Forensic Analytical

ENVIRONMENTAL HEALTH CONSULTANTS

Hazardous Materials Survey Report – Draft

San Jose-Santa Clara Regional Wastewater Facility
700 Los Esteros Road
San Jose, California

July 1, 2014

Prepared for:

Ms. Alison Nojima
Brown & Caldwell
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Prepared by:

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FACS Project #PJ22392

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Executive Summary

Forensic Analytical Consulting Services, Inc. (FACS) performed a hazardous material survey at the San Jose-Santa Clara Regional Wastewater Facility at 700 Los Esteros Road in San Jose on April 21 and 25, 2014. The purpose of the survey was to identify, sample and analyze potentially hazardous materials that may be disturbed in planned renovation.

The survey was intended to meet the requirements of Cal/OSHA and the Bay Area Air Quality Management District (BAAQMD). The results of this report should be incorporated into future renovation plans for the facility.

Asbestos was identified in roof sealant, pipe insulation, and pipe gasket.

Lead-containing paint was identified in all painted components except the following: .

- DAF Tanks – blue paint on generators
- DAF Tanks – white paint on light posts
- DAF Tanks – gray paint on concrete floor
- Pipe at Digesters – green paint on pipes
- Sludge Control Building – yellow paint on cinder block walls
- Sludge Control Building – yellow paint on electrical panels

No detectable level of chromium was identified in the concrete samples collected.

An elevated level of PCBs (110,000 ppm) was identified in the caulk at the base of the digester tanks.

Results of laboratory testing are summarized in Attachment A. The summary table must not be used alone. Important explanations and limitations are contained in the full report text below.

Introduction

Ms. Alison Nojima of Brown & Caldwell retained FACS to perform a hazardous materials survey at the San Jose-Santa Clara Regional Wastewater Facility at 700 Los Esteros Road in San Jose, California.

Steve Parpan and Martin Alvarez of FACS performed the investigation on April 21 and 25, 2014. Both inspectors are State of California Certified Asbestos Consultants and Lead Inspectors. Project Management was provided by Mr. Wilson Wong, a California Certified Asbestos Consultant and Lead Inspector. FACS personnel certifications are provided in Appendix D.

This report contains the findings and recommendations from our inspection and laboratory analysis of samples collected. The purpose of the survey was to identify, sample and analyze suspect hazardous materials that may be disturbed in the planned renovation, within the limitations described below.

Site Description and Scope of Work

The project site is the San Jose-Santa Clara Regional Wastewater Facility. The project scope of work included a survey for hazardous materials at the DAF Tanks, Digesters 5 to 8, DAFT Gallery, Sludge Control Building, and the associated tunnels.

Methodology

To complete this project, FACS:

- Conducted a visual inspection
- Documented relevant conditions
- Collected samples of suspect asbestos-containing materials using the Asbestos Hazard Emergency Response Act (AHERA) sampling protocol. Samples were analyzed in accordance with EPA Method 600/R-93-116
- Suspect lead-containing paints were assessed by a combined use of an XRF instrument and bulk sampling. Samples were analyzed in accordance with EPA Method 3050B
- Collected samples of concrete for analysis of Hexavalent Chromium in accordance with EPA Method 7196A
- Collected samples of caulking and expansion joint for analysis of Polychlorinated Biphenyls (PCBs) in accordance with EPA Method 8082
- Presented analytical results, conclusions and recommendations in a report.

The types, numbers and locations of samples were determined based on information about the planned renovation, visual observations, regulatory requirements, and other project management considerations.

Findings

Suspect asbestos-containing materials observed and sampled included: various mastics, sealants, gaskets, grout, caulking, skim coat, roofing materials, window putty, thermal system insulation, baseboard mastic, and stucco. Survey results are summarized in the table provided in Appendix A.

Asbestos was identified in the following materials:

ACM Description	Location(s) of Material	Asbestos Regulatory Classification
Roof sealant	**DAF Tank, Stair Access Roof** **Digester 5 – 8, roof**	**Cat. I Nonfriable ACM**
Pipe / elbow / "T" insulation	**DAFT Gallery below Digester 5 – 8, piping**	**RACM**
Pipe gasket	**DAFT Gallery below Digester 5 – 8, piping**	**Cat. I Nonfriable ACM**

Lead was identified in all painted components except the followings:

- DAF Tanks – blue paint on generators
- DAF Tanks – white paint on light posts
- DAF Tanks – gray paint on concrete floor
- Pipe at Digesters – green paint on pipes
- Sludge Control Building – yellow paint on cinder block walls
- Sludge Control Building – yellow paint on electrical panels

No detectable level of chromium was identified in the concrete samples collected.

An elevated level of PCBs (110,000 ppm) was identified in the caulk at the base of the digester tanks.

A floor plan showing sample locations is provided in Appendix B. The detailed laboratory report and completed Sampling Data Form (Chain of Custody) are provided in Appendix C.

Conclusions and Discussion

Asbestos

Roof sealant, piping insulation, and pipe gasket were found to contain asbestos in this survey. These materials are considered Asbestos-containing Materials (ACM) and Asbestos-containing Construction Materials (>0.1% asbestos) in California, and are subjected to regulations of the U.S. Environmental Protection Agency (EPA), BAAQMD, Cal/OSHA and the California Contractor State Licensing Board (CSLB).

An asbestos-containing material for which sample analysis results by PLM are greater than 1 percent asbestos is classified as ACM under regulations promulgated by the EPA, BAAQMD, Cal-EPA, OSHA and Cal/OSHA. The EPA and BAAQMD require that a material with a PLM analytical result less than 10 percent (including Trace results of less than 1 percent) be confirmed by the point count method, or else the material must be assumed to be ACM.

An asbestos-containing material for which sample analysis results by PLM are > 0.1 percent asbestos is classified as Asbestos-containing Construction Material (ACCM) by Cal/OSHA and by the CSLB.

