CORNERSTONE EARTH GROUP

Type of Services	**Crawlspace Air, Soil Vapor, and Ground Water Quality Evaluation and Case Closure Request**
Location	**2691 Castro Valley Boulevard** **Castro Valley, California**
Client	**Mr. Anthony Varni**
Client Address	**650 A Street** **Hayward, California 94543**
Project Number	**267-1-1**
Date	**October 31, 2008**

PROFESSIONAL GEOLOGIST
PETER M. LANGTRY
PG-5920
EXP. 1-31-10
STATE OF CALIFORNIA

Peter M. Langtry, P.G., C.E.G.
Principal Geologist

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CORNERSTONE EARTH GROUP

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SECTION 1: INTRODUCTION

This report presents the results of the crawlspace air, soil vapor and ground water quality evaluation performed at 2691 Castro Valley Boulevard in Castro Valley, California (Site) as shown on Figures 1 and 2. This work was performed for Mr. Anthony Varni in accordance with our August 12, 2008 Agreement (Agreement).

1.1 SITE DESCRIPTION

The approximately ½-acre Site is occupied by an approximately 3,500 square foot, single story office building and paved parking lot. A concrete-lined creek channel extends through the Site; the office building is located on an approximately 6,500 square foot portion of the property on the east side of the creek channel. The office building was constructed in 1988 and has a perimeter foundation and a raised wood floor.

The Site is located in a predominantly commercial area and is bordered to the north by Castro Valley Boulevard and to the east and south by Lake Chabot Road. To the north of Castro Valley Boulevard are retail and commercial business. A restaurant and commercial property is located to the east and south, and a commercial property is located to the west.

1.2 BACKGROUND

1.2.1 Site History

In June 1988, prior to the construction of the building, a 1,000-gallon underground storage tank (UST) was removed. The approximate location of the former UST is shown on Figure 2, based on an approximate sketch of the tank location obtained from the Alameda County Health Care Services Agency (ACHCSA) web-site. The former UST was reportedly used for storing diesel. No UST removal report appears to have been submitted to the ACHCSA. However, limited information available on the ACHCSA web-site indicates that laboratory analyses of two soil samples collected following removal of the UST reportedly detected low concentrations of petroleum hydrocarbons (maximum of 6 parts per million (ppm)). The depth and location of the soil samples was not reported. Laboratory analyses of one water sample detected 5,500 parts per billion (ppb) total petroleum hydrocarbons in the gasoline range (TPHg), 6,200 ppb total petroleum hydrocarbons in the diesel range (TPHd), 11 ppb benzene, 30 ppb toluene, 7.6 ppb

ethylbenzene, and 620 ppb xylene) (ACHCSA, 1996). There does not appear to be adequate documentation describing whether the water was collected from inside the tank or from the excavation.

Based on correspondence from ACHCSA and our July 17, 2008 meeting with ACHCSA staff, an evaluation of ground water quality beneath the property and possible vapor intrusion into the on-Site office building was required in order to finalize case closure. An August 12, 2008 work plan for ground water sampling and crawl-space air sampling was submitted to the ACHCSA. The ACHCSA staff approved the work plan on September 4 , 2008 but requested the addition of a soil vapor sample outside the building near the former UST (ACHCSA, 2008).

1.2.2 Hydrogeology

To help evaluate ground water depth and flow direction beneath the Site, information available on the state GeoTracker database for the former Shell service station at 2724 Castro Valley Boulevard was reviewed. The former Shell station is located on the opposite side of Castro Valley Boulevard approximately 150 feet north of the Site.

Based on monitoring well data, ground water flow was reported toward the south to southwest (Pacific Environmental Group, 1994; ACHCSA, 1995).

1.3 OBJECTIVES AND SCOPE OF WORK

1.3.1 Objectives

The objective of this investigation was to evaluate crawlspace air, soil vapor and ground water quality to support ACHCSA staff in evaluating case closure for the Site.

1.3.2 Scope of Work

As presented in our Agreement, the scope of work performed for this investigation included the following:

- Submittal of a drilling permit application to the Alameda County Public Works Agency (ACPWA).
- Drilling and logging of 2 exploratory borings
- Collection of ground water grab samples from the exploratory borings for laboratory analyses
- Collection and laboratory analyses of one soil vapor sample
- Collection and laboratory analyses of one air sample from the building crawlspace and one ambient air sample outside of the building

The limitations for this investigation are presented in Section 7.

SECTION 2.0: SOIL AND GROUND WATER QUALITY EVALUATION

2.1 SUBSURFACE INVESTIGATION

Subsurface investigation activities were performed on October 1, 2008. To evaluate ground water quality, two exploratory borings were drilled to a depth of approximately 18 to 19 feet. The borings were located approximately 20 feet south to southwest of the reported former UST location. Soil samples were collected continuously from boring GW-1 and from the upper approximately 13 feet of boring GW-2; hard bedrock prevented drilling deeper than approximately 13 feet using the soil sampling core. A Hydropunch, which can penetrate more easily through dense materials, was used in this boring from a depth of approximately 13 to 19 feet to collect a ground water grab sample as discussed below.

Soil sampling protocol, boring logs, and permit are presented in Appendix A.

2.1.1 Subsurface Materials and Ground Water

Subsurface materials encountered in exploratory borings drilled during this investigation consisted of sandy clay from the surface to a depth of approximately 5 feet. Silty clay soil with fractured shale/claystone fragments (residual bedrock) was encountered below a depth of approximately 5 feet. The bedrock became less weathered with depth. A clayey sand layer was observed at a depth of approximately 15 to 16 feet in boring GW-1. Ground water was encountered within the clayey sand layer.

2.3 GROUND WATER SAMPLE COLLECTION AND LABORATORY ANALYSES

To evaluate ground water quality beneath the Site, ground water grab samples were collected from exploratory borings GW-1, and GW-2. Ground water grab sampling protocol is summarized in Appendix A.

Ground water grab samples were analyzed for TPHg, benzene, toluene, ethylbenzene and xylene (BTEX) and MTBE (EPA Test Method 8260) and TPHd (EPA Test Method 8015). These analyses were selected to evaluate potential impacts from the former on-Site UST. Analytical results are summarized in Table 1 in the Tables section of this report. Chain of custody documentation and the laboratory analytical report are presented in Appendix B.

2.4 SOIL CUTTINGS

Soil cuttings were stored on-Site in 5-gallon containers. To evaluate re-use or disposal alternatives of the soil cuttings, one 4-point composite sample was collected and analyzed for TPHg, BTEX and MTBE (EPA Test Method 8260) and TPHd (EPA Test Method 8015). Chain of custody documentation and the laboratory analytical report are presented in Appendix B.

