# LIMITED SUBSURFACE INVESTIGATION OF A FORMER AUTOMOBILE DEALERSHIP LOCATED AT 1311 EAST BRIGGS DRIVE, IN THE CITY OF MACON, (MACON COUNTY), MISSOURI

(Bob Bickhaus Motors, Inc.)

24-Jun-2009

Prepared for:

# ZIONS BANK

Zions First National Bank Credit Management Department 1 South Main Street, Suite 500 Salt Lake City, Utah 84133-1109

Prepared by:



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# 1.0 INTRODUCTION

Zions First National Bank (Zions Bank) has a secured interest of a former automobile dealership known as Bickhaus Motors, located at 1311 East Briggs Drive, Macon, (Macon County), Florida (subject property or site). The subject property is located to the northwest of the intersection of East Briggs Drive (US Highway 36 Business Route) and Kellogg Avenue, to the south of US Highway 36, and roughly ½mile to the east of the US Highway 36 and US Highway 63 interchange (Figure 1). The city of Macon is situated within the southeastern quadrant of Macon County approximately 140 miles to the southeast of Des Moines (Iowa), roughly 140 miles to the northwest of St. Louis, and approximately 80 miles to the north of Jefferson City, the Missouri state capital. The natural landscape of the site vicinity can be generally described as a relatively flat to gently sloping area (Figure 2). The subject property consists of two contiguous parcels of land that have a combined total of roughly 23 acres and have an irregular shape. Development on the site is limited to the smaller parcel along East Briggs Drive and consists of an approximately 19,900-square foot automobile dealership building that contains sales offices, vehicle maintenance areas, and a carwash that is surrounded by a combination of asphalt and concrete pavement as well as limited landscaping and two outbuildings. The limited subsurface investigation was undertaken to evaluate specific environmental issues identified by a Phase I Environmental Site Assessment (ESA) completed on 17-April-2009. As noted above, this investigation was undertaken prior to the exercise of enforcement of Zions Bank's secured interest in the subject property to identify if operations conducted on the site by the mortgagor and/or current and historic site uses have impacted the subject property.

# 1.1 Background

A Phase I ESA was conducted on the subject property, "Phase I Environmental Site Assessment of A Former Automobile Dealership Located at 1311 East Briggs Drive, In the City of Macon, (Macon County), Missouri" dated 17-Apr-2009, by EarthTouch, Inc. This document should be referred to as necessary with respect to the background conditions of the subject property. The Phase I ESA identified numerous recognized environmental conditions at the subject property associated with automobile maintenance and repair activities, including; the former presence of an underground storage tank (UST) that was installed and removed from the ground without confirmation sampling; three aboveground storage tanks (ASTs) with a combined capacity of roughly 1,000 gallons; approximately 700 gallons of petroleum products and automotive fluids in smaller containers; 55-gallon drums of hazardous substances and petroleum products; three oil-water separators; a below grade hydraulic lift; and a reported release of kerosene from an AST.



# 1.2 Objectives and Scope of Work

The purpose of the scope of service performed by EarthTouch, Inc. was to perform subsurface sampling in selected areas based on the potential for adverse impact from current and historic site uses in conjunction with pending foreclosure proceedings. Subsurface investigation activities included:

- Advancing up to six subsurface borings up to 30 feet below ground surface (bgs);
- Collecting at least one soil sample per boring;
- Collecting a soil or water sample from one of the three sumps on the site;
- Analyzing selected soil and/or groundwater samples for volatile organic compounds (VOCs), total petroleum hydrocarbons diesel and gasoline range organics (TPH-DRO, TPH-GRO), and/or polychlorinated biphenyls (PCBs); and
- Preparing a summary report of activities and analytical results.

Determination of the location of the sampling points was based on a review of surface features, identified historical uses of the site, underground and overhead utilities, vegetation, structures, as well as accessibility issues. The sample locations (shown in Figure 3) for the subject property are delineated below:

- Boring B-1: located near the western side of the most northwestern building at the site of historic aboveground storage tanks;
- Boring B-2: situated near the northeast corner of the main building by the existing aboveground storage tank;
- Boring B-3: located in the gravel storage yard near the northeast corner of the main building down gradient of the chemical storage room;
- Boring B-4: located along the eastern elevation of the main building within the parking lot area down-gradient of the chemical storage room;
- Boring B-5: located in the parking area to the north of the main building in close proximity to the northwest corner at the location of the former carwash; and
- Boring B-6: Located to the south of the main building in the parking lot area down-gradient of the structures on the subject property.

# 2.0 LIMITED SUBSURFACE INVESTIGATION

Ms. Buffie Chournos of EarthTouch, Inc. (EarthTouch) conducted limited subsurface sampling activities at the site on 27-May-2009, including the advancement of borings and collection of soil and groundwater samples. At each boring location the one to two soil samples were collected using a stainless steel hand auger and completed using a direct push drilling rig. The direct push drilling rig was operated by Direct Push Analytical Corporation of Elburn, Illinios. Soil samples were continuously collected using a two-inch diameter direct push sampling probe lined with disposable liners; soil samples were collected in the liners which were then removed from the probe and opened for review of the soil. Collected soil samples were reviewed for visual and olfactory evidence of impact; collected soil samples were determined by depth and location of each boring as specified below:

- B-1 S-1: collected from 3 to 4 feet below ground surface (bgs) (analyzed for TPH-DRO and TPH-GRO);
- B-2 S-1: collected from 4 to 6 feet bgs (analyzed for TPH-DRO and TPH-GRO);
- B-3 S-1: collected from 2 to 4 feet bgs (analyzed for VOCs, TPH-DRO, and TPH-GRO);
- B-3 S-2: collected from 21 to 23 feet bgs (analyzed for VOCs, PCBs, THP-DRO, and TPH-GRO);
- B-4 S-1: collected from 16 to 19 feet bgs (analyzed for VOCs, PCBs, TPH-DRO, and TPH-GRO);



- B-5 S-1: collected from 10 to 12 feet bgs (analyzed for VOCs, TPH-DRO, and TPH-GRO);
- B-6 S-1: collected from 1 to 3 feet bgs (analyzed for VOCs, TPH-DRO, and TPH-GRO); and
- CWSMP: collected from the carwash sump and drain (analyzed for VOCs, TPH-DRO, and TPH-GRO).

Liquid samples were collected from a sump located in the northeastern storage room and from the northeast sump within the main building repair and maintenance room and analyzed for VOCs, TPH-DRO, and TPH-GRO.

Each of the borings was backfilled using soil cuttings and/or bentonite chips and the surface restored. Soil and groundwater samples were collected in new, specially cleaned containers provided by the analytical laboratory and specific to the analysis to be performed. If appropriate for the analysis, each sample container was filled completely so that no headspace was present in the containers. Sample containers were labeled with the site name, samples designation, and date and time of collection and placed in a rigid cooler and chilled to approximately four degrees Celsius for transport to the analytical laboratory. A chain-of-custody was completed for the samples, which were delivered to TestAmerica, Inc. of St. Louis, Missouri for analysis.

Analytical results for the analyzed soil and groundwater samples are presented in the attached Table 1. Table 1 also contains the regulatory levels for detected analytes. Copies of the analytical data and laboratory report are attached to this document in Appendix A.

# 2.1 Discussion of Analytical Results

Laboratory analysis of the soil and groundwater samples collected from each of the six direct push borings indicated that some VOCs were detected at concentrations above the laboratory limit of detection (LLD). However, all of these detected analytes were found at concentrations less than the *Missouri Risk-Based Corrective Action Table B-1 – Lowest Default Target Levels All Soil Types and All Pathways* as found from the Missouri Department of Environmental Quality (DEQ). No other analytes were detected above the LLD.

# 3.0 SUMMARY OF RELEVANT FINDINGS

The following conclusions are based upon a review of the results of a limited subsurface investigation of the subject property:

- This investigation was undertaken prior to the exercise of enforcement of Zions Banks' secured
  interest in the subject property to identify if the subject property has been impacted by operations
  conducted on the site by the mortgagor and historic site uses.
- As identified in the discussion of the analytical results, some analytes were found at concentrations
  above the LLD but below the referenced regulatory standards. The subject property does not appear
  to have been significantly impacted by the site or host property uses. Analytical results and analysis
  are restricted to the locations sampled during the limited subsurface investigation.
- During the site investigation, drums containing waste oil, tanks with petroleum products, and oil
  products were observed. An auction that included the sale of remaining materials on the site was
  being conducted during the during the limited subsurface investigation activities and the quantities
  remaining are unknown at this time. Hazardous or non-hazardous regulated materials, such the sump
  sediment and water and any remaining drums or above ground storage tanks, remaining on site



would need to be properly disposed of as part of the "winding-up" of business operations after foreclosure.

# 4.0 LIMITATIONS

This project was performed using, as a minimum, practices consistent with the standards acceptable within the industry at the time of the evaluation, and a level of diligence typically exercised by environmental consultants performing similar services. The methods used in the performance of this scope of work were presented to and discussed with representatives of Zions Bank prior to initiating field activities. These methods may have been altered in the field as a result of actual site conditions. The procedures used attempt to establish a balance between the competing goals of limiting investigative sampling and reporting costs and reducing uncertainty about known field conditions. It is possible that unexpected subsurface conditions could be encountered in areas that were not physically sampled. Therefore, because the conditions of this report were derived from the scope of work, costs, time, access and other limitations, the conclusions should not be construed as a guarantee that all environmental liabilities have been identified and fully addressed.