Cal/OSHA regulates all materials that contain asbestos, even at Trace levels. At a minimum, employee training, wet methods, HEPA vacuums, and prompt cleanup and disposal of debris in leak-proof containers are recommended or required for the disturbance of any material that contains asbestos.

Lead

Lead is primarily regulated in California by Cal/OSHA and the California Department of Public Health (CDPH). The current Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1) regulation applies to all construction work where an employee may be occupationally exposed to lead; therefore, work (including manual demolition, scraping, welding, etc.) performed on surfaces containing any amount of lead must comply with the standard, including an exposure assessment (personal air monitoring) to determine if the airborne lead exposure levels are within acceptable limits.

Since **lead was detected in paints at the project area**, 8 CCR 1532.1 applies to any work that will disturb this lead-containing paint. Other components represented by the positive lead samples in the Summary of Lead Testing Laboratory Results found in Appendix A shall be considered to be lead-containing until proven otherwise.

For reference, lead waste is considered a hazardous waste if the result of the Toxicity Characterization Leaching Procedure (TCLP) test exceeds 5 mg/liter, under the Resource Conservation and Recovery Act (RCRA), 40 CFR 261, Appendix II. In California, a waste is also considered hazardous if the result of soluble lead content by a waste extraction test (WET) is > 5 mg/l, or if the total lead content exceeds 1,000 mg/kg in accordance with Title 22 of the CCR. When TTLC results are below 50 mg/kg, STLC/TCLP limits cannot be exceeded, so the waste would be classified as non-hazardous for lead.

Chromium

Sample results were compared to the San Francisco Bay Area Regional Water Quality Control Board's Environmental Screening Levels (ESLs). Table K3 of the ESLs specifically addresses the construction worker exposure scenario. Hexavalent Chromium (Cr VI) has an ESL of 0.53 mg/kg.

No detectable level (<0.4mg/kg) of chromium was identified in this project.

Polychlorinated Biphenyls (PCBs)

PCBs are regulated by the EPA under Code of Federal Regulations (CFR) at 40 CFR 761. Caulk containing PCBs at ≥ 50 ppm is a PCB bulk product that is not authorized for use and should be removed and disposed as PCB bulk product waste. Caulk containing PCBs at levels < 50 ppm may be excluded bulk product that may remain in place.

Adjacent building materials coated with PCB bulk product caulk (e.g., steel, masonry, wood, concrete) may be contaminated with PCBs and be PCB remediation waste. Soil near to PCB bulk product caulk may be contaminated by PCBs due to run off. A plan for removal and disposal of the PCB-containing materials may need to be submitted to and approved by EPA Region 9.

PCB bulk product caulk (>50 ppm) was identified in this survey.

For detailed regulatory requirements in specific situations, FACS should be consulted, or the applicable regulations should be reviewed.

Recommendations

1. The **ACM** identified above should be removed prior to the planned renovation by a licensed asbestos abatement contractor who complies with all applicable regulations.

2. A Certified Asbestos Consultant should be consulted to assist with project design and monitoring, including clearance inspection and air sampling after asbestos removal.

3. Removing the lead paint at spots scheduled for disturbance by the construction would eliminate the applicability of the Cal/OSHA standard to the paint. If the paint is not removed and the work will involve a Cal/OSHA trigger task (such as torch cutting), workers must be protected during the initial exposure monitoring per the Cal/OSHA Lead Standard requirements as if they were exposed above the Permissible Exposure Limit, until actual exposures are determined. With torch cutting, for example, this includes providing supplied air respiratory protection during the initial exposure assessment.

4. Paint chips and other waste generated from the paint removal, as well as painted components destined for disposal, should be tested to determine if they are hazardous waste.

5. Removal of PCB-containing caulk and contaminated soil shall follow requirements under 40 CFR 761.

6. Since concrete contains crystalline silica, disturbance of concrete requires compliance with Cal/OSHA 1530.1 and 5155.

7. For further assistance with regulatory requirements, FACS should be consulted, and the applicable regulations should be reviewed.

Limitations

The results of this survey do not apply beyond the planned renovation described above. Construction materials in areas not included in the scope of this survey should be assumed to contain hazardous

materials unless testing proves otherwise. If revisions to the renovation project are made that impact additional materials or areas, FACS should be contacted to review the changes and/or to conduct survey work to address the additional scope.

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment and experience, and on the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor to indicate that other hazards do not exist.

Please do not hesitate to contact our office at 510-266-4600 if you have any questions about our report. Thank you for the opportunity to assist Brown and Caldwell in promoting a more healthful environment.

Respectfully,
Forensic Analytical Consulting Services

Wilson Wong
Program Manager
CAC 92-0791, CDPH 4401

Appendix A:

Survey Results Summary Tables

SUMMARY OF ASBESTOS SAMPLING LABORATORY RESULTS

San Jose-Santa Clara Regional Wastewater Facility

700 Los Esteros Road, San Jose, California

Date(s) of Sampling: 4/21 & 4/25/2014

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
A-01	Black mastic & paint	DAF Tanks – metal pipe	ND	Not applicable	Not applicable
A-02	Black pipe gasket	DAF Tanks – metal pipe	ND	Not applicable	Not applicable
A-03	Grout	DAF Tanks – exterior wall	ND	Not applicable	Not applicable
A-04	Expansion joint	DAF Tanks – exterior wall	ND	Not applicable	Not applicable
A-05 A-06	Grout on cinder block	DAF Tanks – stair access, walls	ND	Not applicable	Not applicable

