TO-15
		Jnits:		ug/m3
Project: 580 Market Place Shopping Center	`	Jinta.		Page 18 of 45
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	10	1.42	
Methylene Chloride	ND	25	1.42	
4-Methyl-2-Pentanone	ND	8.7	1.42	
Naphthalene	ND	37	1.42	
o-Xylene	ND	3.1	1.42	
p/m-Xylene	ND	12	1.42	
Styrene	ND	9.1	1.42	
Tert-Amyl-Methyl Ether (TAME)	ND	12	1.42	
Tert-Butyl Alcohol (TBA)	25	8.6	1.42	
Tetrachloroethene	ND	4.8	1.42	
Toluene	12	2.7	1.42	
Trichloroethene	ND	3.8	1.42	
Trichlorofluoromethane	ND	8.0	1.42	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	16	1.42	
1,1,1-Trichloroethane	ND	3.9	1.42	
1,1,2-Trichloroethane	ND	3.9	1.42	
1,3,5-Trimethylbenzene	ND	3.5	1.42	
1,1,2,2-Tetrachloroethane	ND	9.7	1.42	
1,2,4-Trimethylbenzene	ND	10	1.42	
1,2,4-Trichlorobenzene	ND	21	1.42	
Vinyl Acetate	ND	10	1.42	
Vinyl Chloride	ND	1.8	1.42	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	97	68-134		
1,2-Dichloroethane-d4	96	67-133		
Toluene-d8	97	70-130		



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 19 of 45

Droject: E90	Market Die	aa Channina	Contor
Profect, Soc	) iviarket Pia	ce Shoppind	ı Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-20B	15-06-2265-10-A	06/25/15 17:25	Air	GC/MS K	N/A	07/03/15 06:30	150702L02
Parameter		Result	RL	=	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		220	6.0	0	1.27		
Benzene		37	2.0	0	1.27		
Benzyl Chloride		ND	9.9	9	1.27		
Bromodichloromethane		ND	4.3	3	1.27		
Bromoform		ND	6.6	6	1.27		
Bromomethane		ND	2.5	5	1.27		
2-Butanone		14	5.6	6	1.27		
Carbon Tetrachloride		ND	4.0	0	1.27		
Chlorobenzene		4.8	2.9	9	1.27		
Chloroethane		ND	1.7	7	1.27		
Chloroform		7.7	3.1	1	1.27		
Chloromethane		1.9	1.3	3	1.27		
Dibromochloromethane		ND	5.4	4	1.27		
Dichlorodifluoromethane		ND	3.1	1	1.27		
Diisopropyl Ether (DIPE)		ND	11		1.27		
1,1-Dichloroethane		ND	2.6	6	1.27		
1,1-Dichloroethene		ND	2.5	5	1.27		
1,2-Dibromoethane		ND	4.9	9	1.27		
Dichlorotetrafluoroethane		ND	18	<b>;</b>	1.27		
1,2-Dichlorobenzene		ND	3.8	8	1.27		
1,2-Dichloroethane		ND	2.6	6	1.27		
1,2-Dichloropropane		ND	2.9	9	1.27		
1,3-Dichlorobenzene		ND	3.8	В	1.27		
1,4-Dichlorobenzene		ND	3.8	В	1.27		
c-1,3-Dichloropropene		ND	2.9	9	1.27		
c-1,2-Dichloroethene		ND	2.5	5	1.27		
t-1,2-Dichloroethene		ND	2.5	5	1.27		
t-1,3-Dichloropropene		ND	5.8	В	1.27		
Ethanol		12	12	<u>.</u>	1.27		
Ethyl-t-Butyl Ether (ETBE)		ND	11		1.27		
Ethylbenzene		13	2.8	8	1.27		
4-Ethyltoluene		ND	3.1		1.27		
Hexachloro-1,3-Butadiene		ND	20		1.27		
2-Hexanone		ND	7.8		1.27		
Methyl-t-Butyl Ether (MTBE)		30	9.2	2	1.27		



Petaluma, CA 94954-2312   Preparation:   Method: Units:	Cardno ERI			Date Re	ceived:			06/30/15
Project: 580 Market Place Shopping Center	601 North McDowell Blvd.			Work O	rder:			15-06-2265
Project: 580 Market Place Shopping Center	Petaluma, CA 94954-2312			Prepara	tion:			N/A
Project: 580 Market Place Shopping Center	,			Method:				EPA TO-15
Project: 580 Market Place Shopping Center         Page 20 of 48 Page 20				Units:				ug/m3
Methylene Chloride         ND         22         1.27           4-Methyl-2-Pentanone         ND         7.8         1.27           Amaphhalene         ND         33         1.27           o-Xylene         10         2.8         1.27           p/m-Xylene         18         11         1.27           Styrene         ND         8.1         1.27           Styrene         ND         11         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         1.1         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         4.3         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         4.3         1.27           Toluene         2.7         2.4         1.27           Toluene         2.7         2.4         1.27           Tirchloroethane         ND         3.5         1.27           1,1.1-Trichloroethane         ND         8.7         1.27           1,2.2-Trichloroethane<	Project: 580 Market Place Shoppi	ing Center		••			Pag	_
Methylene Chloride         ND         22         1.27           4-Methyl-2-Pentanone         ND         7.8         1.27           Amaphhalene         ND         33         1.27           o-Xylene         10         2.8         1.27           p/m-Xylene         18         11         1.27           Styrene         ND         8.1         1.27           Styrene         ND         11         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         1.1         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         4.3         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         4.3         1.27           Toluene         2.7         2.4         1.27           Toluene         2.7         2.4         1.27           Tirchloroethane         ND         3.5         1.27           1,1.1-Trichloroethane         ND         8.7         1.27           1,2.2-Trichloroethane<	<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	alifiers
ND	Methylene Chloride		ND					
o-Xylene         10         2.8         1.27           p/m-Xylene         18         11         1.27           Styrene         ND         8.1         1.27           Styrene         ND         11         1.27           Tert-Amyl-Methyl Ether (TAME)         ND         11         1.27           Tert-Butyl Alcohol (TBA)         180         7.7         1.27           Tettachloroethene         ND         4.3         1.27           Totluene         27         2.4         1.27           Trichloroethene         ND         3.4         1.27           Trichloroethane         ND         7.1         1.27           Trichloroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,2-Trichloroethane         ND         3.5         1.27           1,2-Trichloroethane         ND         3.7         1.27           1,2-Trichloroethane         ND         3.7         1.27           1,2-Trimethylbenzene         ND         9.4         1.27           1,2-Trimethylbenzene         ND	4-Methyl-2-Pentanone		ND		7.8	1.27		
P/m-Xylene	Naphthalene		ND		33	1.27		
Styrene	o-Xylene		10		2.8	1.27		
Tert-Amyl-Methyl Ether (TAME)         ND         11         1.27           Tert-Eutyl Alcohol (TBA)         180         7.7         1.27           Tetrachloroethene         ND         4.3         1.27           Toluene         27         2.4         1.27           Trichloroethene         ND         3.4         1.27           Trichlorofluoromethane         ND         7.1         1.27           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,3,5-Trimethylbenzene         3.1         3.1         1.27           1,1,2-Trichloroethane         ND         8.7         1.27           1,2,4-Trimethylbenzene         ND         9.4         1.27           1,2,4-Trimethylbenzene         ND         9.4         1.27           Vinyl Acetate         ND         1.9         1.27           Vinyl Chloride         ND         1.6         1.27           Vinyl Chloride         ND         1.6         1.27           Vinyl Chloride         98         67-133           1,4-B	p/m-Xylene		18		11	1.27		
Terr-Butyl Alcohol (TBA)         180         7.7         1.27           Tetrachloroethene         ND         4.3         1.27           Toluene         27         2.4         1.27           Trichloroethene         ND         3.4         1.27           Trichlorofluoromethane         ND         7.1         1.27           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.5         1.27           1,1,1-Trichloroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,2,5-Trimethylbenzene         3.1         3.1         1.27           1,2,4-Trimethylbenzene         ND         8.7         1.27           1,2,4-Trichlorobenzene         ND         1.9         1.27           Vinyl Chloride         ND         1.6         1.27           Vinyl Chloride         ND         1.6         1.27           Vinyl Chloride         ND         1.6         1.27           Vinyl Chloride         ND         68-134         1.27           Vinyl Chloride         ND         68-134         1.27           1,4-Bromofluorobenzene         101         68-134         1.27	Styrene		ND		8.1	1.27		
Tetrachloroethene	Tert-Amyl-Methyl Ether (TAME)		ND		11	1.27		
Toluene         27         2.4         1.27           Trichloroethene         ND         3.4         1.27           Trichlorofluoromethane         ND         7.1         1.27           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         1.5         1.27           1,1,1-Trichloroethane         ND         3.5         1.27           1,1,2-Trichloroethane         ND         3.5         1.27           1,3,5-Trimethylbenzene         3.1         3.1         1.27           1,1,2,2-Tetrachloroethane         ND         8.7         1.27           1,2,4-Trichlorobenzene         ND         9.4         1.27           1,2,4-Trichlorobenzene         ND         9.9         1.27           Vinyl Acetate         ND         1.6         1.27           Vinyl Chloride         ND         1.6         1.27           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix Prepared Market Prepared Prepared Analyzed Prepared Prepared Prepared P	Tert-Butyl Alcohol (TBA)		180		7.7	1.27		
Trichloroethene	Tetrachloroethene		ND		4.3	1.27		
Trichlorofluoromethane	Toluene		27		2.4	1.27		
1,1,2-Trichloro-1,2,2-Trifluoroethane	Trichloroethene		ND		3.4	1.27		
1,1,1-Trichloroethane       ND       3.5       1.27         1,1,2-Trichloroethane       ND       3.5       1.27         1,3,5-Trimethylbenzene       3.1       3.1       1.27         1,1,2,2-Tetrachloroethane       ND       8.7       1.27         1,2,4-Trichlorobenzene       ND       9.4       1.27         1,2,4-Trichlorobenzene       ND       19       1.27         Vinyl Acetate       ND       8.9       1.27         Vinyl Chloride       ND       1.6       1.27         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       101       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument       Date Prepared Analyzed       QC Batch Analyzed         SV-20B       15-06-2265-10-A 06/25/15 17:25       Air       GC/MS K       N/A 07/07/15 01:32       150706L0         Surrogate       Result RL DE Qualifiers       Qualifiers	Trichlorofluoromethane		ND		7.1	1.27		
1,1,2-Trichloroethane       ND       3.5       1.27         1,3,5-Trimethylbenzene       3.1       3.1       1.27         1,1,2,2-Tetrachloroethane       ND       8.7       1.27         1,2,4-Trimethylbenzene       ND       9.4       1.27         1,2,4-Trichlorobenzene       ND       19       1.27         Vinyl Acetate       ND       8.9       1.27         Vinyl Chloride       ND       1.6       1.27         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       101       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument Prepared Analyzed Analyzed Prepared Analyzed Prepared Analyzed Olisa       QC Batch Olisa         SV-20B       15-06-2265-10-A 06/25/15 17:25       Air GC/MS K N/A 07/07/15 01:32       150706L0         Parameter Carbon Disulfide       Result RL DE Qualifiers       Qualifiers	1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		15	1.27		
1,3,5-Trimethylbenzene       3.1       3.1       1.27         1,1,2,2-Tetrachloroethane       ND       8.7       1.27         1,2,4-Trimethylbenzene       ND       9.4       1.27         1,2,4-Trichlorobenzene       ND       19       1.27         Vinyl Acetate       ND       8.9       1.27         Vinyl Chloride       ND       1.6       1.27         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       101       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Date/Time Collected       Matrix Instrument Prepared Prepared Analyzed Analyzed Analyzed Analyzed       QC Batch Analyzed O1:32         SV-20B       15-06-2265-10-A 06/25/15 Air GC/MS K N/A 07/07/15 01:32       DT/07/15 01:32       150706L0 01:32         Parameter Carbon Disulfide       Result RL DE Qualifiers       DE Qualifiers	1,1,1-Trichloroethane		ND		3.5	1.27		
1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane		ND		3.5	1.27		
1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene		3.1		3.1	1.27		
1,2,4-Trichlorobenzene         ND         19         1,27           Vinyl Acetate         ND         8.9         1,27           Vinyl Chloride         ND         1.6         1,27           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Prepared         Date/Time Prepared         QC Batch Analyzed           SV-20B         15-06-2265-10-A         06/25/15 17:25         Air         GC/MS K         N/A         07/07/15 01:32         150706L0           Parameter Carbon Disulfide         Result RL         DF         Qualifiers           Carbon Disulfide         Rec. (%)         Control Limits         Qualifiers	1,1,2,2-Tetrachloroethane		ND		8.7	1.27		
Vinyl Acetate         ND         8.9         1.27           Vinyl Chloride         ND         1.6         1.27           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix Collected         Instrument Prepared Analyzed         Date/Time Analyzed         QC Batch Analyzed           SV-20B         15-06-2265-10-A         06/25/15 17:25         Air GC/MS K         N/A         07/07/15 01:32         150706L0           Parameter Carbon Disulfide         Result Result RL DE Qualifiers         DE Qualifiers         Qualifiers           Surrogate         Rec. (%)         Control Limits Qualifiers         Qualifiers	1,2,4-Trimethylbenzene		ND		9.4	1.27		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix Instrument Prepared Analyzed         Date/Time Prepared Analyzed         QC Batch Office Offic	1,2,4-Trichlorobenzene		ND		19	1.27		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix Collected         Instrument Prepared Analyzed         Date/Time Prepared Analyzed         QC Batch Analyzed           SV-20B         15-06-2265-10-A 06/25/15 17:25         Air GC/MS K N/A 07/07/15 01:32         DF Qualifiers           Parameter Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits Qualifiers	Vinyl Acetate		ND		8.9	1.27		
1,4-Bromofluorobenzene         101         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix Collected         Instrument Prepared Prepared Analyzed         Date/Time Analyzed         QC Batch Analyzed           SV-20B         15-06-2265-10-A 06/25/15 17:25         Air GC/MS K N/A 07/07/15 01:32         07/07/15 01:32         150706L0           Parameter Carbon Disulfide         Result RL DE Qualifiers         DE Qualifiers           Surrogate         Rec. (%)         Control Limits Qualifiers	Vinyl Chloride		ND		1.6	1.27		
1,2-Dichloroethane-d4         98         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument         Date Date/Time Prepared         Date/Time Analyzed         QC Batch Analyzed           SV-20B         15-06-2265-10-A         06/25/15 17:25         Air         GC/MS K         N/A         07/07/15 01:32         150706L0           Parameter         Result RL         DF         Qualifiers           Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits         Qualifiers	Surrogate		Rec. (%)		Control Limits	Qualifiers		
Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Prepared         Date/Time Prepared         QC Batch Analyzed           SV-20B         15-06-2265-10-A 06/25/15 17:25         Air GC/MS K N/A 07/07/15 01:32         07/07/15 01:32         150706L0 01:32           Parameter Carbon Disulfide         Result 1100         RL DE 4.14         DE 4.14           Surrogate         Rec. (%)         Control Limits Qualifiers	1,4-Bromofluorobenzene		101		68-134			
Client Sample Number  Lab Sample Number  Collected  Matrix  Instrument  Date Prepared Analyzed  QC Batch  Analyzed  SV-20B  15-06-2265-10-A  06/25/15  17:25  Air  GC/MS K  N/A  07/07/15  01:32  DE  Qualifiers  Carbon Disulfide  Rec. (%)  Control Limits  Qualifiers	1,2-Dichloroethane-d4		98		67-133			
Number         Collected         Prepared         Analyzed           SV-20B         15-06-2265-10-A         06/25/15 17:25         Air         GC/MS K         N/A         07/07/15 01:32         150706L0           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits         Qualifiers	Toluene-d8		95		70-130			
17:25         01:32           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits         Qualifiers	Client Sample Number			Matrix	Instrument			QC Batch ID
Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits         Qualifiers	SV-20B	15-06-2265-10-A	06/25/15 17:25	Air	GC/MS K	N/A	07/07/15 01:32	150706L02
Carbon Disulfide         1100         26         4.14           Surrogate         Rec. (%)         Control Limits         Qualifiers	Parameter		Result		RL	DF	Qua	alifiers
	Carbon Disulfide		1100		26	4.14		
4.4 December 2011	Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromotiuoropenzene 103 68-134	1,4-Bromofluorobenzene		103		68-134			
1,2-Dichloroethane-d4 111 67-133	1,2-Dichloroethane-d4		111		67-133			
Toluene-d8 97 70-130	Toluene-d8		97		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Units: ug/m3 Page 21 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-21A	15-06-2265-11-A	06/25/15 11:36	Air	GC/MS K	N/A	07/03/15 07:23	150702L02
<u>Parameter</u>		Result	R	<u>L</u>	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	6	.7	1.41		
Benzene		69	2	.3	1.41		
Benzyl Chloride		ND	1	1	1.41		
Bromodichloromethane		ND	4	.7	1.41		
Bromoform		ND	7	.3	1.41		
Bromomethane		ND	2	.7	1.41		
2-Butanone		7.6	6	.2	1.41		
Carbon Tetrachloride		ND	4	.4	1.41		
Chlorobenzene		10	3	.2	1.41		
Chloroethane		ND	1	.9	1.41		
Chloroform		16	3	.4	1.41		
Chloromethane		3.2	1	.5	1.41		
Dibromochloromethane		ND	6	.0	1.41		
Dichlorodifluoromethane		3.8	3	.5	1.41		
Diisopropyl Ether (DIPE)		ND	1	2	1.41		
1,1-Dichloroethane		ND	2	.9	1.41		
1,1-Dichloroethene		ND	2	.8	1.41		
1,2-Dibromoethane		ND	5	.4	1.41		
Dichlorotetrafluoroethane		ND	2	0	1.41		
1,2-Dichlorobenzene		ND	4	.2	1.41		
1,2-Dichloroethane		ND	2	.9	1.41		
1,2-Dichloropropane		ND	3	.3	1.41		
1,3-Dichlorobenzene		ND	4	.2	1.41		
1,4-Dichlorobenzene		ND	4	.2	1.41		
c-1,3-Dichloropropene		ND	3	.2	1.41		
c-1,2-Dichloroethene		ND	2	.8	1.41		
t-1,2-Dichloroethene		ND	2	.8	1.41		
t-1,3-Dichloropropene		ND	6	.4	1.41		
Ethanol		ND	1	3	1.41		
Ethyl-t-Butyl Ether (ETBE)		ND	1	2	1.41		
Ethylbenzene		14	3	.1	1.41		
4-Ethyltoluene		ND	3	.5	1.41		
Hexachloro-1,3-Butadiene		ND	2	3	1.41		
2-Hexanone		ND	8	.7	1.41		
Methyl-t-Butyl Ether (MTBE)		ND	1	0	1.41		



Cardno ERI			Date Re	eceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	tion:			N/A
			Method:				EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shoppi	ng Center					Pag	je 22 of 45
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		24	1.41		
4-Methyl-2-Pentanone		ND		8.7	1.41		
Naphthalene		ND		37	1.41		
o-Xylene		9.5		3.1	1.41		
p/m-Xylene		19		12	1.41		
Styrene		ND		9.0	1.41		
Tert-Amyl-Methyl Ether (TAME)		ND		12	1.41		
Tert-Butyl Alcohol (TBA)		ND		8.5	1.41		
Tetrachloroethene		420		4.8	1.41		
Toluene		33		2.7	1.41		
Trichloroethene		7.9		3.8	1.41		
Trichlorofluoromethane		ND		7.9	1.41		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		16	1.41		
1,1,1-Trichloroethane		ND		3.8	1.41		
1,1,2-Trichloroethane		ND		3.8	1.41		
1,3,5-Trimethylbenzene		ND		3.5	1.41		
1,1,2,2-Tetrachloroethane		ND		9.7	1.41		
1,2,4-Trimethylbenzene		ND		10	1.41		
1,2,4-Trichlorobenzene		ND		21	1.41		
Vinyl Acetate		ND		9.9	1.41		
Vinyl Chloride		2.5		1.8	1.41		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		103		68-134			
1,2-Dichloroethane-d4		106		67-133			
Toluene-d8		94		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-21A	15-06-2265-11-A	06/25/15 11:36	Air	GC/MS K	N/A	07/07/15 02:20	150706L02
Parameter Parameter		Result		<u>RL</u>	<u>DF</u>	_	<u>alifiers</u>
Carbon Disulfide		350		19	3.06		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		101		68-134			
1,2-Dichloroethane-d4		100		67-133			
Toluene-d8		100		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Units: ug/m3
Project: 580 Market Place Shopping Center Page 23 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-21B	15-06-2265-12-A	06/25/15 11:31	Air	GC/MS K	N/A	07/03/15 08:16	150702L02
<u>Parameter</u>		Result	RL	=	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		150	6.4	4	1.34		
Benzene		63	2.1	1	1.34		
Benzyl Chloride		ND	10		1.34		
Bromodichloromethane		ND	4.5	5	1.34		
Bromoform		ND	6.9	9	1.34		
Bromomethane		ND	2.6	6	1.34		
2-Butanone		13	5.9	9	1.34		
Carbon Tetrachloride		ND	4.2	2	1.34		
Chlorobenzene		38	3.1	1	1.34		
Chloroethane		ND	1.8	3	1.34		
Chloroform		4.6	3.3	3	1.34		
Chloromethane		ND	1.4	4	1.34		
Dibromochloromethane		ND	5.7	7	1.34		
Dichlorodifluoromethane		ND	3.3	3	1.34		
Diisopropyl Ether (DIPE)		ND	11		1.34		
1,1-Dichloroethane		ND	2.7	7	1.34		
1,1-Dichloroethene		ND	2.7	7	1.34		
1,2-Dibromoethane		ND	5.1	1	1.34		
Dichlorotetrafluoroethane		ND	19		1.34		
1,2-Dichlorobenzene		ND	4.0	)	1.34		
1,2-Dichloroethane		ND	2.7	7	1.34		
1,2-Dichloropropane		ND	3.1	1	1.34		
1,3-Dichlorobenzene		ND	4.0	)	1.34		
1,4-Dichlorobenzene		ND	4.0	)	1.34		
c-1,3-Dichloropropene		ND	3.0	)	1.34		
c-1,2-Dichloroethene		ND	2.7	7	1.34		
t-1,2-Dichloroethene		ND	2.7	7	1.34		
t-1,3-Dichloropropene		ND	6.1	1	1.34		
Ethanol		ND	13		1.34		
Ethyl-t-Butyl Ether (ETBE)		ND	11		1.34		
Ethylbenzene		23	2.9		1.34		
4-Ethyltoluene		ND	3.3		1.34		
Hexachloro-1,3-Butadiene		ND	21		1.34		
2-Hexanone		ND	8.2		1.34		
Methyl-t-Butyl Ether (MTBE)		ND	9.7		1.34		