This report presents the opinion and judgment of EarthTouch, Inc. professionals, which are dependant on the information obtained during the performance of the scope of work. It should be noted that no investigation can be thorough enough to exclude the possible presence of potential liabilities at a site. In cases where contaminants have not been discovered through intrusive exploration and analysis, this should not be construed as a guarantee that contaminants do not exist. At a given site, environmental conditions may exist that cannot be identified by visual observations or through other analytical methodology. Where sample collecting and testing have been performed, EarthTouch, Inc. professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at unsampled locations or the subject property as a whole. EarthTouch, Inc. assumes no responsibility for omissions or errors resulting from inaccurate information, or data provided by secondary sources or public records.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions or recommendations contained within this report. The limitations presented above supersede the requirements or provisions of all other contracts or scopes of work, implied or otherwise except those stated or acknowledged herein.

# 5.0 OUALIFICATIONS OF TECHNICAL STAFF

Short resumes for the environmental professionals contributing to the completion of this report are included in this section.

Buffie R. Chournos Project Analyst

Ms. Chournos has earned a degree in Geology with an emphasis in Environmental Geology from Georgia State University. She has been involved with a range of geophysical projects since her graduation. Ms. Chournos has performed projects like Seismic Refraction, Vibration Monitoring, and Electromagnetic studies throughout Georgia as well as North Carolina and Alabama. She has also performed numerous environmental evaluations including Phase I Environmental Site Assessments, Phase II site evaluations, and NEPA evaluations.



Brett E. Cox Senior Scientist

Mr. Cox has a diverse educational background and professional experience in environmental compliance, air quality, asbestos, geology, and geophysics. He has managed environmental site assessments and subsurface investigations, conducted compliance evaluations, and managed remedial action projects, and developed and implemented large-scale site evaluation programs. Mr. Cox has conducted and managed site assessment programs that have involved hundreds of Phase I ESAs and NEPA checklist evaluations of proposed wireless telecommunications sites in seven western states. As a project manager, he has overseen a multi-disciplinary effort to complete site evaluations, formulate deliverables, interface with relevant regulatory agencies, and complete additional environmental processing in compliance with Federal Communications Commission rules. Scopes of work completed have included FCC-focused NEPA Checklist evaluations, Phase I ESAs, ASTM Transaction Screens, geotechnical analysis, soil and groundwater contaminant assessment, historical/cultural resource inventories, biological assessments/inventories, and Environmental Assessments.



# 5.1 Technical Staff Signatures

The following EarthTouch, Inc. personnel were responsible for this Site Characterization.

Buffie R. Chournos Project Analyst

Phase I Environmental Site Assessment

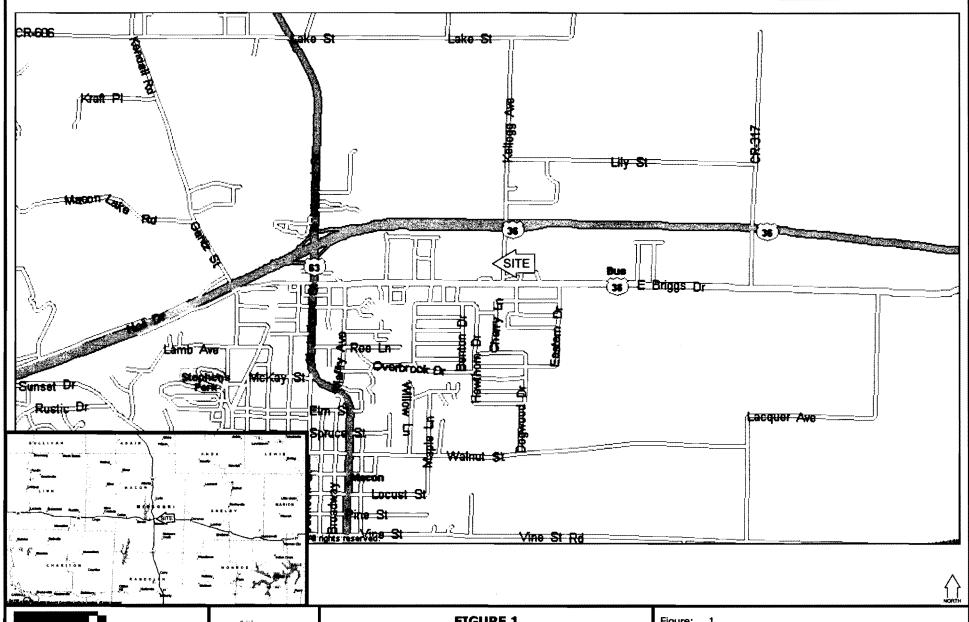
Brett E. Cox Senior Scientist

Technical Review

# FIGURE 1

SITE LOCATION (Street Map)







EarthTouch, Inc. 3135 North Fairfield Road Layton, Utah 84041



FIGURE 1 **Site Location** (Street Map)

Zion-784 / Bob Bickhaus Motors, Inc. 1311 East Briggs Drive Macon, (Macon County), Missouri 63552 Append: Limited Subsurface Investigation

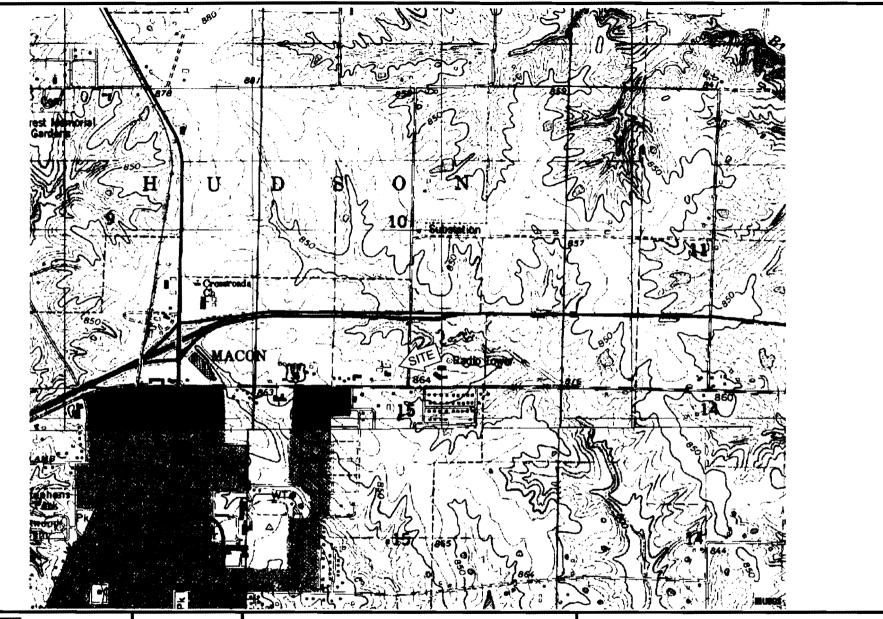
Project: Zion-784-MO / Bob Bickhaus Motors, Inc. Analyst: Buffie Chournos

Source: MS Streets & Trips 2007 Edition

Macon, Missouri

# FIGURE 2 TOPOGRAPHIC MAP







EarthTouch, Inc. 3135 North Fairfield Road Layton, Utah 84041



# FIGURE 2

# **Topographic Map**

Zion-784 / Bob Bickhaus Motors, Inc. 1311 East Briggs Drive Macon, (Macon County), Missouri 63552 Figure: 2

Append: Limited Subsurface Investigation

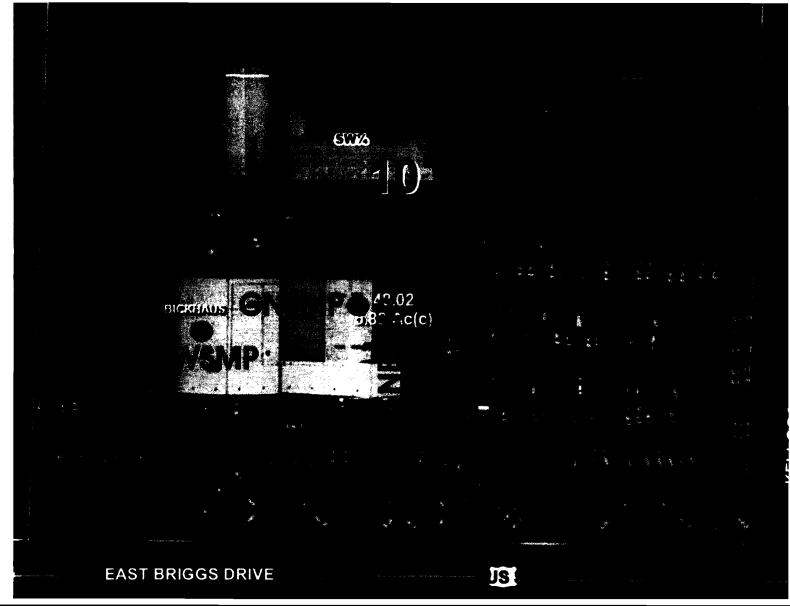
Project: Zion-784-MO / Bob Bickhaus Motors, Inc.