SECTION 3: SOIL VAPOR QUALITY EVALUATION

3.1 SOIL VAPOR SAMPLE COLLECTION

On October 1, 2008, a stainless steel soil vapor probe was advanced to a depth of approximately 5 feet using a slide hammer. The sample was collected approximately 2 feet from the southwest exterior wall of the building approximately 15 feet from the former UST. The approximate locations of the soil vapor sample and former UST are shown on Figure 2.

The soil vapor sample was collected from the probe in a 1-liter SUMA canister generally following various published guidance documents, including "Advisory – Active Soil Gas Investigations dated January 13, 2003 (Los Angeles Regional Water Quality Control Board and Department of Toxic Substances Control). 2-propynol was used as the leak check compound at all fittings and at the soil/probe interface to evaluate potential leakage of ambient/atmospheric air into the sample train. Soil vapor sampling protocol is presented in Appendix A.

3.2 SOIL VAPOR LABORATORY ANALYSES

The soil vapor sample was analyzed for TPHg (EPA Method TO-3), BTEX and 2-propynol (EPA Method TO-15), methane, oxygen and carbon dioxide (Modified ASTM Method D-1946). Analytical results are summarized in Table 2 in the Tables section of this report. The complete analytical results are presented in Appendix B.

SECTION 4: CRAWL SPACE AIR QUALITY EVALUATION

4.1 CRAWL SPACE AIR SAMPLE COLLECTION

To evaluate the presence of volatile petroleum hydrocarbons in the air beneath the floor of the on-Site building, one air sample was collected from the crawl space on October 13, 2008. The air sample was collected using a 6-liter SUMA canister. Polyethylene tubing was inserted through an exterior vent on the southwest side of the building. The sample location was selected because the former UST was reported in the southwest portion of the building. The tubing was connected to an 8-hour flow regulator. In addition, to help interpret the analytical data, an 8-hour ambient air sample was collected outside the building at the same time.

4.2 CRAWL SPACE AIR SAMPLE LABORATORY ANALYSES

The crawl space and ambient air samples were analyzed for TPHg (EPA Method TO-3) plus BTEX (EPA Method TO-15). Analytical results are presented in Table 3 in the Tables section of this report.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 GROUND WATER QUALITY

Laboratory analyses of ground water grab samples GW-1 and GW-2 did not detect petroleum fuel hydrocarbons above laboratory detection limits, with the exception of 0.63 ppb toluene

detected in sample GW-2. The environmental screening level[1] (ESL) for toluene is 40 ppb. Ground water grab samples GW-1 and GW-2 were collected within approximately 20 feet southwest (anticipated down-gradient direction in terms of ground water flow) of the former UST. Based on laboratory analyses of ground water samples collected during this investigation, further evaluation of ground water quality does not appear required.

5.2 INDOOR AIR VAPOR INTRUSION EVALUATION

5.2.1 Soil Vapor Quality

Laboratory analyses of soil vapor sample SV-1, collected approximately 2 feet from the building exterior, detected 190,000 µg/m^3 TPHg, 28,000 µg/m^3 toluene, 520 µg/m^3 ethylbenzene, and 1,980 µg/m^3 total xylenes. Benzene was not detected. The commercial ESLs for these compounds in soil vapor are 29,000 µg/m^3 (TPHg), 180,000 µg/m^3 (toluene), 3,300 µg/m^3 (ethylbenzene), and 58,000 µg/m^3 (xylene). Although TPHg was detected above the ESL, the primary risk associated with TPHg are the BTEX compounds, which were detected below commercial ESLs. In addition, as presented in Section 5.2.2, TPHg was not detected in the crawl-space air. Therefore, the indoor air quality does not appear to be significantly impacted by the soil vapor. Further evaluation of soil vapor quality does not appear required.

The leak check compound, 2-propynol, was not detected in the soil vapor sample. Therefore, leakage of ambient air into the sampling train, and subsequent dilution of the soil vapor sample, does not appear to have occurred.

5.2.2 Crawl Space Air Quality Evaluation

Laboratory analysis of the crawl-space air sample did not detect TPHg. Laboratory analyses detected benzene at 2.0 µg/m^3, toluene at 7.2 µg/m^3, ethylbenzene at 1.4 µg/m^3, and total xylene at 5.6 µg/m^3. The concentrations of these compounds detected in the crawl space air, however, were significantly lower than concentrations detected in the ambient air sample collected outside the building at the same time. Laboratory analyses of the ambient air sample detected 370 µg/m^3 TPHg, 5.4 µg/m^3 benzene, 19 µg/m^3 toluene, 3.9 µg/m^3 ethylbenzene and 19.9 µg/m^3 total xylene. The commercial ambient air/indoor air ESLs for these compounds are 14 µg/m^3 (TPHg), 0.14 µg/m^3 (benzene), 88 µg/m^3 (toluene), 1.6 µg/m^3 (ethylbenzene) and 29 µg/m^3 (total xylenes).

The Site is located on a congested street with significant automobile, bus and truck traffic. In addition, the Site is located at an intersection, resulting in periodic idling of vehicles in front of the Site. The volatile petroleum hydrocarbons detected in the ambient air at concentrations above commercial ESLs appears to be from the vehicle exhaust and vehicle fuel system venting. To evaluate whether the ambient air results appear consistent with typical background conditions, the results of the Bay Area Air Quality Management District (BAAQMD) Toxic Air Contaminant Control Program available on-line were reviewed (http://www.baaqmd.gov). The BAAQMD monitored ambient air quality at 20 locations in the San Francisco Bay Area through the end of 2003. The monitoring station closest to the Site was located at 15400 Foothill Boulevard in San Leandro. Air samples were collected over 24 hour periods on 12-day cycles.

[1] ESLs (May, 2008) were established by the California Regional Water Quality Control Board. ESLs are used to screen sites for potential human health concerns where releases of chemicals to soil have occurred. Under most circumstances, the presence of a chemical in soil below the corresponding ESL can be assumed not to pose a significant risk to human health. A chemical exceeding the ESL does not indicated that adverse impacts to human health are occurring or will occur but suggests that further evaluation of potential health concerns is warranted.

Laboratory analyses of the ambient air samples collected at the San Leandro station detected benzene at up to 1.28 µg/m^3, ethylbenzene at up to 0.87 µg/m^3, toluene up to 8.67 µg/m^3, and total xylene up to 3.91 µg/m^3 (BAAQMD, 2007). Because the ambient air sample collected at the Site was over 8 hours during a weekday, the results would be expected to be higher than results collected over a 24 hour period that includes non-peak vehicle traffic. Therefore, the BAAQMD air monitoring results appear generally consistent with the ambient air sample collected from the Site.

Because no TPHg was detected in the crawl-space air and BTEX compounds were detected below commercial ESLs, further evaluation of vapor intrusion into the on-Site building does not appear required.