Peraluma, CA 94954-2312   Peraluma	Cardno ERI			Date Re	eceived:			06/30/15
Method:   Units:   Units:	601 North McDowell Blvd.			Work O	rder:			15-06-2265
Project: 580 Market Place Shopping Center	Petaluma, CA 94954-2312			Prepara	tion:			N/A
Project: 580 Market Place Shopping Center	· ·			-				EPA TO-15
Project: 580 Market Place Shopping Center   Result   Rt   DE   Qualifiers				Units:				ug/m3
Methylene Chloride         ND         23         1.34           4-Methyl-Z-Pentanone         ND         8.2         1.34           Naphthalene         ND         35         1.34           o-Xylene         23         2.9         1.34           p/m-Xylene         56         12         1.34           Styrene         ND         8.6         1.34           Tert-Amyl-Methyl Ether (TAME)         ND         11         1.34           Tert-Ethyl Alcohol (TBA)         ND         8.1         1.34           Tert-Ethyl Alcohol (TBA)         ND         8.1         1.34           Televachloroethene         140         4.5         1.34           Televachloroethene         4.3         3.6         1.34           Tichloroethene         4.3         3.6         1.34           Tichloroethene         ND         7.5         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,2-2-Trichloroethane         ND         3.7         1.34           1,2-2-Trichloroethane         ND         2.2         1.34           1,2-2-Trichloroethane <td>Project: 580 Market Place Shoppin</td> <td>g Center</td> <td></td> <td></td> <td></td> <td></td> <td>Pag</td> <td>•</td>	Project: 580 Market Place Shoppin	g Center					Pag	•
Methylene Chloride         ND         23         1.34           4-Methyl-Z-Pentanone         ND         8.2         1.34           Naphthalene         ND         35         1.34           o-Xylene         23         2.9         1.34           p/m-Xylene         56         12         1.34           Styrene         ND         8.6         1.34           Tert-Amyl-Methyl Ether (TAME)         ND         11         1.34           Tert-Ethyl Alcohol (TBA)         ND         8.1         1.34           Tert-Ethyl Alcohol (TBA)         ND         8.1         1.34           Televachloroethene         140         4.5         1.34           Televachloroethene         4.3         3.6         1.34           Tichloroethene         4.3         3.6         1.34           Tichloroethene         ND         7.5         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,2-2-Trichloroethane         ND         3.7         1.34           1,2-2-Trichloroethane         ND         2.2         1.34           1,2-2-Trichloroethane <td><u>Parameter</u></td> <td></td> <td>Result</td> <td></td> <td><u>RL</u></td> <td><u>DF</u></td> <td>Qua</td> <td>alifiers</td>	<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Naphthalene         ND         35         1,34         Image: Control Limits         1	Methylene Chloride		ND					
c-Xylene         23         2.9         1.34           p/m-Xylene         56         12         1.34           Styrene         ND         8.6         1.34           Tert-Amyl-Methyl Ether (TAME)         ND         8.1         1.34           Tert-Bulyl Alcohol (TBA)         ND         8.1         1.34           Tert-Carchlorethene         140         4.5         1.34           Totluene         25         2.5         1.34           Trichlorothuoromethane         ND         7.5         1.34           1,1,2-Trichloro-1,2,2-Triffluoroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trimethylbenzene         ND         9.2         1.34           1,2,2-Trimethylbenzene         ND         9.9         1.34           1,2,2-Trimethylbenzene         ND         9.9         1.34           Vinyl Acetate         ND         9.4         1.34           Vinyl Chloride         ND         9.7         0.1         3.3	4-Methyl-2-Pentanone		ND		8.2	1.34		
Prin-Xylene   56	Naphthalene		ND		35	1.34		
Styrene         ND         8.6         1.34           Tert-Amyl-Methyl Ether (TAME)         ND         11         1.34           Tert-Butyl Alcohol (TBA)         ND         8.1         1.34           Tert-Butyl Alcohol (TBA)         140         4.5         1.34           Tetrachloroethene         140         4.5         1.34           Toluene         25         2.5         1.34           Trichloroethene         ND         7.5         1.34           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.7         1.34           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,3,2-Trimethylbenzene         3.8         3.3         1.34           1,3,2-Trimethylbenzene         3.8         3.3         1.34           1,2,2-Trichloroethane         ND         9.2         1.34           1,2,2-Trichloroethane         ND         9.9         1.34           1,2,2-Trichloroethane         ND         9.9         1.34           1,2,2-Trichloroethane         ND         2.0         1.34           Vinyl Acetate         ND         6.7         1	o-Xylene		23		2.9	1.34		
Tert-Amyl-Methyl Ether (TAME)         ND         11         1.34         Image: Control Limits         1.34         Image: Control Limits         Qualifiers         Image: Control Limits         Qualifiers         Qualifiers         Qualifiers         Image: Control Limits         Qualifiers         <	p/m-Xylene		56		12	1.34		
Tertra-Butyl Alcohol (TBA)         ND         8.1         1.34           Tetrachloroethene         140         4.5         1.34           Toluene         25         2.5         1.34           Trichloroethene         4.3         3.6         1.34           Trichlorofluoromethane         ND         7.5         1.34           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.7         1.34           1,1,1-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,3,2-Trimethylbenzene         3.8         3.3         1.34           1,3,2-Trimethylbenzene         ND         9.2         1.34           1,2,2-Trichlorobenzene         ND         9.9         1.34           1,2,2-Trimethylbenzene         ND         9.4         1.34           Vinyl Acetate         ND         9.4         1.34           Vinyl Acetate         ND         1.7         1.34           Vinyl Chloride         ND         1.7         1.34           Vinyl Chloride         97         67-133         Qualifiers           1,4-Bromoflluorobenzene         102         68-134         NE	Styrene		ND		8.6	1.34		
Tetrachloroethene         140         4.5         1.34         Inchested         25         2.5         1.34         Inchested         25         2.5         1.34         Inchested         Inchested         1.34         Inchested         Inchested         Inchested         1.34         Inchested         Inchested </td <td>Tert-Amyl-Methyl Ether (TAME)</td> <td></td> <td>ND</td> <td></td> <td>11</td> <td>1.34</td> <td></td> <td></td>	Tert-Amyl-Methyl Ether (TAME)		ND		11	1.34		
Toluene         25         2.5         1.34           Trichloroethene         4.3         3.6         1.34           Trichlorofluoromethane         ND         7.5         1.34           1,1,2-Trichloroe-1,2,2-Trifluoreethane         ND         3.7         1.34           1,1,1-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,3,5-Trimethylbenzene         3.8         3.3         1.34           1,2,2-Tetrachloroethane         ND         9.2         1.34           1,2,2-Trimethylbenzene         10         9.9         1.34           1,2,2-Trimethylbenzene         ND         9.4         1.34           1,2,4-Trinchlorobenzene         ND         9.4         1.34           Vinyl Acetate         ND         1,7         1.34           Vinyl Chloride         ND         1,7         1.34           Vinyl Chloride         102         68-134         3.4           1,2-Dichloroethane-d4         97         67-133         3.5           Toluene-d8         97         70-130         9.5           SV-21B         Lab Sample Number         Delegation Sample Number         ND </td <td>Tert-Butyl Alcohol (TBA)</td> <td></td> <td>ND</td> <td></td> <td>8.1</td> <td>1.34</td> <td></td> <td></td>	Tert-Butyl Alcohol (TBA)		ND		8.1	1.34		
Trichloroethene         4.3         3.6         1.34           Trichlorofluoromethane         ND         7.5         1.34           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         15         1.34           1,1,1-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,3,5-Trimethylbenzene         3.8         3.3         1.34           1,1,2,2-Tetrachloroethane         ND         9.2         1.34           1,2,4-Trichlorobenzene         10         9.9         1.34           1,2,4-Trichlorobenzene         ND         2.0         1.34           Vinyl Acetate         ND         9.9         1.34           Vinyl Chloride         ND         9.4         1.34           Vinyl Chloride         ND         1,7         1.34           Vinyl Chloride         ND         1,7         1.34           Vinyl Chloride         ND         1,7         1.34           1,4-Bromofluorobenzene         102         68-134           1,2-Dichloroethane-d4         97         67-133           Tolluen-d8         15-06-2265-12-A         06/Z5/15         Air         Instrument         Dat	Tetrachloroethene		140		4.5	1.34		
Trichlorofluoromethane         ND         7.5         1.34           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         15         1.34           1,1,1-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.7         1.34           1,1,2-Trichloroethane         ND         3.8         3.3         1.34           1,1,2-Tertachloroethane         ND         9.2         1.34           1,2,4-Trimethylbenzene         10         9.9         1.34           1,2,4-Trichlorobenzene         ND         20         1.34           Vinyl Acetate         ND         9.4         1.34           Vinyl Chloride         ND         1,7         1.34           Vinyl Chloride         97         67-133         Qualifiers           1,4-Bromofluorobenzene         97         67-133         Date/Time         Analyzed         Analyzed         QC Batch ID           Sv-21B         15-06-2265-12-A         06/25/15         Air         GC/MS K	Toluene		25		2.5	1.34		
1,1,2-Trichloro-1,2,2-Trifluoroethane       ND       15       1.34         1,1,1-Trichloroethane       ND       3.7       1.34         1,1,2-Trichloroethane       ND       3.7       1.34         1,3,5-Trimethylbenzene       3.8       3.3       1.34         1,3,5-Trimethylbenzene       ND       9.2       1.34         1,2,2-Trimethylbenzene       10       9.9       1.34         1,2,4-Trinchlorobenzene       ND       20       1.34         1,2,4-Trichlorobenzene       ND       9.4       1.34         Vinyl Acetate       ND       9.4       1.34         Vinyl Chloride       ND       1.7       1.34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       97       70-130         SV-21B       15-06-2265-12-A       06/25/15       Air       Instrument       Date/Time Analyzed       O7/07/15       150706L02         SV-21B       15-06-2265-12-A       06/25/15       Air       GC/MS K       N/A       07/07/15       150706L02         Parameter       Result <t< td=""><td>Trichloroethene</td><td></td><td>4.3</td><td></td><td>3.6</td><td>1.34</td><td></td><td></td></t<>	Trichloroethene		4.3		3.6	1.34		
1,1,1-Trichloroethane       ND       3,7       1,34         1,1,2-Trichloroethane       ND       3,7       1,34         1,3,5-Trimethylbenzene       3,8       3,3       1,34         1,1,2,2-Tetrachloroethane       ND       9,2       1,34         1,2,4-Trimethylbenzene       10       9,9       1,34         1,2,4-Trichlorobenzene       ND       20       1,34         Vinyl Acetate       ND       9,4       1,34         Vinyl Chloride       ND       1,7       1,34         Vinyl Chloride       ND       1,7       1,34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       97       70-130         SV-21B       15-06-2265-12-A       06/25/15       Air       GC/MS K       N/A       Date/Time Prepared       Analyzed       Date/Time Prepared       Analyzed       Analyzed         Carbon Disulfide       480       21       3,31       3,31       150706L02         Surrogate       Rec. (%)       Control Limits       Qualifiers       Vinyling       Vinyling       Vinyli	Trichlorofluoromethane		ND		7.5	1.34		
1,1,2-Trichloroethane       ND       3.7       1.34         1,3,5-Trimethylbenzene       3.8       3.3       1.34         1,1,2,2-Tetrachloroethane       ND       9.2       1.34         1,2,4-Trimethylbenzene       10       9.9       1.34         1,2,4-Trichlorobenzene       ND       20       1.34         Vinyl Acetate       ND       9.4       1.34         Vinyl Chloride       ND       1.7       1.34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134       4         1,2-Dichloroethane-d4       97       67-133       57-133       Client Sample Number       Lab Sample Number       Matrix Instrument Prepared Analyzed Analy	1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		15	1.34		
1,3,5-Trimethylbenzene       3.8       3.3       1.34         1,1,2,2-Tetrachloroethane       ND       9.2       1.34         1,2,4-Trimethylbenzene       10       9.9       1.34         1,2,4-Trichlorobenzene       ND       20       1.34         Vinyl Acetate       ND       9,4       1.34         Vinyl Chloride       ND       1,7       1.34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134       4         1,2-Dichloroethane-d4       97       67-133       57-130         Client Sample Number       Lab Sample Number       Matrix Collected Collected Collected Collected Number       Matrix Result RL DE QUalifiers       Date/Time Analyzed Analyzed Analyzed Analyzed Analyzed Analyzed Corbon Disulfide       480       21       3.31       3.31       150706L02         Surrogate Rec. (%)       Control Limits Qualifiers       Qualifiers       Qualifiers       1,4-Bromofluorobenzene       103       68-134       1,2-Bromofluorobenzene       103       68-134       1,2-Bromofluorobenzene       109       67-133       1,2-Bromofluorobenzene       109       67-133       1,2-Bromofluorobenzene       100       67-133       1,2-Bromofluorobenzene       100       67-133<	1,1,1-Trichloroethane		ND		3.7	1.34		
1,1,2,2-Tetrachloroethane       ND       9.2       1.34         1,2,4-Trimethylbenzene       10       9.9       1.34         1,2,4-Trichlorobenzene       ND       20       1.34         Vinyl Acetate       ND       9.4       1.34         Vinyl Chloride       ND       1.7       1.34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       Pate/Time Collected       Matrix       Instrument       Date/Time Prepared       QC Batch ID Analyzed         SV-21B       15-06-2265-12-A Number       06/25/15 N1:31       Air       GC/MS K       N/A       07/07/15 N3:09:09:09       150706L02         Earameter       Result A80       21       3.31       Qualifiers       Control Limits       Qualifiers         Surrogate       Rec. (%)       Control Limits       Qualifiers       Qualifiers       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134       Qualifiers       Control Limits       Qualifiers         1,4-Bromofluorobenzene       109       67-133       Qualifiers       Control Limits       Q	1,1,2-Trichloroethane		ND		3.7	1.34		
1,2,4-Trimethylbenzene       10       9.9       1.34         1,2,4-Trichlorobenzene       ND       20       1.34         Vinyl Acetate       ND       9.4       1.34         Vinyl Chloride       ND       1.7       1.34         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       102       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       97       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument       Date Prepared Analyzed Analyze	1,3,5-Trimethylbenzene		3.8		3.3	1.34		
1,2,4-Trichlorobenzene         ND         20         1.34           Vinyl Acetate         ND         9.4         1.34           Vinyl Chloride         ND         1.7         1.34           Surrogate         ND         1.7         1.34           1,4-Bromofluorobenzene         102         68-134         68-134           1,2-Dichloroethane-d4         97         67-133         67-133           Toluene-d8         97         70-130         Date/Time Prepared Analyzed Analy	1,1,2,2-Tetrachloroethane		ND		9.2	1.34		
Vinyl Acetate         ND         9.4         1.34           Vinyl Chloride         ND         1.7         1.34           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         102         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         97         70-130           Client Sample Number         Lab Sample Number         Matrix Prepared Analyzed         Date/Time Prepared Analyzed         QC Batch ID QC Bat	1,2,4-Trimethylbenzene		10		9.9	1.34		
Vinyl Chloride         ND         1.7         1.34           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         102         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         97         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected Collected         Matrix         Instrument Instrument Prepared Analyzed Prepared Analyzed         QC Batch ID On/07/15 O3:09           SV-21B         15-06-2265-12-A 06/25/15 11:31         Air GC/MS K N/A 07/07/15 03:09         07/07/15 03:09         150706L02           Parameter         Result RL DE Qualifiers         DE Qualifiers         Qualifiers           Carbon Disulfide         480         21         3.31           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1,00         68-134         68-134           1,2-Dichloroethane-d4         109         67-133	1,2,4-Trichlorobenzene		ND		20	1.34		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         102         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         97         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument         Date Prepared Analyzed         QC Batch ID Prepared           SV-21B         15-06-2265-12-A 06/25/15 11:31         Air GC/MS K N/A 07/07/15 03:09         150706L02 03:09         150706L02 03:09           Parameter Carbon Disulfide         Result RL DE Qualifiers         DE Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1,03 68-134 1,2-Dichloroethane-d4         109 67-133	Vinyl Acetate		ND		9.4	1.34		
1,4-Bromofluorobenzene       102       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       97       70-130         Client Sample Number       Lab Sample Number       Date/Time Collected Collected       Matrix       Instrument Instrument Prepared Instrument Prepared Analyzed Analyzed Analyzed Analyzed O3:09       QC Batch ID O7/07/15 O3:09         SV-21B       15-06-2265-12-A O6/25/15 O3:09       Air OC/MS K N/A O7/07/15 O3:09       150706L02 O3:09         Parameter Carbon Disulfide       Result A80 O21 O3:33       BL OE O4:00 O3:09         Surrogate Carbon Disulfide       Rec. (%) Control Limits O2 O4:00 O3:09         1,4-Bromofluorobenzene O4       103 O68-134         1,2-Dichloroethane-d4       109 O7/07/15 O7/07/15 O3:09	Vinyl Chloride		ND		1.7	1.34		
1,2-Dichloroethane-d4       97       67-133         Toluene-d8       97       70-130         Client Sample Number       Lab Sample Number       Date/Time Collected Collected Collected Prepared Analyzed Analyz	Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
Toluene-d8         97         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Prepared         Date Prepared Analyzed         QC Batch ID Analyzed           SV-21B         15-06-2265-12-A 06/25/15 11:31         Air Air         GC/MS K N/A 07/07/15 03:09         150706L02           Parameter Carbon Disulfide         Result 480         RL 21         DF 3.31         Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1.2-Dichloroethane-d4         Rec. (%) 68-134         Control Limits 68-134         Qualifiers 7.133	1,4-Bromofluorobenzene		102		68-134			
Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument         Date Prepared Analyzed Analyzed         QC Batch ID Analyzed           SV-21B         15-06-2265-12-A         06/25/15 11:31         Air         GC/MS K         N/A         07/07/15 03:09         150706L02           Parameter         Result 480         RE         DE Qualifiers           Carbon Disulfide         480         21         3.31           Surrogate 1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         109         67-133	1,2-Dichloroethane-d4		97		67-133			
Number         Collected         Prepared         Analyzed           SV-21B         15-06-2265-12-A         06/25/15 11:31         Air         GC/MS K         N/A         07/07/15 03:09         150706L02           Parameter Carbon Disulfide         Result 480         RL DF Qualifiers         Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 103         68-134         Result 34           1,2-Dichloroethane-d4         109         67-133	Toluene-d8		97		70-130			
SV-21B         15-06-2265-12-A         06/25/15 11:31         Air         GC/MS K         N/A         07/07/15 03:09         150706L02           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         480         21         3.31           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         109         67-133	Client Sample Number			Matrix	Instrument	Date Prepared		QC Batch ID
Parameter         Result         RL         DE         Qualifiers           Carbon Disulfide         480         21         3.31           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         109         67-133	SV-21B	_	06/25/15	Air	GC/MS K		07/07/15	150706L02
Carbon Disulfide480213.31SurrogateRec. (%)Control LimitsQualifiers1,4-Bromofluorobenzene10368-1341,2-Dichloroethane-d410967-133	Parameter				RL	DF		alifiers
1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       109       67-133								
1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       109       67-133	<u>Surrogate</u>		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4 109 67-133								
			109					
10 100	Toluene-d8		97		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Units: ug/m3
Page 25 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-22A	15-06-2265-13-A	06/25/15 10:23	Air	GC/MS K	N/A	07/03/15 23:01	150703L02
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	lifiers
Acetone		ND	6.	.7	1.41		
Benzene		46	2.	.3	1.41		
Benzyl Chloride		ND	1	1	1.41		
Bromodichloromethane		ND	4.	.7	1.41		
Bromoform		ND	7.	.3	1.41		
Bromomethane		ND	2.	.7	1.41		
2-Butanone		8.8	6.	.2	1.41		
Carbon Disulfide		82	8.	.8	1.41		
Carbon Tetrachloride		ND	4.	.4	1.41		
Chlorobenzene		ND	3.	.2	1.41		
Chloroethane		ND	1.	.9	1.41		
Chloroform		29	3.	.4	1.41		
Chloromethane		2.0	1.	.5	1.41		
Dibromochloromethane		ND	6.	.0	1.41		
Dichlorodifluoromethane		4.7	3.	.5	1.41		
Diisopropyl Ether (DIPE)		ND	1:	2	1.41		
1,1-Dichloroethane		ND	2.	.9	1.41		
1,1-Dichloroethene		ND	2.	.8	1.41		
1,2-Dibromoethane		ND	5.	.4	1.41		
Dichlorotetrafluoroethane		ND	20	0	1.41		
1,2-Dichlorobenzene		ND	4.	.2	1.41		
1,2-Dichloroethane		ND	2.	.9	1.41		
1,2-Dichloropropane		ND	3.	.3	1.41		
1,3-Dichlorobenzene		ND	4.	.2	1.41		
1,4-Dichlorobenzene		ND	4.	.2	1.41		
c-1,3-Dichloropropene		ND	3.	.2	1.41		
c-1,2-Dichloroethene		ND	2.	.8	1.41		
t-1,2-Dichloroethene		ND	2.	.8	1.41		
t-1,3-Dichloropropene		ND	6.	.4	1.41		
Ethanol		ND	1;	3	1.41		
Ethyl-t-Butyl Ether (ETBE)		ND	1:	2	1.41		
Ethylbenzene		8.7	3.	.1	1.41		
4-Ethyltoluene		ND	3.	.5	1.41		
Hexachloro-1,3-Butadiene		ND	23	3	1.41		
2-Hexanone		ND	8.	.7	1.41		



Cardno ERI	Da	te Received:		06/30/15
601 North McDowell Blvd.	Wo	ork Order:		15-06-2265
Petaluma, CA 94954-2312	Pre	eparation:		N/A
		ethod:		EPA TO-15
		its:		ug/m3
Project: 580 Market Place Shopping Center	O.I.			Page 26 of 45
				. ago 20 0o
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Methyl-t-Butyl Ether (MTBE)	ND	10	1.41	
Methylene Chloride	ND	24	1.41	
4-Methyl-2-Pentanone	9.9	8.7	1.41	
Naphthalene	ND	37	1.41	
o-Xylene	7.8	3.1	1.41	
p/m-Xylene	15	12	1.41	
Styrene	ND	9.0	1.41	
Tert-Amyl-Methyl Ether (TAME)	ND	12	1.41	
Tert-Butyl Alcohol (TBA)	18	8.5	1.41	
Tetrachloroethene	ND	4.8	1.41	
Toluene	33	2.7	1.41	
Trichloroethene	ND	3.8	1.41	
Trichlorofluoromethane	ND	7.9	1.41	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	16	1.41	
1,1,1-Trichloroethane	ND	3.8	1.41	
1,1,2-Trichloroethane	ND	3.8	1.41	
1,3,5-Trimethylbenzene	ND	3.5	1.41	
1,1,2,2-Tetrachloroethane	ND	9.7	1.41	
1,2,4-Trimethylbenzene	ND	10	1.41	
1,2,4-Trichlorobenzene	ND	21	1.41	
Vinyl Acetate	ND	9.9	1.41	
Vinyl Chloride	ND	1.8	1.41	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	104	68-134		
1,2-Dichloroethane-d4	96	67-133		
Toluene-d8	93	70-130		



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 27 of 45

Project: 580 Market Place Shopping Center

	Number	Collected		Instrument	Prepared	Date/Time Analyzed	QC Batch ID
SV-22B	15-06-2265-14-A	06/25/15 10:18	Air	GC/MS K	N/A	07/03/15 23:57	150703L02
Parameter		Result	RL		<u>DF</u>	Qua	lifiers
Acetone		100	5.4	ļ	1.13		
Benzene		42	1.8	3	1.13		
Benzyl Chloride		ND	8.8	3	1.13		
Bromodichloromethane		ND	3.8	3	1.13		
Bromoform		ND	5.8	3	1.13		
Bromomethane		ND	2.2	2	1.13		
2-Butanone		9.9	5.0	)	1.13		
Carbon Disulfide		250	7.0	)	1.13		
Carbon Tetrachloride		ND	3.6	3	1.13		
Chlorobenzene		ND	2.6	3	1.13		
Chloroethane		ND	1.5	5	1.13		
Chloroform		ND	2.8	3	1.13		
Chloromethane		ND	1.2	2	1.13		
Dibromochloromethane		ND	4.8	3	1.13		
Dichlorodifluoromethane		ND	2.8	3	1.13		
Diisopropyl Ether (DIPE)		ND	9.4	Į.	1.13		
1,1-Dichloroethane		ND	2.3	3	1.13		
1,1-Dichloroethene		ND	2.2	2	1.13		
1,2-Dibromoethane		ND	4.3		1.13		
Dichlorotetrafluoroethane		ND	16		1.13		
1,2-Dichlorobenzene		ND	3.4		1.13		
1,2-Dichloroethane		ND	2.3		1.13		
1,2-Dichloropropane		ND	2.6		1.13		
1,3-Dichlorobenzene		ND	3.4		1.13		
1,4-Dichlorobenzene		ND	3.4		1.13		
c-1,3-Dichloropropene		ND	2.6		1.13		
c-1,2-Dichloroethene		ND	2.2		1.13		
t-1,2-Dichloroethene		ND	2.2		1.13		
t-1,3-Dichloropropene		ND	5.1		1.13		
Ethanol		11	11		1.13		
Ethyl-t-Butyl Ether (ETBE)		ND	9.4	ļ	1.13		
Ethylbenzene		10	2.5		1.13		
4-Ethyltoluene		ND	2.8		1.13		
Hexachloro-1,3-Butadiene		ND	18		1.13		
2-Hexanone		ND	6.9		1.13		



Cardno ERI	Da	ate Received:		06/30/15
601 North McDowell Blvd.	W	ork Order:		15-06-2265
Petaluma, CA 94954-2312	Pr	eparation:		N/A
		ethod:		EPA TO-15
		nits:		ug/m3
Project: 580 Market Place Shopping Center	OI	iito.		Page 28 of 45
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	8.1	1.13	
Methylene Chloride	ND	20	1.13	
4-Methyl-2-Pentanone	20	6.9	1.13	
Naphthalene	ND	30	1.13	
o-Xylene	7.8	2.5	1.13	
p/m-Xylene	16	9.8	1.13	
Styrene	ND	7.2	1.13	
Tert-Amyl-Methyl Ether (TAME)	ND	9.4	1.13	
Tert-Butyl Alcohol (TBA)	55	6.9	1.13	
Tetrachloroethene	ND	3.8	1.13	
Toluene	9.3	2.1	1.13	
Trichloroethene	ND	3.0	1.13	
Trichlorofluoromethane	ND	6.3	1.13	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	13	1.13	
1,1,1-Trichloroethane	ND	3.1	1.13	
1,1,2-Trichloroethane	ND	3.1	1.13	
1,3,5-Trimethylbenzene	ND	2.8	1.13	
1,1,2,2-Tetrachloroethane	ND	7.8	1.13	
1,2,4-Trimethylbenzene	ND	8.3	1.13	
1,2,4-Trichlorobenzene	ND	17	1.13	
Vinyl Acetate	ND	8.0	1.13	
Vinyl Chloride	ND	1.4	1.13	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	110	68-134		
1,2-Dichloroethane-d4	98	67-133		
Toluene-d8	95	70-130		