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
A-07	Grout on concrete	DAF Tanks – stair access, walls	ND	Not applicable	Not applicable
A-08	**Roof sealant, gray**	**DAF Tanks – stair access, roof at edges**	**10%**	**Cat. I Nonfriable ACM**	**Not measured**
A-09 A-53	Pipe gasket, green	Digester 5 to 8 – pipes	ND	Not applicable	Not applicable
A-10	Expansion joint, gray	Digester 5 to 8 – exterior at base	ND	Not applicable	Not applicable
A-11 A-12 A-13 A-14 A-15 A-16 A-17	Skim coat	Digester 5 to 8 – exterior wall	ND	Not applicable	Not applicable
A-18 A-19	Roof sealant, gray/black	Digester 5 to 8 – roof	ND	Not applicable	Not applicable

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
A-20 A-21 A-24 A-25	Roof composite	Digester 5 to 8 – roof field	ND	Not applicable	Not applicable
A-22 A-27	Window putty, white	Pump sheds at Digesters - windows	ND	Not applicable	Not applicable
A-23 A-26	**Roof sealant, gray**	**Digester 5 to 8 – roof at penetrations**	**10%**	**Cat. I Nonfriable ACM**	**Not measured**
A-29 A-30	Black mastic	DAFT Gallery, below digesters – sludge pump concrete pad	ND	Not applicable	Not applicable
A-31 A-32	Silver paint / black mastic	DAFT Gallery, below digesters – digester gas pipe	ND	Not applicable	Not applicable
A-33 A-34 A-35	Pipe insulation	DAFT Gallery, below digesters – hot water supply & return pipes	**10%**	**RACM**	**Not measured**

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
A-36 A-37	Elbow insulation	DAFT Gallery, below digesters – hot water supply & return pipes	**80%**	**RACM**	**Not measured**
A-38 A-39	“T” insulation	DAFT Gallery, below digesters – hot water supply & return pipes	**80%**	**RACM**	**Not measured**
A-40	Pipe gasket, black	DAFT Gallery, below digesters – pipes at flanges	**80%**	**Cat. I Nonfriable ACM**	**Not measured**
A-41 A-42	Baseboard mastic, brown	Sludge Control Building – Electrical Room	ND	Not applicable	Not applicable
A-43 A-44	Stone 7 grout	Sludge Control Building – exterior walls	ND	Not applicable	Not applicable
A-45 A-46	Gray caulking	Sludge Control Building – exterior walls	ND	Not applicable	Not applicable

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
A-47 A-48 A-49 A-50 A-51	Stucco	Sludge Control Building – exterior walls	ND	Not applicable	Not applicable
A-52	Window putty, white	Sludge Control Building – exterior walls	ND	Not applicable	Not applicable

ND = None Detected
RACM = friable (easily damaged by hand pressure) or likely to become friable during renovation/demolition
NOTES: This summary table must not be used alone. Important explanations and limitations are contained in the accompanying survey report text.
Percent asbestos content is based on visual area estimation unless noted otherwise (point count analysis was not performed).

SUMMARY OF LEAD TESTING LABORATORY RESULTS
San Jose-Santa Clara Regional Wastewater Facility
700 Los Esteros Road, San Jose, California
Date(s) of Sampling: 4/21 & 4/25/2014

Room	Component	Substrate	Color	XRF Result	Condition	Bulk Sample Number	Bulk Sample Result (%)
DAF Tanks	Generator housing	Metal	Blue	-0.1	I	Pb-01	<0.007
DAF Tanks	Light post	Metal	White	-0.2	I	Pb-02	<0.006
DAF Tanks	**Pipe**	**Metal**	**White**	**0.5**	**I**	**-**	-
DAF Tanks	Electrical panel	Metal	White	-0.1	F	Pb-03	<0.006
DAF Tanks	**Guard rail**	**Metal**	**White**	**1.7**	**I**	**-**	-
DAF Tanks	**Hatch platform, floor**	**Concrete**	**Yellow**	**3.9**	**F**	**-**	-
DAF Tanks	**Pipe jacket**	**Metal**	**Silver**	**-**	**I**	**Pb-04**	**0.003**
DAF Tanks, stair access	**Exterior Wall**	**Cinderblock**	**White**	**0.1**	**F**	**Pb-05**	**0.020**
DAF Tanks, stair access	**Exterior Door**	**Metal**	**Blue**	**-0.1**	**I**	**Pb-06**	**0.051**
DAF Tanks	Floor	Concrete	Gray	-0.3	F	Pb-07	<0.006
Digester 8, shed	**Exterior door (north)**	**Metal**	**White**	**0.3**	**F**	**Pb-08**	**0.030**
Digester 8, shed	**Exterior door (south)**	**Metal**	**White**	-	I	**Pb-09**	**0.045**
Digester 8, shed	**Exterior wall**	**Metal**	**White**	**0.2**	**I**	-	-
Digester 8	**Pipe housing**	**Metal**	**Blue**	**-0.1**	**1**	**Pb-10**	**0.053**
Digester 8	**Exterior wall**	**Concrete**	**White**	**1.0**	**I**	**-**	-
Digester 8	**Roof hatch**	**Metal**	**White**	**2.0**	**F**	**-**	-