5.3 SOIL CUTTINGS

Laboratory analysis of the soil cuttings generated during drilling detected 10 ppm TPHd and 0.0049 ppm toluene. The residential ESLs for these compounds are 83 ppm (TPHd) and 2.9 ppm (toluene). No TPHg, benzene, ethylbenzene, xylene or MTBE were detected in the soil cuttings. Based on the analytical data and the limited amount of soil cuttings (one 5-gallon bucket), placement of the soil cuttings into on-Site landscaping appears appropriate.

5.4 CASE CLOSURE REQUEST

Based on laboratory analyses of ground water, soil vapor, and crawl-space air samples collected during this investigation, the former UST does not appear to have significantly impacted the Site. On behalf of Mr. Varni, we request that the ACHCSA issue case closure for unrestricted Site use.

SECTION 6: LIMITATIONS

Cornerstone performed this investigation to support Mr. Anthony Varni in evaluation of crawl-space air, soil vapor, and ground water quality beneath the Site. Mr. Varni understands that the extent of ambient air, soil vapor and ground water data obtained is based on the reasonable limits of time and budgetary constraints. In addition, the chemical information presented in this report can change over time and is only valid at the time of this investigation and for the locations sampled.

This report, an instrument of professional service, was prepared for the sole use of Mr. Varni and the ACHCSA and may not be reproduced or distributed without written authorization from Cornerstone. Cornerstone makes no warranty, expressed or implied, except that our services have been performed in accordance with the environmental principles generally accepted at this time and location.

SECTION 7: REFERENCES

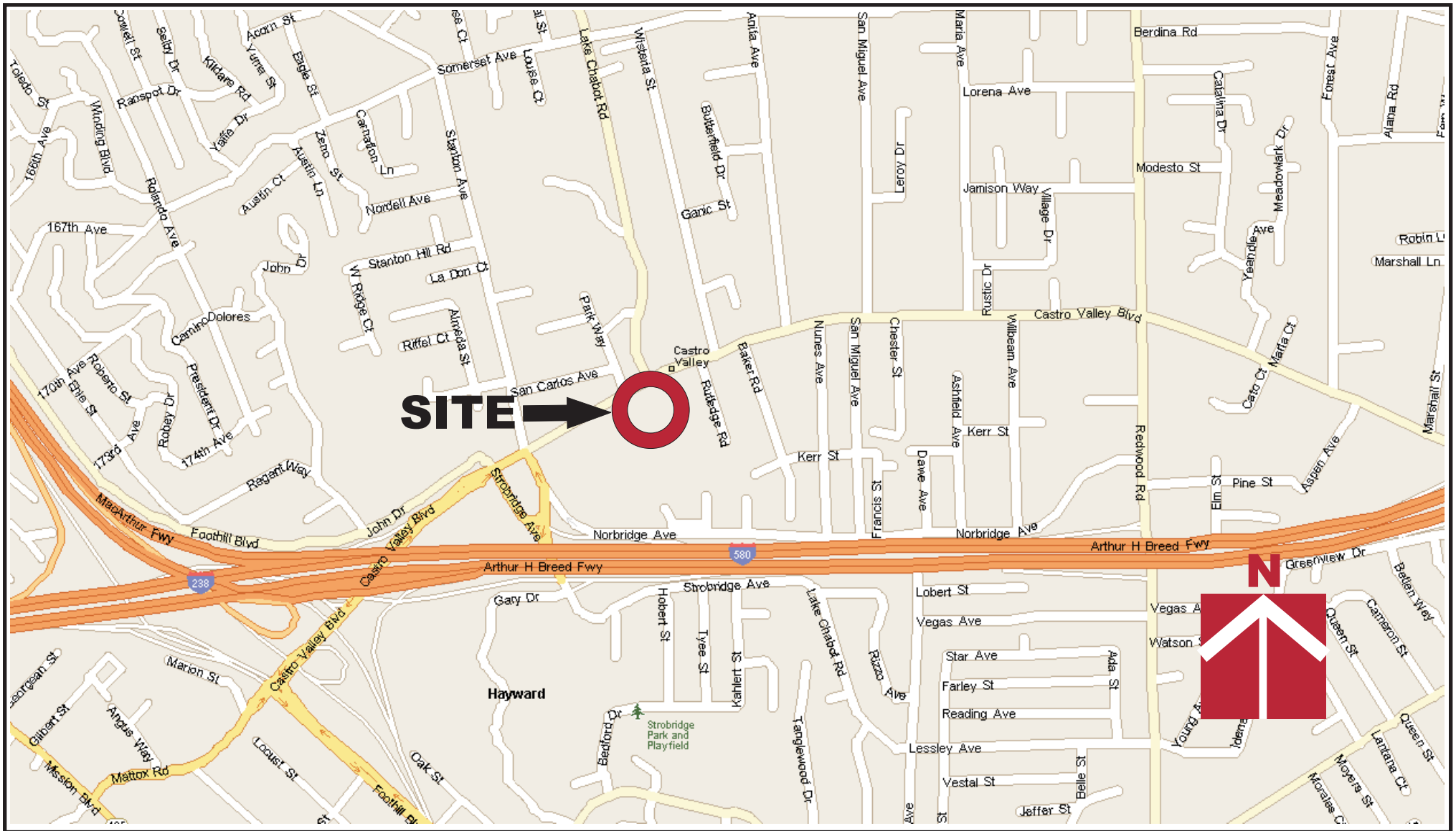
ACHCSA. October 31, 1995. Case Closure Summary form for 2724 Castro Valley Boulevard

ACHCSA. September 4, 2008. Fuel Leak Case No. RO0000322 and Geotracker Global ID T0600101435, Varni Property, 2691 Castro Valley Boulevard, Castro Valley, CA 94546