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3

Project: 580 Market Place Shopping Center Page 29 of 45

Parameter         Result         RL         DEF         Qualifiers           Acctorine         ND         19         4.00           Benzene         90         6.4         4.00           Benzyl Chloride         ND         31         4.00           Benzyl Chloride         ND         13         4.00           Bromodichloromethane         ND         13         4.00           Bromodichloromethane         ND         18         4.00           Bromodichloromethane         ND         18         4.00           Bromodichloromethane         ND         18         4.00           Bromodichloromethane         ND         18         4.00           Chlorothane         ND         13         4.00           Chlorothane         ND         9.2         4.00           Chlorothane         ND         9.2         4.00           Chlorothane         ND         9.8         4.00           Chlorothane         ND         9.9         4.00           Chlorothane         ND         9.9         4.00           Chlorothane         ND         9.9         4.00           Chlorothane         ND         8.1	Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Acctorine         ND         19         4,00           Benzene         90         6.4         4,00           Barnayl Chloride         ND         31         4,00           Bromodichloromethane         ND         13         4,00           Bromodichloromethane         ND         21         4,00           Bromomethane         ND         18         4,00           2-Butanone         ND         18         4,00           Carbon Disulfide         600         25         4,00           Carbon Tetrachloride         ND         13         4,00           Chlorocethane         ND         9,2         4,00           Chlorocethane         ND         5,3         4,00           Chlorocethane         ND         5,3         4,00           Chlorocethane         ND         1,7         4,00           Chlorocethane         ND         1,7         4,00           Dichlorocethane         ND         9,9         4,00           Dichlorocethane         ND         8,1         4,00           1,2-Dichlorocethane         ND         15         4,00           1,2-Dichlorocethane         ND         8,1         4,00	SV-23A	15-06-2265-15-A		Air	GC/MS K	N/A		150703L02
Benzene         90         6.4         4.00           Benzyl Chloride         ND         31         4.00           Gromodichioromethane         ND         13         4.00           Gromodichioromethane         ND         7.8         4.00           Bromomethane         ND         7.8         4.00           Bethannon         ND         18         4.00           Barbanone         ND         18         4.00           Barbanone         ND         13         4.00           Barbanone         ND         13         4.00           Chlorobenzene         ND         13         4.00           Chlorobenzene         ND         5.3         4.00           Chloromethane         ND         5.3         4.00           Chloromethane         4.7         4.1         4.00           Discorporly Ether (DIPE)         ND         33         4.00           Discorporly Ether (DIPE)         ND         8.1         4.00           1,2-Dichlorotetarlucorethane         ND         15         4.00           1,2-Dichlorotetarlucorethane         ND         12         4.00           1,2-Dichlorotetarlucorethane         ND	Parameter		Result	RL	=	<u>DF</u>	Qua	<u>llifiers</u>
Benzyl Chloride         ND         31         4.00           Bromodichloromethane         ND         13         4.00           Bromoform         ND         21         4.00           Bromomethane         ND         7.8         4.00           Bromomethane         ND         18         4.00           Carbon Disulfide         600         25         4.00           Carbon Loristife         ND         13         4.00           Chlorobenzene         ND         9.2         4.00           Chlorobenzene         ND         5.3         4.00           Chlorobenzene         ND         5.3         4.00           Chlorobenzene         ND         5.3         4.00           Chlorobenzene         ND         17         4.00           Chloromethane         ND         17         4.00           Dibromoethane         ND         8.1         4.00           1,1-Dichloroethane         ND         15         4.00           1,2-Dichloroethane         ND         15         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         8.1         4.00	Acetone		ND	19		4.00		
Bromodichloromethane         ND         13         4.00           Bromodern         ND         21         4.00           Bromomethane         ND         7.8         4.00           Bromomethane         ND         18         4.00           Carbon Disulfide         600         25         4.00           Darbon Eterachloride         ND         13         4.00           Chlorobetacene         ND         5.3         4.00           Chlorobetane         ND         5.3         4.00           Chlorobethane         ND         5.3         4.00           Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         17         4.00           Dibromochloromethane         ND         3.3         4.00           Dibromochloromethane         ND         3.3         4.00           Dibromochloroethane         ND         8.1         4.00           1,1-Dichloroethane         ND         15         4.00           1,2-Dichloroethane         ND         12         4.00           1,2-Dichloroethane         ND         9.2         4.00           1,2-Dichloroethane         ND <td< td=""><td>Benzene</td><td></td><td>90</td><td>6.4</td><td>4</td><td>4.00</td><td></td><td></td></td<>	Benzene		90	6.4	4	4.00		
Bromoform         ND         21         4.00           Bromomethane         ND         7.8         4.00           Bromomethane         ND         18         4.00           Bathanone         ND         18         4.00           Carbon Disulfide         600         25         4.00           Chloroberace         ND         9.2         4.00           Chloroberace         ND         5.3         4.00           Chloroberace         ND         5.3         4.00           Chloroberace         ND         5.3         4.00           Chloroberace         ND         5.3         4.00           Chloroberace         ND         1.7         4.00           Chloroberthane         ND         1.7         4.00           Discorpobliorocethane         ND         8.1         4.00           1,1-Dichlorocethane         ND         8.1         4.00           1,2-Dichlorocethane         ND         8.1         4.00           1,2-Dichlorocethane         ND         8.1         4.00           1,2-Dichlorocethane         ND         8.1         4.00           1,2-Dichlorocethane         ND         9.2         4.00 <td>Benzyl Chloride</td> <td></td> <td>ND</td> <td>31</td> <td></td> <td>4.00</td> <td></td> <td></td>	Benzyl Chloride		ND	31		4.00		
Bromomethane         ND         7.8         4.00           2-Butanone         ND         18         4.00           Carbon Disulfide         600         25         4.00           Carbon Tetrachloride         ND         13         4.00           Chlorobenzene         ND         9.2         4.00           Chloroferm         55         9.8         4.00           Chloroferm         56         9.8         4.00           Chloromethane         4.7         4.1         4.00           Dichlorofiffloromethane         ND         17         4.00           Dichlorofiffloromethane         ND         9.9         4.00           1,1-Dichlorotethane         ND         8.1         4.00           1,2-Dichlorotethane         ND         8.1         4.00           1,2-Dichlorotetrafluoroethane         ND         12         4.00           1,2-Dichloroptopane         ND         12         4.00           1,2-Dichlorotethane         ND         12         4.00           1,3-Dichlorotethane         ND         12         4.00           1,3-Dichlorotethane         ND         12         4.00           1,3-Dichlorotethane	Bromodichloromethane		ND	13		4.00		
2-Butanone         ND         18         4.00           Carbon Disulfide         600         25         4.00           Carbon Tetrachloride         ND         13         4.00           Chloroethane         ND         5.3         4.00           Chloroethane         ND         5.3         4.00           Chloroform         55         9.8         4.00           Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         17         4.00           Dibromochloromethane         ND         9.9         4.00           Disopropyl Ether (DIPE)         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         56         4.00           1,2-Dichloroethane         ND         12         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         9.2         4.00           1,2-Dichloroethane         ND         12         4.00           1,2-Dichloroethane         ND         12         4.00           1,2-Dichloroethane         ND	Bromoform		ND	21		4.00		
Carbon Disulfide         600         25         4.00           Carbon Tetrachloride         ND         13         4.00           Chlorobenzene         ND         9.2         4.00           Chlorobertanne         ND         5.3         4.00           Chloromethane         ND         5.5         9.8         4.00           Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         1.7         4.00           Dichlorodifluoromethane         ND         9.9         4.00           Disproppyl Ether (DIPE)         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dishloroethane         ND         16         4.00           1,2-Dichloroethane         ND         56         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         9.2         4.00           1,2-Dichloroepropane         ND         9.2         4.00           1,2-Dichloroepropane         ND         12         4.00           1,3-Dichloroepropane         ND         9.1         4.00           2	Bromomethane		ND	7.8	3	4.00		
Carbon Tetrachloride         ND         13         4,00           Chlorobenzene         ND         9,2         4,00           Chlorofethane         ND         5,3         4,00           Chloroform         55         9,8         4,00           Chloromethane         4,7         4,1         4,00           Discopropyl Ether (DIPE)         ND         17         4,00           Discopropyl Ether (DIPE)         ND         33         4,00           L,1-Dichloroethane         ND         8,1         4,00           L,2-Dichloroethane         ND         8,1         4,00           L,2-Dichloroethane         ND         56         4,00           L,2-Dichloroethane         ND         8,1         4,00           L,2-Dichloroethane         ND         8,1         4,00           L,2-Dichloropropane         ND         8,2         4,00           L,2-Dichloropropane         ND         9,2         4,00           L,3-Dichloropropane         ND         12         4,00           L,4-Dichlorobenzene         ND         9,1         4,00           L,4-Dichloropropene         ND         9,1         4,00           L,1-3-Dichloropropene <td>2-Butanone</td> <td></td> <td>ND</td> <td>18</td> <td></td> <td>4.00</td> <td></td> <td></td>	2-Butanone		ND	18		4.00		
Chlorobenzene         ND         9.2         4.00           Chlorofethane         ND         5.3         4.00           Chloroform         55         9.8         4.00           Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         17         4.00           Dichlorodifluoromethane         ND         9.9         4.00           Disopropyl Ether (DIPE)         ND         33         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         56         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloropropane         ND         8.1         4.00           1,3-Dichloropropane         ND         9.2         4.00           1,4-Dichlorobenzene         ND         12         4.00           1,3-Dichloropropene         ND         9.1         4.00           1,4-Dichloropropene         ND         18         4.00           1,1-July Ether (ETBE)         ND         33         4.00           1-Ethyl Ether (ETBE)	Carbon Disulfide		600	25		4.00		
Chloroethane         ND         5.3         4.00           Chloroform         55         9.8         4.00           Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         17         4.00           Dichlorodiflucromethane         ND         33         4.00           Disspropyl Ether (DIPE)         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         56         4.00           1,2-Dichlorotetrafluoroethane         ND         56         4.00           1,2-Dichloroptrapene         ND         8.1         4.00           1,2-Dichlorotetrafluoroethane         ND         8.1         4.00           1,2-Dichloroptropane         ND         8.1         4.00           1,2-Dichloroptropane         ND         9.2         4.00           1,3-Dichloroptropane         ND         12         4.00           1,4-Dichloroptropene         ND         9.1         4.00           2-1,3-Dichloroptropene         ND         8.1         4.00           2-1,3-Dichloroptropene         ND         38         4.00	Carbon Tetrachloride		ND	13		4.00		
Chloroform         55         9.8         4.00           Chloromethane         4.7         4.1         4.00           Chloromethane         ND         17         4.00           Dichlorodiffluoromethane         ND         9.9         4.00           Dichlorodiffluoromethane         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         15         4.00           1,2-Dichloroethane         ND         56         4.00           1,2-Dichloroethane         ND         12         4.00           1,2-Dichloroptopane         ND         8.1         4.00           1,2-Dichloroptopane         ND         9.2         4.00           1,2-Dichloroptopane         ND         9.2         4.00           1,3-Dichloroptopane         ND         12         4.00           1,4-Dichloroptopane         ND         9.1         4.00           1,3-Dichloroptopane         ND         9.1         4.00           1,4-Dichloroptopane         ND         9.1         4.00           1,3-Dichloroptopane         ND         9.1         4.00           1,4-Dichloroptopane<	Chlorobenzene		ND	9.2	2	4.00		
Chloromethane         4.7         4.1         4.00           Dibromochloromethane         ND         17         4.00           Dichlorodifluoromethane         ND         9.9         4.00           Dichloroptyl Ether (DIPE)         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dibromoethane         ND         15         4.00           1,2-Dichloroptane         ND         56         4.00           1,2-Dichloroptane         ND         8.1         4.00           1,2-Dichloroptopane         ND         8.1         4.00           1,2-Dichloroptopane         ND         9.2         4.00           1,3-Dichloroptopane         ND         12         4.00           1,3-Dichloroptopane         ND         12         4.00           2,1,3-Dichloroptopane         ND         9.1         4.00           2,1,3-Dichloroptopane         ND         18         4.00           2,1,3-Dichloroptopane         ND         38         4.00           2,1,3-Dichloroptopane         ND         38         4.00           2,1,3-Dichloroptopane         ND         8.7         4.00	Chloroethane		ND	5.3	3	4.00		
Dibromochloromethane         ND         17         4.00           Dichlorodiffluoromethane         ND         9.9         4.00           Disspropyl Ether (DIPE)         ND         33         4.00           1,1-Dichloroethane         ND         8.1         4.00           1,2-Dichloroethane         ND         15         4.00           1,2-Dichlorobenzene         ND         56         4.00           1,2-Dichloroethane         ND         8.1         4.00           1,2-Dichloropropane         ND         8.1         4.00           1,2-Dichloropropane         ND         9.2         4.00           1,3-Dichloropropane         ND         12         4.00           1,3-Dichloropropene         ND         12         4.00           1,3-Dichloropropene         ND         9.1         4.00           2-1,3-Dichloropropene         ND         18         4.00           2-thurstell Ether (ETBE)         ND         33         4.00           2-thurstell Ether (ETBE)         ND         33         4.00           4-Ethyltoluene         ND         9.8         4.00           4-exachloro-1,3-Butadiene         ND         64         4.00	Chloroform		55	9.8	3	4.00		
Dicklorodifluoromethane   ND   9.9   4.00   1.1   Dicklorogethane   ND   33   4.00   1.1   Dicklorogethane   ND   8.1   4.00   1.2   Dickloromethane   ND   15   4.00   Dicklorotetrafluoroethane   ND   15   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.2   4.00   1.3   4.00   1.3   4.00   1.3   4.00   1.3   4.00   1.3   4.00   1.3   4.00   1.3   4.00   1.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00   4.3   4.00	Chloromethane		4.7	4.	1	4.00		
Disspropyl Ether (DIPE)	Dibromochloromethane		ND	17		4.00		
1,1-Dichloroethane       ND       8.1       4.00         1,2-Dibromoethane       ND       15       4.00         Dichlorotetrafluoroethane       ND       56       4.00         1,2-Dichlorobenzene       ND       12       4.00         1,2-Dichloropropane       ND       8.1       4.00         1,3-Dichlorobenzene       ND       12       4.00         1,4-Dichlorobenzene       ND       12       4.00         1,4-Dichloropropene       ND       12       4.00         -1,3-Dichloropropene       ND       9.1       4.00         -1,3-Dichloropropene       ND       18       4.00         -1,3-Dichloropropene       ND       18       4.00         -1,3-Dichloropropene       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethyloretheur       ND       8.7       4.00         -Ethyltoluene       ND       9.8       4.00         -Ethyltoluene       ND       9.8       4.00         -Evacanone       ND       64       4.00         -Ethyltoluene       ND       29       4.00         -Ethyltoluene       ND       9	Dichlorodifluoromethane		ND	9.9	9	4.00		
1,2-Dibromoethane	Diisopropyl Ether (DIPE)		ND	33		4.00		
Dicklorotetrafluoroethane       ND       56       4.00         1,2-Dickloroethane       ND       12       4.00         1,2-Dickloropropane       ND       8.1       4.00         1,2-Dickloropropane       ND       9.2       4.00         1,3-Dicklorobenzene       ND       12       4.00         1,4-Dickloropropene       ND       12       4.00         2-1,3-Dickloropropene       ND       9.1       4.00         2-1,3-Dickloropropene       ND       18       4.00         Ethanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         4-exachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       69       4.00         Methylene Chloride       ND       69       4.00	1,1-Dichloroethane		ND	8.	1	4.00		
1,2-Dichlorobenzene       ND       12       4.00         1,2-Dichloroperbane       ND       8.1       4.00         1,2-Dichloropropane       ND       9.2       4.00         1,3-Dichlorobenzene       ND       12       4.00         1,4-Dichlorobenzene       ND       12       4.00         2-1,3-Dichloropropene       ND       9.1       4.00         2-1,3-Dichloropropene       ND       18       4.00         2-thanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         2-thylboluene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         4-exachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	1,2-Dibromoethane		ND	15		4.00		
1,2-Dichloroethane	Dichlorotetrafluoroethane		ND	56		4.00		
1,2-Dichloropropane       ND       9.2       4.00         1,3-Dichlorobenzene       ND       12       4.00         1,4-Dichlorobenzene       ND       12       4.00         2-1,3-Dichloropropene       ND       9.1       4.00         2-1,3-Dichloropropene       ND       18       4.00         Ethanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	1,2-Dichlorobenzene		ND	12		4.00		
1,3-Dichlorobenzene       ND       12       4.00         1,4-Dichlorobenzene       ND       12       4.00         2-1,3-Dichloropropene       ND       9.1       4.00         -1,3-Dichloropropene       ND       18       4.00         Ethanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	1,2-Dichloroethane		ND	8.	1	4.00		
1,3-Dichlorobenzene       ND       12       4.00         1,4-Dichlorobenzene       ND       12       4.00         2-1,3-Dichloropropene       ND       9.1       4.00         -1,3-Dichloropropene       ND       18       4.00         Ethanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	1,2-Dichloropropane		ND	9.2	2	4.00		
ND   9.1   4.00    -1,3-Dichloropropene   ND   18   4.00    -1,3-Dichloropropene   ND   38   4.00    -1,3-Dichloropropene   ND   8.7   4.00    -1,3-Dichloropropene   ND   9.8   4.00    -1,3-Dichloropropene   9.00   4.00    -1,3-Dichloropropen	1,3-Dichlorobenzene		ND	12		4.00		
-1,3-Dichloropropene ND 18 4.00 Ethanol ND 38 4.00 Ethyl-t-Butyl Ether (ETBE) ND 33 4.00 Ethylbenzene ND 8.7 4.00 4-Ethyltoluene ND 9.8 4.00 Hexachloro-1,3-Butadiene ND 64 4.00 2-Hexanone ND 25 4.00 Methyl-t-Butyl Ether (MTBE) ND 29 4.00 Methyl-t-Butyl Ether (MTBE) ND 69 4.00	1,4-Dichlorobenzene		ND	12		4.00		
Ethanol       ND       38       4.00         Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	c-1,3-Dichloropropene		ND	9.	1	4.00		
Ethyl-t-Butyl Ether (ETBE)       ND       33       4.00         Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	t-1,3-Dichloropropene		ND	18		4.00		
Ethylbenzene       ND       8.7       4.00         4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	Ethanol		ND	38		4.00		
4-Ethyltoluene       ND       9.8       4.00         4-Ethyltoluene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	Ethyl-t-Butyl Ether (ETBE)		ND	33		4.00		
4-Ethyltoluene       ND       9.8       4.00         Hexachloro-1,3-Butadiene       ND       64       4.00         2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	Ethylbenzene		ND	8.7	7	4.00		
2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	4-Ethyltoluene		ND	9.8	3	4.00		
2-Hexanone       ND       25       4.00         Methyl-t-Butyl Ether (MTBE)       ND       29       4.00         Methylene Chloride       ND       69       4.00	Hexachloro-1,3-Butadiene		ND	64		4.00		
Methyl-t-Butyl Ether (MTBE)         ND         29         4.00           Methylene Chloride         ND         69         4.00	2-Hexanone			25		4.00		
Methylene Chloride ND 69 4.00	Methyl-t-Butyl Ether (MTBE)							
•	Methylene Chloride							
r Widerly 1 2 1 Origination 190 20 4.00	4-Methyl-2-Pentanone		ND	25		4.00		

06/30/15



Cardno ERI

1,4-Bromofluorobenzene

1,2-Dichloroethane-d4

Toluene-d8

#### **Analytical Report**

Date Received:

Work Order: 15-06-2265 601 North McDowell Blvd. Petaluma, CA 94954-2312 Preparation: N/A Method: EPA TO-15 Units: ug/m3 Project: 580 Market Place Shopping Center Page 30 of 45 <u>DF</u> **Parameter** Result <u>RL</u> Qualifiers Naphthalene ND 100 4.00 o-Xylene ND 8.7 4.00 p/m-Xylene ND 35 4.00 Styrene ND 26 4.00 Tert-Amyl-Methyl Ether (TAME) ND 33 4.00 Tert-Butyl Alcohol (TBA) ND 24 4.00 Toluene 37 7.5 4.00 Trichlorofluoromethane ND 22 4.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 46 4.00 1,1,1-Trichloroethane ND 11 4.00 ND 1,1,2-Trichloroethane 11 4.00 1,3,5-Trimethylbenzene ND 9.8 4.00 1,1,2,2-Tetrachloroethane ND 27 4.00 1,2,4-Trimethylbenzene ND 29 4.00 1,2,4-Trichlorobenzene ND 59 4.00 Vinyl Acetate ND 28 4.00 Qualifiers **Control Limits** <u>Surrogate</u> Rec. (%)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23A	15-06-2265-15-A	06/25/15 08:21	Air	GC/MS K	N/A	07/07/15 09:50	150706L02
<u>Parameter</u>		Result	<u>i</u>	<u> </u>	DF	Qua	<u>llifiers</u>
1,1-Dichloroethene		3700	ţ	500	250		
c-1,2-Dichloroethene		53000	į	500	250		
t-1,2-Dichloroethene		4700	į	500	250		
Tetrachloroethene		20000	8	350	250		
Trichloroethene		40000	(	670	250		
Vinyl Chloride		1700	;	320	250		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		103	(	68-134			
1,2-Dichloroethane-d4		111	(	67-133			
Toluene-d8		98	-	70-130			

110

113

94

68-134

67-133

70-130



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Units: ug/m3
Project: 580 Market Place Shopping Center Page 31 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23B	15-06-2265-16-A	06/25/15 08:06	Air	GC/MS K	N/A	07/04/15 01:41	150703L02
<u>Parameter</u>		Result	RL		<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	5.8	3	1.22		
Benzene		54	1.9	)	1.22		
Benzyl Chloride		ND	9.5	5	1.22		
Bromodichloromethane		ND	4.1		1.22		
Bromoform		ND	6.3	3	1.22		
Bromomethane		ND	2.4	ļ	1.22		
2-Butanone		ND	5.4	ļ	1.22		
Carbon Tetrachloride		ND	3.8	3	1.22		
Chlorobenzene		5.0	2.8	3	1.22		
Chloroethane		2.9	1.6	3	1.22		
Chloroform		6.8	3.0	)	1.22		
Chloromethane		2.5	1.3	3	1.22		
Dibromochloromethane		ND	5.2	2	1.22		
Dichlorodifluoromethane		ND	3.0	)	1.22		
Diisopropyl Ether (DIPE)		ND	10		1.22		
1,1-Dichloroethane		ND	2.5	5	1.22		
1,1-Dichloroethene		80	2.4	ļ	1.22		
1,2-Dibromoethane		ND	4.7	,	1.22		
Dichlorotetrafluoroethane		ND	17		1.22		
1,2-Dichlorobenzene		ND	3.7	7	1.22		
1,2-Dichloroethane		ND	2.5	5	1.22		
1,2-Dichloropropane		ND	2.8	3	1.22		
1,3-Dichlorobenzene		ND	3.7	7	1.22		
1,4-Dichlorobenzene		ND	3.7	,	1.22		
c-1,3-Dichloropropene		ND	2.8	3	1.22		
t-1,2-Dichloroethene		86	2.4	ļ	1.22		
t-1,3-Dichloropropene		ND	5.5	5	1.22		
Ethanol		ND	11		1.22		
Ethyl-t-Butyl Ether (ETBE)		ND	10		1.22		
Ethylbenzene		21	2.6	5	1.22		
4-Ethyltoluene		11	3.0		1.22		
Hexachloro-1,3-Butadiene		ND	20		1.22		
2-Hexanone		ND	7.5		1.22		
Methyl-t-Butyl Ether (MTBE)		ND	8.8		1.22		
Methylene Chloride		ND	21		1.22		