Analyst: Buffie Chournos

Source: US Geological Survey 7.5-minute quadrangle series Axtel (Missouri) quadrangle map

# FIGURE 3 BORING LOCATIONS







EarthTouch, Inc. 3135 North Fairfield Road Layton, Utah 84041 Tei: 801.771.2800



# FIGURE 3

# **Boring Locations**

Zion-784 / Bob Bickhaus Motors, Inc. 1311 East Briggs Drive Macon, (Macon County), Missouri 63552 Figure:

Append: Limited Subsurface Investigation

Project: Zion-784-MO / Bob Bickhaus Motors, Inc.

Analyst: Buffie Chournos

Source: Google Earth

# TABLE 1 SOIL AND GROUNDWATER ANALYTICAL RESULTS



Table 1
Soil and Groundwater Analytical Results

Detected Analytes	Water S	ample ID ug/L	Groundwater Target Cleanup Levels^			Soll S	Sample ID ug/Kg			Soil Target Cleanup Levels^*
	NESMP	CNSMP	Lowest Default Target Level Groundwater	B-3 S-1	- B-3 S-2	B-4 S-1	B-5 S-1	B-6 S-1	CWSMP	Lowest Default Target Level
Methyl-Ethyl-Ketone	5.3	1.4	3640	9.9	BLLD	BLLD	BLLD	12	BLLD	7,300
Toluene	0.38	1.5	1000	BLLD	BLLD	BLLD	BLLD	BLLD	BLLD	NA
Total Xylenes	BLLD	3	10,000	BLLD	BLLD	BLLD	BLLD	BLLD	BLLD	NA
1, 2 - Dichlorobenzene	BLLD	2.6	NA	0.52	BLLD	BLLD	BLLD	BLLD	BLLD	56,100
1, 2 - Dichloroethane	BLLD	5.8	NA	BLLD	1.4	BLLD	BLLD	BLLD	BLLD	21
1, 2 - Dichloropropane	BLLD	BLLD	NA	BLLD	0.6	BLLD	BLLD	BLLD	BLLD	42
Styrene	BLLD	BLLD	NA	BLLD	BLLD	0.33	0.28	BLLD	BLLD	11,700
Acetone	16	15	2970	34	BLLD	BLLD	BLLD	96	13	220,000
Ethylbenzene	BLLD	0.58	700	BLLD	BLLD	BLLD	BLLD	BLLD	BLLD	NA

<sup>^</sup> Missouri Risk-Based Corrective Action Lowest Default Targel Levels All Soil Types and All Pathways Table B-1

NA - Not Applicable

<sup>^^</sup> Missouri Risk-Based Corrective Action Lowest Default Targel Levels All Soil Types and All Pathways Table B-1 BLLD - Below the laboratory limit of detection

# APPENDIX A LABORATORY REPORT





TestAmerica Laboratories, Inc.

#### ANALYTICAL REPORT

Residential Memitoring

Lot #: F9E290228

Eve Dunn

Earth Touch, Inc 3135 N Fairfield, Unit D Layton, UT 84041

TESTAMERICA LABORATORIES: INC.

Kay Clay Project Manager

June 18, 2009

#### Case Narrative LOT NUMBER: F9E290228

This report contains the analytical results for the 10 samples received under chain of custody by TestAmerica St. Louis on May 28, 2009. These samples are associated with your Residential Monitoring project.

The analytical results included in this report meet all epplicable quality control procedure requirements except as noted below.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

#### Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

#### Volatiles Method: 8260B

#### Batch 9160394

The CCV recovery was outside the upper QC limit (greater than 20% D) for Dichlorodifluoromethane and Freon-114, indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit or were not target analytes in the associated samples. No further action is required.

The LCS recoveries for Dichlorodifluoromethane, Freon-114 and Chloromethane are outside the upper CC limit, indicating a potential positive bias for these analytes. These analytes were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The original sample results are provided.

The LCS recovery for Acrylonitrile is outside the lower QC limit. This compound is not a target for the samples in this batch, therefore the sample data was not adversely affected by this excursion. The original sample results are provided.

The MS and/or MSD recoveries for Dichlorodifluoromethane, Freon-114 and Chloromethane are outside the upper QC limit, indicating a potential positive bias for these analytes. These analytes were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion.

The MS and/or MSD recoveries for Ethyl acetate and Acrylonitrile are outside the lower QC limit. These compounds were not target analytes for the associated samples; therefore the sample data was not adversely affected by this excursion. The original sample results are provided.

The analyte 2-Chloroethyl vinyl ether was not detected in the MS/MSD due to sample preservation with hydrochloric acid.

Affected Samples: F9E290228 (9): BB-NESMP F9E290228 (10): BB-CNSMP

# METHODS SUMMARY

#### F9E290228

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD		
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510		
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3550		
Percent Moisture	MCANW 160.3 MOD	MCAWW 160.3 MOD		
PCBs by SW-846 8082	SW846 8082	\$W846 3550B/366		
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B		
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030		

#### References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 Test Methods for Bvaluating Solid Waste, Physical/Chemical Methods\*, Third Edition, November 1996 and its updates.

### SAMPLE SUMMARY

#### F9R290228

₩0 #	sample#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LD1LP	001	BB1-S1	05/27/09	08:35
LD1LR	003	BB2-S1	05/27/09	10:40
LD1LV	003	BB3-S1	05/27/09	12:40
LD1LX	004	BB3-82	05/27/09	13:05
LD1L6	005	BB4-S1	05/27/09	14:33
LD1L9	006	BB5-S1	05/27/09	15:15
LD1MC	007	BB6-81	05/27/09	16:05
LD1MB	008	BB6-CWSMP	05/27/09	09:46
LD1MG	009	BB-NESMP	05/27/09	10:30
LD1MM	010	BB-CNSMP	05/27/09	11:45

#### RUTE(S):

- The analytical results of the samples libral above are presented on the following pages.
- All calculations are performed before rounding to avoid tound-off errors in calculated results.
- Results noted as "ND" were not desected at or above the stated licele.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight hasts: color, corrostwiny, density, flustopoins, ignistability, layers, odor, paker filter ass. pH, perceity pressure, rescrivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscusity, and weight.

#### Client Sample ID: BB1-S1

#### General Chemistry

Lot-Sample \$...: F9E290228-001 Work Order \$...: LD1LP Matrix.....: SOLID Date Sampled...: 05/27/09 08:35 Date Received..: 05/28/09

\* Moisture....: 23

		Dilu	tion Facto	r: 1	Analysis Time: 00:00		
Percent Moisture	23.4		0.10	¥	MCANW 160.3 MOD	06/05-06/08/09	9152321
PARAMETER	RESULT		RL	UNITS	METHOD	ANALYSIS DATE	BATCH #
						PREPARATION-	PREP

Barth Touch, Inc

Client Sample ID: RB2-S1

#### GC Volatiles

Lot-Sample #...: F9E290228-002 Work Order #...: LD1LR1AD Matrix..... SOLID Date Sampled...: 05/27/09 10:40 Date Received..: 05/28/09 Prep Date....: 06/10/09 Analysis Date..: 06/10/09 Prep Batch # ...: 9161534 Analysis Time..: 20:03 Dilution Factor: 1 \* Moisture....: 22 Method..... SW846 8015 MOD REPORTING PARAMETER RESULT LIMIT UNITS Volatile Petroleum ND 0.13 mg/kg Hydrocarbons

 SURROGATE
 PERCENT
 RECOVERY

 Trifluorotoluene
 80
 (55 - 150)

NOTE(S):

#### Client Sample ID: HB3-S1

#### GC/MS Volatiles

Lot-Sample #...: F9E290228-003 Work Order #...: LD1LV1AE
Date Sampled...: 05/27/09 12:40 Date Received..: 05/28/09
Prep Date....: 06/10/09 Analysis Date..: 06/10/09
Prep Batch #...: 9161547 Analysis Time..: 13:23

Method....: SW846 8260B

REPORTING PARAMETER RESULT LIMIT UNITS ND 12 ug/kg Chloromethane Vinyl chloride ND 6.1 ug/kg ug/kg Bromomethane ND 12 12 ug/kg ND Chloroethane 34 24 ug/kg Acetone 6.1 ND ug/kg 1,1-Dichloroethene Methylene chloride ND 6.1 ug/kg Carbon disulfide ND 6.1 ug/kg 6.1 ug/kg ND 1,1-Dichloroethane 9.9 J 24 ug/kg 2-Butanone 1,2-Dichloroethene ND 12 ug/kg (total) ND 6.1 uq/kg Chloroform 6.1 ug/kg 1,1,1-Trichloroethane ND 6.1 ug/kg Carbon tetrachloride ND 1,2-Dichloroethane ND 6.1 ug/kg 6.1 ND ug/kg Benzene 6.1 ug/kg ND Trich1oroethene 1,2-Dichloropropane ND 6.1 ug/kg 6.1 ug/kg Bromodichloromethane ND 4-Methyl-2-pentanone ND 24 ug/kg cis-1,3-Dichloropropene ND 6.1 ug/kg ND 6.1 ug/kg Toluene ND 6.1 uq/kg trans-1,3-Dichloropropene 1,1,2-Trichloroethane ND 5.1 ug/kg ND 24 ug/kg 2-Hexanone Tetrachloroethene ND 6.1 ug/kg Dibromochloromethane ND 6.1 ug/kg 6.1 ug/kg Chlorobenzene ND Ethylbenzene ND 6.1 ug/kg Xvlenes (total) ND 1.2 ug/kg 6.1 ug/kg ND Styrene ND 6.1 ug/kg Bromoform ug/kg ND 6.1 1,1,2,2-Tetrachloroethane 1,2-Dichlorobenzene 6.1 ug/kg 0.52 J 1,3-Dichlorobenzene ND 6.1 ug/kg 6 1 ug/kg ND 1,4-Dichlorobenzene

(Continued on next page)

#### Earth Touch, Inc.

#### Client Sample ID: BB3-S1

#### GC/MS Volatiles

Test - Samuel a	F9F290228~003	Work Order	#: LD1LV1AE	Matrix	· SOLID

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Toluene-d8	88	(65 - 143)
Dibromofluoromethane	102	(73 - 131)
1,2-Dichloroethane-d4	103	(63 - 145)
4-Bromofluorobenzene	102	(46 - 150)

#### NOTE(5):

Results and reporting limits have been adjusted for dry weight.