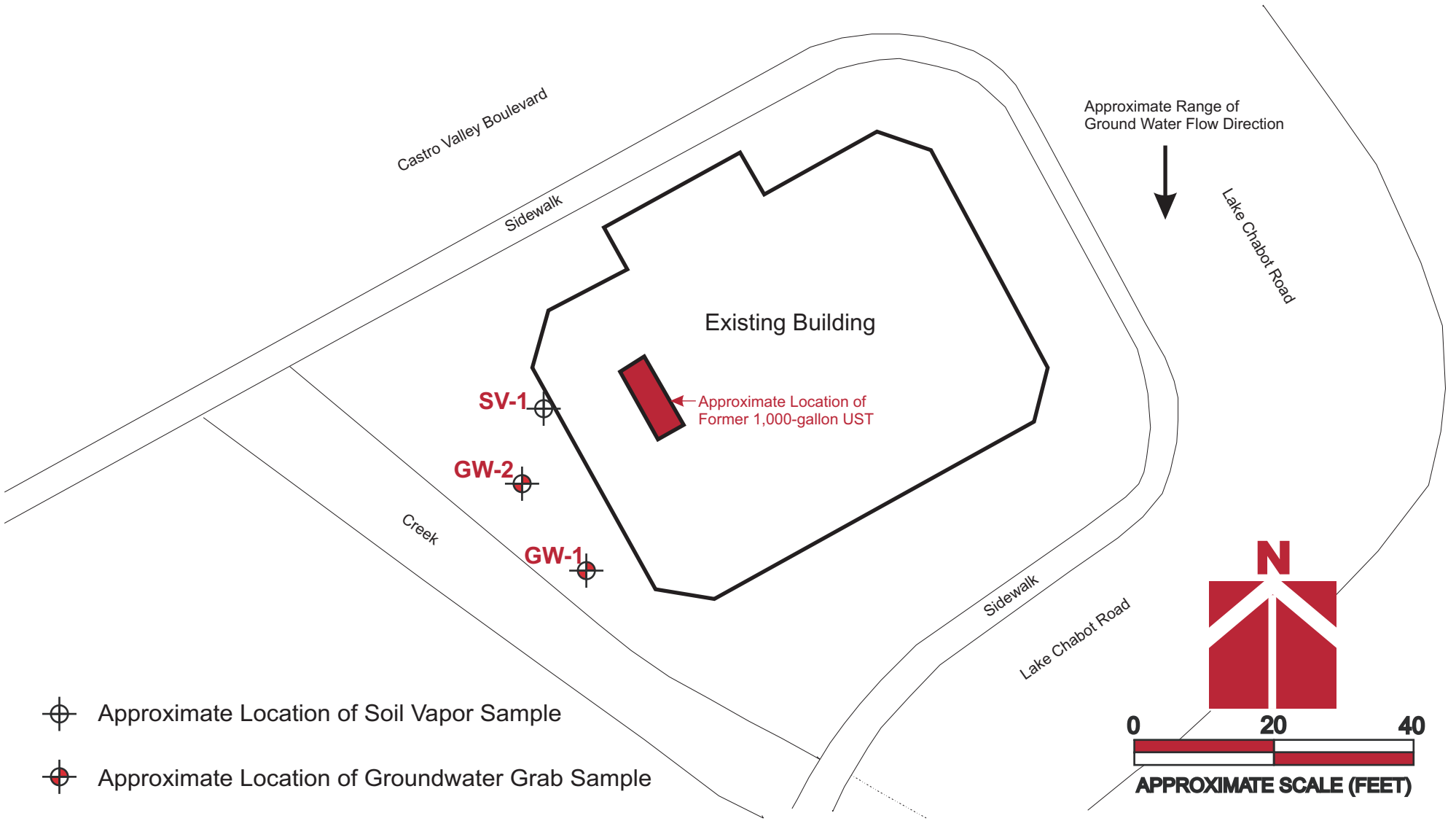
BAAQMD. August 2007. Toxic Air Contaminants Control Program, Annual Report, 2003, Volume 1.

Cornerstone Earth Group, Inc. August 12, 2008. Work Plan for Ground Water Quality Evaluation and Sub-Floor Air Sampling, 2691 Castro Valley Boulevard, Castro Valley, California

Pacific Environmental Group, Inc. December 20, 1994. Case Closure Request, Former Shell Service Station, 2724 Castro Valley Boulevard at Lake Chabot Road, Castro Valley, California



CORNERSTONE EARTH GROUP	**Vicinity Map** **2691 Castro Valley Boulevard** **Castro Valley, CA**	Project Number: 267-1-1 Figure Number: Figure 1 Date: September 2008 Drawn By: FLL



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Site Plan

2691 Castro Valley Boulevard
Castro Valley, CA

Project Number	267-1-1
Figure Number	Figure 2
Date	September 2008
Drawn By	FLL

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DATA SUMMARY TABLES

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Table 1. Laboratory Analytical Results of Ground Water Grab Samples

(Concentrations in parts per billion)

Sample ID	Date	TPHg	TPHd	Benzene	Toluene	Ethyl benzene	Xylene	MTBE
GW-1	10/1/2008	<50	<50	<0.50	0.63	<0.50	<1.0	<0.50
GW-2	10/1/2008	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
ESL[a]		100	100	1.0	40	30	20	5

a. Environmental Screening Level, California Regional Water Quality Control Board, SF Bay Region, May 2008
< Indicates that constituent was not detected above the laboratory detection limit

Table 2. Laboratory Analytical Results of Soil Vapor Sample SV-1

(Concentrations in parts per µg/m^3)

Sample ID	Date	TPHg	Benzene	Toluene	Ethyl benzene	Total Xylene	2-propanol[b]
SV-1	10/1/2008	190,000	<81	28,000	520	1,980	<250
Commercial ESL[a]		29,000	280	180,000	3,300	58,000	NA

a. Environmental Screening Level, California Regional Water Quality Control Board, SF Bay Region, May 2008
b. 2-Prypanol was used as the leak-check compound
< Indicates that constituent was not detected above the laboratory detection limit
NA Not applicable

Table 3. Laboratory Analytical Results of Crawl Space and Ambient Air Samples

(Concentrations in parts per µg/m^3)

Sample ID	Date	TPHg	Benzene	Toluene	Ethyl benzene	Total Xylene
Crawl Space	10/13/2008	<200	2.0	7.2	1.4	5.6
Ambient	10/13/2008	370	5.4	19	3.9	19.9
Commercial ESL[a]		14	0.14	88	1.6	29

a. Environmental Screening Level, California Regional Water Quality Control Board, SF Bay Region, May 2008
< Indicates that constituent was not detected above the laboratory detection limit

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APPENDIX A – AMBIENT AIR, SOIL VAPOR, AND GROUND WATER SAMPLING PROTOCOL, BORING LOGS, AND DRILLING PERMITS

Subsurface Exploration Method

Method
The subsurface investigation was performed using a Hydraulic coring rig (Geoprobe) using a dual wall coring system. Soils observed in the borings were logged in general accordance with the Unified Soil Classification System (ASTM D-2487). Soil samples were collected continuously.

Ground water Grab Sampling Method

Method
Ground water grab sample GW-1 was collected directly from the stainless steel drive casing using a small-diameter bailer. Ground water grab sample GW-2 was collected using a hydropunch. Ground water grab samples were collected in appropriate containers and labeled with the sample ID, project number, and date and time of collection. Samples were placed in an ice-chilled cooler and transported to a state-certified laboratory with chain of custody documentation.