Room	Component	Substrate	Color	XRF Result	Condition	Bulk Sample Number	Bulk Sample Result (%)
Digester 8	**Roof hatch (west)**	**Metal**	**Gray**	**1.1**	**P**	**-**	-
Digester 7	**Stairs railing**	**Metal**	**Blue**	**0.4**	**F**	**-**	-
Digester 7	Pipe housing	Metal	Green	-0.2	I	Pb-11	<0.006
Digester 6	**Gas Pipe**	**Metal**	**Blue**	**0.4**	**I**	**-**	-
DAFT Gallery	**Equipment pad (north)**	**Concrete**	**White**	**0.1**	**F**	**Pb-12**	**0.093**
DAFT Gallery	**Equipment frame (north)**	**Metal**	**White**	**0.4**	**I**	**-**	-
DAFT Gallery	**Equipment pad (sludge pump 3)**	**Concrete**	**Black**	**0.1**	**I**	**Pb-13**	**0.006**
DAFT Gallery	**Tank 6**	**Metal**	**Yellow**	**0.5**	**I**	**-**	-
DAFT Gallery	**Gas digester pipe**	**Metal**	**Off White**	**0.6**	**I**	**-**	-
DAFT Gallery	**Pipe**	**Metal**	**Silver**	**0.5**	**I**	**-**	-
DAFT Gallery	**Equipment pad (drainage 1)**	**Concrete**	**Gray**	**0.1**	**I**	**Pb-14**	**0.020**
DAFT Gallery	**Equipment cover (drainage 1)**	**Metal**	**Yellow**	**0.6**	**I**	**-**	**-**
Sludge bldg, electrical room	Wall	Cinderblock	Yellow	0.1	F	Pb-15	<0.007
Sludge bldg, electrical room	**Wall**	**Concrete**	**Yellow**	**0.2**	**F**	**Pb-16**	**0.030**
Sludge bldg, electrical room	Electrical panel	Metal	Yellow	0.1	F	Pb-17	<0.006
Sludge bldg, electrical room	**Floor**	**Concrete**	**Gray**	**0.1**	**F**	**Pb-18**	**0.26**
Sludge bldg, electrical room	**Electrical pipe**	**Metal**	**Off white**	**0.4**	**F**	**-**	-
Sludge bldg, exterior	**Ceiling overhang**	**Stucco**	**Off White**	**0.5**	**I**	**-**	-

Room	Component	Substrate	Color	XRF Result	Condition	Bulk Sample Number	Bulk Sample Result (%)
Exterior mechanical	**Mechanical equipment frame**	**Metal**	**Off White**	**0.5**	**I**	**-**	-
Exterior mechanical	**Mechanical equipment cover**	**Metal**	**Blue**	**0.4**	**I**	**-**	-
Exterior mechanical	**Pipe**	**Metal**	**White**	**0.4**	**I**	**-**	-

% means: percent lead in sample, by weight
Condition – I (Intact), F (Fair), P (Poor)

SUMMARY OF PCB SAMPLING LABORATORY RESULTS

San Jose-Santa Clara Regional Wastewater Facility

700 Los Esteros Road, San Jose, California

Date(s) of Sampling: 4/21 & 4/25/2014

Sample Number	Material Description	Location(s) of Material	PCB Content (PPM)
PCB-1	Gray Expansion Joint	DAF Tanks on concrete	3.4
PCB-2	**Gray Expansion Joint**	**Digesters 5-8 along bottom of digesters on concrete**	**110,000**
PCB-3	Gray/Black Roof Sealant	Digesters 5-8 on roof	ND
PCB-4	White Window Putty	Digesters 5-8 pump shed metal window frames	1.2
PCB-5	Gray over Black Seam Caulking	Sludge Control Building exterior stucco	7.6

ND = None Detected

SUMMARY OF CHROMIUM SAMPLING LABORATORY RESULTS

San Jose-Santa Clara Regional Wastewater Facility

700 Los Esteros Road, San Jose, California

Date(s) of Sampling: 4/21 & 4/25/2014

Sample Number	Material Description	Location(s) of Material	Chromium Content (PPM)
CR-1	Concrete	Digesters 5-8, exterior	ND
CR-2	Concrete	Digesters 5-8, exterior	ND

ND = None Detected

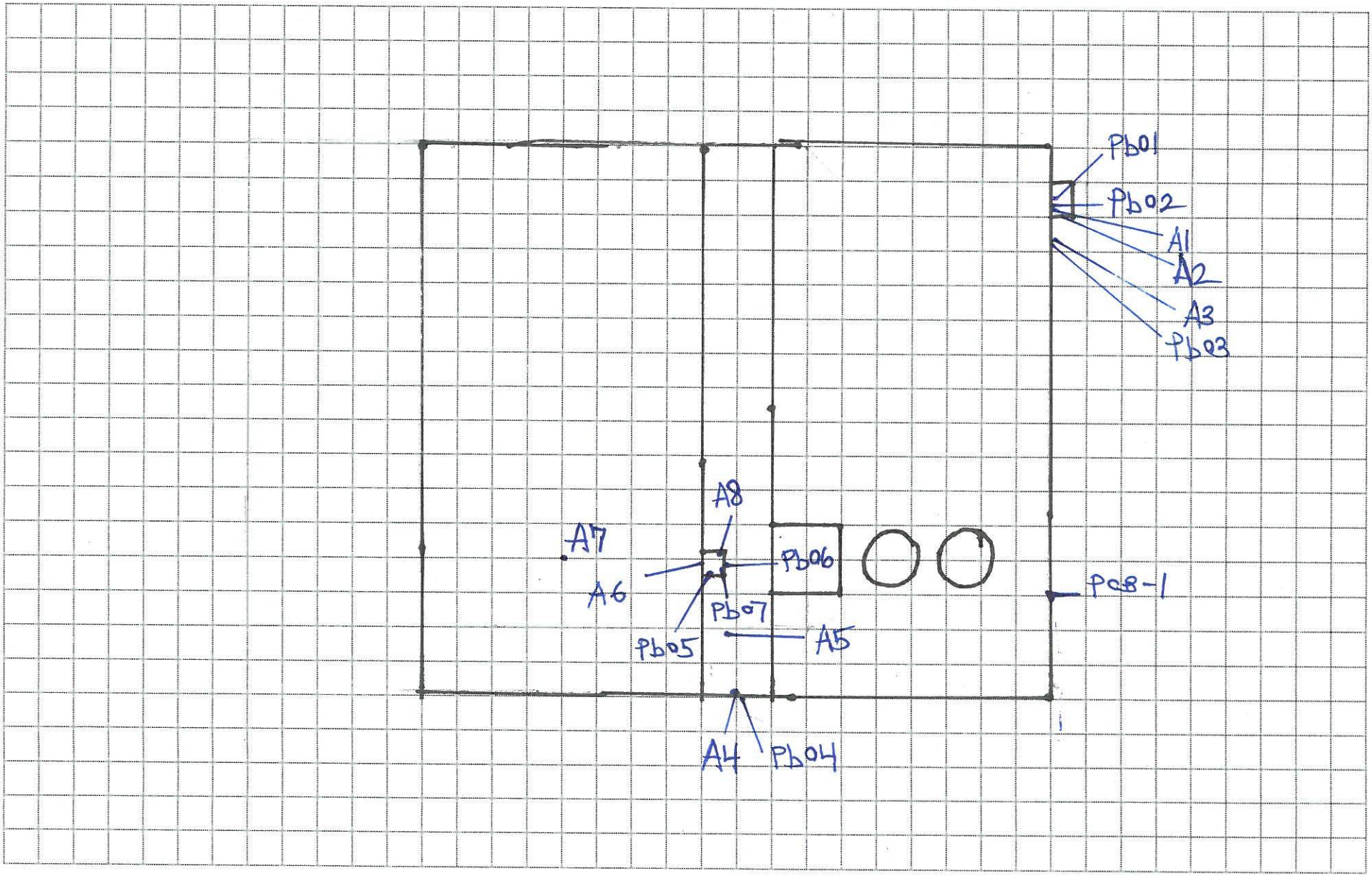
Appendix B:

Floor Plan – Sample Locations

Forensic Analytica ENVIRONMENTAL HEALTH CONSULTANTS	FLOOR PLAN FORM	Date:	Job #: PJ22392	Site: 700 Los Esteros Road San Jose CA	Title: DAF TANKS	Inspectors: MA/SP

Legend:

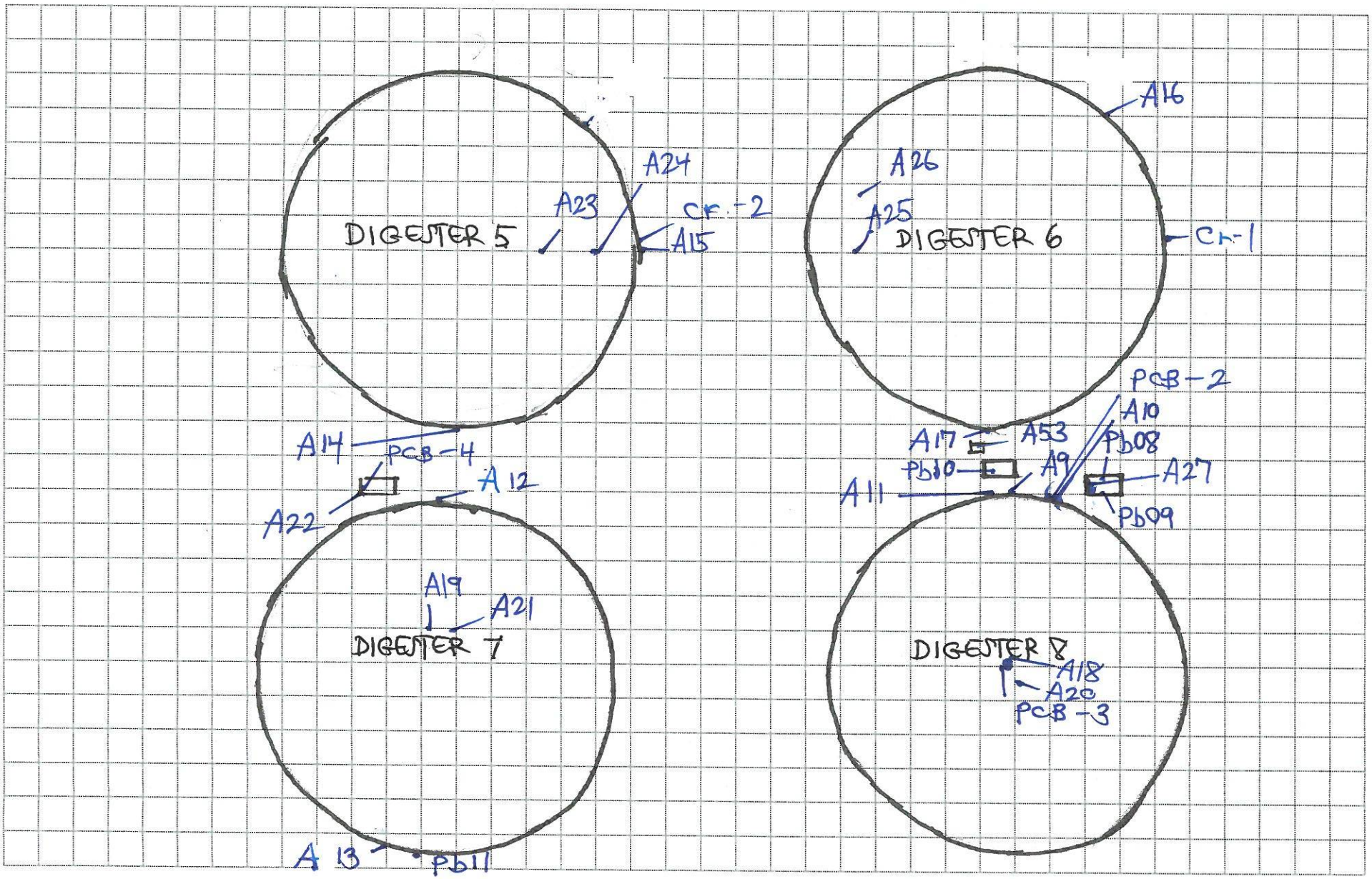
N



Forensic Analytica ENVIRONMENTAL HEALTH CONSULTANTS	FLOOR PLAN FORM	Date:	Job #: PJ22392	Site: 700 Los Esteros Road San Jose CA	Title: DIGESTER TANKS	Inspectors: MA/SP