Petaluma, CA 94954-2312 Preparation: N/A	Cardno ERI			Date Re	eceived:			06/30/15
Project: 580 Market Place Shopping Center	601 North McDowell Blvd.			Work O	rder:			15-06-2265
Project: 580 Market Place Shopping Center	Petaluma, CA 94954-2312			Prepara	tion:			N/A
Project: 580 Market Place Shopping Center         Result         Rt         DE         Qualifiers           Parameter         ND         7.5         1.22         Image: Result No. 1.22           4-Methyl-2-Pentanone         ND         32         1.22         Image: Result No. 1.22           0-Xylane         16         2.6         1.22         Image: Result No. 1.22           5-Yylane         27         11         1.22         Image: Result No. 1.22           Tert-Buyl Alcohol (TBA)         ND         7.4         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         7.4         1.22         Image: Result No. 1.22           Trichlorofluoromethane         ND         6.9         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         3.3         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         3.3         1.22         Image: Result No. 1.22           Ti.1.1-2-Trichlorothane         ND         8.4         1.22         Image: Result No. 1.22           Ti.1.2-Trichlorothane         ND         8.6         1.22				Method:				EPA TO-15
Project: 580 Market Place Shopping Center         Result         Rt         DE         Qualifiers           Parameter         ND         7.5         1.22         Image: Result No. 1.22           4-Methyl-2-Pentanone         ND         32         1.22         Image: Result No. 1.22           0-Xylane         16         2.6         1.22         Image: Result No. 1.22           5-Yylane         27         11         1.22         Image: Result No. 1.22           Tert-Buyl Alcohol (TBA)         ND         7.4         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         7.4         1.22         Image: Result No. 1.22           Trichlorofluoromethane         ND         6.9         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         3.3         1.22         Image: Result No. 1.22           Trichlorothuoromethane         ND         3.3         1.22         Image: Result No. 1.22           Ti.1.1-2-Trichlorothane         ND         8.4         1.22         Image: Result No. 1.22           Ti.1.2-Trichlorothane         ND         8.6         1.22				Units:				ua/m3
4-Methyl-2-Pentanone         ND         7.5         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.24         1.24         1.24         1.24         1.24         1.22         1.22         1.22         1.24         1.22         1.22         1.22         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12 <th>Project: 580 Market Place Shopp</th> <th>ing Center</th> <th></th> <th></th> <th></th> <th></th> <th>Pag</th> <th>_</th>	Project: 580 Market Place Shopp	ing Center					Pag	_
4-Methyl-2-Pentanone         ND         7.5         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.22         1.24         1.24         1.24         1.24         1.24         1.22         1.22         1.22         1.24         1.22         1.22         1.22         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12 <td><u>Parameter</u></td> <td></td> <td>Result</td> <td></td> <td><u>RL</u></td> <td><u>DF</u></td> <td>Qua</td> <td><u>llifiers</u></td>	<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
o-Vylene         16         2.6         1.22           p/m-Vylene         27         11         1.22           Styrene         ND         7.8         1.22           Tert-Amyl-Methyl Ether (TAME)         ND         10         1.22           Tert-Butyl Alcohol (TBA)         ND         7.4         1.22           Tichlorosthane         530         3.3         1.22           Trichlorosthane         ND         6.9         1.22           Tichlorosthane         ND         14         1.22           1,1.2-Trichloroethane         ND         3.3         1.22           1,1.2-Trichloroethane         ND         3.3         1.22           1,1.2-Trichloroethane         ND         3.3         1.22           1,1.2-Trichloroethane         ND         8.4         1.22           1,2-Trichloroethane         ND         8.4         1.22           1,2-Trichloroethane         ND         8.6         1.22           1,2-Trichloroethane         ND         8.6         1.22           Vinyl Choride         3.7         1.6         1.22           Vinyl Choride         9.8         67-133           Tolloroethane         117         6	4-Methyl-2-Pentanone		ND		7.5	1.22		
P/m-Xylene     27	Naphthalene		ND		32	1.22		
Styrene         ND         7.8         1.22           Tert-Maryt-Methyl Ether (TAME)         ND         10         1.22           Tert-Butyl Alcohol (TBA)         ND         7.4         1.22           Totluene         82         2.3         1.22           Trichlorosthere         830         3.3         1.22           Trichlorofluoromethane         ND         6.9         1.22           1,1,2-Trichloro-1,2,2-Trifluoresthane         ND         3.3         1.22           1,1,1-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         8.4         1.22           1,1,2-Trichloroethane         ND         8.4         1.22           1,1,2-Tetrachloroethane         ND         8.4         1.22           1,2,2-Tetrachloroethane         ND         8.6         1.22           1,2,4-Trichlorobenzene         ND         8.6         1.22           Vinyl Acetate         ND         8.6         1.22           Vinyl Chloride         98         67-133         1.22           1,4-Bromofluorobenzene         1117         68-134         1.22	o-Xylene		16		2.6	1.22		
Tort-Amyl-Methyl Ether (TAME)         ND         10         1.22           Tert-Butyl Alcoho (TBA)         ND         7.4         1.22           Tort-Butyl Alcoho (TBA)         ND         7.4         1.22           Trichloroethene         530         3.3         1.22           Trichloroethane         ND         6.9         1.22           Trichloroethane         ND         14         1.22           1,1,1-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         8.4         1.22           1,2,2-Trichloroethane         ND         8.4         1.22           1,2,2-Trichloroethane         ND         8.4         1.22           1,2,2-Trichlorobenzene         ND         8.6         1.22           Vinyl Acetate         ND         8.6         1.22           Vinyl Chioride         37         1.6         1.22           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         117         68-134           1,2-Dichloroethane-d4         94         70-130           Cilent Samp	p/m-Xylene		27		11	1.22		
Tert-Butyl Alcohol (TBA)         ND         7.4         1.22           Toluene         82         2.3         1.22           Trichlorethene         530         3.3         1.22           Trichlorofluoromethane         ND         6.9         1.22           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.22           1,1,1-Trichloroethane         ND         3.3         1.22           1,3,2-Trichloroethane         ND         3.3         1.22           1,3,2-Trichloroethane         ND         8.4         1.22           1,3,2-Trichloroethane         ND         8.4         1.22           1,1,2,2-Trichloroethane         ND         8.4         1.22           1,2,2-Trichloroethane         ND         8.6         1.22           1,2,2-Trichloroethane         ND         8.6         1.22           Vinyl Acetate         ND         8.6         1.22           Vinyl Chloride         37         1.6         1.22           Vinyl Chloride         98         67-133         1.22           Surrogate         8.6         1.22         1.22           1,4-Eromofluorobenzene         117         68-134           1,2-Dichlo	Styrene		ND		7.8	1.22		
Toluene	Tert-Amyl-Methyl Ether (TAME)		ND		10	1.22		
Trichloroethene         530         3.3         1.22           Trichlorofluoromethane         ND         6.9         1.22           1,1,2-Trichloro-1,2,2-Trifluorethane         ND         14         1.22           1,1,1-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         3.3         1.22           1,3,5-Trimethylbenzene         17         3.0         1.22           1,2,2-Trimethylbenzene         61         9.0         1.22           1,2,2-Trichlorobenzene         ND         8.4         1.22           1,2,4-Trichlorobenzene         ND         8.6         1.22           Vinyl Acetate         ND         8.6         1.22           Vinyl Chride         37         1.6         1.22           Vinyl Chride         37         68-134         1.22           Vinyl Chride         117         68-134         1.22           Vinyl Chride         98         67-133         1.22           Vin	Tert-Butyl Alcohol (TBA)		ND		7.4	1.22		
Trichlorofluoromethane         ND         6.9         1.22           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.22           1,1,1-Trichloroethane         ND         3.3         1.22           1,1,2-Trichloroethane         ND         3.3         1.22           1,3,5-Trimethylbenzene         17         3.0         1.22           1,2,2-Tetrachloroethane         ND         8.4         1.22           1,2,4-Trinchlorobenzene         61         9.0         1.22           1,2,4-Trinchlorobenzene         ND         18         1.22           Vinyl Acetate         ND         8.6         1.22           Vinyl Chloride         37         1.6         1.22           Vinyl Chloride         117         88-134         1.22           1,4-Bromofluorobenzene         117         88-134         1.22           1,4-Bromofluorobenzene         117         88-134         1.22           1,4-Bromofluorobenzene         117         88-134         1.22           1,0-Bromofluorobenzene         117         88-134         1.22           1,0-Bromofluorobenzene         108-06         Air         Date/Time All Marin         Date/Time All Marin         Date/Time All Marin	Toluene		82		2.3	1.22		
1,1,2-Trichloro-1,2,2-Trifluoroethane       ND       14       1.22         1,1,1-Trichloroethane       ND       3.3       1.22         1,1,2-Trichloroethane       ND       3.3       1.22         1,3,5-Trimethylbenzene       17       3.0       1.22         1,2,2-Tetrachloroethane       ND       8.4       1.22         1,2,2-Trimethylbenzene       61       9.0       1.22         1,2,4-Trichlorobenzene       ND       18       1.22         Vinyl Acetate       ND       8.6       1.22         Vinyl Acetate       ND       8.6       1.22         Vinyl Chloride       37       1.6       1.22         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       117       68-134         1,2-Dichloroethane-d4       98       67-133         7 Oluene-d8       94       70-130         Surrogate       Lab Sample Number       Nater/Time Rough       Matrix       Instrument       Date/Time Analyzed       QC Batch ID Analyzed         Survasa       15-06-2265-16-A       06/25/15 08-06       Air       GC/MS K       N/A       07/07/15 10:36       15006-02         Earmeter       820	Trichloroethene		530		3.3	1.22		
1,1,1-Trichloroethane       ND       3.3       1,22         1,1,2-Trichloroethane       ND       3.3       1,22         1,3,5-Trimethylbenzene       17       3.0       1,22         1,2,2-Tetrachloroethane       ND       8,4       1,22         1,2,2-Trimethylbenzene       61       9,0       1,22         1,2,2-Trichlorobenzene       ND       18       1,22         1,2,2-Trichlorobenzene       ND       8,6       1,22         Vinyl Chloride       37       1,6       1,22         Vinyl Chloride       37       1,6       1,22         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       117       68-134       1,22         1,4-Bromofluorobenzene       117       68-134       1,22         1,4-Bromofluorobenzene       19       Matrix       Instrument       Date/Time Prepared       Date/Time Prepared       Analyzed       OC Batch ID         Survasa       15-06-2265-16-A       06/25/15       Air       GC/MS K       N/A       07/07/15       150706.02         Parameter       820       400       63.6       63.6       63.6       63.6       63.6       63.6       63.6	Trichlorofluoromethane		ND		6.9	1.22		
1,1,2-Trichloroethane       ND       3.3       1,22         1,3,5-Trimethylbenzene       17       3.0       1,22         1,1,2,2-Tetrachloroethane       ND       8.4       1,22         1,2,4-Trimethylbenzene       61       9.0       1,22         1,2,4-Trichlorobenzene       ND       18       1,22         Vinyl Acetate       ND       8.6       1,22         Vinyl Chloride       37       1.6       1,22         Surrogate       117       68-134       1,22         1,4-Bromofluorobenzene       117       68-134       1,22         1,4-Bromofluorobenzene       117       68-134       1,22         1,2-Dichloroethane-d4       98       67-133       67-133         Toluene-d8       94       70-130       70-130       70-130         SV-23B       15-06-2265-16-A       06/25/15       Air       BC/MS K       N/A       07/07/15       150706L02         Parameter       Result       RL       DF       Qualifiers         Carbon Disulfide       820       400       63.6       63.6         c-1,2-Dichloroethene       1000       130       63.6       63.6         Tetrachloroethene       17000	1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		14	1.22		
1,3,5-Trimethylbenzene       17       3.0       1.22         1,1,2,2-Tetrachloroethane       ND       8.4       1.22         1,2,4-Trimethylbenzene       61       9.0       1.22         1,2,4-Trichlorobenzene       ND       18       1.22         Vinyl Acetate       ND       8.6       1.22         Vinyl Chloride       37       1.6       1.22         Vinyl Chloride       117       68-134       1.22         Surrogate       117       68-134       1.22         1,4-Bromofluorobenzene       117       68-134       1.22         1,4-Bromofluorobenzene       198       67-133       67-133         1,2-Dichloroethane-d4       94       70-130       Date_Time Prepared       Date_Time Analyzed       QC Batch ID Prepared       Date_Time Analyzed       QC Batch ID Prepared       Date_Time Analyzed       Prepared       Dat	1,1,1-Trichloroethane		ND		3.3	1.22		
1,1,2,2-Tetrachloroethane       ND       8.4       1,22         1,2,4-Trimethylbenzene       61       9.0       1,22         1,2,4-Trichlorobenzene       ND       18       1,22         Vinyl Acetate       ND       8.6       1,22         Vinyl Chloride       37       1.6       1,22         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       117       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       94       70-130         SV-23B       15-06-2265-16-A       06/25/15       Air       GC/MS K       N/A       Date/Time Analyzed       QC Batch ID Prepared         Parameter       Result       RL       DE       Qualifiers         Carbon Disulfide       820       400       63.6       400       63.6         c-1,2-Dichloroethene       1000       130       63.6       400       63.6       400       63.6       400       63.6       400       63.6       63.6       400       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.6       63.	1,1,2-Trichloroethane		ND		3.3	1.22		
1,2,4-Trimethylbenzene       61       9.0       1.22         1,2,4-Trichlorobenzene       ND       18       1.22         Vinyl Acetate       ND       8.6       1.22         Vinyl Chloride       37       1.6       1.22         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       1117       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       94       70-130         SV-23B       15-06-2265-16-A       06/25/15 08:06       Air       Instrument log/MS K       N/A       07/07/15 Nalyzed log/MS K       150706L02         Parameter       Result       BL       DF       Qualifiers         Carbon Disulfide       820       400       63.6       63.6         c-1,2-Dichloroethene       1000       130       63.6       63.6         Tetrachloroethene       17000       220       63.6       63.6         Surrogate       Rec. (%)       Control Limits Outlinits Outlinits Outlinits       Qualifiers         1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       103       67-133	1,3,5-Trimethylbenzene		17		3.0	1.22		
1,2,4-Trichlorobenzene         ND         18         1,22           Vinyl Acetate         ND         8.6         1,22           Vinyl Chloride         37         1.6         1,22           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromoffluorobenzene         1117         68-134         68-134           1,2-Dichloroethane-d4         98         67-133         67-133           Toluene-d8         Pate/Time Collected         Matrix         Instrument Instrument Prepared Analyzed Analyz	1,1,2,2-Tetrachloroethane		ND		8.4	1.22		
Vinyl Acetate         ND         8.6         1.22           Vinyl Chloride         37         1.6         1.22           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         1117         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         94         70-130           Client Sample Number         Lab Sample Number         Matrix Collected         Instrument Prepared         Date Prepared Analyzed         QC Batch ID Prepared Analyzed           SV-23B         15-06-2265-16-A 06/25/15 08:06         Air GC/MS K         N/A 07/07/15 150706L02         150706L02           Parameter         Result RL DE OF GAIS COLLEGE         Qualifiers         Qualifiers           Carbon Disulfide Colleged         820 400 63.6         63.6         63.6           C-1,2-Dichloroethene         1000 130 63.6         63.6         63.6           Surrogate Rec. (%)         Control Limits Control Lim	1,2,4-Trimethylbenzene		61		9.0	1.22		
Vinyl Chloride         37         1.6         1.22           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1,2-Dichloroethane-d4 1,2-Dichloroethane-d4 1,2-Dichloroethane-d4 1,2-Dichloroethane-d8 98 67-133 70-130         68-134 70-130         Pate Prepared Pr	1,2,4-Trichlorobenzene		ND		18	1.22		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         1117         68-134           1,2-Dichloroethane-d4         98         67-133           Toluene-d8         94         70-130           Client Sample Number         Lab Sample Number         Matrix         Instrument Instrument Prepared         Date/Time Analyzed         QC Batch ID Prepared           SV-23B         15-06-2265-16-A 08:06         06/25/15 08:06         Air GC/MS K N/A 07/07/15 10:36         150706L02           Parameter         Result RL DE Qualifiers         DE Qualifiers           Carbon Disulfide         820 400 63.6         63.6           c-1,2-Dichloroethene         1000 130 63.6         63.6           Tetrachloroethene         17000 220 63.6         63.6           Surrogate 1,4-Bromofluorobenzene         106 68-134         68-134           1,2-Dichloroethane-d4         103 67-133         67-133	Vinyl Acetate		ND		8.6	1.22		
1,4-Bromofluorobenzene       117       68-134         1,2-Dichloroethane-d4       98       67-133         Toluene-d8       94       70-130         Client Sample Number       Lab Sample Number       Date/Time Collected       Matrix       Instrument Instrument       Date Prepared Analyzed       QC Batch ID         SV-23B       15-06-2265-16-A 08:06       06/25/15 08:06       Air GC/MS K N/A 07/07/15 10:36       150706L02         Parameter       Result RL DF Qualifiers       DF Qualifiers         Carbon Disulfide c-1,2-Dichloroethene       1000 130 63.6       63.6         Tetrachloroethene       17000 220 63.6       63.6         Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1,06 68-134 1,2-Dichloroethane-d4       Control Limits 02 Qualifiers	Vinyl Chloride		37		1.6	1.22		
1,2-Dichloroethane-d4         98         67-133           Toluene-d8         94         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Instrument         Date Prepared Analyzed         Date/Time Analyzed         QC Batch ID           SV-23B         15-06-2265-16-A         06/25/15 08:06         Air         GC/MS K         N/A         07/07/15 10:36         150706L02           Parameter         Result         RL         DE         Qualifiers           Carbon Disulfide         820         400         63.6         63.6           c-1,2-Dichloroethene         1000         130         63.6         40.6           Tetrachloroethene         17000         220         63.6         40.6           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Instrument         Date Prepared Prepared Analyzed         Date/Time Analyzed         QC Batch ID Prepared Analyzed           SV-23B         15-06-2265-16-A 08/25/15 08:06         Air         GC/MS K         N/A         07/07/15 10:36         150706L02           Parameter         Result         RL         DE         Qualifiers           Carbon Disulfide         820         400         63.6           c-1,2-Dichloroethene         1000         130         63.6           Tetrachloroethene         17000         220         63.6           Surrogate         Rec. (%)         Control Limits Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	1,4-Bromofluorobenzene		117		68-134			
Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument         Date Prepared         Date/Time Analyzed         QC Batch ID           SV-23B         15-06-2265-16-A         06/25/15 08:06         Air         GC/MS K         N/A         07/07/15 10:36         150706L02           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         820         400         63.6         Control Limits         63.6           C-1,2-Dichloroethene         17000         220         63.6         Control Limits         Qualifiers           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	1,2-Dichloroethane-d4		98		67-133			
SV-23B         15-06-2265-16-A         06/25/15 08:06         Air         GC/MS K         N/A         07/07/15 150706L02           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         820         400         63.6           c-1,2-Dichloroethene         1000         130         63.6           Tetrachloroethene         17000         220         63.6           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	Toluene-d8		94		70-130			
08:06         10:36           Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         820         400         63.6           c-1,2-Dichloroethene         1000         130         63.6           Tetrachloroethene         17000         220         63.6           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	Client Sample Number			Matrix	Instrument			QC Batch ID
Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         820         400         63.6           c-1,2-Dichloroethene         1000         130         63.6           Tetrachloroethene         17000         220         63.6           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         103         67-133	SV-23B	15-06-2265-16-A		Air	GC/MS K	N/A	07/07/15 10:36	150706L02
c-1,2-Dichloroethene       1000       130       63.6         Tetrachloroethene       17000       220       63.6         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       103       67-133	Parameter				RL	DF		lifiers
Tetrachloroethene 17000 220 63.6  Surrogate Rec. (%) Control Limits Qualifiers  1,4-Bromofluorobenzene 106 68-134  1,2-Dichloroethane-d4 103 67-133	Carbon Disulfide		820		400	63.6		
SurrogateRec. (%)Control LimitsQualifiers1,4-Bromofluorobenzene10668-1341,2-Dichloroethane-d410367-133	c-1,2-Dichloroethene		1000		130	63.6		
1,4-Bromofluorobenzene     106     68-134       1,2-Dichloroethane-d4     103     67-133	Tetrachloroethene		17000		220	63.6		
1,2-Dichloroethane-d4 103 67-133	Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
	1,4-Bromofluorobenzene		106		68-134			
Toluene-d8 99 70-130	1,2-Dichloroethane-d4		103		67-133			
	Toluene-d8		99		70-130			



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3 Page 33 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC/MS K	N/A	07/04/15 02:30	150703L02
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	1	9	4.00		
Benzene		110	6	6.4	4.00		
Benzyl Chloride		ND	3	31	4.00		
Bromodichloromethane		ND	1	3	4.00		
Bromoform		ND	2	21	4.00		
Bromomethane		ND	7	7.8	4.00		
2-Butanone		ND	1	8	4.00		
Carbon Disulfide		910	2	25	4.00		
Carbon Tetrachloride		ND	1	3	4.00		
Chlorobenzene		ND	9	).2	4.00		
Chloroethane		ND	5	5.3	4.00		
Chloroform		67	g	9.8	4.00		
Chloromethane		6.5	4	l.1	4.00		
Dibromochloromethane		ND	1	7	4.00		
Dichlorodifluoromethane		ND	g	0.9	4.00		
Diisopropyl Ether (DIPE)		ND	3	33	4.00		
1,1-Dichloroethane		ND	8	3.1	4.00		
1,2-Dibromoethane		ND	1	5	4.00		
Dichlorotetrafluoroethane		ND	5	56	4.00		
1,2-Dichlorobenzene		ND	1	2	4.00		
1,2-Dichloroethane		ND	8	3.1	4.00		
1,2-Dichloropropane		ND	g	0.2	4.00		
1,3-Dichlorobenzene		ND	1	2	4.00		
1,4-Dichlorobenzene		ND	1	2	4.00		
c-1,3-Dichloropropene		ND	g	0.1	4.00		
t-1,3-Dichloropropene		ND	1	8	4.00		
Ethanol		ND	3	88	4.00		
Ethyl-t-Butyl Ether (ETBE)		ND	3	33	4.00		
Ethylbenzene		14	8	3.7	4.00		
4-Ethyltoluene		ND	g	0.8	4.00		
Hexachloro-1,3-Butadiene		ND	6	64	4.00		
2-Hexanone		ND	2	25	4.00		
Methyl-t-Butyl Ether (MTBE)		ND	2	29	4.00		
Methylene Chloride		ND		69	4.00		
4-Methyl-2-Pentanone		ND	2	25	4.00		



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265 Petaluma, CA 94954-2312 Preparation: N/A Method: EPA TO-15 Units: ug/m3 Project: 580 Market Place Shopping Center Page 34 of 45 <u>DF</u> **Parameter** Result <u>RL</u> Qualifiers Naphthalene ND 100 4.00 o-Xylene ND 8.7 4.00 p/m-Xylene ND 35 4.00 Styrene ND 26 4.00 Tert-Amyl-Methyl Ether (TAME) ND 33 4.00 Tert-Butyl Alcohol (TBA) ND 24 4.00 Toluene 34 7.5 4.00

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Trichlorofluoromethane ND 4.00 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 46 4.00 1,1,1-Trichloroethane ND 11 4.00 ND 1,1,2-Trichloroethane 11 4.00 1,3,5-Trimethylbenzene ND 9.8 4.00 1,1,2,2-Tetrachloroethane ND 4.00 27 1,2,4-Trimethylbenzene ND 29 4.00 1,2,4-Trichlorobenzene ND 59 4.00 Vinyl Acetate ND 28 4.00

Qualifiers **Control Limits** Surrogate Rec. (%) 1,4-Bromofluorobenzene 107 68-134 1.2-Dichloroethane-d4 67-133 117 Toluene-d8 83 70-130

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC/MS NN	N/A	07/07/15 11:18	150706L01
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	alifiers
1,1-Dichloroethene		2500	5	500	250		
c-1,2-Dichloroethene		47000	5	500	250		
t-1,2-Dichloroethene		4300	5	500	250		
Tetrachloroethene		14000	8	350	250		
Trichloroethene		33000	6	570	250		
Vinyl Chloride		1300	3	320	250		
Surrogate		Rec. (%)	<u>C</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		107	6	8-134			
1,2-Dichloroethane-d4		113	6	67-133			
Toluene-d8		105	7	70-130			

ug/m3



#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units:

Project: 580 Market Place Shopping Center Page 35 of 45

	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC/MS K	N/A	07/06/15 22:19	150706L02
<u>Parameter</u>		Result	RI	<u>L</u>	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	6.	0	1.27		
Benzene		18	2.	0	1.27		
Benzyl Chloride		ND	9.	9	1.27		
Bromodichloromethane		8.3	4.	3	1.27		
Bromoform		ND	6.	6	1.27		
Bromomethane		ND	2.	5	1.27		
2-Butanone		ND	5.	6	1.27		
Carbon Tetrachloride		ND	4.	0	1.27		
Chlorobenzene		4.7	2.	9	1.27		
Chloroethane		ND	1.	7	1.27		
Chloroform		51	3.	1	1.27		
Chloromethane		5.9	1.	3	1.27		
Dibromochloromethane		ND	5.	4	1.27		
Dichlorodifluoromethane		3.2	3.	1	1.27		
Diisopropyl Ether (DIPE)		ND	11	1	1.27		
1,1-Dichloroethane		ND	2.	6	1.27		
1,1-Dichloroethene		19	2.	5	1.27		
1,2-Dibromoethane		ND	4.	9	1.27		
Dichlorotetrafluoroethane		ND	18	3	1.27		
1,2-Dichlorobenzene		ND	3.	8	1.27		
1,2-Dichloroethane		ND	2.	6	1.27		
1,2-Dichloropropane		ND	2.	9	1.27		
1,3-Dichlorobenzene		ND	3.	8	1.27		
1,4-Dichlorobenzene		ND	3.	8	1.27		
c-1,3-Dichloropropene		ND	2.	9	1.27		
c-1,2-Dichloroethene		270	2.	5	1.27		
t-1,2-Dichloroethene		61	2.	5	1.27		
t-1,3-Dichloropropene		ND	5.	8	1.27		
Ethanol		ND	12		1.27		
Ethyl-t-Butyl Ether (ETBE)		ND	11		1.27		
Ethylbenzene		ND	2.		1.27		
4-Ethyltoluene		ND	3.		1.27		
Hexachloro-1,3-Butadiene		ND	20		1.27		
2-Hexanone		ND	7.		1.27		
Methyl-t-Butyl Ether (MTBE)		ND	9.:		1.27		



Cardno ERI			Date Re	eceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	ition:			N/A
			Method:	:			EPA TO-15
			Units:				ug/m3
Project: 580 Market Place Shoppin	ng Center					Pag	e 36 of 45
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methylene Chloride		ND		22	1.27		
4-Methyl-2-Pentanone		ND		7.8	1.27		
Naphthalene		ND		33	1.27		
o-Xylene		ND		2.8	1.27		
p/m-Xylene		ND		11	1.27		
Styrene		ND		8.1	1.27		
Tert-Amyl-Methyl Ether (TAME)		ND		11	1.27		
Tert-Butyl Alcohol (TBA)		ND		7.7	1.27		
Toluene		8.5		2.4	1.27		
Trichloroethene		210		3.4	1.27		
Trichlorofluoromethane		ND		7.1	1.27		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		15	1.27		
1,1,1-Trichloroethane		ND		3.5	1.27		
1,1,2-Trichloroethane		ND		3.5	1.27		
1,3,5-Trimethylbenzene		ND		3.1	1.27		
1,1,2,2-Tetrachloroethane		ND		8.7	1.27		
1,2,4-Trimethylbenzene		ND		9.4	1.27		
1,2,4-Trichlorobenzene		ND		19	1.27		
Vinyl Acetate		ND		8.9	1.27		
Vinyl Chloride		23		1.6	1.27		
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		104		68-134			
1,2-Dichloroethane-d4		109		67-133			
Toluene-d8		94		70-130			
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC/MS NN	N/A	07/07/15 12:05	150706L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Carbon Disulfide		410		92	14.8		
Tetrachloroethene		3000		50	14.8		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		112		68-134			
1,2-Dichloroethane-d4		116		67-133			
Toluene-d8		108		70-130			



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3 Page 37 of 45

Project: 580 Market Place Shopping Center

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-24B	15-06-2265-19-A	06/25/15 09:25	Air	GC/MS K	N/A	07/04/15 04:18	150703L02
Parameter		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	<u>llifiers</u>
Acetone		ND	5	.7	1.19		
Benzene		40	1.	.9	1.19		
Benzyl Chloride		ND	9	.2	1.19		
Bromodichloromethane		ND	4	.0	1.19		
Bromoform		ND	6	.2	1.19		
Bromomethane		ND	2	.3	1.19		
2-Butanone		19	5	.3	1.19		
Carbon Tetrachloride		ND	3	.7	1.19		
Chlorobenzene		11	2	.7	1.19		
Chloroethane		ND	1.	.6	1.19		
Chloroform		3.9	2	.9	1.19		
Chloromethane		3.8	1.	.2	1.19		
Dibromochloromethane		ND	5	.1	1.19		
Dichlorodifluoromethane		ND	2	.9	1.19		
Diisopropyl Ether (DIPE)		ND	9	.9	1.19		
1,1-Dichloroethane		ND	2	.4	1.19		
1,1-Dichloroethene		ND	2	.4	1.19		
1,2-Dibromoethane		ND	4	.6	1.19		
Dichlorotetrafluoroethane		ND	1	7	1.19		
1,2-Dichlorobenzene		ND	3	.6	1.19		
1,2-Dichloroethane		ND	2	.4	1.19		
1,2-Dichloropropane		ND	2	.7	1.19		
1,3-Dichlorobenzene		ND	3	.6	1.19		
1,4-Dichlorobenzene		ND	3	.6	1.19		
c-1,3-Dichloropropene		ND	2	.7	1.19		
c-1,2-Dichloroethene		23	2	.4	1.19		
t-1,2-Dichloroethene		4.1	2	.4	1.19		
t-1,3-Dichloropropene		ND	5	.4	1.19		
Ethanol		12	1	1	1.19		
Ethyl-t-Butyl Ether (ETBE)		ND	9	.9	1.19		
Ethylbenzene		12	2	.6	1.19		
4-Ethyltoluene		ND	2	.9	1.19		
Hexachloro-1,3-Butadiene		ND	1	9	1.19		
2-Hexanone		ND	7.	.3	1.19		
Methyl-t-Butyl Ether (MTBE)		ND	8	.6	1.19		