Soil Gas Sampling Method

Method
The soil gas sampling collection system consisted of a 1-liter Summa sample canister and purge canister connected by a manifold that included a half-hour flow controller, pressure gauge, filter, and valve. All connections were equipped with Swagelok fittings. To facilitate sampling, a dedicated 167 milliliters-per-minute flow regulator inclusive of particulate filter was fitted to the shut-off valve emanating from the driven vapor point and the other end to a "T" fitting. One end of the "T" was connected to the sampling summa canister. The other end of the "T" was affixed to a vacuum gauge and another "T" fitted to a 1-liter summa canister utilized for purging. A ten minute minimum vacuum tightness test was performed on the manifold and connections at each location by opening and closing one of the 1-liter purge canister valves and applying and monitoring a vacuum on the vacuum gauge. The sample shut-off valve on the downhole side of the sampling manifold remained in the closed position. When gauge vacuum was maintained for ten minutes without any significant decrease (less than 0.1 inches of mercury [Hg] for properly connected fittings). The down-hole shut off valve was opened, and purging was performed for approximately 3-5 minutes or approximately up to 1-liter to be purged prior to sampling. Isopropyl alcohol (IPA or 2-propanol) was utilized as a leak detection compound during sampling by applying between 5 and 10 drops to cotton gauze and placing near the probe location. Sampling continued until the vacuum gauge indicated approximately 5 inches of Hg remaining. A flow controller was utilized in the sample train to control the flow of soil gas into the summa canister for sample collection. Limiting the purging and sampling rate to between 100 and 200 milliliters per minute limits stripping and aids in preventing ambient air from diluting the soil gas samples.

Crawl Space Air Sampling Method

Method
The crawl space air sample was collected through a sub-floor vent on the southwest side of the building. The sampling location was selected in the approximate area of the former UST. One ambient air outdoor sample also was collected at the same time near the same sub-floor vent. The indoor and outdoor air samples were collected in 6-liter Summa canisters equipped with an 8-hour flow controller. The Summa canisters and flow controllers were certified for low level Selected Ion Monitoring (SIM).

Equipment Decontamination

Method
All sampling equipment was cleaned in a solution of laboratory grade detergent and rinsed with distilled water or steam cleaned prior to use at each sample point.

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: 08/19/2008 By jamesy

Permit Numbers: W2008-0592
Permits Valid from 08/26/2008 to 08/27/2008

Application Id: 1219090693277
City of Project Site: Castro Valley
Site Location: 2691 Castro Valley Bl, Castro Valley, CA
Project Start Date: 08/26/2008
Completion Date: 08/27/2008
Requested Inspection: 08/26/2008
Scheduled Inspection: 08/26/2008 at 9:30 AM (Contact your inspector, Ron Smalley at (510) 670-5407, to confirm.)

Applicant: Cornerstone Earth Group - Peter Langtry
2737 N Main St., Walnut Creek, CA 94597
Phone: 925-988-9500

Property Owner: Anthony Varni
650 A St., Hayward, CA 94543
Phone: 510-886-5000

Client: ** same as Property Owner **

	Total Due:	$230.00
Receipt Number: WR2008-0295	**Total Amount Paid:**	$230.00
Payer Name : Cornerstone Earth Group	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 2 Boreholes
Driller: Vironex - Lic #: 705927 - Method: other

Work Total: $230.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0592	08/19/2008	11/24/2008	2	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. 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 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.

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. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 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.

6. Permitte, 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.

7. 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.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

BORING NUMBER GW-1

CORNERSTONE EARTH GROUP

PROJECT NAME 2691 Castro Valley Boulevard
PROJECT NUMBER 267-1-1
PROJECT LOCATION Castro Valley, CA

DATE STARTED 10/1/08 **DATE COMPLETED** 10/1/08
GROUND ELEVATION _____ **BORING DEPTH** 18 ft.
DRILLING CONTRACTOR _____ **LATITUDE** _____ **LONGITUDE** _____
DRILLING METHOD Geoprobe GH42
GROUND WATER LEVELS:
LOGGED BY JLF
▽ **AT TIME OF DRILLING** 15 ft.
NOTES _____
▼ **AT END OF DRILLING** 15 ft.

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sampling Method	Percent Recovery (%)	OVM Reading (ppm)	Submitted for Laboratory Analysis	Well Construction Details
	0		**Sandy Lean Clay (CL)** moist, brown to dark brown, some fine gravel						Hand Augered to 5 feet
	5		**Clay with Claystone (CL)** **dry with fractured shale / claystone**			100 100			
	10		**Claystone / Shale** strong, dark gray, moist, heavilty fractured, 6" to 8" layers of clay and sand			100 100	<.5 <.5		
	15		**Sandy Lean Clay (CL)** stiff, moist, dark gray, fine sand, some fine gravel **Clayey Sand (SC)** very loose, wet, dark brown **Sandy Lean Clay (CL)** stiff, moist, dark gray, fine sand, some shale fragments			100	1.0		
	20		Bottom of Boring at 18.0 feet.						
	25								
	30								
	35								

BORING NUMBER GW-2

CORNERSTONE EARTH GROUP

PROJECT NAME 2691 Castro Valley Boulevard
PROJECT NUMBER 267-1-1
PROJECT LOCATION Castro Valley, CA

DATE STARTED 10/1/08 **DATE COMPLETED** 10/1/08
GROUND ELEVATION _____ **BORING DEPTH** 19 ft.
DRILLING CONTRACTOR _____ **LATITUDE** _____ **LONGITUDE** _____
DRILLING METHOD Geoprobe GH42
GROUND WATER LEVELS:
LOGGED BY JLF
AT TIME OF DRILLING 15 ft.
NOTES _____
AT END OF DRILLING 15 ft.

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	Sampling Method	Percent Recovery (%)	OVM Reading (ppm)	Submitted for Laboratory Analysis	Well Construction Details
	0		**Sandy Lean Clay (CL)** stiff, moist, brown to dark brown, some charcoal and Mn staining						Hand Augered to 5 feet
	5		**Clay with Claystone (CL)** stiff, dry, heavily fractured			100	10-15		
						100	.5-1.5		
	10		**Claystone / Shale** strong, dark gray, heavilty fractured, intermixed layers of clay and sand			100	<1		
			Clayey Sand with Claystone (SC) loose, moist, light brown			100	.5-5		
	15		used hammer punch to 19' (no samples taken)						
			Bottom of Boring at 19.0 feet.						
	20								
	25								
	30								
	35								

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APPENDIX B – LABORATORY ANALYTICAL REPORTS

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Peter Langtry

Collected by: (Print and Sign) Peter Langtry

Company Connestoga Earth Corp Email plangtry@conestogaenv.com

Address 1259 Oakmead Pkwy City Sunnyvale State CA Zip 94085

Phone 408 245-4600 Fax

Project Info:
P.O. #
Project # [redacted] 267-1-1
Project Name Castro Valley

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N, He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	Ambient 101308	33972	10/13/03	730 AM 5:08 PM	TPHg/BTEX (TO-15)	730	-1		
02A	Crawl Space 101305	23998	10/13/03	730 AM 3:10 PM	" "	730	[illegible] -12.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	10/13/03	[signature] ATL	10/15/03 0830
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	GSO	NA		Good	Yes No (None)	0810353