J. Estimated result. Result is less than RL.

\* Moisture....: 18

#### Client Sample ID: BB3-S1

#### General Chemistry

Lot-Sample #...: F9E290228-003 Work Order #...: LD1LV Matrix......: SOLID

Date Sampled...: 05/27/09 12:40 Date Received..: 05/28/09

\* Moisture....: 18

							PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHOI	<u> </u>		ANALYSIS DATE	BATCH #
Percent Moisture	18.1	0.10	•	MCANW	160.3	MOD	06/05-06/08/09	9152321
	Dila	ition Facto	r: 1	Analysis	Time :	00:00		

### Barth Touch, Inc

### Client Sample ID: BB3-S2

#### GC/MS Volatiles

Lot-Sample #:	F9E290228-004	Work Order #:	LD1LX1AC	Matrix SOLID
Date Sampled:	05/27/09 13:05	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/10/09	
Prep Batch #:	9161547	Analysis Time:	14:00	
Dilution Factor:	1			

Method...... SW846 8260B

		REPORTIN	iG
PARAMETER	RESULT	LIMIT	UNITS
Chloromethane	ND	12	ug/kg
Vinyl chloride	ND	5.9	ug/kg
Bromomethane	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Acetone	ND	23	ug/kg
1,1-Dichloroethene	ND	5.9	ug/kg
Methylene chloride	ND	5.9	ug/kg
Carbon disulfide	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
2-Butanone	ND	23	ug/kg
1,2-Dichloroethene	ND	12	ug/kg
(total)			
Chloroform	ND	5.9	ug/kg
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
1,2-Dichloroethane	1.4 J	5.9	ug/kg
Benzene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
1,2-Dichloropropane	0.60 J	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	23	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Toluene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
2-Hexanone	ND	23	ug/kg
Tetrachloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	NID	5.9	ug/kg
Xylenes (total)	ND	12	ug/kg
Styrene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg
1,2-Dichlorobenzene	ND	5.9	ug/kg
1,3-Dichlorobenzene	NID	5.9	ug/kg
1,4-Dichlorobenzene	ND	5.9	ug/kg

\* Moisture....: 15

(Continued on next page)

# Client Sample ID: BB3-S2

### GC Semivolatiles

Lot-Sample #:	F9E290228-004	Work Order #:	LDILXIAE	Matrix SOLI	ID
Date Sampled:	05/27/09 13:05	Date Received:	05/28/09		
Prep Date:	06/10/09	Analysis Date:	06/15/09		
Prep Batch #:	9161350	Analysis Time:	19:08		
Dilution Factor:	1				
* Moisture:	15	Method:	SW846 8015	MOD	
			REPORTING		
PARAMETER		RESULT	LIMIT	UNITS	
TPH (as Diesel)		ND	29	mg/kg	
		PERCENT	RECOVERY		
SURROGATE		RECOVERY	LIMITS		
o-Terphenyl		70	(30 - 150)	•	
NOTE (S):					

#### Earth Touch, Inc.

#### Client Sample ID: BB3-S2

### GC Semivolatiles

Lot-Sample #: P9E290228-004 Date Sampled: 05/27/09 13:09 Prep Date: 06/10/09		05/28/09	Matrix SOLID
Prep Batch #: 9161347	Analysis Time:	20:22	
Dilution Factor: 1		#W046 0000	*
* Moisture: 15	Method:	58846 8082	
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	İND	39	ug/k <del>g</del>
Aroclor 1248	ND .	39	ug/k <del>g</del>
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	97	(42 - 150)	

#### MOTE(S):

lessits and reporting limits have been adjusted for dry weigh

### Client Sample ID: BB4-S1

### GC/MS Volatiles

Lot-Sample #...: F9E290228~005 Work Order #...: LD1L61AC Matrix.....: SOLID

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Toluene-d8	101	(65143)
Dibromofluoromethane	104	(73 - 131)
1,2-Dichloroethane-d4	109	(63 - 145)
4-Bromofluorobenzene	97	(46 - 150)

#### NOTE(S):

Results and reporting limits have been adjusted for dry weight.

- I Estimated result. Repult is less than RL
- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Barth Touch, Inc

# Client Sample ID: B84-S1

### GC Volatiles

Lot-Sample #: F9E290228-005	Work Order #:	LD1L61AF	Matrix SOLID
Date Sampled: 05/27/09 14:3	3 Date Received:	05/28/09	
Prep Date: 06/10/09	Analysis Date:	06/10/09	
Prep Batch #: 9161534	Analysis Time:	21:48	
Dilution Factor: 1	-		
* Moisture: 14	Method:	SW846 8015	MOD
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Volatile Petroleum	ND	0.12	mg/kg
Hydrocarbons			
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Trifluorotoluene	76	(55 - 150)	

### HOTE (S) :

#### Client Sample ID: BB4-S1

### General Chemistry

Matrix..... SOLID Lot-Sample #...: F9E290228-005 Work Order #...: LD1L6 Date Sampled...: 05/27/09 14:33 Date Received..: 05/28/09

\* Moisture....: 14

PREPARATION- PREP RL UNITS ANALYSIS DATE BATCH # PARAMETER RESULT 14.3 MCANW 160.3 MOD 06/05-06/08/09 9152321 Percent Moisture Dilution Factor: 1 Analysis Time..: 00:00

Earth Touch, Inc

### Client Sample ID: BB5-S1

### GC/MS Volatiles

Lot-Sample #:	F9E290228-006	Work Order #: LD	1L91AC I	Matrix:	SOLID
Date Sampled:	05/27/09 15:15	Date Received: 05/	/28/09		
Prep Date:	06/10/09	Analysis Date: 06	/10/09		
Prep Batch #:	9161547	Analysis Time: 15:	:12		
Dilution Factor:	1				
* Moisture:	17	Method SW	846 8260B		

		REPORTIN	G
PARAMETER	RESULT	<u>LIMIT</u>	UNITS
Chloromethane	ND	12	ug/kg
Vinyl chloride	ND	6.1	ug/kg
Bromomethane	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Acetone	ND	24	ug/kg
1,1-Dichloroethene	ND	6.1	ug/kg
Methylene chloride	ND	6.1	ug/kg
Carbon disulfide	ND	6.1	ug/kg
1,1-Dichloroethane	ND	6.1	ug/kg
2-Butanone	ND	24	ug/kg
1,2-Dichloroethene	ND	12	ug/kg
(total)			
Chloroform	ND	6.1	ug/kg
1,1,1-Trichloroethane	ND	6.1	ug/kg
Carbon tetrachloride	ND	6.1	ug/kg
1,2-Dichloroethane	ND	6.1	ug/kg
Benzene	ND	6.1	ug/kg
Trichloroethene	ND	6.1	ug/kg
1,2-Dichloropropane	ND	6.1	ug/kg
Bromodichloromethane	ND	6.1	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
cis-1,3-Dichloropropene	ND	6.1	ug/kg
Toluene	ND	6.1	ug/kg
trans-1,3-Dichloropropene	ND	6.1	ug/kg
1,1,2-Trichloroethane	ND	6.1	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.1	ug/kg
Dibromochloromethane	ND	6.1	ug/kg
Chlorobenzene	ND	6.1	ug/kg
Ethylbenzene	ND	6.1	ug/kg
Xylenes (total)	ND	12	ug/kg
Styrene	0.28 J,B	6.1	ug/kg
Bromoform	ND	6.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg
1,2-Dichlorobenzene	ND	6.1	ug/kg
1,3-Dichlorobenzene	ND	6.1	ug/kg
1,4-Dichlorobenzene	ND	6.1	ug/kg

(Continued on next page)

### Client Sample ID: BB5-S1

#### GC Semivolatiles

Lot-Sample #:	F9R290228-006	Work Order #:	LD1L91AD	Matrix SOLID
Date Sampled:	05/27/09 15:15	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/15/09	
Prep Batch #:	9161350	Analysis Time:	20:13	
Dilution Factor:	1			
% Moisture:	17	Method:	SW846 8015	MOD
			REPORTING	
PARAMETER		RESULT	LIMIT	UNITS
TPH (as Diesel)		ND	30	mg/kg
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
o-Terphenyl		67	(30 - 150)	
NOTE(S):				

Barth Touch, Inc

### Client Sample ID: BB5-S1

#### General Chemistry

Lot-Sample \$...: F9E290228-006 Work Order \$...: LD1L9 Matrix.....: SOLID Date Sampled...: 05/27/09 15:15 Date Received..: 05/28/09

\* Moisture....: 17

						PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHOI	)	ANALYSIS DATE	BATCH #
Percent Moisture	17.5	0.10	4	MCANIN	160.3 MOD	06/05-06/08/09	9152321
	Dilu	tion Facto	r: 1 .	Analysis	Time: 00:00		

### Client Sample ID: BB6-S1

#### GC Volatiles

Lot-Sample #: F9E290228-007	Work Order #:	LD1MC1AE	Matrix SOLID
Date Sampled: 05/27/09 16:05	Date Received:	05/28/09	
Prep Date: 06/10/09	Analysis Date:	06/11/09	
Prep Batch #: 9161534	Analysis Time:	00:08	
Dilution Factor: 1			
% Moisture: 26	Method:	SW846 8015	MOD
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Volatile Petroleum Hydrocarbons	ND	0.13	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	and the second s
Trifluorotoluene	90	(55 - 150)	
NOTE(S):			

Results and reparting limits have been adjusted for dry weight.