Potentian	Cardno ERI			Date Re	ceived:			06/30/15
Method: Units: Units: Sugm3   Project: 580 Market Place Shopping Center	601 North McDowell Blvd.			Work O	rder:			15-06-2265
Project: 580 Market Place Shopping Center	Petaluma, CA 94954-2312			Prepara	tion:			N/A
Project: 580 Market Place Shopping Center         Result Result ND         RL DE ND         Qualifiers           Parameter Methylene Chloride         ND         21         1.19         Amount of the ND         Amount of the ND				Method:				EPA TO-15
Parameter         Result ND         RL         DE Oualifers         Qualifers           Methylene Chloride         ND         21         1.19				Units:				ug/m3
Methylene Chloride         ND         21         1.19         Heathyle Perhatanone         ND         7.3         1.19         Heathyle Perhatanone         ND         3.1         1.19         Heathyle Perhatanone         ND         3.1         1.19         Heathyle Perhatanone         Residence         1.19         Heathyle Perhatanone         1.11         3.2         1.19         Heathyle Perhatanone         1.11         3.2         1.19         Heathyle Perhatanone         1.11         1.12         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11	Project: 580 Market Place Shopp	ing Center					Pag	je 38 of 45
4-Methyls-2-Pentanone         ND         7.3         1.19         Image (1.19)         1.19         Image (1.19)         Image (1	<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Qua</u>	alifiers
Naphthalene         ND         31         1.19         Head of the primary late of the	Methylene Chloride		ND		21	1.19		
c.Xylene         8.6         2.6         1.19           p/m-Xylene         16         10         1.19           Slyrene         ND         7.6         1.19           Tert-Amyl-Methyl Ether (TAME)         ND         9.9         1.19           Tert-Butyl Alcohol (TBA)         30         7.2         1.19           Tert-Butyl Alcohol (TBA)         30         7.2         1.19           Tert-Amyl-Methyl Ether (TAME)         30         7.2         1.19           Tert-Amyl-Methyl Ether (TAME)         30         7.2         1.19           Tert-Amyl-Methyl Ether (TAME)         30         7.2         1.19           Total Color (TBA)         30         7.2         1.19           Total Color (TBA)         30         7.2         1.19           Tickhoroethane         ND         6.7         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,1,2,2-Tetrachloroethane         ND         8.8         1.19           1,2,2-Trichloroethane         ND         8.8         1.19           1,2,4-Trinchlorobenzene         ND         8.4         1.19           Vinyl Chloride         ND         1.5         1.19	4-Methyl-2-Pentanone		ND		7.3	1.19		
P/m-Xylene	Naphthalene		ND		31	1.19		
Styrene	-		8.6		2.6	1.19		
Tert-Amyl-Methyl Ether (TAME)         ND         9.9         1.19           Tert-Butyl Alcohol (TBA)         30         7.2         1.19           Tertachloroethene         7.8         4.0         1.19           Toluene         26         2.2         1.19           Trichloroethene         111         3.2         1.19           Trichlorofluoromethane         ND         6.7         1.19           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         3.2         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,1,2-Trimethylbenzene         3.1         2.9         1.19           1,2,2-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trichlorobenzene         ND         8.4         1.19           Vinyl Acetate         ND         8.4         1.19           Vinyl Chloride         ND         8.4         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           Surrogate         But Sample         Matrix	p/m-Xylene		16		10	1.19		
Tetra-Butyl Alcohol (TBA)         30         7.2         1.19         Tetrachloroethene         7.8         4.0         1.19         Tetrachloroethene         1.10         1.19         Tetrachloroethene         1.11         3.2         1.19         Tetrachloroethene         1.11         3.2         1.19         Tetrachloroethene         1.10         1.12         1.19         1.19         1.12         1.11         1.19         1.11         1.11         1.19         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.11         1.12         1.11         1.12         1.11         1.12         1.11         1.12         1.11         1.12         1.11         1.12         1.11         1.12         1.11 <td>Styrene</td> <td></td> <td>ND</td> <td></td> <td>7.6</td> <td>1.19</td> <td></td> <td></td>	Styrene		ND		7.6	1.19		
Tetrachloroethene         7.8         4.0         1.19           Toluene         26         2.2         1.19           Trichlorothene         11         3.2         1.19           Trichlorothucomethane         ND         6.7         1.19           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,3,5-Trimethylbenzene         3.1         2.9         1.19           1,2,2-Tetrachloroethane         ND         8.2         1.19           1,2,4-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trichloroethane         ND         8.8         1.19           1,2,4-Trichlorobenzene         ND         8.4         1.19           Vinyl Acetate         ND         1.5         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134         1.24         Date/Time Analyzed         OC Date/Time Prepared         Analyzed         OC Dat	Tert-Amyl-Methyl Ether (TAME)		ND		9.9	1.19		
Toluene         26         2.2         1.19           Trichloroethene         111         3.2         1.19           Trichloromethane         ND         6.7         1.19           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,3,5-Trimethylbenzene         3.1         2.9         1.19           1,2,2-Tetrachloroethane         ND         8.2         1.19           1,2,2-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trimethylbenzene         ND         18         1.19           1,2,4-Trimethylbenzene         ND         18         1.19           1,2,4-Trimethylbenzene         ND         1.5         1.19           Vinyl Chloride         ND         1.5         1.19           Vinyl Chloride         ND         1.5         0.0           Surrogate         Rec. (%)         Control Limits         Qualifiers           Lab Sample Number         Lab Sample Number         Na Collected	Tert-Butyl Alcohol (TBA)		30		7.2	1.19		
Trichloroethene         111         3.2         1.19           Trichlorofluoromethane         ND         6.7         1.19           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,3,5-Trimethylbenzene         3.1         2.9         1.19           1,1,2,2-Tetrachloroethane         ND         8.2         1.19           1,2,4-Trichlorobenzene         ND         8.8         1.19           1,2,4-Trichloroebnzene         ND         1.8         1.19           Vinyl Acetate         ND         1.5         1.19           Vinyl Chloride         ND         1.5         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Diichlorethane-d4         97         67-133           Toluene-d8         Date/Time Number         Result         Instrument         Date/Time Analyzed         OC Batch ID O6:26           SV-24B         15-06-2	Tetrachloroethene		7.8		4.0	1.19		
Trichlorofluoromethane         ND         6.7         1.19           1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,3,5-Trimethylbenzene         3.1         2.9         1.19           1,3,5-Trimethylbenzene         ND         8.2         1.19           1,2,2-Tetrachloroethane         ND         8.8         1.19           1,2,4-Trichlorobenzene         ND         18         1.19           Vinyl Acetate         ND         8.4         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           Sv-24B         15-06-2265-19-A         06/25/15         Air         Instrument         Date/Time Analyzed         Analyzed           Carbon Disulfide         2400         50         7.95         Occide         Isoroelace	Toluene		26		2.2	1.19		
1,1,2-Trichloro-1,2,2-Trifluoroethane         ND         14         1.19           1,1,1-Trichloroethane         ND         3.2         1.19           1,1,2-Trichloroethane         ND         3.2         1.19           1,3,5-Trimethylbenzene         3.1         2.9         1.19           1,2,2-Tetrachloroethane         ND         8.2         1.19           1,2,2-Trimethylbenzene         ND         8.8         1.19           1,2,4-Trichlorobenzene         ND         18         1.19           Vinyl Acetate         ND         8.4         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           SV-24B         15-06-2265-19-A         06(25/15)         Air         GC/MS K         N/A         07/07/15         150706L02           Parameter         Result         RL         DE         Qualifiers           Carbon Disulfide         2400         50         7.95           Surrogate	Trichloroethene		11		3.2	1.19		
1,1,1-Trichloroethane       ND       3.2       1.19         1,1,2-Trichloroethane       ND       3.2       1.19         1,3,5-Trimethylbenzene       3.1       2.9       1.19         1,1,2,2-Tetrachloroethane       ND       8.2       1.19         1,2,4-Trimethylbenzene       ND       8.8       1.19         1,2,4-Triinethylbenzene       ND       18       1.19         1,2,4-Triinethylbenzene       ND       18       1.19         Vinyl Acetate       ND       8.4       1.19         Vinyl Chloride       ND       1.5       1.19         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       95       70-130         SV-24B       15-06-2265-19-A       06/25/15       Air       GC/MS K       N/A       Date/Time Analyzed       QC Batch ID Prepared         Parameter       Result       RL       DF       Qualifiers         Carbon Disulfide       2400       50       7.95         Surrogate       Result       RL       DF       Qualifiers         1,4-Brom	Trichlorofluoromethane		ND		6.7	1.19		
1,1,2-Trichloroethane       ND       3.2       1.19         1,3,5-Trimethylbenzene       3.1       2.9       1.19         1,1,2,2-Tetrachloroethane       ND       8.2       1.19         1,2,4-Trichlorobenzene       ND       8.8       1.19         1,2,4-Trichlorobenzene       ND       18       1.19         Vinyl Acetate       ND       8.4       1.19         Vinyl Chloride       ND       1.5       1.19         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134       4         1,2-Dichloroethane-d4       97       67-133       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument Instrument Prepared Analyzed Analyzed Analyzed Occidence       QC Batch ID Analyzed Occidence         SV-24B       15-06-2265-19-A 06/25/15 09:25       Air GC/MS K       N/A 07/07/15 06:26       150706L02         Parameter       Result Result RL       DE DE Qualifiers         Carbon Disulfide       2400       50       7.95       4         Surrogate Rec. (%)       Control Limits Occidence       Qualifiers       4         1,4-Bromofluorobenzene       106       68-134       68-134	1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		14	1.19		
1,3,5-Trimethylbenzene       3.1       2.9       1.19         1,1,2,2-Tetrachloroethane       ND       8.2       1.19         1,2,4-Trimethylbenzene       ND       8.8       1.19         1,2,4-Trichlorobenzene       ND       18       1.19         Vinyl Acetate       ND       8.4       1.19         Vinyl Chloride       ND       1.5       1.19         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134       4         1,2-Dichloroethane-d4       97       67-133       67-133         Toluene-d8       95       70-130       Date/Time Prepared Analyzed Analyzed Analyzed Analyzed O9:25       QC Batch ID Analyzed Analyzed O9:25       Air GC/MS K       N/A       07/07/15 06:26       150706L02         Ev-24B       15-06-2265-19-A 09:25       Air GC/MS K       N/A       07/07/15 06:26       150706L02         Earameter       Result RL DE OFTION Disulfide       Qualifiers         Surrogate       Rec. (%)       Control Limits Outling Qualifiers         1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       109       67-133	1,1,1-Trichloroethane		ND		3.2	1.19		
1,1,2,2-Tetrachloroethane       ND       8.2       1.19         1,2,4-Trimethylbenzene       ND       8.8       1.19         1,2,4-Trichlorobenzene       ND       18       1.19         Vinyl Acetate       ND       8.4       1.19         Vinyl Chloride       ND       1.5       1.19         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument Prepared Analyzed Analyzed Analyzed Analyzed O9:25       QC Batch ID O9:25         SV-24B       15-06-2265-19-A 09:25       Air GC/MS K N/A 07/07/15 09:25       DT 07/07/15 09:26       150706L02         Parameter       Result RL DE OF CONTROL Limits O9:25       DE OF CONTROL Limits O9:26       Qualifiers         Surrogate       Rec. (%)       Control Limits O9:26       Qualifiers         1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       109       67-133	1,1,2-Trichloroethane		ND		3.2	1.19		
1,2,4-Trimethylbenzene       ND       8.8       1.19         1,2,4-Trichlorobenzene       ND       18       1.19         Vinyl Acetate       ND       8.4       1.19         Vinyl Chloride       ND       1.5       1.19         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       95       70-130         SV-24B       15-06-2265-19-A       06/25/15 09:25       Air       GC/MS K       N/A       07/07/15 06:26       150706L02         SV-24B       15-06-2265-19-A       06/25/15 09:25       Air       GC/MS K       N/A       07/07/15 06:26       150706L02         Earameter       Result       RL       DE       Qualifiers         Carbon Disulfide       2400       50       7.95         Surrogate       Rec. (%)       Control Limits       Qualifiers         1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       109       67-133	1,3,5-Trimethylbenzene					1.19		
1,2,4-Trichlorobenzene         ND         18         1.19           Vinyl Acetate         ND         8.4         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix         Instrument Prepared Analyzed Ana	1,1,2,2-Tetrachloroethane					1.19		
Vinyl Acetate         ND         8.4         1.19           Vinyl Chloride         ND         1.5         1.19           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Matrix Collected Collected         Instrument Prepared Prepared Analyzed Analyzed O6:26         QC Batch ID O7/07/15 06:26           SV-24B         15-06-2265-19-A 06/25/15 09:25         Air GC/MS K N/A 07/07/15 06:26         07/07/15 06:26         150706L02           Parameter Carbon Disulfide         Result RL DE DE 7.95         DE Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,06 68-134         Control Limits 04-134         Qualifiers           1,4-Bromofluorobenzene 106 68-134 1,2-Dichloroethane-d4         109 67-133         67-133	1,2,4-Trimethylbenzene		ND		8.8	1.19		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected Collected         Matrix         Instrument Instrument Prepared Analyzed Analyzed         QC Batch ID O6:265-19-A 06/25/15 09:25           SV-24B         15-06-2265-19-A 06/25/15 09:25         Air GC/MS K N/A 07/07/15 06:26         150706L02 06:26           Parameter Carbon Disulfide         Result RL DE Qualifiers         DE Qualifiers           Carbon Disulfide         2400         50         7.95           Surrogate 1,4-Bromofluorobenzene 1,06         68-134         68-134           1,2-Dichloroethane-d4         109         67-133	1,2,4-Trichlorobenzene					1.19		
Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         103         68-134           1,2-Dichloroethane-d4         97         67-133           Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Instrument         Date Prepared Analyzed         QC Batch ID Prepared Analyzed           SV-24B         15-06-2265-19-A 06/25/15 09:25         Air GC/MS K N/A 07/07/15 06:26         DE Qualifiers           Parameter Carbon Disulfide         Result RL DE 7.95         DE Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 106 68-134 1,2-Dichloroethane-d4         109 67-133	Vinyl Acetate					1.19		
1,4-Bromofluorobenzene       103       68-134         1,2-Dichloroethane-d4       97       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Matrix       Instrument Instrument Prepared Pr	Vinyl Chloride		ND		1.5	1.19		
1,2-Dichloroethane-d4       97       67-133         Toluene-d8       95       70-130         Client Sample Number       Lab Sample Number       Date/Time Collected Collected Collected Prepared Analyzed Analy	<del></del> _					Qualifiers		
Toluene-d8         95         70-130           Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Prepared         Date Prepared Analyzed         QC Batch ID Prepared           SV-24B         15-06-2265-19-A 06/25/15 09:25         Air GC/MS K 0/A 07/07/15 06:26         DF 06:26         Qualifiers           Parameter Carbon Disulfide         Result 2400         SU Control Limits 00 (68-134)         Qualifiers           Surrogate 1,4-Bromofluorobenzene         106 68-134         68-134           1,2-Dichloroethane-d4         109 67-133	•							
Client Sample Number         Lab Sample Number         Date/Time Collected         Matrix         Instrument Prepared         Date Prepared Analyzed Analyzed         QC Batch ID           SV-24B         15-06-2265-19-A         06/25/15 09:25         Air         GC/MS K         N/A         07/07/15 06:26         150706L02           Parameter Carbon Disulfide         Result 2400         BL DE 7.95         Qualifiers           Surrogate 1,4-Bromofluorobenzene 1,4-Bromofluorobenzene 1.2-Dichloroethane-d4         109         67-133	1,2-Dichloroethane-d4							
Number         Collected         Prepared         Analyzed           SV-24B         15-06-2265-19-A         06/25/15 09:25         Air         GC/MS K         N/A         07/07/15 06:26         150706L02           Parameter Carbon Disulfide         Result RL DF Qualifiers         Qualifiers           Carbon Disulfide         50         7.95           Surrogate 1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         109         67-133	Toluene-d8		95		70-130			
Parameter         Result         RL         DF         Qualifiers           Carbon Disulfide         2400         50         7.95           Surrogate         Rec. (%)         Control Limits         Qualifiers           1,4-Bromofluorobenzene         106         68-134           1,2-Dichloroethane-d4         109         67-133	Client Sample Number			Matrix	Instrument	Date Prepared		QC Batch ID
Carbon Disulfide2400507.95SurrogateRec. (%)Control LimitsQualifiers1,4-Bromofluorobenzene10668-1341,2-Dichloroethane-d410967-133	SV-24B	15-06-2265-19-A		Air	GC/MS K	N/A		150706L02
Carbon Disulfide2400507.95SurrogateRec. (%)Control LimitsQualifiers1,4-Bromofluorobenzene10668-1341,2-Dichloroethane-d410967-133	Parameter		Result		RL	DF	Qua	alifiers
1,4-Bromofluorobenzene       106       68-134         1,2-Dichloroethane-d4       109       67-133	Carbon Disulfide		2400					
1,2-Dichloroethane-d4 109 67-133	Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
	1,4-Bromofluorobenzene		106		68-134			
Toluene-d8 98 70-130	1,2-Dichloroethane-d4		109		67-133			
	Toluene-d8		98		70-130			



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15 Units: ug/m3

Project: 580 Market Place Shopping Center Page 39 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-15629	N/A	Air	GC/MS K	N/A	07/02/15 18:05	150702L02
Parameter		Result	RL	•	<u>DF</u>	Qua	<u>lifiers</u>
Acetone		ND	4.8	3	1.00		
Benzene		ND	1.6	6	1.00		
Benzyl Chloride		ND	7.8	3	1.00		
Bromodichloromethane		ND	3.4	4	1.00		
Bromoform		ND	5.2	2	1.00		
Bromomethane		ND	1.9	9	1.00		
2-Butanone		ND	4.4	1	1.00		
Carbon Disulfide		ND	6.2	2	1.00		
Carbon Tetrachloride		ND	3.1	1	1.00		
Chlorobenzene		ND	2.3	3	1.00		
Chloroethane		ND	1.3	3	1.00		
Chloroform		ND	2.4	1	1.00		
Chloromethane		ND	1.0	)	1.00		
Dibromochloromethane		ND	4.3	3	1.00		
Dichlorodifluoromethane		ND	2.5	5	1.00		
Diisopropyl Ether (DIPE)		ND	8.4	1	1.00		
1,1-Dichloroethane		ND	2.0	)	1.00		
1,1-Dichloroethene		ND	2.0	)	1.00		
1,2-Dibromoethane		ND	3.8	3	1.00		
Dichlorotetrafluoroethane		ND	14		1.00		
1,2-Dichlorobenzene		ND	3.0	)	1.00		
1,2-Dichloroethane		ND	2.0	)	1.00		
1,2-Dichloropropane		ND	2.3	3	1.00		
1,3-Dichlorobenzene		ND	3.0	)	1.00		
1,4-Dichlorobenzene		ND	3.0	)	1.00		
c-1,3-Dichloropropene		ND	2.3	3	1.00		
c-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,3-Dichloropropene		ND	4.5	5	1.00		
Ethanol		ND	9.4		1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	8.4		1.00		
Ethylbenzene		ND	2.2		1.00		
4-Ethyltoluene		ND	2.5	5	1.00		
Hexachloro-1,3-Butadiene		ND	16		1.00		
2-Hexanone		ND	6.1		1.00		



Cardno ERI	Da	te Received:		06/30/15
601 North McDowell Blvd.	Wo	ork Order:		15-06-2265
Petaluma, CA 94954-2312	Pre	eparation:		N/A
,		thod:		EPA TO-15
	Un			ug/m3
Project: 580 Market Place Shopping Center	<b>3</b>			Page 40 of 45
Parameter	Result	<u>RL</u>	<u>DF</u>	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	<u>Qualifici 5</u>
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Naphthalene	ND	26	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	
Styrene	ND	6.4	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	68-134		
1,2-Dichloroethane-d4	95	67-133		
Toluene-d8	97	70-130		



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Preparation: N/A Method: EPA TO-15

Units: ug/m3 Page 41 of 45

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-15630	N/A	Air	GC/MS K	N/A	07/03/15 19:38	150703L02
<u>Parameter</u>		Result	RL		<u>DF</u>	Qua	alifiers
Acetone		ND	4.8	3	1.00		
Benzene		ND	1.6	5	1.00		
Benzyl Chloride		ND	7.8	3	1.00		
Bromodichloromethane		ND	3.4	1	1.00		
Bromoform		ND	5.2	2	1.00		
Bromomethane		ND	1.9	9	1.00		
2-Butanone		ND	4.4	1	1.00		
Carbon Disulfide		ND	6.2	2	1.00		
Carbon Tetrachloride		ND	3.1	l	1.00		
Chlorobenzene		ND	2.3	3	1.00		
Chloroethane		ND	1.3	3	1.00		
Chloroform		ND	2.4	1	1.00		
Chloromethane		ND	1.0	)	1.00		
Dibromochloromethane		ND	4.3	3	1.00		
Dichlorodifluoromethane		ND	2.5	5	1.00		
Diisopropyl Ether (DIPE)		ND	8.4	1	1.00		
1,1-Dichloroethane		ND	2.0	)	1.00		
1,1-Dichloroethene		ND	2.0	)	1.00		
1,2-Dibromoethane		ND	3.8	3	1.00		
Dichlorotetrafluoroethane		ND	14		1.00		
1,2-Dichlorobenzene		ND	3.0	)	1.00		
1,2-Dichloroethane		ND	2.0	)	1.00		
1,2-Dichloropropane		ND	2.3	3	1.00		
1,3-Dichlorobenzene		ND	3.0	)	1.00		
1,4-Dichlorobenzene		ND	3.0	)	1.00		
c-1,3-Dichloropropene		ND	2.3	3	1.00		
c-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,2-Dichloroethene		ND	2.0	)	1.00		
t-1,3-Dichloropropene		ND	4.5	5	1.00		
Ethanol		ND	9.4	1	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	8.4	1	1.00		
Ethylbenzene		ND	2.2	2	1.00		
4-Ethyltoluene		ND	2.5	5	1.00		
Hexachloro-1,3-Butadiene		ND	16		1.00		
2-Hexanone		ND	6.1	I	1.00		



**Surrogate** 

Toluene-d8

1,4-Bromofluorobenzene

1,2-Dichloroethane-d4

### **Analytical Report**

Cardno ERI	D	ate Received:		06/30/15
601 North McDowell Blvd.	W	ork Order:		15-06-2265
Petaluma, CA 94954-2312	Pi	reparation:		N/A
		ethod:		EPA TO-15
		nits:		ug/m3
Project: 580 Market Place Shopping Center	J			Page 42 of 45
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Methyl-t-Butyl Ether (MTBE)	ND	— 7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Naphthalene	ND	26	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	
Styrene	ND	6.4	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	

Rec. (%)

95

95

96

**Control Limits** 

68-134

67-133

70-130

Qualifiers



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-15

Units: ug/m3

Project: 580 Market Place Shopping Center Page 43 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-15633	N/A	Air	GC/MS NN	N/A	07/06/15 21:49	150706L01
<u>Parameter</u>		Result	ļ	<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>
Carbon Disulfide		ND	(	6.2	1.00		
1,1-Dichloroethene		ND	2	2.0	1.00		
c-1,2-Dichloroethene		ND	2	2.0	1.00		
t-1,2-Dichloroethene		ND	2	2.0	1.00		
Tetrachloroethene		ND	;	3.4	1.00		
Trichloroethene		ND	2	2.7	1.00		
Vinyl Chloride		ND		1.3	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		101	(	68-134			
1,2-Dichloroethane-d4		100	(	67-133			
Toluene-d8		102	-	70-130			



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-15

Units: ug/m3

Project: 580 Market Place Shopping Center Page 44 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-15631	N/A	Air	GC/MS K	N/A	07/06/15 20:38	150706L02
<u>Parameter</u>	,	Result	<u>RI</u>	=	<u>DF</u>	Qualifiers	
Acetone		ND	4.	8	1.00		
Benzene		ND	1.0	6	1.00		
Benzyl Chloride		ND	7.	8	1.00		
Bromodichloromethane		ND	3.	4	1.00		
Bromoform		ND	5	2	1.00		
Bromomethane		ND	1.9	9	1.00		
2-Butanone		ND	4.	4	1.00		
Carbon Disulfide		ND	6.3	2	1.00		
Carbon Tetrachloride		ND	3.	1	1.00		
Chlorobenzene		ND	2.3	3	1.00		
Chloroethane		ND	1.3	3	1.00		
Chloroform		ND	2.	4	1.00		
Chloromethane		ND	1.0	0	1.00		
Dibromochloromethane		ND	4.3	3	1.00		
Dichlorodifluoromethane		ND	2.	5	1.00		
Diisopropyl Ether (DIPE)		ND	8.	4	1.00		
1,1-Dichloroethane		ND	2.	0	1.00		
1,1-Dichloroethene		ND	2.	0	1.00		
1,2-Dibromoethane		ND	3.	8	1.00		
Dichlorotetrafluoroethane		ND	14	ļ	1.00		
1,2-Dichlorobenzene		ND	3.	0	1.00		
1,2-Dichloroethane		ND	2.	0	1.00		
1,2-Dichloropropane		ND	2.:	3	1.00		
1,3-Dichlorobenzene		ND	3.	0	1.00		
1,4-Dichlorobenzene		ND	3.		1.00		
c-1,3-Dichloropropene		ND	2.:	3	1.00		
c-1,2-Dichloroethene		ND	2.	0	1.00		
t-1,2-Dichloroethene		ND	2.		1.00		
t-1,3-Dichloropropene		ND	4.	5	1.00		
Ethanol		ND	9.		1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	8.		1.00		
Ethylbenzene		ND	2.:		1.00		
4-Ethyltoluene		ND	2.		1.00		
Hexachloro-1,3-Butadiene		ND	16		1.00		
2-Hexanone		ND	6.		1.00		



Toluene-d8

# **Analytical Report**

Cardno ERI	Da	te Received:		06/30/15
601 North McDowell Blvd.	Wo	ork Order:		15-06-2265
Petaluma, CA 94954-2312	Pre	eparation:		N/A
Totalama, 671 6 166 1 2612		ethod:		EPA TO-15
	Un			ug/m3
Project: 580 Market Place Shopping Center	On	115.		Page 45 of 45
Froject. 300 Market Flace Shopping Center				
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Naphthalene	ND	26	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	
Styrene	ND	6.4	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	102	68-134		
1,2-Dichloroethane-d4	111	67-133		

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

96

70-130

Page 1 of 6



# **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Units: ug/m3

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC/MS K	N/A	07/02/15 22:27	150702L01
<u>Parameter</u>		Result		<u>RL</u>	DF	Qua	<u>lifiers</u>
TPH as Gasoline (C6-C12)		15000		700	1.50		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4		100		50-150			
1,4-Bromofluorobenzene		90		50-150			
Toluene-d8		95		50-150			

SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC/MS K	N/A	07/03/15 20:24	150703L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Qu</u>	<u>alifiers</u>
TPH as Gasoline (C6-C12)		38000		3000	6.54		
Currogata		Pag (9/)		Control Limits	Qualifiers		
<u>Surrogate</u>		Rec. (%)		CONTROL LITTIES	Qualifiers		
1,2-Dichloroethane-d4		111		50-150			
1,4-Bromofluorobenzene		101		50-150			
Toluene-d8		97		50-150			

SV-17A	15-06-2265-3-A	06/25/15 15:00	Air	GC/MS K	N/A	07/03/15 21:17	150703L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
TPH as Gasoline (C6-C12)		4500		470	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		100		50-150			
1,4-Bromofluorobenzene		99		50-150			
Toluene-d8		96		50-150			

SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC/MS K	N/A	07/03/15 22:06	150703L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qu	alifiers
TPH as Gasoline (C6-C12)		38000		2900	6.24		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		111		50-150			
1,4-Bromofluorobenzene		97		50-150			
Toluene-d8		97		50-150			



Cardno ERI Date Received: 06/30/15 15-06-2265 Work Order:

601 North McDowell Blvd. N/A Petaluma, CA 94954-2312 Preparation:

> Method: GC/MS C6-C12 AS GASOLINE

		Į	Units:				ug/m3
Project: 580 Market Place Shoppin	ng Center					Pa	ge 2 of 6
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-18A	15-06-2265-5-A	06/25/15 12:22	Air	GC/MS K	N/A	07/03/15 02:05	150702L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		5500		560	1.21		
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		97		50-150			
1,4-Bromofluorobenzene		98		50-150			
Toluene-d8		96		50-150			
SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC/MS K	N/A	07/03/15 03:00	150702L01
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
TPH as Gasoline (C6-C12)		14000		490	1.06		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		104		50-150			
1,4-Bromofluorobenzene		97		50-150			
Toluene-d8		110		50-150			
SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC/MS K	N/A	07/03/15 03:54	150702L01

SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC/MS K	N/A	07/03/15 03:54	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline (C6-C12)		8400		620	1.34		
<u>Surrogate</u>		Rec. (%)		Control Limits	<b>Qualifiers</b>		
1,2-Dichloroethane-d4		103		50-150			
1,4-Bromofluorobenzene		94		50-150			
Toluene-d8		109		50-150			

SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC/MS K	N/A	07/03/15 04:44	150702L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		5900		470	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		107		50-150			
1,4-Bromofluorobenzene		97		50-150			
Toluene-d8		97		50-150			



Cardno ERI Date Received: 06/30/15

601 North McDowell Blvd. Work Order: 15-06-2265
Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Units: ug/m3 Page 3 of 6

Project: 580 Market Place Shopping Center

	Collected			Date Prepared	Date/Time Analyzed	QC Batch ID
15-06-2265-9-A	06/25/15 17:10	Air	GC/MS K	N/A	07/03/15 05:37	150702L01
	Result		RL	<u>DF</u>	Qua	<u>lifiers</u>
	8800		660	1.42		
	Rec. (%)		Control Limits	Qualifiers		
	99		50-150			
	95		50-150			
	97		50-150			
	15-06-2265-9-A	Result 8800 Rec. (%) 99 95	17:10  Result 8800  Rec. (%) 99 95	Result     RL       8800     660       Rec. (%)     Control Limits       99     50-150       95     50-150	Result   RL   DF	Result   RL   DF   Quare

SV-20B	15-06-2265-10-A	06/25/15 17:25	Air	GC/MS K	N/A	07/03/15 06:30	150702L01	
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>	
TPH as Gasoline (C6-C12)		25000		590	1.27			
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>			
1,2-Dichloroethane-d4		100		50-150				
1,4-Bromofluorobenzene		93		50-150				
Toluene-d8		95		50-150				

SV-21A	15-06-2265-11-A	06/25/15 11:36	Air	GC/MS K	N/A	07/03/15 07:23	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
TPH as Gasoline (C6-C12)		29000		660	1.41		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		107		50-150			
1,4-Bromofluorobenzene		92		50-150			
Toluene-d8		94		50-150			

SV-21B	15-06-2265-12-A	06/25/15 11:31	Air	GC/MS K	N/A	07/03/15 08:16	150702L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		21000		620	1.34		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		99		50-150			
1,4-Bromofluorobenzene		94		50-150			
Toluene-d8		96		50-150			

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#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