Form 288 rev.1

AN ENVIRONMENTAL ANALYTICAL LABRATORY

10/28/2008

Mr. Peter Langtry
Cornerstone Earth Group
2737 North Main St.
Suite 10
Walnut Creek CA 94597

Project Name: Castro Valley
Project #: 267-1-1

Dear Mr. Peter Langtry

The following report includes the data for the above referenced project for sample(s) received on 10/15/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori
Project Manager

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810353A

Work Order Summary

CLIENT:	Mr. Peter Langtry Cornerstone Earth Group 2737 North Main St. Suite 10 Walnut Creek, CA 94597	**BILL TO:**	Accounts Payable Cornerstone Earth Group 1259 Oakmead Parkway Sunnyvale, CA 94085
PHONE:	925-988-9500	**P.O. #**	
FAX:		**PROJECT #**	267-1-1 Castro Valley
DATE RECEIVED:	10/15/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	10/27/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Ambient 101308	Modified TO-15 SIM	0.0 "Hg	5 psi
02A	Crawl Space 101308	Modified TO-15 SIM	10.0 "Hg	5 psi
02AA	Crawl Space 101308 Lab Duplicate	Modified TO-15 SIM	10.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 10/28/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 SIM
Cornerstone Earth Group
Workorder# 0810353A

Two 6 Liter Summa Canister (SIM Certified) samples were received on October 15, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Sample Ambient 101308 arrived at ambient pressure yet flow controllers were used for sample collection.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: Ambient 101308

Lab ID#: 0810353A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.067	1.7	0.21	5.4
Toluene	0.027	5.2	0.10	19
Ethyl Benzene	0.027	0.90	0.12	3.9
m,p-Xylene	0.054	3.2	0.23	14
o-Xylene	0.027	1.1	0.12	4.9

Client Sample ID: Crawl Space 101308

Lab ID#: 0810353A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.10	0.63	0.32	2.0
Toluene	0.040	1.9	0.15	7.2
Ethyl Benzene	0.040	0.31	0.17	1.4
m,p-Xylene	0.080	0.98	0.35	4.2
o-Xylene	0.040	0.33	0.17	1.4

Client Sample ID: Crawl Space 101308 Lab Duplicate

Lab ID#: 0810353A-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.10	0.64	0.32	2.0
Toluene	0.040	2.0	0.15	7.4
Ethyl Benzene	0.040	0.30	0.17	1.3
m,p-Xylene	0.080	0.94	0.35	4.1
o-Xylene	0.040	0.31	0.17	1.4

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Ambient 101308

Lab ID#: 0810353A-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102609sim**	**Date of Collection: 10/13/08**	
Dil. Factor:	**1.34**	**Date of Analysis: 10/26/08 03:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.067	1.7	0.21	5.4
Toluene	0.027	5.2	0.10	19
Ethyl Benzene	0.027	0.90	0.12	3.9
m,p-Xylene	0.054	3.2	0.23	14
o-Xylene	0.027	1.1	0.12	4.9

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Crawl Space 101308

Lab ID#: 0810353A-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102610sim**	**Date of Collection: 10/13/08**	
Dil. Factor:	**2.01**	**Date of Analysis: 10/26/08 03:48 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.10	0.63	0.32	2.0
Toluene	0.040	1.9	0.15	7.2
Ethyl Benzene	0.040	0.31	0.17	1.4
m,p-Xylene	0.080	0.98	0.35	4.2
o-Xylene	0.040	0.33	0.17	1.4

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Crawl Space 101308 Lab Duplicate

Lab ID#: 0810353A-02AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102611sim**	**Date of Collection: 10/13/08**	
Dil. Factor:	**2.01**	**Date of Analysis: 10/26/08 04:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.10	0.64	0.32	2.0
Toluene	0.040	2.0	0.15	7.4
Ethyl Benzene	0.040	0.30	0.17	1.3
m,p-Xylene	0.080	0.94	0.35	4.1
o-Xylene	0.040	0.31	0.17	1.4

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810353A-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102606sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/26/08 12:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.050	Not Detected	0.16	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810353A-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102603sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/26/08 10:12 AM**	

Compound	%Recovery
Benzene	81
Toluene	84
Ethyl Benzene	89
m,p-Xylene	88
o-Xylene	86

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810353A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z102604sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/26/08 10:56 AM**	

Compound	%Recovery
Benzene	80
Toluene	88
Ethyl Benzene	93
m,p-Xylene	94
o-Xylene	92

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Peter Langtry
Collected by: (Print and Sign) Jacob Fink
Company Cornerstone Earth Group Email
Address 1259 Oakmead Pkwy City Sunnyvale State CA Zip 94085
Phone 408-245-4600 Fax 408 245-4620

Project Info:
P.O. # ~~2691 Castro Valley Blvd~~
Project # 267-1-1
Project Name 2691 Castro Valley Blvd.

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SV-1	33633	10/1/08	1255 PM	TPH gasoline, BTEX (TO-15)	-30	-5		

Relinquished by: (signature) Date/Time 10/2/08
Received by: (signature) Monica Wiggen AAL 10/3/08 1015

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes:

Lab Use Only

Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
UPS		NA	Good	Yes No (None)	0810101

Form 1295 rev. 0

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810101A

Work Order Summary

CLIENT:	Mr. Peter Langtry Cornerstone Earth Group 2737 North Main St. Suite 10 Walnut Creek, CA 94597	**BILL TO:**	Accounts Payable Cornerstone Earth Group 1259 Oakmead Parkway Sunnyvale, CA 94085
PHONE:	925-988-9500	**P.O. #**	
FAX:		**PROJECT #**	267-1-1 2691 Castro Valley Blvd.
DATE RECEIVED:	10/03/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	10/16/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-1	Modified TO-15	6.0 "Hg	15 psi
01AA	SV-1 Lab Duplicate	Modified TO-15	6.0 "Hg	15 psi
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 10/16/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
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LABORATORY NARRATIVE
Modified TO-15
Cornerstone Earth Group
Workorder# 0810101A

One 1 Liter Summa Canister sample was received on October 03, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-1

Lab ID#: 0810101A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Toluene	25	7500	95	28000
Ethyl Benzene	25	120	110	520
m,p-Xylene	25	360	110	1500
o-Xylene	25	110	110	480

Client Sample ID: SV-1 Lab Duplicate

Lab ID#: 0810101A-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Toluene	63	7500	240	28000
Ethyl Benzene	63	110	270	480
m,p-Xylene	63	360	270	1600
o-Xylene	63	100	270	460