Barth Touch, Inc

#### Client Sample ID: BB6-S1

#### GC Semivolatiles

Lot-Sample #:	F9E290228-007	Work Order #:	LDIMCLAD	Matrix SOLID
Date Sampled:	05/27/09 16:05	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/15/09	
Prep Batch #:	9161350	Analysis Time:	21:50	
Dilution Factor:	4	_		
* Moisture:	26	Method:	SW846 8015	MOD
			REPORTING	
PARAMETER		RESULT	LIMIT	UNITS
TPH (as Diesel)		ND	130	mg/kg
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
o-Terphenyl		71	(30 - 150)	
NOTE(S):	*			

#### Client Sample ID: BB6-CWSMP

### GC/MS Volatiles

Lot-Sample #...: F9E290228-008 Work Order #...: LDIMEIAC Matrix.....: SOLID

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Toluene-d8	105	(65 - 143)
Dibromofluoromethane	103	(73 - 131)
1,2-Dichloroethane-d4	110	(63 - 145)
4-Bromofluorobenzene	113	(46 - 150)

### NOTE (S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

#### Earth Touch, Inc.

#### Client Sample ID: BB6-CWEMP

### GC Volatiles

Lot-Sample #: F9E290228-008 Date Sampled: 05/27/09 09:4 Prep Date: 06/10/09		05/28/09	Matrix: SOLID
Prep Batch #: 9161534	Analysis Time:		
Dilution Factor: 1			
* Moisture: 17	Method:	SW846 8015	MOD
		REPORTING	
PARAMETER	result	LIMIT	UNITS
Volatile Petroleum	NTD	0.12	mg/kg
Hydrocarbons			
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Trifluorotoluene	35 *	(55 - 150)	

#### NOTE (S)

Surrogate recovery is outside stated control limits.

#### Client Sample ID: HB-NRSMP

#### GC/MS Volatiles

Lot-Sample #...: P9E290228-009 Work Order #...: LD1M31AA
Date Sampled...: 05/27/09 10:30 Date Received..: 05/28/09
Prep Date....: 06/08/09 Analysis Date..: 06/09/09
Prep Batch #...: 9160394 Analysis Time..: 02:08
Dilution Factor: 1

Method..... SW846 8260B

REPORTING PARAMETER RESULT LIMIT UNITS Chloromethane ND 10 ug/L Vinyl chloride ND ug/L 5.0 Bromomethane ND 10 ug/L NO ug/L Chloroethane 10 16 J 20 ug/L Acetone 1.1-Dichloroethene ND 5.0 ug/L Methylene chloride ND 5.0 ug/L Carbon disulfide ug/L ND 5.0 1,1-Dichloroethane ND 5.0 ug/L 20 ug/L 5.3 J 2-Butanone 1,2-Dichloroethene ND 10 ug/L (total) ug/L Chloroform ND 5.0 1,1,1-Trichloroethane ND 5.0 ug/L Carbon tetrachloride ND 5.0 ug/L 1,2-Dichloroethane MD 5.0 ug/L Benzene ND 5.0 uq/L Trichloroethene ND 5.0 ug/L ug/L 1,2-Dichloropropane ND 5.0 Bromodichloromethane ND: 5.0 ug/L 4-Methyl-2-pentanone ND 20 ug/L ug/L ND cis-1,3-Dichloropropene 5.0 0.38 J,B 5.0 ug/L Toluene ug/L trans-1,3-Dichloropropene ND 5.0 ug/L 1,1,2-Trichloroethane ND 5.0 ND 20 ug/L 2-Hexanone MO ug/L Tetrachloroethene 5.0 ug/L Dibromochloromethane ND 5.0 Chlorobenzene ND 5.0 ug/L ug/L Ethylbenzene ND 5.0 ND 10 ug/L Xylenes (total) ND ug/L Styrene 5.0 Bromoform ND 5.0 ug/L 1,1,2,2-Tetrachloroethane ND 5.0 ug/L 1,2-Dichlorobenzene ND 5.0 ug/L 1,3-Dichlorobenzene ND 5.0 ug/L 1,4-Dichlorobenzene ND 5.0 ug/L

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#### Earth Touch, Inc.

#### Client Sample ID: BB-NESMP

#### GC/MS Volatiles

Lot-Sample #...: F9E290228-009 Work Order #...: LD1M31AA Matrix.....: WATER

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Toluene-d8	111	(85 - 121)
Dibromofluoromethane	107	(85 - 118)
1,2-Dichloroethane-d4	100	(85 - 115)
4-Bromofluorobenzene	107	(85 - 120)

#### NOTE(S):

- J Estimated result. Result is less than RL.
- B. Method blank contamination. The associated method blank contains the current analyte at a reportable level.

### Client Sample ID: BB-CNSMP

# GC/MS Volatiles

Lot-Sample #...: F9E290228-010 Work Order #...: LDIMMIAA Matrix...: WATER
Date Sampled...: 05/27/09 11:45 Date Received..: 05/28/09
Prep Date....: 06/08/09 Analysis Date..: 06/09/09
Prep Batch #...: 9160394 Analysis Time..: 02:36

Method.....: SW846 8260B

		REPORTIN	iG
parameter	RESULT	LIMIT	UNITS
Chloromethane	ND	10	ug/L
Vinyl chloride	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Acetone	15 J	20	ng/L
1,1-Dichloroethene	ND	5.0	ug/L
Methylene chloride	ND	5.0	ug/L
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethane	ND .	5.0	ug/L
2-Butanone	ND	20	ug/L
1,2-Dichloroethene (total)	ND	10	ug/L
Chloroform	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Toluene	1.5 J,B	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	ND	5.0	ug/L
Dibromochloromethane	NTD	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	0.58 J	5.0	ug/L
Xylenes (total)	3.0 J	10	ug/L
Styrene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L

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#### Earth Touch, Inc

#### Client Sample ID: BB-CNSMP

#### GC/MS Volatiles

Lot-Sample #...: F9E290228-010 Work Order #...: LDIMM1AA Matrix.....: WATER

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Toluene-d8	106	(85 - 121)
Dibromofluoromethane	104	(85 - 118)
1,2-Dichloroethane-d4	101	(85 - 115)
4-Bromofluorohenzene	111	(85 - 120)

### NOTE (S):

- J Estimated result. Result is less than RL.
- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Analysis Time..: 01:10

#### METHOD BLANK REPORT

#### GC/MS Volatiles

Prep Date....: 06/08/09

Client Lot #...: F9E290228 | Work Order #...: LEKOA1AA | Matrix.....: WATER MES Lot-Sample #: F9F090000-394

Analysis Date..: 06/09/09 Prep Batch #...: 9160394

Dilution Factor: 1

		REPORTI	NG			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
Chloromethane	ND	10	ug/L	SW846 8260B		
Vinyl chloride	ND	5.0	ug/L	SW846 8260B		
Bromomethane	ND	10	ug/L	SW846 8260B		
Chloroethane	ND	10	ug/L	SW846 8260B		
Acetone	ND	20	ug/L	SW846 8260B		
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B		
Methylene chloride	ND	5.0	ug/L	SW846 8260B		
Carbon disulfide	ND	5.0	ug/L	SW846 8260B		
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B		
2-Butanone	ND	20	ug/L	SW846 8260B		
1,2-Dichloroethene (total)	ND	10	ug/L	SW846 8260B		
Chloroform	ND	5.0	uq/L	SW846 8260B		
1.1.1-Trichloroethane	ND	5.0	ug/L	SW846 8260B		
Carbon tetrachloride	ND	5.0	uq/L	SW846 8260B		
1.2-Dichloroethane	ND	5.0	ug/L	SW846 8260B		
Benzene	ND	5.0	ug/L	SW846 8260B		
Trichloroethene	ND	5.0	ug/L	SW846 8260B		
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B		
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B		
4-Methyl-2-pentanone	ND	20	ug/L	SW846 8260B		
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B		
Toluene	2.0 J	5.0	ug/L	SW846 8260B		
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B		
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B		
2-Hexanone	ND	20	ug/L	SW846 8260B		
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B		
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B		
Chlorobenzene	ND	5.0	ug/L	SW846 8260B		
Ethylbenzene	ND	5.0	ug/L	SW846 8260B		
Xylenes (total)	ND	10	ug/L	SW846 8260B		
Styrene	ND	5.0	ug/L	SW846 8260B		
Bromoform	ND	5.0	ug/L	SW846 8260B		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	EW846 8260B		
1,2-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B		
1,3-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B		
1,4-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B		
	PERCENT	RECOVER	ty.			
SURROGATE	RECOVERY	LIMITS				
Toluene-d8	105	(85 - 1	21)			

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#### METROD BLANK REPORT

#### GC/MS Volatiles

Client Lot #: F9E290228	Work Order #	: LEKOA1AA	Matrix WATER
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD
Dibromofluoromethane	101	(85 - 118)	
1,2-Dichloroethane-d4	95	(85 - 115)	
4-Bromofluorobensene	104	(85 - 120)	

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Petitosend result. Result is less than RL.