601 North McDowell Blvd. Work Order: 15-06-2265
Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Units: ug/m3

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-22A	15-06-2265-13-A	06/25/15 10:23	Air	GC/MS K	N/A	07/03/15 23:01	150703L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		21000		660	1.41		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4		97		50-150			
1,4-Bromofluorobenzene		96		50-150			
Toluene-d8		93		50-150			
SV-22B	15-06-2265-14-A	06/25/15	Air	GC/MS K	N/A	07/03/15	150703L01

SV-22B	15-06-2265-14-A	06/25/15 10:18	Air	GC/MS K	N/A	07/03/15 23:57	150703L01
Parameter		Result		<u>RL</u>	<u>DF</u>	<u>Qu</u>	<u>alifiers</u>
TPH as Gasoline (C6-C12)		16000		530	1.13		
<u>Surrogate</u>		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		100		50-150			
1,4-Bromofluorobenzene		103		50-150			
Toluene-d8		94		50-150			

SV-23A	15-06-2265-15-A	06/25/15 08:21	Air	GC/MS K	N/A	07/04/15 00:46	150703L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Gasoline (C6-C12)		89000		1900	4.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		114		50-150			
1,4-Bromofluorobenzene		108		50-150			
Toluene-d8		94		50-150			

SV-23B	15-06-2265-16-A	06/25/15 08:06	Air	GC/MS K	N/A	07/06/15 21:27	150706L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qu	alifiers
TPH as Gasoline (C6-C12)		47000		1500	3.18		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		116		50-150			
1,4-Bromofluorobenzene		107		50-150			
Toluene-d8		97		50-150			

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#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

601 North McDowell Blvd. Work Order: 15-06-2265
Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Units: ug/m3

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC/MS K	N/A	07/04/15 02:30	150703L01
Parameter		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		86000		1900	4.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4		118		50-150			
1,4-Bromofluorobenzene		103		50-150			
Toluene-d8		81		50-150			
a., a.,				200101/			

SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC/MS K	N/A	07/06/15 22:19	150706L01
Parameter		Result		RL	<u>DF</u>	Qu	alifiers
TPH as Gasoline (C6-C12)		14000		590	1.27		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		111		50-150			
1,4-Bromofluorobenzene		100		50-150			
Toluene-d8		94		50-150			

SV-24B	15-06-2265-19-A	06/25/15 09:25	Air	GC/MS K	N/A	07/04/15 04:18	150703L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>
TPH as Gasoline (C6-C12)		21000		550	1.19		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		99		50-150			
1,4-Bromofluorobenzene		93		50-150			
Toluene-d8		95		50-150			

Method Blank	099-16-014-93	N/A	Air	GC/MS K	N/A	07/02/15 18:05	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline (C6-C12)		ND		470	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4		100		50-150			
1,4-Bromofluorobenzene		93		50-150			
Toluene-d8		98		50-150			



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Units: ug/m3 Page 6 of 6

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-014-94	N/A	Air	GC/MS K	N/A	07/03/15 19:38	150703L01
Parameter		Result		RL	<u>DF</u>	Qua	lifiers
TPH as Gasoline (C6-C12)		ND		470	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,2-Dichloroethane-d4		101		50-150			
1,4-Bromofluorobenzene		93		50-150			
Toluene-d8		97		50-150			

Method Blank	099-16-014-95	N/A	Air	GC/MS K	N/A	07/06/15 20:38	150706L01
Parameter		Result		<u>RL</u>	<u>DF</u>	<u>Qu</u>	alifiers
TPH as Gasoline (C6-C12)		ND		470	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,2-Dichloroethane-d4		115		50-150			
1,4-Bromofluorobenzene		100		50-150			
Toluene-d8		96		50-150			





 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 SCAQMD 25.1M

 Units:
 %v

			Offits.				/0
Project: 580 Market Place S	Shopping Center					Pa	age 1 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC 65	N/A	07/01/15 11:21	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		3.8		0.50	1.00		
Carbon Dioxide		2.6		0.50	1.00		
SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC 65	N/A	07/01/15 12:09	150701L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		2.4		0.50	1.00		
Carbon Dioxide		21		0.50	1.00		
SV-17A	15-06-2265-3-A	06/25/15 15:00	Air	GC 65	N/A	07/01/15 12:28	150701L01
<u>Parameter</u>	,	Result		RL	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		8.7		0.50	1.00		
Carbon Dioxide		0.75		0.50	1.00		
SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC 65	N/A	07/01/15 12:46	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		4.8		0.50	1.00		
Carbon Dioxide		17		0.50	1.00		
SV-18A	15-06-2265-5-A	06/25/15 12:22	Air	GC 65	N/A	07/01/15 13:08	150701L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		8.0		0.50	1.00		
Carbon Dioxide		0.69		0.50	1.00		
SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC 65	N/A	07/01/15 13:28	150701L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>alifiers</u>
Oxygen (+ Argon)		6.4		0.50	1.00		
Carbon Dioxide		23		0.50	1.00		



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 SCAQMD 25.1M

 Units:
 %v

 Project: 580 Market Place Shopping Center
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC 65	N/A	07/01/15 14:08	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	lifiers
Oxygen (+ Argon)		8.8	(	0.50	1.00		

SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC 65	N/A	07/01/15 150701L01 14:27
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qualifiers
Oxygen (+ Argon)		8.1		0.50	1.00	
Carbon Dioxide		20		0.50	1.00	

SV-20A	15-06-2265-9-A	06/25/15 17:10	Air	GC 65	N/A	07/01/15 14:51	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Oxygen (+ Argon)		4.1		0.50	1.00		
Carbon Dioxide		4.6		0.50	1.00		

SV-20B	15-06-2265-10-A	06/25/15 17:25	Air	GC 65	N/A	07/01/15 15:31	150701L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qualifie	<u>ers</u>
Oxygen (+ Argon)		7.6		0.50	1.00		
Carbon Dioxide		11		0.50	1.00		

SV-21A	15-06-2265-11-A	06/25/15 11:36	Air	GC 65	N/A	07/01/15 16:14	150701L01
Parameter		Result		RL	DF	Qu	alifiers
Oxygen (+ Argon)		5.0		0.50	1.00		
Methane		0.61		0.50	1.00		
Carbon Dioxide		3.8		0.50	1.00		
SV-24B	15_06_2265_12_A	06/25/15	Air	GC 65	N/A	07/01/15	1507011.01

SV-21B	15-06-2265-12-A	06/25/15 11:31	Air	GC 65	N/A	07/01/15 16:36	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>
Oxygen (+ Argon)		3.7		0.50	1.00		
Carbon Dioxide		28		0.50	1.00		



Oxygen (+ Argon)

Carbon Dioxide

#### **Analytical Report**

 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 SCAQMD 25.1M

 Units:
 %v

 Project: 580 Market Place Shopping Center
 Page 3 of 4

Project: 580 Market Place S	Shopping Center					Pa	age 3 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-22A	15-06-2265-13-A	06/25/15 10:23	Air	GC 65	N/A	07/01/15 17:14	150701L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		4.8		0.50	1.00		
Methane		0.82		0.50	1.00		
Carbon Dioxide		1.1		0.50	1.00		
SV-22B	15-06-2265-14-A	06/25/15 10:18	Air	GC 65	N/A	07/01/15 17:35	150701L01
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		2.2		0.50	1.00		
Methane		0.55		0.50	1.00		
Carbon Dioxide		56		0.50	1.00		
SV-23A	15-06-2265-15-A	06/25/15 08:21	Air	GC 65	N/A	07/02/15 14:45	150702L02
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		13		0.50	1.00		
Carbon Dioxide		0.85		0.50	1.00		
SV-23B	15-06-2265-16-A	06/25/15	Air	GC 65	N/A	07/01/15	150701L01

SV-23B	15-06-2265-16-A	06/25/15 08:06	Air	GC 65	N/A	07/01/15 18:18	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		2.8		0.50	1.00		
Carbon Dioxide		28		0.50	1.00		
SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC 65	N/A	07/02/15 13:54	150702L02
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers

0.50

0.50

1.00

1.00

SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC 65	N/A	07/01/15 19:24	150701L01
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		7.9		0.50	1.00		
Carbon Dioxide		2.1		0.50	1.00		

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1.1

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#### **Analytical Report**

Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265 Petaluma, CA 94954-2312 Preparation: N/A Method: SCAQMD 25.1M Units:

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-24B	15-06-2265-19-A	06/25/15 09:25	Air	GC 65	N/A	07/01/15 19:45	150701L01
Parameter		Result	<u>F</u>	<u>L</u>	<u>DF</u>	Qua	<u>llifiers</u>
Oxygen (+ Argon)		8.2	0	.50	1.00		
Carbon Dioxide		17	0	.50	1.00		

Method Blank	099-12-192-671	N/A	Air	GC 65	N/A	07/01/15 11:00	150701L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Oxygen (+ Argon)		ND		0.50	1.00		
Methane		ND		0.50	1.00		
Carbon Dioxide		ND		0.50	1.00		

Method Blank	099-12-192-672	N/A	Air	GC 65	N/A	07/02/15 11:19	150702L02
Parameter		Result		<u>RL</u>	DF	Qua	alifiers
Oxygen (+ Argon)		ND		0.50	1.00		
Carbon Dioxide		ND		0.50	1 00		



Cardno ERI			Date Re	eceived:			06/30/15
601 North McDowell Blvd.			Work O	rder:			15-06-2265
Petaluma, CA 94954-2312			Prepara	ition:			N/A
			Method:	:		SC	CAQMD 25.1M
			Units:				%
Project: 580 Market Place Shop	ping Center					Pa	ige 1 of 3
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16A	15-06-2265-1-A	06/25/15 14:05	Air	GC 14	N/A	07/02/15 11:53	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Methane		0.25		0.00010	1.00		
SV-16B	15-06-2265-2-A	06/25/15 14:06	Air	GC 14	N/A	07/02/15 12:14	150702L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Methane		0.41		0.00010	1.00		
SV-17A	15-06-2265-3-A	06/25/15 15:00	Air	GC 14	N/A	07/02/15 12:34	150702L01
<u>Parameter</u>		Result	-	<u>RL</u>	<u>DF</u>	Qua	alifiers
Methane		0.026		0.00010	1.00		
SV-17B	15-06-2265-4-A	06/25/15 15:06	Air	GC 14	N/A	07/02/15 12:52	150702L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Methane		0.36		0.00010	1.00		
SV-18A	15-06-2265-5-A	06/25/15 12:22	Air	GC 14	N/A	07/02/15 13:19	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methane		0.026		0.00010	1.00		
SV-18B	15-06-2265-6-A	06/25/15 12:32	Air	GC 14	N/A	07/02/15 13:49	150702L01
<u>Parameter</u>		Result	-	<u>RL</u>	<u>DF</u>	Qua	alifiers
Methane		0.38		0.00010	1.00		
SV-19A	15-06-2265-7-A	06/25/15 15:57	Air	GC 14	N/A	07/02/15 14:13	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Methane		0.0043		0.00010	1.00		
Carbon Dioxide		0.14		0.00010	1.00		
SV-19B	15-06-2265-8-A	06/25/15 16:03	Air	GC 14	N/A	07/02/15 14:40	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
8.4. d							

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

Methane

0.018

0.00010

1.00

07/02/15 16:09

150702L01

Qualifiers



SV-21B

<u>Parameter</u>

# **Analytical Report**

Cardno ERI Date Received: 06/30/15 Work Order: 15-06-2265 601 North McDowell Blvd. Petaluma, CA 94954-2312 Preparation: N/A Method: SCAQMD 25.1M Units: Project: 580 Market Place Shopping Center Page 2 of 3 Lab Sample Number Date Prepared QC Batch ID Client Sample Number Date/Time Date/Time Matrix Instrument Collected Analyzed 07/02/15 15:04 06/25/15 17:10 SV-20A 15-06-2265-9-A GC 14 150702L01 Air N/A **Parameter** Result <u>RL</u> <u>DF</u> Qualifiers 0.0039 0.00010 1.00 Methane **SV-20B** GC 14 N/A 15-06-2265-10-A 06/25/15 Air 07/02/15 150702L01 15:24 <u>RL</u> <u>DF</u> Qualifiers **Parameter** Result Methane 0.041 0.00010 1.00

Methane		0.13		0.00010	1.00		
SV-23A	15-06-2265-15-A	06/25/15 08:21	Air	GC 14	N/A	07/02/15 16:50	150702L01
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Methane		0.45		0.00010	1.00		
SV-23B	15-06-2265-16-A	06/25/15 08:06	Air	GC 14	N/A	07/02/15 17:08	150702L01
<u>Parameter</u>		Result		RL	DF	Qua	alifiers
Methane		0.41		0.00010	1.00		

Air

GC 14

RL

N/A

DF

06/25/15 11:31

Result

15-06-2265-12-A

SV-23A DUP	15-06-2265-17-A	06/25/15 08:23	Air	GC 14	N/A	07/02/15 17:25	150702L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Methane		0.49		0.00010	1.00		

SV-24A	15-06-2265-18-A	06/25/15 09:21	Air	GC 14	N/A	07/02/15 17:48	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	<u>llifiers</u>
Methane		0.025		0.00010	1.00		

SV-24B	15-06-2265-19-A	06/25/15 09:25	Air	GC 14	N/A	07/02/15 18:07	150702L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	<u>Qua</u>	<u>lifiers</u>
Methane		0.19		0.00010	1.00		



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 SCAQMD 25.1M

 Units:
 %

Project: 580 Market Place Shopping Center 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	099-12-194-831	N/A	Air	GC 14	N/A	07/02/15 11:09	150702L01
Parameter		Result	<u> </u>	<u> </u>	<u>DF</u>	Qua	<u>llifiers</u>
Methane		ND	(	0.00010	1.00		
Carbon Dioxide		ND	(	0.00010	1.00		





 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 ASTM D-1946 (M)

 Project: 580 Market Place Shopping Center
 Page 1 of 17

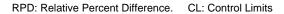
Quality Control Sample ID	Туре	Ма	trix	Instrument	Date P	repared	Date	Analyzed	LCS/LCSD E	atch Number
099-12-872-818	LCS	Air		GC 55	N/A		06/30	0/15 11:05	150630L01	
099-12-872-818	LCSD	Air		GC 55	N/A		06/30	0/15 11:29	150630L01	
Parameter	Spike Adde	d LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Red	:. CL	RPD	RPD CL	<u>Qualifiers</u>
Helium	1.000	0.9634	96	0.9670	97	80-12	.0	0	0-30	
Hydrogen	1.000	0.9567	96	0.9603	96	80-12	0	0	0-30	



Cardno ERI Date Received: 06/30/15 Work Order: 15-06-2265 601 North McDowell Blvd. Preparation: N/A Petaluma, CA 94954-2312 Method: ASTM D-1946 (M) Page 2 of 17

Project: 580 Market Place Shopping Center

Quality Control Sample ID	Туре	Mat	trix	Instrument	Date Pr	epared [	Date Analyzed	LCS/LCSD E	atch Number
099-12-872-819	LCS	Air		GC 55	N/A	C	07/01/15 10:04	150701L01	
099-12-872-819	LCSD	Air		GC 55	N/A	C	07/01/15 10:26	150701L01	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	%Rec.	CL RPD	RPD CL	<u>Qualifiers</u>
Helium	1.000	0.8933	89	0.9314	93	80-120	4	0-30	
Hydrogen	1.000	0.8874	89	0.9250	92	80-120	4	0-30	





 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 ASTM D-1946 (M)

 Project: 580 Market Place Shopping Center
 Page 3 of 17

Quality Control Sample ID	Туре	Mai	trix	Instrument	Date Pr	epared Dat	te Analyzed	LCS/LCSD B	Satch Number
099-12-872-820	LCS	Air		GC 55	N/A	07/	02/15 10:18	150702L01	
099-12-872-820	LCSD	Air		GC 55	N/A	07/	02/15 10:46	150702L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	<u>Qualifiers</u>
Helium	1.000	0.9276	93	0.9459	95	80-120	2	0-30	
Hydrogen	1.000	0.9204	92	0.9406	94	80-120	2	0-30	



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Project: 580 Market Place Shopping Center Page 4 of 17

Quality Control Sample ID	Туре		Matrix	In	nstrument	Date Prepare	ed Date A	nalyzed	LCS/LCSD Ba	tch Number
095-01-021-15629	LCS		Air	G	C/MS K	N/A	07/02/1	5 12:56	150702L02	
095-01-021-15629	LCSD		Air	G	C/MS K	N/A	07/02/1	5 13:45	150702L02	
Parameter	<u>Spike</u> <u>Added</u>	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Acetone	59.39	78.06	131	60.51	102	67-133	56-144	25	0-30	
Benzene	79.87	75.36	94	82.60	103	70-130	60-140	9	0-30	
Benzyl Chloride	129.4	146.7	113	146.8	113	38-158	18-178	0	0-30	
Bromodichloromethane	167.5	186.6	111	183.3	109	70-130	60-140	2	0-30	
Bromoform	258.4	279.9	108	279.2	108	63-147	49-161	0	0-30	
Bromomethane	97.08	121.3	125	98.85	102	70-139	58-150	20	0-30	
2-Butanone	73.73	73.69	100	78.88	107	66-132	55-143	7	0-30	
Carbon Disulfide	77.85	104.5	134	87.12	112	68-146	55-159	18	0-30	
Carbon Tetrachloride	157.3	178.6	114	166.5	106	70-136	59-147	7	0-30	
Chlorobenzene	115.1	119.0	103	119.2	104	70-130	60-140	0	0-30	
Chloroethane	65.96	80.52	122	65.42	99	65-149	51-163	21	0-30	
Chloroform	122.1	123.6	101	118.9	97	70-130	60-140	4	0-30	
Chloromethane	51.63	70.88	137	55.34	107	69-141	57-153	25	0-30	
Dibromochloromethane	213.0	229.5	108	230.7	108	70-138	59-149	1	0-30	
Dichlorodifluoromethane	123.6	153.0	124	124.6	101	67-139	55-151	20	0-30	
Diisopropyl Ether (DIPE)	104.5	93.62	90	98.34	94	63-130	52-141	5	0-30	
1,1-Dichloroethane	101.2	98.83	98	102.7	102	70-130	60-140	4	0-30	
1,1-Dichloroethene	99.12	115.4	116	92.23	93	70-135	59-146	22	0-30	
1,2-Dibromoethane	192.1	207.2	108	209.3	109	70-133	60-144	1	0-30	
Dichlorotetrafluoroethane	174.8	171.1	98	133.4	76	51-135	37-149	25	0-30	
1,2-Dichlorobenzene	150.3	147.8	98	149.5	99	48-138	33-153	1	0-30	
1,2-Dichloroethane	101.2	111.9	111	104.0	103	70-132	60-142	7	0-30	
1,2-Dichloropropane	115.5	108.2	94	119.1	103	70-130	60-140	10	0-30	
1,3-Dichlorobenzene	150.3	149.3	99	148.7	99	56-134	43-147	0	0-30	
1,4-Dichlorobenzene	150.3	151.5	101	151.9	101	52-136	38-150	0	0-30	
c-1,3-Dichloropropene	113.5	133.7	118	133.5	118	70-130	60-140	0	0-30	
c-1,2-Dichloroethene	99.12	93.04	94	98.38	99	70-130	60-140	6	0-30	
t-1,2-Dichloroethene	99.12	105.9	107	98.60	99	70-130	60-140	7	0-30	
t-1,3-Dichloropropene	113.5	182.9	161	153.8	136	70-147	57-160	17	0-30	Χ
Ethanol	188.4	246.8	131	205.9	109	37-139	20-156	18	0-30	
Ethyl-t-Butyl Ether (ETBE)	104.5	109.9	105	109.8	105	67-130	56-140	0	0-30	
Ethylbenzene	108.6	116.8	108	116.0	107	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	128.3	104	128.4	104	68-130	58-140	0	0-30	
Hexachloro-1,3-Butadiene	266.6	232.3	87	235.2	88	44-146	27-163	1	0-30	
2-Hexanone	102.4	110.0	107	109.9	107	70-136	59-147	0	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	99.68	111	97.93	109	68-130	58-140	2	0-30	

0-30



#### **Quality Control - LCS/LCSD**

 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-15

Project: 580 Market Place Shopping Center Page 5 of 17

<u>Parameter</u>	<u>Spike</u> Added	LCS Cor	nc. <u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Methylene Chloride	86.84	93.56	108	78.47	90	69-130	59-140	18	0-30	
4-Methyl-2-Pentanone	102.4	104.9	102	108.8	106	70-130	60-140	4	0-30	
Naphthalene	131.1	109.0	83	110.7	84	24-144	4-164	1	0-30	
o-Xylene	108.6	111.4	103	111.1	102	69-130	59-140	0	0-30	
p/m-Xylene	217.1	226.2	104	224.3	103	70-132	60-142	1	0-30	
Styrene	106.5	114.1	107	113.5	107	65-131	54-142	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	110.7	106	113.5	109	69-130	59-140	2	0-30	
Tert-Butyl Alcohol (TBA)	151.6	193.4	128	159.2	105	66-144	53-157	19	0-30	
Tetrachloroethene	169.6	178.7	105	178.9	106	70-130	60-140	0	0-30	
Toluene	94.21	101.2	107	102.0	108	70-130	60-140	1	0-30	
Trichloroethene	134.3	138.4	103	138.3	103	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	165.3	118	125.6	89	63-141	50-154	27	0-30	
1,1,2-Trichloro-1,2,2- Trifluoroethane	191.6	217.8	114	180.5	94	70-136	59-147	19	0-30	
1,1,1-Trichloroethane	136.4	151.6	111	138.6	102	70-130	60-140	9	0-30	
1,1,2-Trichloroethane	136.4	168.4	123	142.3	104	70-130	60-140	17	0-30	
1,3,5-Trimethylbenzene	122.9	124.5	101	124.1	101	62-130	51-141	0	0-30	
1,1,2,2-Tetrachloroethane	171.6	160.8	94	159.0	93	63-130	52-141	1	0-30	
1,2,4-Trimethylbenzene	122.9	120.6	98	120.3	98	60-132	48-144	0	0-30	
1,2,4-Trichlorobenzene	185.5	162.8	88	165.2	89	31-151	11-171	1	0-30	
Vinyl Acetate	88.03	78.80	90	87.20	99	58-130	46-142	10	0-30	

62.92

98

121

70-134

59-145

21

77.49

63.91

Total number of LCS compounds: 57
Total number of ME compounds: 0
Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

Vinyl Chloride



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: EPA TO-15

Project: 580 Market Place Shopping Center Page 6 of 17

Quality Control Sample ID	Туре		Matrix	Ins	trument	Date Prepare	ed Date A	nalyzed	LCS/LCSD Ba	tch Number
095-01-021-15630	LCS		Air	GC	MS K	N/A	07/03/	15 14:40	150703L02	
095-01-021-15630	LCSD		Air	GC	MS K	N/A	07/03/	15 15:31	150703L02	
<u>Parameter</u>	<u>Spike</u> <u>Added</u>	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	62.60	105	60.20	101	67-133	56-144	4	0-30	
Benzene	79.87	79.36	99	80.17	100	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	147.3	114	144.9	112	38-158	18-178	2	0-30	
Bromodichloromethane	167.5	178.3	106	179.9	107	70-130	60-140	1	0-30	
Bromoform	258.4	279.1	108	277.6	107	63-147	49-161	1	0-30	
Bromomethane	97.08	97.75	101	97.15	100	70-139	58-150	1	0-30	
2-Butanone	73.73	77.12	105	65.27	89	66-132	55-143	17	0-30	
Carbon Disulfide	77.85	88.36	114	85.76	110	68-146	55-159	3	0-30	
Carbon Tetrachloride	157.3	163.8	104	164.9	105	70-136	59-147	1	0-30	
Chlorobenzene	115.1	116.6	101	115.1	100	70-130	60-140	1	0-30	
Chloroethane	65.96	67.69	103	66.11	100	65-149	51-163	2	0-30	
Chloroform	122.1	116.6	96	115.3	94	70-130	60-140	1	0-30	
Chloromethane	51.63	51.25	99	51.24	99	69-141	57-153	0	0-30	
Dibromochloromethane	213.0	228.9	108	226.6	106	70-138	59-149	1	0-30	
Dichlorodifluoromethane	123.6	119.0	96	115.0	93	67-139	55-151	3	0-30	
Diisopropyl Ether (DIPE)	104.5	95.45	91	94.26	90	63-130	52-141	1	0-30	
1,1-Dichloroethane	101.2	100.2	99	102.5	101	70-130	60-140	2	0-30	
1,1-Dichloroethene	99.12	96.57	97	91.65	92	70-135	59-146	5	0-30	
1,2-Dibromoethane	192.1	204.0	106	203.4	106	70-133	60-144	0	0-30	
Dichlorotetrafluoroethane	174.8	131.4	75	127.5	73	51-135	37-149	3	0-30	
1,2-Dichlorobenzene	150.3	145.5	97	144.3	96	48-138	33-153	1	0-30	
1,2-Dichloroethane	101.2	101.6	100	101.8	101	70-132	60-142	0	0-30	
1,2-Dichloropropane	115.5	115.6	100	115.6	100	70-130	60-140	0	0-30	
1,3-Dichlorobenzene	150.3	146.8	98	146.0	97	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	149.5	99	147.3	98	52-136	38-150	1	0-30	
c-1,3-Dichloropropene	113.5	129.7	114	129.6	114	70-130	60-140	0	0-30	
c-1,2-Dichloroethene	99.12	95.79	97	94.58	95	70-130	60-140	1	0-30	
t-1,2-Dichloroethene	99.12	96.88	98	98.35	99	70-130	60-140	2	0-30	
t-1,3-Dichloropropene	113.5	151.2	133	150.4	133	70-147	57-160	1	0-30	
Ethanol	188.4	198.0	105	208.0	110	37-139	20-156	5	0-30	
Ethyl-t-Butyl Ether (ETBE)	104.5	106.9	102	106.4	102	67-130	56-140	1	0-30	
Ethylbenzene	108.6	115.0	106	112.6	104	70-130	60-140	2	0-30	
4-Ethyltoluene	122.9	126.6	103	125.0	102	68-130	58-140	1	0-30	
Hexachloro-1,3-Butadiene	266.6	230.1	86	230.5	86	44-146	27-163	0	0-30	
2-Hexanone	102.4	107.5	105	106.8	104	70-136	59-147	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	94.70	105	85.76	95	68-130	58-140	10	0-30	

06/30/15

N/A

15-06-2265

EPA TO-15

0-30



#### **Quality Control - LCS/LCSD**

Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received:
Work Order:
Preparation:
Method:

Project: 580 Market Place Shopping Center Page 7 of 17

Parameter	<u>Spike</u> Added	LCS Cond	LCS <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Methylene Chloride	86.84	79.10	91	77.77	90	69-130	59-140	2	0-30	
4-Methyl-2-Pentanone	102.4	105.4	103	104.1	102	70-130	60-140	1	0-30	
Naphthalene	131.1	107.0	82	107.5	82	24-144	4-164	0	0-30	
o-Xylene	108.6	110.8	102	108.7	100	69-130	59-140	2	0-30	
p/m-Xylene	217.1	222.7	103	220.3	101	70-132	60-142	1	0-30	
Styrene	106.5	112.9	106	110.4	104	65-131	54-142	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	107.6	103	109.5	105	69-130	59-140	2	0-30	
Tert-Butyl Alcohol (TBA)	151.6	162.4	107	158.1	104	66-144	53-157	3	0-30	
Tetrachloroethene	169.6	175.2	103	174.3	103	70-130	60-140	1	0-30	
Toluene	94.21	99.99	106	98.66	105	70-130	60-140	1	0-30	
Trichloroethene	134.3	133.6	99	134.1	100	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	132.0	94	128.2	91	63-141	50-154	3	0-30	
1,1,2-Trichloro-1,2,2- Trifluoroethane	191.6	181.1	95	175.4	92	70-136	59-147	3	0-30	
1,1,1-Trichloroethane	136.4	135.1	99	134.5	99	70-130	60-140	0	0-30	
1,1,2-Trichloroethane	136.4	138.5	102	137.6	101	70-130	60-140	1	0-30	
1,3,5-Trimethylbenzene	122.9	123.4	100	121.6	99	62-130	51-141	1	0-30	
1,1,2,2-Tetrachloroethane	171.6	159.5	93	156.3	91	63-130	52-141	2	0-30	
1,2,4-Trimethylbenzene	122.9	119.1	97	118.0	96	60-132	48-144	1	0-30	
1,2,4-Trichlorobenzene	185.5	158.6	86	159.6	86	31-151	11-171	1	0-30	
Vinyl Acetate	88.03	84.98	97	66.79	76	58-130	46-142	24	0-30	

62.35

98

70-134

59-145

2

Total number of LCS compounds: 57
Total number of ME compounds: 0
Total number of ME compounds allowed: 3

63.91

63.30

99

LCS ME CL validation result: Pass

Vinyl Chloride



Cardno ERI Date Received: 06/30/15
601 North McDowell Blvd. Work Order: 15-06-2265
Petaluma, CA 94954-2312 Preparation: N/A

Method: EPA TO-15

Project: 580 Market Place Shopping Center Page 8 of 17

Quality Control Sample ID	Туре		Matrix	Ins	strument	Date Prepare	ed Date A	nalyzed	LCS/LCSD Ba	atch Number
095-01-021-15631	LCS		Air	GC	C/MS K	N/A	07/06/1	15 15:05	150706L02	
095-01-021-15631	LCSD		Air	GC	C/MS K	N/A	07/06/1	15 15:53	150706L02	
<u>Parameter</u>	<u>Spike</u> <u>Added</u>	LCS Conc	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	79.92	135	84.08	142	67-133	56-144	5	0-30	ME
Benzene	79.87	74.69	94	74.23	93	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	160.5	124	162.0	125	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	197.0	118	198.3	118	70-130	60-140	1	0-30	
Bromoform	258.4	321.8	125	324.8	126	63-147	49-161	1	0-30	
Bromomethane	97.08	132.7	137	131.8	136	70-139	58-150	1	0-30	
2-Butanone	73.73	72.24	98	72.07	98	66-132	55-143	0	0-30	
Carbon Disulfide	77.85	114.0	146	120.7	155	68-146	55-159	6	0-30	ME
Carbon Tetrachloride	157.3	196.9	125	196.5	125	70-136	59-147	0	0-30	
Chlorobenzene	115.1	118.9	103	118.9	103	70-130	60-140	0	0-30	
Chloroethane	65.96	89.60	136	87.40	132	65-149	51-163	2	0-30	
Chloroform	122.1	129.3	106	129.6	106	70-130	60-140	0	0-30	
Chloromethane	51.63	63.33	123	63.30	123	69-141	57-153	0	0-30	
Dibromochloromethane	213.0	256.4	120	257.6	121	70-138	59-149	0	0-30	
Dichlorodifluoromethane	123.6	145.4	118	150.1	121	67-139	55-151	3	0-30	
Diisopropyl Ether (DIPE)	104.5	92.87	89	92.70	89	63-130	52-141	0	0-30	
1,1-Dichloroethane	101.2	98.83	98	97.30	96	70-130	60-140	2	0-30	
1,1-Dichloroethene	99.12	124.7	126	130.1	131	70-135	59-146	4	0-30	
1,2-Dibromoethane	192.1	211.5	110	212.2	110	70-133	60-144	0	0-30	
Dichlorotetrafluoroethane	174.8	168.8	97	176.1	101	51-135	37-149	4	0-30	
1,2-Dichlorobenzene	150.3	153.5	102	154.2	103	48-138	33-153	0	0-30	
1,2-Dichloroethane	101.2	119.0	118	118.6	117	70-132	60-142	0	0-30	
1,2-Dichloropropane	115.5	103.5	90	104.0	90	70-130	60-140	0	0-30	
1,3-Dichlorobenzene	150.3	157.9	105	160.1	107	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	158.1	105	159.2	106	52-136	38-150	1	0-30	
c-1,3-Dichloropropene	113.5	128.7	113	130.0	115	70-130	60-140	1	0-30	
c-1,2-Dichloroethene	99.12	93.48	94	93.01	94	70-130	60-140	0	0-30	
t-1,2-Dichloroethene	99.12	94.13	95	90.76	92	70-130	60-140	4	0-30	
t-1,3-Dichloropropene	113.5	161.0	142	160.7	142	70-147	57-160	0	0-30	
Ethanol	188.4	274.0	145	289.8	154	37-139	20-156	6	0-30	ME
Ethyl-t-Butyl Ether (ETBE)	104.5	110.8	106	111.0	106	67-130	56-140	0	0-30	
Ethylbenzene	108.6	117.8	109	118.8	109	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	131.9	107	134.6	110	68-130	58-140	2	0-30	
Hexachloro-1,3-Butadiene	266.6	278.1	104	282.9	106	44-146	27-163	2	0-30	
2-Hexanone	102.4	99.84	97	99.84	97	70-136	59-147	0	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	101.7	113	99.91	111	68-130	58-140	2	0-30	

0-30



#### **Quality Control - LCS/LCSD**

 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-15

Project: 580 Market Place Shopping Center Page 9 of 17

Parameter	<u>Spike</u>	LCS Cor	nc. LCS	LCSD	LCSD	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
	Added		nc. <u>LCS</u> <u>%Rec.</u>	Conc.	%Rec.	,,,,,,,,,,,				
Methylene Chloride	86.84	101.9	117	106.9	123	69-130	59-140	5	0-30	
4-Methyl-2-Pentanone	102.4	96.65	94	96.41	94	70-130	60-140	0	0-30	
Naphthalene	131.1	115.8	88	118.4	90	24-144	4-164	2	0-30	
o-Xylene	108.6	116.2	107	117.4	108	69-130	59-140	1	0-30	
p/m-Xylene	217.1	240.9	111	243.8	112	70-132	60-142	1	0-30	
Styrene	106.5	111.8	105	111.9	105	65-131	54-142	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	108.7	104	110.0	105	69-130	59-140	1	0-30	
Tert-Butyl Alcohol (TBA)	151.6	196.7	130	220.5	145	66-144	53-157	11	0-30	ME
Tetrachloroethene	169.6	189.1	112	189.5	112	70-130	60-140	0	0-30	
Toluene	94.21	98.83	105	99.18	105	70-130	60-140	0	0-30	
Trichloroethene	134.3	141.0	105	141.1	105	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	174.7	124	180.5	128	63-141	50-154	3	0-30	
1,1,2-Trichloro-1,2,2- Trifluoroethane	191.6	241.1	126	250.9	131	70-136	59-147	4	0-30	
1,1,1-Trichloroethane	136.4	159.3	117	161.1	118	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	129.7	95	130.6	96	70-130	60-140	1	0-30	
1,3,5-Trimethylbenzene	122.9	132.4	108	133.8	109	62-130	51-141	1	0-30	
1,1,2,2-Tetrachloroethane	171.6	153.5	89	154.4	90	63-130	52-141	1	0-30	
1,2,4-Trimethylbenzene	122.9	131.7	107	132.4	108	60-132	48-144	1	0-30	
1,2,4-Trichlorobenzene	185.5	180.6	97	185.1	100	31-151	11-171	2	0-30	
Vinyl Acetate	88.03	79.26	90	78.19	89	58-130	46-142	1	0-30	

80.92

127

70-134

59-145

3

Total number of LCS compounds: 57 Total number of ME compounds: 4

Vinyl Chloride

Total number of ME compounds allowed: 3

LCS ME CL validation result: 'Not Pass (See Narrative)

63.91

78.77

123

N/A



# **Quality Control - LCS/LCSD**

Cardno ERI Date Received: 06/30/15 Work Order: 15-06-2265 601 North McDowell Blvd. Preparation: Petaluma, CA 94954-2312

> Method: EPA TO-15

Page 10 of 17 Project: 580 Market Place Shopping Center

Quality Control Sample ID	Туре		Matrix		Instrument	Date Prepare	d Date A	Analyzed	LCS/LCSD Ba	tch Number
095-01-021-15633	LCS		Air		GC/MS NN	N/A	07/06/	15 19:08	150706L01	
095-01-021-15633	LCSD		Air		GC/MS NN	N/A	07/06/	15 20:04	150706L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSE Conc		%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	59.82	101	58.99	99	67-133	56-144	1	0-30	
Benzene	79.87	81.58	102	83.06	104	70-130	60-140	2	0-30	
Benzyl Chloride	129.4	149.1	115	151.5	117	38-158	18-178	2	0-30	
Bromodichloromethane	167.5	185.8	111	185.3	3 111	70-130	60-140	0	0-30	
Bromoform	258.4	262.4	102	263.4	102	63-147	49-161	0	0-30	
Bromomethane	97.08	101.9	105	101.7	105	70-139	58-150	0	0-30	
2-Butanone	73.73	74.77	101	73.39	100	66-132	55-143	2	0-30	
Carbon Disulfide	77.85	79.99	103	79.55	102	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	175.9	112	174.7	111	70-136	59-147	1	0-30	
Chlorobenzene	115.1	113.7	99	115.0	100	70-130	60-140	1	0-30	
Chloroethane	65.96	65.90	100	65.23	99	65-149	51-163	1	0-30	
Chloroform	122.1	123.2	101	122.6	100	70-130	60-140	0	0-30	
Chloromethane	51.63	54.10	105	50.90	99	69-141	57-153	6	0-30	
Dibromochloromethane	213.0	222.0	104	222.6	105	70-138	59-149	0	0-30	
Dichlorodifluoromethane	123.6	107.3	87	104.8	85	67-139	55-151	2	0-30	
Diisopropyl Ether (DIPE)	104.5	97.24	93	95.71	92	63-130	52-141	2	0-30	
1,1-Dichloroethane	101.2	99.50	98	98.66	97	70-130	60-140	1	0-30	
1,1-Dichloroethene	99.12	95.24	96	94.04	95	70-135	59-146	1	0-30	
1,2-Dibromoethane	192.1	192.8	100	195.6	102	70-133	60-144	1	0-30	
Dichlorotetrafluoroethane	174.8	151.7	87	148.1	85	51-135	37-149	2	0-30	
1,2-Dichlorobenzene	150.3	147.7	98	152.5	101	48-138	33-153	3	0-30	
1,2-Dichloroethane	101.2	107.7	106	106.5	105	70-132	60-142	1	0-30	
1,2-Dichloropropane	115.5	112.4	97	114.1	99	70-130	60-140	1	0-30	
1,3-Dichlorobenzene	150.3	151.0	100	154.1	103	56-134	43-147	2	0-30	
1,4-Dichlorobenzene	150.3	149.4	99	153.0	102	52-136	38-150	2	0-30	
c-1,3-Dichloropropene	113.5	121.9	107	123.2	109	70-130	60-140	1	0-30	
c-1,2-Dichloroethene	99.12	95.86	97	95.85	97	70-130	60-140	0	0-30	
t-1,2-Dichloroethene	99.12	98.25	99	97.60	98	70-130	60-140	1	0-30	
t-1,3-Dichloropropene	113.5	139.4	123	138.9	122	70-147	57-160	0	0-30	
Ethanol	188.4	199.1	106	173.4	92	37-139	20-156	14	0-30	
Ethyl-t-Butyl Ether (ETBE)	104.5	110.9	106	108.9	104	67-130	56-140	2	0-30	
Ethylbenzene	108.6	113.3	104	114.7	106	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	124.8	102	126.6	103	68-130	58-140	1	0-30	
Hexachloro-1,3-Butadiene	266.6	259.7	97	277.3	104	44-146	27-163	7	0-30	
2-Hexanone	102.4	101.6	99	103.7	101	70-136	59-147	2	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	100.8	112	98.70	110	68-130	58-140	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits



Cardno ERI 601 North McDowell Blvd. Petaluma, CA 94954-2312 Date Received: Work Order: Preparation:

Method:

06/30/15 15-06-2265 N/A

EPA TO-15

Project: 580 Market Place Shopping Center

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0-30

<u>Parameter</u>	<u>Spike</u> Added	LCS Cond	c. <u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Methylene Chloride	86.84	79.65	92	79.24	91	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	106.5	104	107.2	105	70-130	60-140	1	0-30	
Naphthalene	131.1	114.3	87	122.3	93	24-144	4-164	7	0-30	
o-Xylene	108.6	110.2	101	111.4	103	69-130	59-140	1	0-30	
p/m-Xylene	217.1	228.7	105	228.7	105	70-132	60-142	0	0-30	
Styrene	106.5	105.0	99	107.7	101	65-131	54-142	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	112.0	107	111.3	107	69-130	59-140	1	0-30	
Tert-Butyl Alcohol (TBA)	151.6	165.3	109	153.2	101	66-144	53-157	8	0-30	
Tetrachloroethene	169.6	173.7	102	175.7	104	70-130	60-140	1	0-30	
Toluene	94.21	98.11	104	99.55	106	70-130	60-140	1	0-30	
Trichloroethene	134.3	139.3	104	139.1	104	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	148.3	106	146.5	104	63-141	50-154	1	0-30	
1,1,2-Trichloro-1,2,2- Trifluoroethane	191.6	186.3	97	189.9	99	70-136	59-147	2	0-30	
1,1,1-Trichloroethane	136.4	147.4	108	145.7	107	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	138.9	102	139.1	102	70-130	60-140	0	0-30	
1,3,5-Trimethylbenzene	122.9	126.0	103	128.7	105	62-130	51-141	2	0-30	
1,1,2,2-Tetrachloroethane	171.6	157.7	92	161.2	94	63-130	52-141	2	0-30	
1,2,4-Trimethylbenzene	122.9	126.0	103	128.5	105	60-132	48-144	2	0-30	
1,2,4-Trichlorobenzene	185.5	181.4	98	193.9	105	31-151	11-171	7	0-30	
Vinyl Acetate	88.03	83.28	95	82.68	94	58-130	46-142	1	0-30	

64.66

101

70-134

59-145

3

104

66.40

Total number of LCS compounds: 57 Total number of ME compounds: 0

Vinyl Chloride

Total number of ME compounds allowed: 3

63.91

LCS ME CL validation result: Pass





Cardno ERI Date Received: 06/30/15
601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Project: 580 Market Place Shopping Center Page 12 of 17

Quality Control Sample ID	Туре	Ma	trix	Instrument	Date Pre	pared Date	Analyzed	LCS/LCSD Ba	atch Number
099-16-014-93	LCS	Air		GC/MS K	N/A	07/02	2/15 15:31	150702L01	
099-16-014-93	LCSD	Air		GC/MS K	N/A	07/02	2/15 16:20	150702L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline (C6-C12)	4663	5114	110	4759	102	50-150	7	0-30	





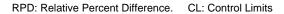
Cardno ERI Date Received: 06/30/15
601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Project: 580 Market Place Shopping Center Page 13 of 17

Quality Control Sample ID	Туре	Mat	trix	Instrument	Date Pre	pared Date	Analyzed	LCS/LCSD B	atch Number
099-16-014-94	LCS	Air		GC/MS K	N/A	07/0	3/15 17:13	150703L01	
099-16-014-94	LCSD	Air		GC/MS K	N/A	07/0	3/15 18:01	150703L01	
Parameter	Spike Adde	d LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline (C6-C12)	4663	4962	106	5389	116	50-150	8	0-30	





Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2265

Petaluma, CA 94954-2312 Preparation: N/A

Method: GC/MS C6-C12 AS GASOLINE

Project: 580 Market Place Shopping Center Page 14 of 17

Quality Control Sample ID	Type	Mat	rix	Instrument	Date Pre	epared Date	e Analyzed	LCS/LCSD B	atch Number
099-16-014-95	LCS	Air		GC/MS K	N/A	07/0	06/15 18:10	150706L01	
099-16-014-95	LCSD	Air		GC/MS K	N/A	07/0	06/15 18:59	150706L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline (C6-C12)	4663	5074	109	5111	110	50-150	1	0-30	



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: SCAQMD 25.1M

Project: 580 Market Place Shopping Center Page 15 of 17

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pr	epared Date	Analyzed	LCS/LCSD B	atch Number
099-12-192-671	LCS	Air		GC 65	N/A	07/0	1/15 10:24	150701L01	
099-12-192-671	LCSD	Air		GC 65	N/A	07/0	1/15 10:42	150701L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Oxygen (+ Argon)	4.010	4.128	103	4.144	103	80-120	0	0-20	
Nitrogen	69.50	71.26	103	71.50	103	80-120	0	0-20	
Methane	4.500	4.319	96	4.335	96	80-120	0	0-20	
Carbon Monoxide	6.990	6.907	99	6.932	99	80-120	0	0-20	
Carbon Dioxide	15.00	14.96	100	15.23	102	80-120	2	0-20	





 Cardno ERI
 Date Received:
 06/30/15

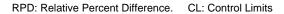
 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: SCAQMD 25.1M

Project: 580 Market Place Shopping Center Page 16 of 17

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Prep	ared Date	Analyzed	LCS/LCSD Ba	atch Number
099-12-192-672	LCS	Air		GC 65	N/A	07/02	2/15 10:39	150702L02	
099-12-192-672	LCSD	Air		GC 65	N/A	07/02	2/15 11:01	150702L02	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Oxygen (+ Argon)	4.010	4.345	108	4.202	105	80-120	3	0-20	
Nitrogen	69.50	71.37	103	71.20	102	80-120	0	0-20	
Methane	4.500	4.270	95	4.302	96	80-120	1	0-20	
Carbon Monoxide	6.990	6.829	98	6.880	98	80-120	1	0-20	
Carbon Dioxide	15.00	14.84	99	15.00	100	80-120	1	0-20	



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# **Quality Control - LCS/LCSD**

 Cardno ERI
 Date Received:
 06/30/15

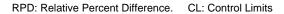
 601 North McDowell Blvd.
 Work Order:
 15-06-2265

 Petaluma, CA 94954-2312
 Preparation:
 N/A

Method: SCAQMD 25.1M

Project: 580 Market Place Shopping Center

Quality Control Sample ID	Туре	Mat	trix	Instrument	Date Pr	epared Da	ate Analyzed	LCS/LCSD B	atch Number
099-12-194-831	LCS	Air		GC 14	N/A	07	7/02/15 10:25	150702L01	
099-12-194-831	LCSD	Air		GC 14	N/A	07	7/02/15 10:49	150702L01	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. C	CL RPD	RPD CL	<u>Qualifiers</u>
Methane	0.01000	0.01134	113	0.01122	112	80-120	1	0-20	
Carbon Dioxide	0.01040	0.01108	107	0.01097	105	80-120	1	0-20	
Carbon Monoxide	0.01010	0.01058	105	0.01046	104	80-120	1	0-20	
TGNMO	0.03000	0.03418	114	0.03390	113	80-120	1	0-20	





# **Summa Canister Vacuum Summary**

Work Order: 15-06-2265				Page 1 of 1
Sample Name	Vacuum Out	Vacuum In	Equipment	Description
SV-16A	-29.50 in Hg	-7.80 in Hg	LC769	Summa Canister 1L
SV-16B	-29.50 in Hg	-7.00 in Hg	LC631	Summa Canister 1L
SV-17A	-29.50 in Hg	-9.10 in Hg	LC308	Summa Canister 1L
SV-17B	-29.50 in Hg	-7.90 in Hg	LC820	Summa Canister 1L
SV-18A	-29.50 in Hg	-6.20 in Hg	LC372	Summa Canister 1L
SV-18B	-29.50 in Hg	-8.10 in Hg	LC050	Summa Canister 1L
SV-19A	-29.50 in Hg	-7.50 in Hg	SLC066	Summa Canister 1L
SV-19B	-29.50 in Hg	-2.40 in Hg	LC838	Summa Canister 1L
SV-20A	-29.50 in Hg	-7.10 in Hg	LC1018	Summa Canister 1L
SV-20B	-29.50 in Hg	-6.50 in Hg	LC1001	Summa Canister 1L
SV-21A	-29.50 in Hg	-8.30 in Hg	LC912	Summa Canister 1L
SV-21B	-29.50 in Hg	-8.50 in Hg	LC913	Summa Canister 1L
SV-22A	-29.50 in Hg	-7.50 in Hg	LC1010	Summa Canister 1L
SV-22B	-29.50 in Hg	-7.00 in Hg	LC937	Summa Canister 1L
SV-23A	-29.50 in Hg	-5.00 in Hg	LC088	Summa Canister 1L
SV-23B	-29.50 in Hg	-6.00 in Hg	LC480	Summa Canister 1L
SV-23A DUP	-29.50 in Hg	-5.00 in Hg	LC277	Summa Canister 1L
SV-24A	-29.50 in Hg	-6.10 in Hg	LC361	Summa Canister 1L
SV-24B	-29.50 in Hg	-6.00 in Hg	LC894	Summa Canister 1L



# **Sample Analysis Summary Report**

Work Order: 15-06-2265	Page 1 of 1			
Method	Extraction	Chemist ID	Instrument	Analytical Location
ASTM D-1946 (M)	N/A	929	GC 55	2
ASTM D-1946 (M)	N/A	982	GC 55	2
ASTM D-1946 (M)	N/A	1008	GC 55	2
EPA TO-15	N/A	866	GC/MS NN	2
EPA TO-15	N/A	953	GC/MS K	2
GC/MS C6-C12 AS GASOLINE	N/A	953	GC/MS K	2
SCAQMD 25.1M	N/A	929	GC 14	2
SCAQMD 25.1M	N/A	929	GC 65	2
SCAQMD 25.1M	N/A	982	GC 65	2
SCAQMD 25.1M	N/A	1008	GC 14	2
SCAOMD 25 1M	N/A	1008	GC 65	2



# **Glossary of Terms and Qualifiers**

Work Order: 15-06-2265 Page 1 of 1

Qualifiers	<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.
В	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.



**AIR CHAIN-OF-CUSTODY RECORD** 

15-06-2265

DATE:	6/26/15		
PAGE:	/ OF	2_	

	n Way, Garden Grove, CA 92		fineus com or ca	ıll us			)-Ub-	225	5			PAGE:			OF .		
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.  LABORATORY CLIENT:  Cardon ATC				CLIEN	CLIENT PROJECT NAME / NO.: P.O. NO.:												
	Cardno ATO	<u> </u>					Market Plac	e Shopping	Center / C	ardno ATC	Project #						
ADDRESS: 701 University Avenue Suite 200					Z075000152 PROJECT CONTACT:					LAB CONTACT OR QUOTE NO.:							
CITY: STATE: ZIP: CA 95825				Gabe Stivala													
TEL: 925-223-7123 E-MAIL: gabe.stivala@cardno.com					PROJECT ADDRESS:					SAMPLER(S): (PRINT)							
		pply to any TAT not "STANDARD"):	zarano.com	<u> </u>		3735-4065 East Castro Valley Boulevard					Nadya Vicente						
SAME			5 DAYS	K STANDA	ARD	CITY: STATE: ZIP:				ZIP:	REQUESTED						
EDD: UNITS:			Castro	Castro Valley CA 94552				94552	ANALYSES								
COELT     SPECIAL INS	EDF OTHER TRUCTIONS:											ANALISES					
*ASTMD	-1946 = He (% Volu	ume)	*8	CAQMD 2	5.1 = CO2	, O2, and	CH4 (% Vc	lume)									
*TO-15 S	ican includes HVO	Cs, BTEX, oxygenated	compound	s, lead sc	avengers (	(including	1,2-DCA),	naphthale	ene, ethen	e, ethane							
*Report	final vacuum readir	ngs															
	ng Limits - ug/m³													12)			
	Lowest dilution pos	ssible												ပ္			
*Global I	D = T10000004345													3)	Ą,		8
						*							ے	Нg	CH4,		2
													Scan	TP			ΞΙ
LAB		FIELD ID /	MATRIX Indoor (I)	SAM	APLING EQUIPM  Canister	ENT Flow	START S	AMPLING INFOR	RMATION Canister	STOP SA	AMPLING INFOR	Canister	l w	GC/MS TPHg (C6-C12)	, 02		(ASTMD-1946)
USE ONLY	SAMPLE ID	POINT OF COLLECTION	Soil Vap. (SV)	Media	Size	Controller		Time	Pressure		Time	Pressure	10-1	SC	CO2,		H E
	SV-16A	SV-16	Ambient (A)	LC769	6L or 1L <b>1L</b>	AD72	Date 6/25/2015	(24 hr clock) 1355	(in Hg) <b>30</b>	Date 6/25/2015	(24 hr clock) 1405	(in Hg) <b>5</b>	×	x	×		x
2		SV-16	sv	LC631	1L	AD24	6/25/2015	1355	30	6/25/2015	1406	5	x	×			X
3	SV-16B SV-17A	SV-10	sv	LC308	1L	AD136	6/25/2015	1453	30	6/25/2015	1500	5	x	x	x		x
		SV-17	sv	LC820	1L	AD86	6/25/2015	1453	30	6/25/2015	1506	6	x	x	х		x
<del>E</del> -	SV-17B SV-18A	SV-18	sv	LC372	1L	AD112	6/25/2015	1214	30	6/25/2015	1222	5	×	x	x		$\frac{}{x}$
7		SV-18	sv	LC050	1L	AD69	6/25/2015	1214	30	6/25/2015	1232	6	×	×	x		x
4 5 4 7 8 9	SV-18B SV-19A	SV-19	sv	SLC066	1L	AD82	6/25/2015	1549	30	6/25/2015	1557	5	x	х	x		x
7	SV-19B	SV-19	SV	LC838	1L	AD07	6/25/2015	1549	30	6/25/2015	1603	16	х	х	х		×
0	SV-20A	SV-20	sv	LC1018	1L	AD184	6/25/2015	1701	30	6/25/2015	1710	5	х	х	х		×
10	SV-20B	SV-20	sv	LC1001	1L	AD06	6/25/2015	1704	30	6/25/2015	1725	5	х	x ·	х		х
	d by: (Signature)					(Signature/Affi	iliation			<u> </u>	Date	/ /	1	Time:			7
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#### AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY Calscience 06- 2265 PAGE: Z OF 2 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. LABORATORY CLIENT: CLIENT PROJECT NAME / NO P.O. NO.: Cardno ATC 580 Market Place Shopping Center / Cardno ATC Project # ADDRESS: Z075000152 701 University Avenue Suite 200 PROJECT CONTACT: LAB CONTACT OR QUOTE NO .: CITY: Sacramento CA 95825 Gabe Stivala SAMPLER(S): (PRINT) TEL: E-MAIL: PROJECT ADDRESS: gabe.stivala@cardno.com 925-223-7123 Nadya Vicente 3735-4065 East Castro Valley Boulevard TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): □ 5 DAYS X STANDARD ☐ SAME DAY ☐ 24 HR □ 48 HR ☐ 72 HR CITY: STATE: **REQUESTED** UNITS Castro Vallev CA 94552 **ANALYSES ★ COELT EDF** □ OTHER SPECIAL INSTRUCTIONS: *SCAQMD 25.1 = CO2, O2, and CH4 (% Volume) *ASTMD-1946 = He (% Volume) *TO-15 Scan includes HVOCs, BTEX, oxygenated compounds, lead scavengers (including 1,2-DCA), naphthalene, ethene, ethane *Report final vacuum readings (C6-C12) *Reporting Limits - ug/m³ *Report Lowest dilution possible (ASTMD-1946) *Global ID = T10000004345 **S**, 4, 7 TPHg MATRIX SAMPLING EQUIPMENT START SAMPLING INFORMATION STOP SAMPLING INFORMATION GC/MS LAB FIELD ID / Indoor (I) Caniste Canister Caniste SAMPLE ID USE POINT OF COLLECTION Media Controller Time Time Soil Vap. (SV) Size Pressure Pressure ONLY (24 hr clock) Date (24 hr clock) Ambient (A) 6L or 1L ID Date (in Hg) (in Hg) 6/26/2015 **SV-21A** LC912 AD23 1122 6/26/2015 SV-21 SV 1L 30 1136 5 х х x SV-21 SV LC913 1L **AD16** 6/26/2015 1122 30 6/26/2015 1131 5 х X х SV-21B LC1010 AD61 6/26/2015 6/26/2015 5 **SV-22A** SV-22 SV 1L 1011 30 1023 X х x X SV-22 LC937 1L 6/26/2015 6/26/2015 5 SV AD163 1011 30 1018 **SV-22B** х x х X 1L 0752 5 **SV-23A SV-23** SV LC088 AD34 6/26/2015 30 6/26/2015 0821 х х Х х 5 SV-23 SV LC480 1L AD31 6/26/2015 0752 30 6/26/2015 0806 **SV-23B** х х х SV-23 sv LC277 1L AD140 6/26/2015 0752 30 6/26/2015 0823 5 **SV-23A DUP** х х X 6/26/2015 6/26/2015 SV-24 SV LC361 1L AD22 0911 30 0921 5 **SV-24A** х SV-24B SV-24 SV LC894 1L AD175 6/26/2015 0911 30 6/26/2015 0925 6 х Received by: (Signature/Affiliation) Relinquished by: (Signature) Received by: (Signature/Affiliation) Relinquished by: (Signature) TOGS1) 6/29/15 1730 En 6930 Received by: (Signature/Affiliation) Relinquished by: (Signature)