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-1

Lab ID#: 0810101A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**y101310**	**Date of Collection: 10/1/08**	
Dil. Factor:	**50.6**	**Date of Analysis: 10/13/08 03:35 PM**	

Compound	**Rpt. Limit (ppbv)**	**Amount (ppbv)**	**Rpt. Limit (uG/m3)**	**Amount (uG/m3)**
2-Propanol	100	Not Detected	250	Not Detected
Benzene	25	Not Detected	81	Not Detected
Toluene	25	7500	95	28000
Ethyl Benzene	25	120	110	520
m,p-Xylene	25	360	110	1500
o-Xylene	25	110	110	480

Container Type: 1 Liter Summa Canister

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	109	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-1 Lab Duplicate

Lab ID#: 0810101A-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**y101309**	**Date of Collection: 10/1/08**	
Dil. Factor:	**126**	**Date of Analysis: 10/13/08 02:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	250	Not Detected	620	Not Detected
Benzene	63	Not Detected	200	Not Detected
Toluene	63	7500	240	28000
Ethyl Benzene	63	110	270	480
m,p-Xylene	63	360	270	1600
o-Xylene	63	100	270	460

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	107	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810101A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**y101304**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/13/08 11:06 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Propanol	2.0	Not Detected	4.9	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	108	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810101A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**y101302**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/13/08 08:44 AM**	

Compound	%Recovery
2-Propanol	81
Benzene	84
Toluene	95
Ethyl Benzene	96
m,p-Xylene	97
o-Xylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	112	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810101A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**y101303**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/13/08 09:26 AM**	

Compound	%Recovery
2-Propanol	85
Benzene	89
Toluene	102
Ethyl Benzene	97
m,p-Xylene	100
o-Xylene	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	112	70-130

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-16254-1

Job Description: 2691 Castro Valley Blvd.

For:
Cornerstone Earth Group
2737 North Main Street, Unit 10
Walnut Creek, CA 94597

Attention: Peter Langtry

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
10/08/2008

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA

No other analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Cornerstone Earth Group Job Number: 720-16254-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16254-5	**SC1 A,B,C,D**				
Toluene		0.036	0.0049	mg/Kg	8260B/CA_LUFTMS
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		10	1.0	mg/Kg	8015B
720-16254-6	**GW1**				
Toluene		0.63	0.50	ug/L	8260B/CA_LUFTMS

METHOD SUMMARY

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Ultrasonic Extraction	TAL SF		SW846 3550B
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Allen, Coretta	CA
SW846 8015B	Hayashi, Derek	DH
SW846 8015B	Relja, Marlene	MR

SAMPLE SUMMARY

Client: Cornerstone Earth Group Job Number: 720-16254-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-16254-5	SC1 A,B,C,D	Solid	10/01/2008 1130	10/01/2008 1524
720-16254-6	GW1	Water	10/01/2008 1130	10/01/2008 1524
720-16254-7	GW2	Water	10/01/2008 1130	10/01/2008 1524

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: **SC1 A,B,C,D**

Lab Sample ID: 720-16254-5 | Date Sampled: 10/01/2008 1130
Client Matrix: Solid | Date Received: 10/01/2008 1524

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-42087	Instrument ID: Varian 3900A
Preparation:	5030B	Prep Batch: 720-42121	Lab File ID: c:\saturnws\data\200810\10
Dilution:	1.0		Initial Weight/Volume: 5.08 g
Date Analyzed:	10/05/2008 1917		Final Weight/Volume: 10 mL
Date Prepared:	10/05/2008 1100		

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Benzene		ND		0.0049
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Toluene		0.036		0.0049
Xylenes, Total		ND		0.0098
MTBE		ND		0.0049
Ethylbenzene		ND		0.0049

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	97	74 - 118
1,2-Dichloroethane-d4 (Surr)	107	54 - 134

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: **GW1**

Lab Sample ID: 720-16254-6 | Date Sampled: 10/01/2008 1130
Client Matrix: Water | Date Received: 10/01/2008 1524

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS | Analysis Batch: 720-42086 | Instrument ID: Saturn 3900B
Preparation: 5030B | Lab File ID: c:\saturnws\data\200810\10
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 10/03/2008 1049 | Final Weight/Volume: 40 mL
Date Prepared: 10/03/2008 1049

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	0.63		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	78 - 112
1,2-Dichloroethane-d4 (Surr)	98	67 - 126

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: GW2

Lab Sample ID: 720-16254-7 | Date Sampled: 10/01/2008 1130
Client Matrix: Water | Date Received: 10/01/2008 1524

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS | Analysis Batch: 720-42086 | Instrument ID: Saturn 3900B
Preparation: 5030B | Lab File ID: c:\saturnws\data\200810\10
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 10/03/2008 1024 | Final Weight/Volume: 40 mL
Date Prepared: 10/03/2008 1024

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	99	78 - 112
1,2-Dichloroethane-d4 (Surr)	91	67 - 126

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: **SC1 A,B,C,D**

Lab Sample ID: 720-16254-5 | Date Sampled: 10/01/2008 1130
Client Matrix: Solid | Date Received: 10/01/2008 1524

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-42158 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-42010 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.06 g
Date Analyzed: 10/06/2008 1524 | Final Weight/Volume: 5 mL
Date Prepared: 10/03/2008 1726 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		10		1.0

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	72	41 - 105

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: GW1

Lab Sample ID: 720-16254-6 | Date Sampled: 10/01/2008 1130
Client Matrix: Water | Date Received: 10/01/2008 1524

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-42241 | Instrument ID: HP DRO5
Preparation: 3510C SGC | Prep Batch: 720-42014 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 250 mL
Date Analyzed: 10/07/2008 0850 | Final Weight/Volume: 1 mL
Date Prepared: 10/03/2008 1221 | Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	68	46 - 114

Client: Cornerstone Earth Group | Job Number: 720-16254-1

Client Sample ID: GW2

Lab Sample ID: 720-16254-7 | Date Sampled: 10/01/2008 1130
Client Matrix: Water | Date Received: 10/01/2008 1524

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-42241 | Instrument ID: HP DRO5
Preparation: 3510C SGC | Prep Batch: 720-42014 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 250 mL
Date Analyzed: 10/07/2008 0919 | Final Weight/Volume: 1 mL
Date Prepared: 10/03/2008 1221 | Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	60	46 - 114

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: Cornerstone Earth Group

Job Number: 720-16254-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-42086					
LCS 720-42086/2	Lab Control Spike	T	Water	8260B/CA_LUFT	
LCSD 720-42086/1	Lab Control Spike Duplicate	T	Water	8260B/CA_LUFT	
MB 720-42086/3	Method Blank	T	Water	8260B/CA_LUFT	
720-16254-6	GW1	T	Water	8260B/CA_LUFT	
720-16254-7	GW2	T	Water	8260B/CA_LUFT	
Analysis Batch:720-42087					
LCS 720-42121/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-42121
LCSD 720-42121/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-42121
MB 720-42121/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-42121
720-16254-5	SC1 A,B,C,D	T	Solid	8260B/CA_LUFT	720-42121
Prep Batch: 720-42121					
LCS 720-42121/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-42121/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-42121/1-A	Method Blank	T	Solid	5030B	
720-16254-5	SC1 A,B,C,D	T	Solid	5030B	