#### METHOD BLANK REPORT

#### GC Volatiles

Client Lot #...: F9E290228 Work Order # ...: LENGVIAA Matrix.... WATER MB Lot-Sample #: F9F100000-532 Prep Date....: 06/10/09 Analysis Time..: 03:38 Analysis Date ..: 06/11/09 Prep Batch # ...: 9161532 Dilution Factor: 1 REPORTING LIMIT PARAMETER RESULT METHOD Volatile Petroleum 0.10 SW846 8015 MOD ND mg/L Hydrocarbons PERCENT RECOVERY

Trifluorotoluene

SURROGATE

RECOVERY 102

LIMITS (55 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### METHOD BLASK REPORT

#### GC Volatiles

Client Lot #...: F9E290228 MB Lot-Sample #: F9F100000-534

Work Order # ...: LENGOLAA

Matrix..... SOLID

Prep Date....: 06/10/09 Prep Batch # ...: 9161534

Analysis Time..: 16:32

Analysis Date ..: 06/10/09 Dilution Factor: 1

REPORTING RESULT PARAMETER

ND

LIMIT 0.10 mg/kg METHOD SW846 8015 MOD

Volatile Petroleum Hydrocarbons

PERCENT RECOVERY 107

RECOVERY LIMITS (55 - 150)

NOTE (S):

SURROGATE

Trifluorotoluene

Calculations are performed before rounding to avoid round-off errors in calculated results.

Matrix..... WATER

#### METHOD BLANK REPORT

#### GC Semivolatiles

Client Lot #...: F9E290228

MB Lot-Sample #: F9F100000-347

Analysis Date..: 06/11/09 Dilution Factor: 1

Work Order #...: LEMJA1AA

Prep Date....: 06/10/09 Prep Batch # ...: 9161347

Matrix..... SOLID Analysis Time..: 19:50

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	_	
Decachlorobiphenyl	92	(42 - 150	)	

Note (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: F9E290228 Work Order # ...: LEKOA1AC

LCS Lot-Sample#: F9F090000-394

Prep Date....: 06/08/09 Prep Batch #...: 9160394

Analysis Date..: 06/09/09 Analysis Time..: 00:13

Prep Batch #:	9160394	Analysis Time:
Dilution Factor:	1	

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Chloromethane	126 a	(58 - 124)	SW846 8260B
Vinyl chloride	116	(56 - 140)	SW846 8260B
Bromomet.hane	114	(43 - 140)	SW846 8260B
Chloroethane	118	(54 - 140)	SW846 8260B
Acetone	83	(67 - 140)	SW846 8260B
1,1-Dichloroethene	96	(80 - 123)	SW846 8260B
Methylene chloride	86	(68 ~ 127)	SW846 8260B
Carbon disulfide	101	(72 - 139)	SW846 8260B
1,1-Dichloroethane	94	(76 ~ <u>12</u> 0)	SW846 8260B
2-Butanone	82	(77 - 134)	SW846 8260B
1,2-Dichloroethene	95	(84 - 118)	SW846 8260B
(total)			
Chloroform	94	(83 - 117)	SW846 8260B
1,1,1-Trichloroethane	97	(83 - 119)	SW846 8260B
Carbon tetrachloride	99	(83 - 119)	SW846 8260B
1,2-Dichloroethane	96	(84 - 115)	SW846 8260B
Benzene	92	(85 - 115)	SW846 8260B
Trichloroethene	92	(85 - 115)	SW846 8260B
1,2-Dichloropropane	91	(85 - 115)	SW846 8260B
Bromodichloromethane	89	(85 - 117)	
4-Methyl-2-pentanone	89	(82 - 135)	
cis-1,3-Dichloropropene	95	(85 - 120)	SW846 8260B
Toluene	, 97	(85 - 115)	SW846 8260B
trans-1,3-Dichloropropene	98	( <b>85 - 121</b> )	SW846 8260B
1,1,2-Trichloroethane	93	(83 - 115)	SW846 8260B
2-Hexanone	86	(79 - 135)	SW846 8260B
Tetrachloroethene	99	(71 - 127)	8W846 8260B
Dibromochloromethane	94	(85 - 117)	SW846 8260B
Chlorobenzene	93	(85 - 115)	SW846 8260B
Ethylbenzene	95	(85 - 116)	SW846 8260B
Styrene	97	(85 - 124)	8W846 8260B
Bromoform	102	(81 - 123)	SW846 8260B
1,1,2,2-Tetrachloroethane	88	(80 - 119)	SW846 8260B
1,2-Dichlorobenzene	93	(85 - 115)	SW846 8260B

(Continued on next page)

### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: F9E290228 Work Order #...: LEKOAlaC Matrix...... WATER

LCS Lot-Sample#: F9F090000-394

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: F9E290228 Work Order #...: LENJW1AC Matrix.....: SOLID LCS Lot-Sample#: F9F100000-547

Prep Date....: 06/10/09 Analysis Date..: 06/10/09
Prep Batch #...: 9161547 Analysis Time..: 11:20

Prep Batch #...: 9161547 Analysis Time Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Chloromethane	111	(53 - 133)	SW846 8260B
Vinyl chloride	1.28	(43 - 140)	SW846 8260B
Bronomethane	134	(51 - 140)	SW846 8260B
Chloroethane	119	(58 - 140)	SW846 8260B
Acetone	84	(59 - 140)	SW846 8260B
1,1-Dichloroethene	104	(75 - 131)	SW846 8260B
Methylene chloride	108	(63 - 140)	SW846 8260B
Carbon disulfide	108	(69 - 140)	SW846 8260B
1,1-Dichloroethane	106	(74 - 130)	SW846 8260B
2-Butanone	84	(69 - 140)	SW846 8260B
1,2-Dichloroethene	106	(82 - 124)	SW846 B260B
(total)			
Chloroform	102	(83 - 119)	SW846 8260B
1,1,1-Trichloroethane	103	(84 - 121)	SW846 B260B
Carbon tetrachloride	99	(82 - 123)	SW846 8260B
1,2-Dichloroethane	101	(80 - 120)	SW846 8260B
Benzene	101	(83 - 120)	SW846 8260B
Trichloroethene	98	(80 - 121)	SW846 8260B
1,2-Dichloropropane	102	(79 - 121)	SW846 8260B
Bromodichloromethane	100	(84 - 120)	SW846 8260B
4-Methyl-2-pentanone	91	(75 - 140)	SW846 8260B
cis-1,3-Dichloropropene	103	(82 - 127)	SW846 8260B
Toluene	103	(78 - 126)	SW846 8260B
trans-1,3-Dichloropropene	104	(77 ~ 134)	SW846 8260B
1,1,2-Trichloroethane	99	(80 ~ 120)	SW846 8260B
2-Hexanone	91	(66 - 140)	SW846 8260B
Tetrachloroethene	102	<b>(67 - 131)</b>	SW846 8260B
Dibromochloromethane	94	(82 - 125)	SW846 8260B
Chlorobenzene	104	(83 ~ 117)	SW846 8260B
Ethylbenzene	104	(85 - 122)	SW846 8260B
Styrene	98	(85 - 125)	SW846 8260B
Bromoform	98	(80 - 127)	SW846 8260B
1,1,2,2-Tetrachloroethane	104	(77 - 123)	SW846 8260B
1,2-Dichlorobenzene	97	(82 - 118)	59846 8260B

(Continued on next page)

a Spiked analyse recovery is outside sound control limits.

#### LABORATORY CUNTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: F9E290228 Work Order #...: LENJWIAC Matrix.....: SOLID LCS Lot-Sample#: F9F100000-547

NOTE(S):

Calculations are performed before rounding to avoid round-off arrors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC Volatiles

Client Lot \$...: F9E290228 Work Order \$...: LENGVIAC Matrix.....: WATER

LCS Lot-Sample#: F9F100000-532

Prep Date....: 06/10/09 Analysis Date..: 06/11/09

Prep Batch #...: 9161532 Analysis Time..: 04:12

Dilution Factor: 1

PERCENT RECOVERY
PARAMETER RECOVERY LIMITS METHOD

Volatile Petroleum 99 (74 - 111) SW846 8015 MOD

Hydrocarbons

 SURROGATE
 PERCENT
 RECOVERY

 Trifluorotoluene
 131
 (82 - 145)

HOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold pries denotes control parameters

### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC Semivolatiles

Client Lot #...: F9E290228 Work Order #...: LEMH31AC Matrix.....: SOLID

LCS Lot-Sample#: F9F100000-350

Prep Date....: 06/10/09 Analysis Date..: 06/15/09
Prep Batch #...: 9161350 Analysis Time..: 15:54

Dilution Factor: 1

 PARAMETER
 PERCENT
 RECOVERY
 METHOD

 TPH (as Diesel)
 84
 (45 - 119)
 \$8846 8015 MOD

PERCENT RECOVERY

 SURROGATE
 RECOVERY
 LIMITS

 o-Temphenyl
 115
 (30 - 150)

BOTE (6):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC Semivolatiles

Client Lot #...: F9E290228 Work Order #...: LEMJALAC Matrix......: SOLID

LCS Lot-Sample#: F9F100000-347

Prep Date....: 06/10/09 Analysis Date..: 06/11/09
Prep Batch #...: 9161347 Analysis Time..: 20:06

Dilution Factor: 1

 PERCENT
 RECOVERY

 PARAMETER
 RECOVERY
 LIMITS
 METHOD

 Aroclor 1016
 108
 (74 - 130)
 SW846 8082

Aroclor 1260 116 (73 - 139) SW846 8082

PERCENT RECOVERY

SURROGATE RECOVERY LIMITS
Decachlorobiphenyl 114 (64 - 140)

### NOTE (S):

Calculations are performed before rounding to avoid round-off errors in calculated resolts.