800-322-5555 www.gso.com



Ship From

CAL SCIENCE- CONCORD ALAN KEMP 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To CEL SAMPLE RECEIVING 7440 LINCOLN WAY Tracking #: 528422386

NPS



ORC GARDEN GROVE



https://app.gso.com/Shipping/ShippingLabel

4.53**0** 

Ship From

CAL SCIENCE- CONCORD ALAN KEMP 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To CEL SAMPLE RECEIVING 7440 LINCOLN WAY GARDEN GROVE, CA 92841

COD: \$0.00 Weight: 0 lb(s) Reference: CARDNO ERI Delivery Instructions:

Signature Type: REQUIRED

800-322-5555 www.gso.com

Tracking #: 528422387

**NPS** 



ORC GARDEN GROVE A

D92845A



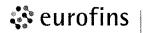
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Package 2 of 2

LABEL INSTRUCTIONS:





Calscience

COOLER O OF O

SAMPLE RECEIPT CHECKLIST	COOLER	0	0F <u></u>
CLIENT: Cardno ATC	DATE: <b>06</b>	130	/ 2015
TEMPERATURE: (Criteria: 0.0°C − 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF):°C (w/ CF):  □ Sample(s) outside temperature criteria (PM/APM contacted by:)  □ Sample(s) outside temperature criteria but received on ice/chilled on same day of sample (s) received at ambient temperature; placed on ice for transport by courier  Ambient Temperature: □ Air □ Filter	ing	□ Sam ed by: ₋	
Custody SEAL:  Cooler Present and Intact Present but Not Intact Not Present Not Present Not Sample(s) Present and Intact Present but Not Intact Not Present Not Not Present Not Not Not Not Not Not Not Not Not No		ed by: _ ed by: _	8% 300
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	d 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	П		
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	П		
☐ 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			<b>a</b>
CONTAINER TYPE: (Trip Blank Lot N	lumber:		)
Aqueous: □ VOA □ VOAh □ VOAna₂ □ 100PJ □ 100PJna₂ □ 125AGB □ 125AGBh □	1 125AGB <b>p</b> □	125PB	
□ 125PB <b>znna</b> □ 250AGB □ 250CGB □ 250CGB <b>s</b> □ 250PB □ 250PB <b>n</b> □ 500AGB □ 5	00AGJ 🗆 500	AGJ <b>s</b>	
□ 500PB □ 1AGB □ 1AGBna₂ □ 1AGBs □ 1PB □ 1PBna □ □ □	]	]	<u>_</u>
Solid: 🗆 4ozCGJ 🗆 8ozCGJ 🗅 16ozCGJ 🗅 Sleeve () 🗅 EnCores® () 🗅 TerraC			
Air: ☐ Tedlar™   Canister  ☐ Sorbent Tube  ☐ PUF  ☐ Other Matrix (	): 🗆	□	
Container: $A = Amber$ , $B = Bottle$ , $C = Clear$ , $E = Envelope$ , $G = Glass$ , $J = Jar$ , $P = Plastic$ , and $Z = Ziplastic$			_
Preservative: $\mathbf{b}$ = buffered, $\mathbf{f}$ = filtered, $\mathbf{h}$ = HCl, $\mathbf{n}$ = HNO ₃ , $\mathbf{na}$ = NaOH, $\mathbf{na_2}$ = Na ₂ S ₂ O ₃ , $\mathbf{p}$ = H ₃ PO ₄ ,	_abeled/Check	ed by:	200
$\mathbf{s} = H_2SO_4$ , $\mathbf{u} = \text{ultra-pure}$ , $\mathbf{znna} = \text{Zn}(CH_3CO_2)_2 + \text{NaOH}$	Review		



# **Calscience**



# **WORK ORDER NUMBER: 15-06-2268**

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For** 

Client: Cardno ERI

Client Project Name: 580 Market Place Shopping Center

**Attention:** Gabe Stivala

601 North McDowell Blvd. Petaluma, CA 94954-2312

amande Porter

Approved for release on 07/15/2015 by: Amanda Porter

Amanda Porter Project Manager



Email your PM )

ResultLink >

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.



# **Contents**

Client Project Name:	580 Market Place Shopping Center
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Work Order Number: 15-06-2268

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3	Quality Control Sample Data.     3.1 LCS/LCSD.	8
4	Sample Analysis Summary	10
5	Glossary of Terms and Qualifiers	11
6	Chain-of-Custody/Sample Receipt Form	12



#### **Work Order Narrative**

Work Order: 15-06-2268 Page 1 of 1

#### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/30/15. They were assigned to Work Order 15-06-2268.

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.



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2268

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-17 (M)

 Units:
 ug/m3

 Project: 580 Market Place Shopping Center
 Page 1 of 4

 Client Sample Number
 Lab Sample Number
 Date/Time Collected Collected Collected Collected Solution
 Matrix Instrument Prepared Analyzed Analyzed Analyzed Analyzed Analyzed Street
 QC Batch ID Number Str-SV-16A

 ST-SV-16A
 15-06-2268-1-A 06/25/15 14:07
 Air GC/MS MMM N/A 07/07/15 00:05
 150706L01

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
ST-SV-16A	15-06-2268-1-A	06/25/15 14:07	Air	GC/MS MMM	N/A	07/07/15 00:05	150706L01
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		108		57-129			
ST-SV-16B	15-06-2268-2-A	06/25/15	Air	GC/MS MMM	N/A	07/06/15	150706L01

ST-SV-16B	15-06-2268-2-A	06/25/15 13:57	Air	GC/MS MMM	N/A	07/06/15 16:58	150706L01
<u>Parameter</u>		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		117		57-129			

ST-SV-17A	15-06-2268-3-A	06/25/15 15:10	Air	GC/MS MMM	N/A	07/06/15 17:40	150706L01
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qu	alifiers
Naphthalene		ND	2	20	1.00		
<u>Surrogate</u>		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		109	Ę	7-129			

ST-SV-17B	15-06-2268-4-A	06/25/15 14:55	Air	GC/MS MMM	N/A	07/06/15 18:23	150706L01
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	alifiers
Naphthalene		ND	2	20	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		115	5	7-129			

ST-SV-18A	15-06-2268-5-A	06/25/15 12:40	Air	GC/MS MMM	N/A	07/06/15 23:22	150706L01
<u>Parameter</u>		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qu	alifiers
Naphthalene		ND	2	0	1.00		
Surrogate		Rec. (%)	<u>C</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		105	5	7-129			

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



Date Received:

06/30/15 Cardno ERI 601 North McDowell Blvd. Work Order: 15-06-2268 Petaluma, CA 94954-2312 Preparation: N/A Method: EPA TO-17 (M) Units: ug/m3 Project: 580 Market Place Shopping Center Page 2 of 4 Lab Sample Number Date/Time Collected Date Prepared Date/Time Analyzed Client Sample Number Matrix QC Batch ID Instrument

ST-SV-18B	15-06-2268-6-A	06/25/15 12:20	Air	GC/MS MMM	N/A	07/06/15 19:06	150706L01
Parameter		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		113		57-129			
CT CV 40A	45 00 2200 7 A	06/05/45	Λ:	CC/MC MMM	NI/A	07/06/4 <i>E</i>	4507061.04

ST-SV-19A	15-06-2268-7-A	06/25/15 16:15	Air	GC/MS MMM	N/A	07/06/15 19:49	150706L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Qu</u>	<u>alifiers</u>
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		110		57-129			

ST-SV-19B	15-06-2268-8-A	06/25/15 15:43	Air	GC/MS MMM	N/A	07/06/15 20:32	150706L01
Parameter		Result	RI	=	<u>DF</u>	Qu	alifiers
Naphthalene		ND	20		1.00		
Surrogate		Rec. (%)	<u>Cc</u>	ontrol Limits	Qualifiers		
1,4-Bromofluorobenzene		113	57	-129			

ST-SV-20A	15-06-2268-9-A	06/25/15 17:20	Air	GC/MS MMM	N/A	07/06/15 21:15	150706L01
Parameter		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	alifiers
Naphthalene		ND	20	)	1.00		
Surrogate		Rec. (%)	<u>C</u>	ontrol Limits	Qualifiers		
1,4-Bromofluorobenzene		105	57	7-129			

ST-SV-20B	15-06-2268-10-A	06/25/15 17:06	Air	GC/MS MMM	N/A	07/06/15 21:57	150706L01
Parameter		Result		RL	<u>DF</u>	Qu	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1.4-Bromofluorobenzene		112		57-129			

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



 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2268

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-17 (M)

 Units:
 ug/m3

 Project: 580 Market Place Shopping Center
 Page 3 of 4

			Method:			E	PA TO-17 (M)
			Units:				ug/m3
Project: 580 Market Place SI	hopping Center					Pa	ge 3 of 4
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
ST-SV-21A	15-06-2268-11-A	06/26/15 11:41	Air	GC/MS MMM	N/A	07/06/15 22:40	150706L01
Parameter		Result		RL	<u>DF</u>	Qua	<u>llifiers</u>
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		109		57-129			
ST-SV-21B	15-06-2268-12-A	06/26/15 11:25	Air	GC/MS MMM	N/A	07/07/15 01:31	150706L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		107		57-129			
ST-SV-22A	15-06-2268-13-A	06/26/15 10:28	Air	GC/MS MMM	N/A	07/07/15 17:31	150707L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	lifiers
Naphthalene		410		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		507		57-129	2,7		
ST-SV-22B	15-06-2268-14-A	06/26/15 10:14	Air	GC/MS MMM	N/A	07/08/15 09:25	150707L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		106		57-129			

Surrogate 1,4-Bromofluorobenzene		Rec. (%) 106		Control Limits 57-129	<u>Qualifiers</u>		
ST-SV-23B	15-06-2268-16-A	06/26/15 07:57	Air	GC/MS MMM	N/A	07/07/15 03:41	150706L01
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		

57-129

113

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

1,4-Bromofluorobenzene



Cardno ERI Date Received: 06/30/15 601 North McDowell Blvd. Work Order: 15-06-2268 Petaluma, CA 94954-2312 Preparation: N/A Method: EPA TO-17 (M) Units: ug/m3 Page 4 of 4

Project: 580 Market Place Shopping Center

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
ST-SV-24A	15-06-2268-17-A	06/26/15 09:30	Air	GC/MS MMM	N/A	07/07/15 04:24	150706L01
Parameter		Result		RL	<u>DF</u>	Qua	lifiers
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
1,4-Bromofluorobenzene		106		57-129			

ST-SV-24B	15-06-2268-18-A	06/26/15 09:15	Air	GC/MS MMM	N/A	07/07/15 00:48	150706L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
Naphthalene		ND		20	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		111		57-129			

Method Blank	099-15-178-30	N/A	Air	GC/MS MMM	N/A	07/06/15 14:19	150706L01
Comment(s): - M	IB data is reported in ng/sample.						
<u>Parameter</u>		Result	<u>RL</u>		<u>DF</u>	Qual	<u>ifiers</u>
Naphthalene		ND	2.0		1.00		
<u>Surrogate</u>		Rec. (%)	Cont	rol Limits	Qualifiers		
1,4-Bromofluorobenz	zene	99	57-1	29			

Method Blank		099-15-178-31	N/A	Air	GC/MS MMM	N/A	07/07/15 14:53	150707L01
Comment(s):	- MB data is reported in ng/	sample.						
<u>Parameter</u>			Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qual	<u>lifiers</u>
Naphthalene			ND	2	2.0	1.00		
Surrogate			Rec. (%)	<u>(</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluoro	benzene		103	į	57-129			

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

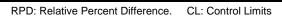


# **Quality Control - LCS/LCSD**

Cardno ERI Date Received: 06/30/15
601 North McDowell Blvd. Work Order: 15-06-2268
Petaluma, CA 94954-2312 Preparation: N/A
Method: EPA TO-17 (M)

Project: 580 Market Place Shopping Center Page 1 of 2

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	Analyzed	LCS/LCSD Ba	atch Number
099-15-178-30	LCS	Air		GC/MS MMM	N/A	07/0	6/15 11:48	150706L01	
099-15-178-30	LCSD	Air		GC/MS MMM	N/A	07/0	6/15 12:31	150706L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Naphthalene	100.0	106.6	107	106.3	106	40-190	0	0-35	





# **Quality Control - LCS/LCSD**

 Cardno ERI
 Date Received:
 06/30/15

 601 North McDowell Blvd.
 Work Order:
 15-06-2268

 Petaluma, CA 94954-2312
 Preparation:
 N/A

 Method:
 EPA TO-17 (M)

Project: 580 Market Place Shopping Center Page 2 of 2

Quality Control Sample ID	Туре	Mat	trix	Instrument	Date Prepa	ared Date	Analyzed	LCS/LCSD Ba	atch Number
099-15-178-31	LCS	Air		GC/MS MMM	N/A	07/07	7/15 12:23	150707L01	
099-15-178-31	LCSD	Air		GC/MS MMM	N/A	07/07	7/15 14:10	150707L01	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD 9	%Rec. CL	RPD	RPD CL	Qualifiers
Naphthalene	100.0	91.99	92	119.2	119	40-190	26	0-35	





# **Sample Analysis Summary Report**

Work Order: 15-06-2268				Page 1 of 1
Method	Extraction	Chemist ID	<u>Instrument</u>	Analytical Location
EPA TO-17 (M)	N/A	658	GC/MS MMM	2



# **Glossary of Terms and Qualifiers**

Work Order: 15-06-2268 Page 1 of 1

Qualifiers	<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.
В	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.
Е	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.

- Χ % Recovery and/or RPD out-of-range. Ζ
  - 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.



**AIR CHAIN-OF-CUSTODY RECORD** 

WO NO. 7 LAB USE ONLY 15-06-2268

DATE:_	6/26/15					
PAGE:	1	OF	2			

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.							)-Ub-	ZZD				PAGE:			OF _	2	
LABORATORY CLIENT:							CLIENT PROJECT NAME / NO.: P.O. NO.:										
	Cardno ATO	; 						e Shopping	Center / C	ardno ATC	Project #						- 1
ADDRESS	701 University Avenue S	Suite 200					000152 ECT CONTACT:					LAB CONTAC	T OR OU	OTE NO			
CITY:		STATE:	CA	ZIP: 95825	-							27.5 00.77710	· Ortao	012110	•		ı
	acramento			9062			Stivala					0.1145) 557(0)	(550.5)				
TEL: 925-223-7123 E-MAIL: gabe.stivala@cardno.com							PROJECT ADDRESS: SAMPLER(S): (PRINT)										
TURNARO	OUND TIME (Rush surcharges may a							astro Valley Bo	ulevard			Nadya Vicer	nte				
☐ SAN	E DAY 🗆 24 HR 🗀	] 48 HR	5 DAYS	<b>₩</b> STANDA	RD	CITY:				STATE:	ZIP:	REQUESTED					
	LT EDF 🗆 OTHER	ONITS.				Castr	o Valley			CA	94552	ANALYSES					
SPECIAL	NSTRUCTIONS:																
•	ting Limits - ug/m ³																
*Globa	I ID = T10000004345																
													e E	-	i		
													ale				
													Napthalene				
LAB			MATRIX	SAN	IPLING EQUIPM		START	SAMPLING INFOR		STOP S	AMPLING INFOR		Ž				
USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	Indoor (I) Soil Vap. (SV) Ambient (A)	Media ID	Canister Size	Flow Controller ID	Date	Time (24 hr clock)	Canister Pressure (in Hg)	Date	Time (24 hr clock)	Canister Pressure (in Hg)	TO-17				
	ST-SV-16A	SV-16	sv	G0189622	- 100ML	NA		(	(	6/25/2015	1407	NA	×				$\neg$
2	ST-SV-16B	SV-16	sv	G0189345	. 100ML	NA				6/25/2015	1357	NA	х				$\neg \neg$
3	ST-SV-17A	SV-17	sv	G0150611	. 100ML	NA				6/25/2015	1510	NA	х				
4	ST-SV-17B	SV-17	sv	G0143005	~100ML	NA	· · · · · · · · · · · · · · · · · · ·			6/25/2015	1455	NA	х				
5	ST-SV-18A	SV-18	sv	G0189314	_100ML	NA				6/25/2015	1240	NA	х				$\neg$
6	ST-SV-18B	SV-18	sv	G0137937	. 100ML	NA				6/25/2015	1220	NA	х				$\neg$
7	ST-SV-19A	SV-19	sv	G0189606	- 100ML	NA				6/25/2015	1615	NA	х				
9	ST-SV-19B	SV-19	sv	G0187201	, 100ML	NA				6/25/2015	1543	NA	х				
9	ST-SV-20A	SV-20	sv	G0187290	∝100ML	NA				6/25/2015	1720	NA	х				一
10	ST-SV-20B	SV-20	sv	G0184764	≠ 100ML	NA				6/25/2015	1706	NA	х				$\neg$
Relinquis	shed by: (Signature)	A/A			- A -	(Signature/Affi	liation)		)		Date:	(00.1		Time:	7/2		
Polinguis	shod by (Signatura)	Vim	4	-	Possived by	(Signature/Affi	ally	, EC/				29//_	2	/ <u>`</u>	5LQ	<u> </u>	[
Reinquis	shed by: (Signature)	70 650 6/2°	9/15	1730	Received by:	(Signature/Ami	nauon)				Date:	•		Time:			
Rélinquis	shed by: (Signature)	7	,	·	Received by:	(Signature/Affi	liation)		M	2 st	Date:			Time:	 720		

• 4						
	e	u	ro	T	n	S

## **AIR CHAIN-OF-CUSTODY RECORD**

		Calscience				WON	O. / LAB USE ON					DATE	:	6/20	15		
	oln Way, Garden Grove, CA 92	841-1427 • (714) 895-5494		-11				86-	226	8		PAGE	: <u>Z</u>	1	OF _	2	
	DRY CLIENT:	mation, contact us26_sales@eu	rotinsus.com or c	all us.		CLIEN	IT PROJECT NAI					P.O. NO.:		<del></del>			
	Cardno AT	C						e Shopping	Center / C	Cardno ATC	Project #						
ADDRESS: 701 University Avenue Suite 200							000152 ECT CONTACT:				•	LAB CONTAC	T OR QU	OTE NO.	:		
CITY:	acramento	STAT	E: CA	ZIP: 95825	<del></del> 5	Gabe	Stivala										
TEL: E-MAIL:							PROJECT ADDRESS: SAMPLER(S):						:): (PRINT)				
	5-223-7123	gabe.Stivalace  spply to any TAT not "STANDARD"):	gcaruno.com	1_		3735-	-4065 East Ca	astro Valley Bo	oulevard			Nadya Vice	nte				
□ SAM			□ 5 DAYS	<b>№</b> STANDA	RD	CITY:				STATE:	ZIP:	1	T	REG	LIEST	FD	
EDD:	T EDF 🗆 OTHER	UNITS:				Castr	o Valley			CA	94552	REQUESTED ANALYSES					
	NSTRUCTIONS:																
													Napthalene				
LAB		FIELD ID /	MATRIX Indoor (I)	SAN	IPLING EQUIPN Canister	IENT Flow	START	SAMPLING INFOR	RMATION Canister	STOP S	AMPLING INFO	RMATION Canister	] [				
USE ONLY	SAMPLE ID	POINT OF COLLECTION	Soil Vap. (SV) Ambient (A)	Media ID	Size	Controller	Date	Time (24 hr clock)	Pressure (in Hg)	Date	Time (24 hr clock)	Pressure (in Hg)	TO-17				
11	ST-SV-21A	SV-21	sv	G0137972	- 100ML	NA		\	(	6/26/2015	1141	NA	х				
12	ST-SV-21B	SV-21	sv	G0183819	″ 100ML	NA				6/26/2015	1125	NA	х				
13	ST-SV-22A	SV-22	sv	G0187123	, 100ML	NA				6/26/2015	1028	NA	х				
14	ST-SV-22B	SV-22	sv	G0184759	- 100ML	NA				6/26/2015	1014	NA	x				
15	ST-SV-23A	SV-23	sv	G0188617	ູ100ML	NA				6/26/2015	0828	NA	х				
16	ST-SV-23B	SV-23	sv	G0186955	₂ 100ML	NA				6/26/2015	0757	NA	х				
17-	ST-SV-24A	SV-24	SV	G0184789	<u> </u>	NA				6/26/2015	0930	NA	x				
18	ST-SV-24B	SV-24	sv	G0141322	√100ML	NA				6/26/2015	0915	NA	х				
													<u> </u>	<b> </b>			
Delinevial	and by (Clamphyn)				Deseived by	(Cinnelluro/Aff	iliation 4				Det		<u></u>	Timo			
Relinquisi	hed by: (Signature)				Received by	: (Signeture/Aff	elle	CC	<del>j</del>		Date	129/2	5	Time;	7/8		
Relinquisl	ned by: (Signature)	- / (X //	na/ir-	172n		: (Signature/Aff	iliation)				Date			Time:			
Relinquist	hed by: (Signature)	70650 6/a	7//0 /	130	Received hv	: (Signature/Aff	iliation)			100	Date	e: <b>, /</b>		Time:			
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Return to Contents



#### 800-322-5555 www.gso.com



Ship From

CAL SCIENCE- CONCORD ALAN KEMP 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To
CEL
SAMPLE RECEIVING
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD: \$0.00 Weight: 0 lb(s) Reference:

CARDNO ERI, PHILLIPS 66, ARCADIS

Delivery Instructions:

Signature Type: REQUIRED

Tracking #: 528422421



ORC GARDEN GROVE



D92845A



39463773

Print Date: 6/29/2015 2:59 PM

#### LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.



Calscience

Page 15 of 15 WORK ORDER NUMBER: **15-06-** 2266

# SAMPLE RECEIPT CHECKLIST

		_		
COO	ED	ì	OF	1
		•	OI.	,

CLIENT: Cardy ERI	DATE: <b>06</b>	1 30	/ 2015
TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): 2.7—°C (w/ CF): 2.4  Sample(s) outside temperature criteria (PM/APM contacted by:)  Sample(s) outside temperature criteria but received on ice/chilled on same day of sample Sample(s) received at ambient temperature; placed on ice for transport by courier  Ambient Temperature: □ Air □ Filter		⊒ Samp ed by:	
CUSTODY SEAL:  Cooler Present and Intact Present but Not Intact Not Present D N/  Sample(s) Present and Intact Present but Not Intact Not Present D N/		ed by: ed by: <b>[</b> _	
SAMPLE CONDITION: Chain-of-Custody (COC) document(s) received with samples  COC document(s) received complete  Sampling date Sampling time Matrix Number of containers		No	N/A
□ No analysis requested □ Not relinquished □ No relinquished date □ No relinquished Sampler's name indicated on COC  Sample container label(s) consistent with COC  Sample container(s) intact and in good condition	Þ Þ		0
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	Ø		
□ pH □ Residual Chlorine □ Dissolved Sulfide □ Dissolved Oxygen			\(\overline{\pi}\)
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			<b>a</b>
CONTAINER TYPE:  Aqueous: □ VOA □ VOAh □ VOAna₂ □ 100PJ □ 100PJna₂ □ 125AGB □ 125AGBh □ 125PBznna □ 250AGB □ 250CGB □ 250CGBs □ 250PB □ 250PBn □ 500AGB □ 500PB □ 1AGB □ 1AGBna₂ □ 1AGBs □ 1PB □ 1PBna □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Number: 1 125AGBp	125PB AGJs 	No. of the Control of
Container: <b>A</b> = Amber, <b>B</b> = Bottle, <b>C</b> = Clear, <b>E</b> = Envelope, <b>G</b> = Glass, <b>J</b> = Jar, <b>P</b> = Plastic, and <b>Z</b> = Zipter Preservative: <b>b</b> = buffered, <b>f</b> = filtered, <b>h</b> = HCl, <b>n</b> = HNO ₃ , <b>na</b> = NaOH, <b>na</b> ₂ = Na ₂ S ₂ O ₃ , <b>p</b> = H ₃ PO ₄ , <b>l</b> s = H ₂ SO ₄ , <b>u</b> = ultra-pure, <b>znna</b> = Zn(CH ₃ CO ₂ ) ₂ + NaOH	loc/Resealable B abeled/Check Reviewe	ed by: _	1070