Report Basis
T = Total

Client: Cornerstone Earth Group

Job Number: 720-16254-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-42010					
LCS 720-42010/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-42010/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-42010/1-A	Method Blank	A	Solid	3550B	
720-16254-5	SC1 A,B,C,D	A	Solid	3550B	
Prep Batch: 720-42014					
LCS 720-42014/2-A	Lab Control Spike	A	Water	3510C SGC	
LCSD 720-42014/3-A	Lab Control Spike Duplicate	A	Water	3510C SGC	
MB 720-42014/1-A	Method Blank	A	Water	3510C SGC	
720-16254-6	GW1	A	Water	3510C SGC	
720-16254-7	GW2	A	Water	3510C SGC	
Analysis Batch:720-42158					
LCS 720-42010/2-A	Lab Control Spike	A	Solid	8015B	720-42010
LCSD 720-42010/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-42010
MB 720-42010/1-A	Method Blank	A	Solid	8015B	720-42010
720-16254-5	SC1 A,B,C,D	A	Solid	8015B	720-42010
Analysis Batch:720-42241					
LCS 720-42014/2-A	Lab Control Spike	A	Water	8015B	720-42014
LCSD 720-42014/3-A	Lab Control Spike Duplicate	A	Water	8015B	720-42014
MB 720-42014/1-A	Method Blank	A	Water	8015B	720-42014
720-16254-6	GW1	A	Water	8015B	720-42014
720-16254-7	GW2	A	Water	8015B	720-42014

Report Basis
A = Silica Gel Cleanup

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Method Blank - Batch: 720-42086

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-42086/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/03/2008 0827
Date Prepared: 10/03/2008 0827

Analysis Batch: 720-42086
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200810\1(
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	99	78 - 112
1,2-Dichloroethane-d4 (Surr)	101	67 - 126

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

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42086

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-42086/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/03/2008 0853
Date Prepared: 10/03/2008 0853

Analysis Batch: 720-42086
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200810\1(
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-42086/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/03/2008 0918
Date Prepared: 10/03/2008 0918

Analysis Batch: 720-42086
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200810\10(
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	79	95	72 - 117	18	20		
Gasoline Range Organics (GRO)-C5-C12	64	57	43 - 95	11	20		
Toluene	87	88	78 - 123	1	20		
MTBE	81	90	64 - 131	11	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	111	103	78 - 112
1,2-Dichloroethane-d4 (Surr)	100	106	67 - 126

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

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Method Blank - Batch: 720-42121

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-42121/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1105
Date Prepared: 10/05/2008 1100

Analysis Batch: 720-42087
Prep Batch: 720-42121
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200810\1(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.0050
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Toluene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
Ethylbenzene	ND		0.0050

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	99	74 - 118
1,2-Dichloroethane-d4 (Surr)	97	54 - 134

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

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42121

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-42121/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1151
Date Prepared: 10/05/2008 1100

Analysis Batch: 720-42087
Prep Batch: 720-42121
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200810\1(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-42121/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1214
Date Prepared: 10/05/2008 1100

Analysis Batch: 720-42087
Prep Batch: 720-42121
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200810\10(
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	93	94	66 - 128	1	20		
Gasoline Range Organics (GRO)-C5-C12	65	65	43 - 95	1	20		
Toluene	96	94	76 - 128	1	20		
MTBE	104	97	59 - 145	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	98	98	74 - 118
1,2-Dichloroethane-d4 (Surr)	100	96	54 - 134

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

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Method Blank - Batch: 720-42010

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-42010/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1718
Date Prepared: 10/03/2008 1209

Analysis Batch: 720-42158
Prep Batch: 720-42010
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.05 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		1.0

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	93	41 - 105

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42010

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-42010/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1620
Date Prepared: 10/03/2008 1209

Analysis Batch: 720-42158
Prep Batch: 720-42010
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.02 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-42010/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/05/2008 1649
Date Prepared: 10/03/2008 1209

Analysis Batch: 720-42158
Prep Batch: 720-42010
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.03 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	80	75	50 - 130	7	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	80	79	41 - 105

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

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Method Blank - Batch: 720-42014

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

Lab Sample ID: MB 720-42014/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/07/2008 1047
Date Prepared: 10/03/2008 1221

Analysis Batch: 720-42241
Prep Batch: 720-42014
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	76	46 - 114

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42014

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-42014/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/07/2008 0949
Date Prepared: 10/03/2008 1221

Analysis Batch: 720-42241
Prep Batch: 720-42014
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-42014/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/07/2008 1018
Date Prepared: 10/03/2008 1221

Analysis Batch: 720-42241
Prep Batch: 720-42014
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	63	66	41 - 103	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	64	65	46 - 114

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

CORNERSTONE EARTH GROUP

Chain of Custody Record

720-16254

172683

Cornerstone Earth Group, Inc.	Project Manager: Peter Langtry
1259 Oakmead Parkway	Tel/Fax:
Sunnyvale, California 94085	Analysis Turnaround Time
(408) 245-4600 Phone	TAT if different from Below
(408) 245-4620 FAX	☒ 1 week
Project Name: 2691 Castro Valley Blvd.	☐ 3 days
Site:	☐ 2 days
Project Number: 207-1-1	☐ 1 day

Site Contact:

Lab Contact:

Date: 10/1/08

Carrier:

COC No.

___ of ___ COCs

Laboratory's Job No.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	TPH, BTEX, 8260 for MTBE	TPH diesel (silica gel)	OXYGENATES	HOLD
SC1 (A, B, C, + D)	10/1	11:30	LINER	SOIL	4		✓	✓	✓	
GW1	↓	11:30	VIAL	WATER	3		✓	✓		
GW2			AMBER	↓	1		✓	✓		
GW2		11:30	VIAL		3		✓	✓		
GW2			AMBER	↓	1		✓	✓		
GW2 11.5'-12'	↓	11:00	LINER	SOIL	1					✓
TRAVEL BLANKS			VIAL	WATER	3					✓

Laboratory's Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

5 8C

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: Jacob Dee Fink	CORNERSTONE	10/1 15:24			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Received by: 10-01-08 1524

Login Sample Receipt Check List

Client: Cornerstone Earth Group

Job Number: 720-16254-1

Login Number: 16254
List Source: TestAmerica San Francisco
Creator: Mullen, Joan
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

CORNERSTONE
EARTH GROUP