Bold print denotes control parameters

### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
				-	
sec-Butylbenzene	101	(85 - 124)			SW846 8260B
-	97	(85 - 124)	3.7	(0~20)	SW846 8260B
tert-Butylbenzene	102	(85 - 124)			5W846 8260B
	98	(85 - 124)	4.4	(0-20)	SW846 8260B
Allyl chloride	101	(80 - 126)			SW846 8260B
	97	(80 - 126)	4.0	(0-20)	SW846 8260B
2-Chlorotoluene	94	(75 - 136)			SW846 8260B
	91	(75 - 136)	3.2	(0-20)	SW846 8260B
4-Chlorotoluene	94	(79 - 127)			SW846 8260B
	92	(79 - 127)	1.6	(0-20)	SW846 8260B
Cyclohexanone	95	(45 - 119)			5W846 8260B
	86	(45 - 119)	9.2	(0-20)	SW846 8260B
1,2-Dibroso-3-	101	(77 - 122)			SW846 8260B
chloropropane (DBCP)					•
	88	(77 ~ 122)	13	(0-20)	SW846 8260B
1,2-Dibromoethane (RDB)	95	(85 - 115)			SW846 8260B
•	91	(85 - 115)	3.7	(0~20)	SWB46 8260B
trans-1,4-Dichloro-	90	(79 - 126)			SW846 8260B
2-butene					
	80	(79 - 126)	12	(0-20)	SW846 8260B
Dichlorodifluoromethane	148	(29 - 150)			SW846 B260B
(Freon 12)					
	158 æ	(29 - 150)	6.5	(0-20)	SW846 8260B
cis-1,2-Dichloroethene	96	(80 - 123)			SW846 8260B
	98	(80 - 123)	2.2	(0-20)	SW846 8260B
trans-1,2-Dichloroethene	90	(78 - 124)			SW846 8260B
	91	(78 - 124)	0.88	(0~20)	SW846 8260B
1,3-Dichloropropane	92	(85 ~ 115)			SW846 8260B
	88	(85 - 115)	5.3	(0-20)	SW846 8260B
2,2-Dichloropropane	98	(75 - 123)			SW846 8260B
	96	(75 - 123)	1.9	(0-20)	SW846 8260B
1,1-Dichloropropene	97	(85 - 116)			SW846 8260B
	94	(85 - 116)	2.5	(0-20)	SW846 8260B
Ethyl ether	91	(76 - 126)			SW846 8260B
	97	(76 - 126)	6.5	(0-20)	SWB46 8260B
Ethyl methacrylate	95	(73 ~ 123)			SW846 8260B
	91	(73 - 123)	4.4	(0-20)	9W846 8260B
Freon 113	96	(53 - 134)			SW846 8260B
	104	(53 - 134)	7.4	(0-20)	SW846 B260B

(Continued on next page)

### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
		-			
Hexachlorobutadiene	103	(64 ~ 131)			SW846 8260B
	97	(64 - 131)	5.5	(0-20)	SW846 8260B
n-Herane	99	(79 - 120)			SW846 8260B
	102	(79 - 120)	3.3	(0-20)	SW846 8260B
Isopropylbenzene	98	(85 - 121)			SW846 8260B
	99	(85 - 121)	0.95	(0-20)	SW846 8260B
4-Isopropyltoluene	101	(85 - 124)			SW846 8260B
	97	(85 ~ 124)	4.0	(0~20)	SW846 8260B
Methyl methacrylate	94	(75 ~ 116)			SW846 8260B
	88	(75 - 116)	6.6	(0-20)	SW846 8260B
Methyl tert-butyl ether (MTBE)	98	(74 - 125)			SW846 8260B
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	94	(74 - 125)	4.8	(0-20)	SW846 8260B
Naphthalene	101	(77 - 123)			SW846 8260B
technology conc	95	(77 - 123)	5.9	(0-20)	SW846 8260B
2-Nitropropane	98	(65 - 133)	3.5	(,	SW846 8260B
z minoprogram.	91	(65 - 133)	7.9	(0-20)	98846 8260B
n-Propylbenzene	99	(85 - 124)		,,,	SW846 8260B
1 1100	97	(85 - 124)	2.1	(0-20)	SW846 8260B
1,1,1,2-Tetrachloroethane		(85 - 115)		,,	SW846 8260B
1,1,1,2,1010000000000000000000000000000	93	(85 - 115)	3.4	(0-20)	SW846 8260B
Tetrahydrofuran	90	(73 - 124)			SW846 8260B
2 Continuity California	87	(73 ~ 124)	3.5	(0-20)	SW846 8260B
1.2.3-Trichlorobenzene	98	(74 - 123)		,	SW846 8260B
1,2,3-11101010000	94	(74 - 123)	4.1	(0-20)	SW846 8260B
1,2,4-Trichloro- benzene	94	(75 - 125)		,, 20,	SW846 8260B
	96	(75 - 125)	2.7	(0-20)	SW846 8260B
Trichlorofluoromethane	106	(72 - 127)			SW846 8260B
	110	(72 - 127)	4.3	(0-20)	SW846 8260B
1,3,5-Trimethylbenzene	98	(85 - 123)			SW846 8260B
•	95	(85 - 123)	2.8	(0~20)	SW846 8260B
1-Butanol	94	(62 - 122)			SW846 8260B
	86	(62 - 122)	8.0	(0-20)	SW846 8260B
Acetonitrile	88	(63 - 140)			SW846 8260B
	84	(63 - 140)	3.7	(0-20)	9W846 8260B
Ethyl acetate	87	(80 - 115)			SW846 8260B
-	75 a	(80 - 115)	14	(0-20)	SW846 8260B
2-Chloroethyl vinyl ether	0.0 a	(10 - 50)			SW846 8260B
• • •	0.0 a	(10 - 50)	0.0	(0-20)	SW846 8260B

(Continued on next page)

Matrix..... SOLID

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

BW846 8260B

(0-30)

(0-30)

8.2 (0-30)

2.6

2.6

# MATRIX SPIRE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #:	F9B290228	Work Order #:	LD1N41AG-MS	Matrix SOLID
MS Lot-Sample #:	F9E290240-005		LD1N41AH-MSD	
Date Sampled:	05/28/09 13:20	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/10/09	
Prep Batch #:	9161547	Analysis Time:	20:02	
Dilution Factor:	1	* Moisture:	19	

*	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Chloromethane	99	(47 - 140)			SW846 8260B
	106	(47 - 140)	8.1	(0-30)	SW846 8260B
Vinyl chloride	120	(42 ~ 150)		,	SW846 8260B
	124	(42 - 150)	4.8	(0-30)	SW846 8260B
Bromomethane	128	(29 - 150)		,	SW846 8260B
	127	(29 - 150)	0.54	(0-30)	57846 8260B
Chloroethane	107	(48 - 150)			5W846 8260B
	109	(48 - 150)	3.9	(0-30)	SW846 8260B
Acetone	89	(40 - 150)			SW846 8260B
	96	(40 - 150)	9.4	(0-30)	SW846 8260B
1,1-Dichloroethene	101	(65 - 141)			SW846 8260B
	102	(65 - 141)	2.0	(0-30)	SW846 8260B
Methylene chloride	114	(51 - 150)			SW846 8260B
	115	(51 - 150)	2.0	(0-30)	SW846 8260B
Carbon disulfide	103	(59 - 148)			SW846 8260B
	106	(59 - 148)	4.8	(0-30)	SW846 8260B
1,1-Dichloroethane	103	(67 - 142)			SW846 8260B
•	105	(67 - 142)	3.1	(0-30)	SW846 8260B
2-Butanone	81	(56 - 150)			SW846 8260B
	92	(56 - 150)	15	(0-30)	SW846 8260B
1,2-Dichloroethene	102	(73 - 130)			SW846 8260B
(total)					
	102	(73 - 130)	2.0	(0-30)	SW846 8260B
Chloroform	105	(74 - 131)			SW846 8260B
	104	(74 - 131)	0.90	(0-30)	SW846 8260B
1,1,1-Trichloroethane	104	<b>(74 - 130)</b>			SW846 8260B
	103	(74 - 130)	0.81	(0-30)	SW846 8260B
Carbon tetrachloride	105	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.42	(0-30)	SW846 8260B
1,2-Dichloroethane	101	(65 - 143)			SW846 8260B
_	101	(65 - 143)	2.0	(0~30)	SW846 8260B
Benzene	103	(77 - 123)	×		BW846 8260B
	101	(77 - 123)	0.80	(0-30)	SW846 8260B
Trichloroethene	99	(65 - 136)			SW846 8260B
	99	(65 - 136)	1.8	(0-30)	SW846 8260B
1,2-Dichloropropane	100	(74 - 130)			5W846 8260B
D	101	(74 - 130)	3.0	(0-30)	5W846 8260B
Bromodichloromethane	101	(72 - 135)			SW846 8260B
	100	(72 - 135)	0.89	(0-30)	SW846 8260B

.(Continued on next page)

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Work Order # ...: LDIN41AG-MS

LD1N41AH-MSD

Client Lot # ...: F9B290228

MS Lot-Sample #: F9E290240-005

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
4-Methy1-2-pentanone	80	(46 - 150)			SW846 8260B
	82	(46 - 150)	4.0	(0-30)	5W846 8260B
cis-1,3-Dichloropropene	96	(67 - 134)			SW846 8260B
	99	(67 - 134)	4.9	(0-30)	SW846 8260B
Toluene	99	(65 - 137)			SW846 8260B
	99	(65 - 137)	1.5	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	93	(63 - 150)			SW846 8260B
	97	(63 - 150)	5.9	(0-30)	SW846 8260B
1,1,2-Trichloroethane	97	(59 - 150)			SW846 8260B
	98	(59 - 150)	3.5	(0-30)	SW846 8260B
2-Hexanone	82	(18 - 150)			SW846 8260B
	86	(18 - 150)	6.8	(0-30)	SW846 8260B
Tetrachloroethene	98	(26 - 150)			SW846 8260B
	116	(26 - 150)	19	(0-30)	SW846 8260B
Dibromochloromethane	99	(67 - 145)			5W846 8260B
	98	(67 ~ 145)	0.61	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 125)			SW846 8260B
	96	(70 - 125)	2.0	(0-30)	SW846 8260B
<b>Ethylbenzene</b>	98	(68 - 131)			SW846 8260B
	96	(68 - 131)	0.51	(0-30)	SW846 8260B
Styrene	97	(69 - 129)			SW846 8260B
	93	(69 - 129)	1.8	(0-30)	SW846 8260B
Bromoform	91	(56 - 150)			SW846 8260B
	92	(56 - 150)	3.4	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	95	(44 - 150)			SW846 8260B
	97	(44 - 150)	4.1	(0-30)	SW846 8260B
1,2-Dichlorobenzene	100	(64 - 128)			SW846 8260B
	96	(64 - 128)	1.9	(0-30)	SW846 8260B
m-Xylene & p-Xylene	95	(66 - 130)			SW846 8260B
	95	(66 - 130)	1.9	(0-30)	SW846 8260B
1,3-Dichlorobenzene	97	(65 - 127)			SW846 8260B
	94	(65 - 127)	1.9	(0-30)	SW846 8260B
o- <b>Xylene</b>	94	(68 - 127)			SW846 8260B
	95	(68 - 127)	2.4	(0~30)	SW846 8260B
1,4-Dichlorobenzene	98	(65 - 125)			SW846 8260B

(31 - 147) (31 - 147) 8.2 (Continued on next page)

(65 - 125)

(51 - 150)

(51 - 150)

(66 - 139)

(66 - 139)

98

108

103

104

105

77

82

Bromobenzene

n-Butylbenzene

Bromochloromethane

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Volatiles

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Vinyl acetate	86	(10 - 146)			SW846 8260B
•	82	(10 - 146)	3.5	(0~20)	SW846 8260B
Acrolein	72	(10 - 150)			SW846 8260B
	88 p	(10 - 150)	23	(0-20)	SW846 8260B
Acrylonitrile	62	(41 - 150)			SW846 8260B
-	63	(41 - 150)	3.1	(0-20)	SW846 8260B
Cyclohexane	102	(59 - 134)			SW846 8260B
-	100	(59 - 134)	0.59	(0-20)	SW846 8260B
Isobutanol	91	(40 - 150)			SW846 8260B
	93	(40 - 150)	3.4	(0-20)	SW846 8260B
Methacrylonitrile	98	(43 - 150)			SW846 8260B
	100	(43 - 150)	3.6	(0-20)	SW846 8260B
Methylcyclobexane	96	(43 - 140)			SW846 8260B
• •	97	(43 - 140)	2.9	(0-20)	SW846 8260B
Propionitrile	100	(56 ~ 150)			SW846 9260B
_	101	(56 - 150)	3.3	(0-20)	SW846 8260B
1,4-Dioxane	85	(42 ~ 150)			SW046 02600
	82	(42 - 150)	1.8	(0-20)	SW846 8260B
Pentachloroethane	93	(10 - 150)			SW846 8260B
	72 p	(10 ~ 150)	24	(0-20)	SW846 8260B
Methyl acetate	96	(31 - 150)			SW846 8260B
	96	(31 - 150)	1.8	(0-20)	SW846 8260B
2-Chloro-1,3-butadiene	104	(57 - 149)			SW846 8260B
	105	(57 - 149)	2.0	(0-20)	SW846 8260B
1,2-Dichloro-	123	(31 - 150)			SW846 8260B
1,1,2,2-tetrafluoroeth	ene				
	125	(31 - 150)	2.8	(0~30)	SW846 8260B
1,2,3-Trichloropropane	107	(50 ~ 150)		*	SW846 8260B
,	110	(50 - 150)	4.0	(0-30)	SW846 8260B
Dibrowcmethane	101	(50 ~ 150)			SW846 8260B
	101	(50 - 150)	1.8	(0~30)	SW846 8260B
		PERCENT		RECOVER)	r
SURROGATE	_	RECOVERY		LIMITS	
Toluene-d8		96		(65 - 14	
		100		(65 - 14	
Dibromofluoromethane		105		(73 - 13	
		104		(73 - 13	•
1,2-Dichloroethane-d4		103		(63 - 14	•
		105		(63 - 14	15)

(Continued on next page)

#### MATRIX SPIRE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: F9E290228 Work Order #...: LD1N41AG-MS Matrix.....: SOLID
MS Lot-Sample #: F9E290240-005 LD1N41AH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	107 105	(46 - 150) (46 - 150)

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

p Relative persons difference (RPD) is outside somed control limits.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC Semivolatiles

Client Lot #:	F9E290228	Work Order #:	LD1LP1AB-MS	Matrix SOLID
MS Lot-Sample #:	F9E290228-001		LD1LP1AF-MSD	
Date Sampled:	05/27/09 08:35	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/15/09	
Prep Batch #:	9161350	Analysis Time:	16:58	
Dilution Pactor:	1	* Moisture:	23	

PARAMETER	PERCENT RECOVERY	recovery Limits	RPD	RPD LIMITS	METHO	2	
TPH (as Diesel)	82	(36 - 139)			SW846		
	89	(36 - 139)	8.0	(0-30)	SW845	9015	MOD
		PERCENT		RECOVERY			
SURROGATE		RECOVERY		LIMITS			
o-Terphenyl		124		(30 - 150	)		
		130		(30 - 150	1}		

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control passmeters

Results and reporting fimits have been adjusted for dry weight.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC Semivolatiles

Client Lot #:	F9B290228	Work Order #:	LD1LX1AG-MS	Matrix SOLID
MS Lot-Sample #:			LD1LX1AH-MSD	
Date Sampled:	05/27/09 13:05	Date Received:	05/28/09	
Prep Date:	06/10/09	Analysis Date:	06/11/09	
Prep Batch #:	9161347	Analysis Time:	20:38	
Dilution Factor:	1 .	* Moisture:	15	

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Aroclor 1016	96	(42 - 150)			SW846 8082
	105	(42 ~ 150)	8.5	(0-30)	SW846 8082
Aroclor 1260	106	(44 - 150)			SW846 8082
	114	(44 - 150)	7.4	(0-30)	SW846 8082
		PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	
Decachlorobiphenyl		98		(42 - 15	0)
• •		109		(42 - 15	(0)

#### MOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica L	#(s): F9E 2902	28)
		40
	Date: 5-28-C	7 Time 110:50
Shipper: FedEx UPS DHL Courier Cl Shipping # (s):*		Multiple Packages: Y N uple Temperature (s): **
,,		_36
1. 6		<u>(o</u> 7.
		<u> 6</u> 8.
		9,
5 10	5.	. 10.
*Numbered shipping lines correspond to Numbered Sample Temp lines  Coladition (Circle "Y" for yes, "N" for no and "N/A" for not applicable)	**Sample must be received at 4°C :	2°C- If not note contents below. Temperature ring: Metals-Liquid or Rad tests- Liquid or Solids
Are there custody seals present on the	8. Y(N) Are th	ere custody seals present on bottles?
2. Y N NA Do custody seals on cooler appear to be tampered with?		study seak on bottles appear to be red with?
3. N Wers contents of cooler frisked after opening, but before unpacking?	10 VIN N/A Was s	ample received with proper pH'? (If not, note below)
4. Sample received with Chain of Custody?	11. (Y) N Samp	le received in proper containers?
5. Y N N/A Does the Chain of Custody match sample ID's on the container(s)?		space in VOA or TOX liquid samples? I, note sample ID's below)
6. Y N Was sample received broken?	13. Y N N/A Was I	nternal COC/Workshare received?
7. (Y) N Is sample volume sufficient for analysis?		oH taken by original TestAmerica lab?
For DOB-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received Notes:	d must be verified, EXCEPT VOA, TOX	I and soils,
Samples BB-NESMP of BBSN. Could not got p#	3mp had so much	mudin watersouple
Corrective Action:  Client Contact Name;  Sample(s) processed "as is"	Informed by:	
Sample(s) on hold until:  Project Management Review:	If released, notify:	66 52 09

Lot # F9E290228