Legend:

N



Forensic Analytica ENVIRONMENTAL HEALTH CONSULTANTS	FLOOR PLAN FORM	Date:	Job #: PJ22392	Site: 700 Los Esteros Road San Jose CA	Title: DAFT Gallery & Tunnel G	Inspectors: MA/SP

Legend:

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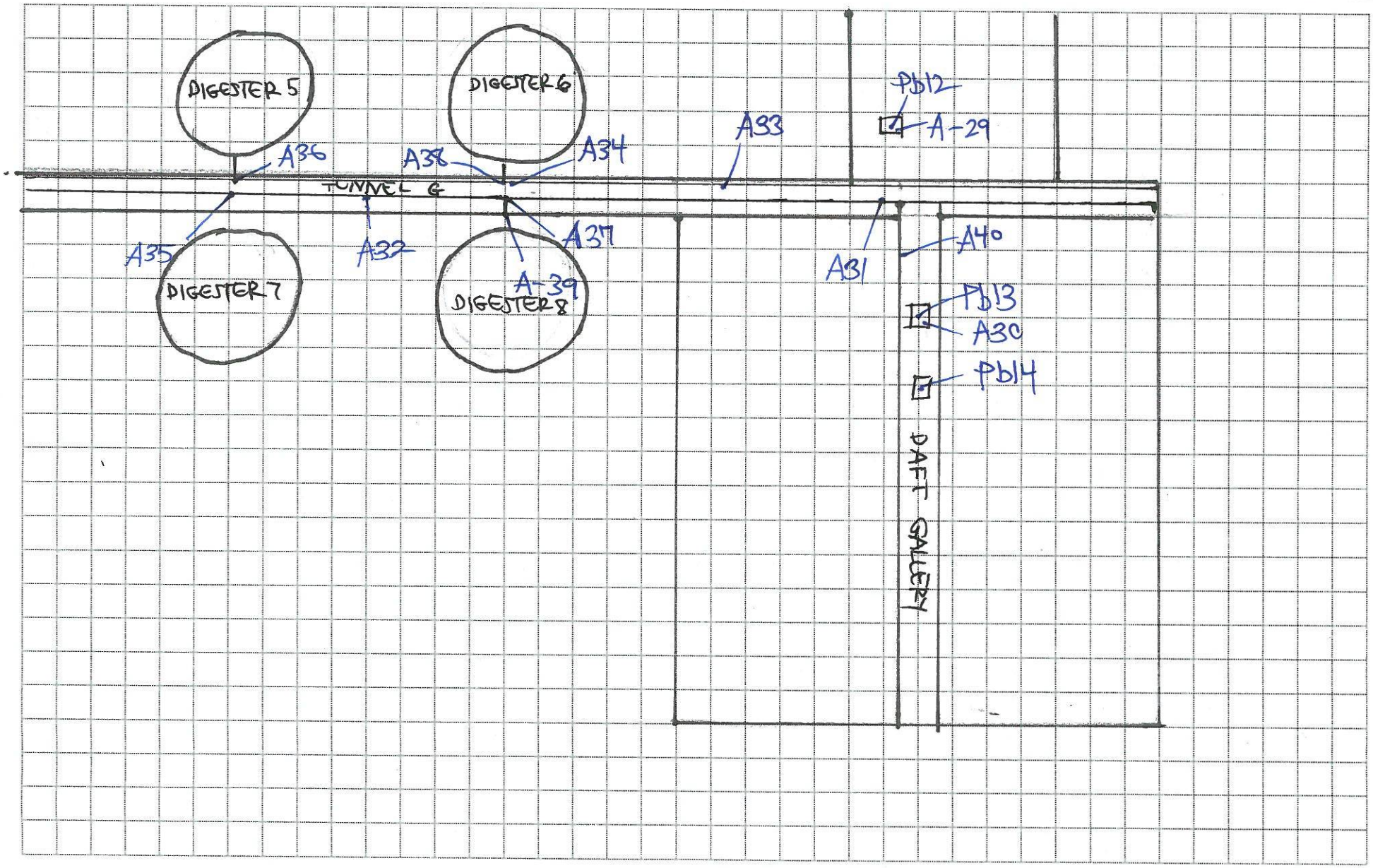

Forensic Analytica ENVIRONMENTAL HEALTH CONSULTANTS FLOOR PLAN FORM	Date:	Job #: PJ22392	Site: 700 Los Esteros Road San Jose CA	Title: SLUDGE CONTROL BUILDING	Inspectors: MA/JP

Legend:

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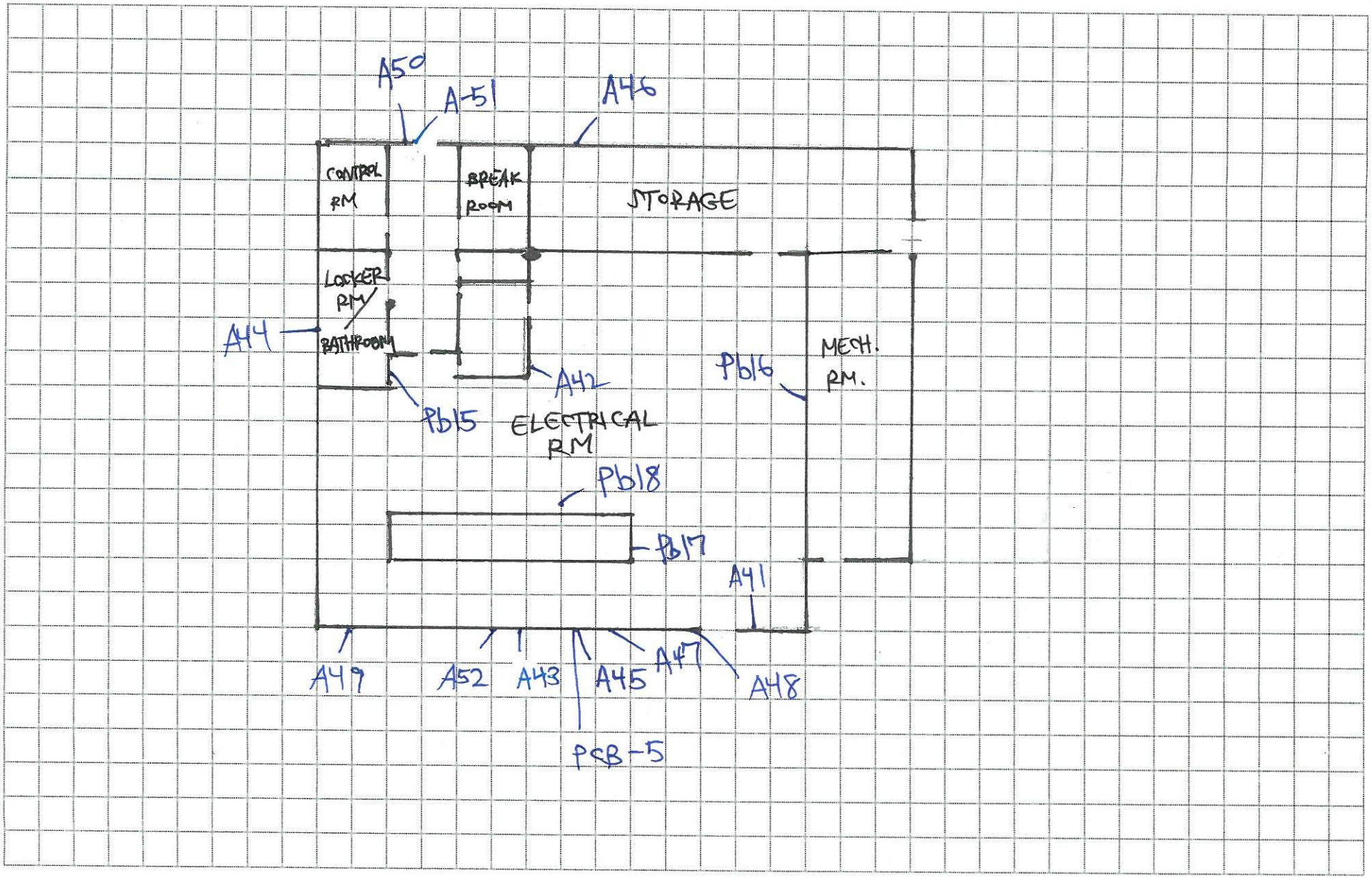

Appendix C:

Supporting Laboratory Reports and Chain-of-Custody Documents

Forensic Analytical Laboratories

Metals Analysis of Paints

Forensic Analytical Consulting Svcs
Wilson Wong
3777 Depot Road
Suite 413
Hayward, CA 94545

Client ID: HAY01
Report Number: M149048
Date Received: 04/25/14
Date Analyzed: 04/30/14
Date Printed: 04/30/14
First Reported: 04/30/14

Job ID / Site: PJ22392; 700 Los Esteros Road San Jose CA
Date(s) Collected:

FALI Job ID: HAY01
Total Samples Submitted: 17
Total Samples Analyzed: 17

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PB-01	30681028	Pb	< 0.007	wt%	0.007	EPA 3050B/7420
PB-02	30681029	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
PB-03	30681030	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
PB-05	30681031	Pb	0.020	wt%	0.006	EPA 3050B/7420
PB-06	30681032	Pb	0.051	wt%	0.006	EPA 3050B/7420
PB-07	30681033	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
PB-08	30681034	Pb	0.030	wt%	0.007	EPA 3050B/7420
PB-09	30681035	Pb	0.045	wt%	0.006	EPA 3050B/7420
PB-10	30681036	Pb	0.053	wt%	0.007	EPA 3050B/7420
PB-11	30681037	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
PB-12	30681038	Pb	0.093	wt%	0.007	EPA 3050B/7420
PB-13	30681039	Pb	0.006	wt%	0.006	EPA 3050B/7420
PB-14	30681040	Pb	0.020	wt%	0.007	EPA 3050B/7420
PB-15	30681041	Pb	< 0.007	wt%	0.007	EPA 3050B/7420
PB-16	30681042	Pb	0.030	wt%	0.006	EPA 3050B/7420
PB-17	30681043	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
PB-18	30681044	Pb	0.26	wt%	0.02	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

Forensic Analytical Laboratories

Metals Analysis of Bulks

Forensic Analytical Consulting Svcs
Wilson Wong
3777 Depot Road
Suite 413
Hayward, CA 94545

Client ID: HAY01
Report Number: M149049
Date Received: 04/25/14
Date Analyzed: 04/30/14
Date Printed: 04/30/14
First Reported: 04/30/14

Job ID / Site: PJ22392; 700 Los Esteros Road San Jose CA
Date(s) Collected: 4/21/14

FALI Job ID: HAY01
Total Samples Submitted: 1
Total Samples Analyzed: 1

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PB-04	30681045	Pb	60	mg/kg	30	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

PAINT CHIP SAMPLE REQUEST FORM

Client:	HAY01 FACS San Francisco Brown and Caldwell	Sampled by: SP/MA	PM: Wilson Wong Date: 04/11/14, 4/25/14
Contact:	Wilson Wong Phone: (510) 266-4600	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com
Site:	700 Los Esteros Road San Jose CA	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	C1114 FACS Job #: PJ22392	Analysis:	☑ Flame AA (Pb) / ☐ Other:

Sample Number	Sample Location	Component	Color	Substrate	Condition
Pb-01	DAF Tank, Generator Housing, NE	Generator Housing	Blue	Metal	I
Pb-02	DAF Tank, NE	Light post	White	Metal	I
Pb-03	DAF Tank, NE	Electrical panel	White	Metal	F
Pb-04	DAF Tank, South	pipe jacket	Silver	Metal	I
Pb-05	↓, Stair Access, South	Ext. Wall	White	Concrete	F
Pb-06	↓, ↓, East	Ext. door	Blue	Metal	I
Pb-07	DAF Tank, South	Floor	Gray	Concrete	F
Pb-08	Digester 8, Shed, Exterior door, North	Ext. door	White	Metal	F
Pb-09	↓, South	↓	↓	↓	I
Pb-10	Digester 8, Pipe Housing, South	Pipe Housing	Blue	Metal	I

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☑ Drop Off ☐ Other:

Relinquished by:	Date & Time: 4/25/14 3:00 P.M.	Received by:	Date & Time: 04-25-14 P05:17 RC Condition Acceptable ☑ Yes ☐ No
Relinquished by:	Date & Time:	Received by:	Date & Time: Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

PAINT CHIP SAMPLE REQUEST FORM

Client:	HAY01 FACS San Francisco Brown and Caldwell	Sampled by: MA PM: Wilson Wong	Date: 04/21/14, 4/25/14
Contact:	Wilson Wong Phone: (510) 266-4600	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com
Site:	700 Los Esteros Road San Jose CA	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	C1114 FACS Job #: PJ22392	Analysis:	☑ Flame AA (Pb) / ☐ Other:

Sample Number	Sample Location	Component	Color	Substrate	Condition
~~A@~~ Pb-11	Digester 7, South	pipe Housing	Green	Metal	I
Pb-12	DAFT Gallery, North at Process flow 2	Equipment pad	White	Concrete	F
Pb-13	DAFT Gallery at Sludge Pump 3	Equipment Pad	Black	Concrete	I
Pb-14	DAFT Gallery, at Drain 1 ~~over~~	Equipment pad	Gray	Concrete	I
Pb-15	Sludge Bldg, Electrical RM	wall	Yellow	Cinderblock	F
Pb-16	↓ , ↓	wall	Yellow	Concrete	F
Pb-17	↓ , ↓	Electrical panel	Yellow	Metal	F
Pb-18	↓ ↓	Floor	Gray	Concrete	F

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☐ FedEx ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	Date & Time: 4/25/14 3:00P.M.	Received by:	Date & Time: 04-25-14 03:1 RCVD Condition Acceptable ☑ Yes ☐ No
Relinquished by:	Date & Time:	Received by:	Date & Time: Condition Acceptable ☐ Yes ☐ No

Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Forensic Analytical Consulting Svcs
Wilson Wong
3777 Depot Road
Suite 413
Hayward, CA 94545

Client ID: HAY01
Report Number: B190396
Date Received: 04/25/14
Date Analyzed: 04/29/14
Date Printed: 04/30/14
First Reported: 04/30/14

Job ID/Site: PJ22392; 700 Los Esteros Road San Jose CA

Date(s) Collected:

FALI Job ID: HAY01
Total Samples Submitted: 52
Total Samples Analyzed: 52

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A1	11508369						
Layer: White Paint			**ND**				
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A2	11508370						
Layer: Black Semi-Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %)		**Asbestos (ND)**					
A3	11508371						
Layer: Grey Grout			**ND**				
Layer: Grey Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A4	11508372						
Layer: Grey Non-Fibrous Material			**ND**				
Layer: Grey Foam			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A5	11508373						
Layer: Grey Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A6	11508374						
Layer: Grey Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					

Report Number: B190396
Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A7	11508375						
Layer: Grey Grout			**ND**				
Layer: Tan Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A8	11508376						
Layer: Grey Mastic		Chrysotile	**10 %**				
Total Composite Values of Fibrous Components:		**Asbestos (10%)**					
Cellulose (Trace)							
A9	11508377						
Layer: Green Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Synthetic (80 %)							
A10	11508378						
Layer: Grey Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A11	11508379						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A12	11508380						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A13	11508381						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A14	11508382						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A15	11508383						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

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Report Number: B190396
Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A16	11508384						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A17	11508385						
Layer: Off-White Skimcoat			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A18	11508386						
Layer: Grey/Black Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A19	11508387						
Layer: Grey/Black Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A20	11508388						
Layer: Black Semi-Fibrous Material			**ND**				
Layer: Stones			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %) Fibrous Glass (45 %) Comment: Bulk complex sample.		**Asbestos (ND)**					

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Report Number: B190396
Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A21	11508389						
Layer: Black Semi-Fibrous Material			**ND**				
Layer: Stones			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
A22	11508390						
Layer: White Putty			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A23	11508391						
Layer: Grey Mastic		Chrysotile	**10 %**				
Total Composite Values of Fibrous Components:		**Asbestos (10%)**					
Cellulose (Trace)							
A24	11508392						
Layer: Stones			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
A25	11508393						
Layer: Stones			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							

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Report Number: B190396
Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A26	11508394						
Layer: Grey Mastic		Chrysotile	**10 %**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (10%)**					
A27	11508395						
Layer: White Putty			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A29	11508396						
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A30	11508397						
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A31	11508398						
Layer: Black Mastic			**ND**				
Layer: Silver Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A32	11508399						
Layer: Black Mastic			**ND**				
Layer: Silver Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A33	11508400						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (10%)**					
A34	11508401						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (10%)**					
A35	11508402						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (10%)**					

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Report Number: B190396

Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A36	11508403						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Light Grey Fibrous Material		Chrysotile	**80 %**				
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (20%)**					
A37	11508404						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Light Grey Fibrous Material		Chrysotile	**80 %**				
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (20%)**					
A38	11508405						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Light Grey Fibrous Material		Chrysotile	**80 %**				
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (20%)**					
A39	11508406						
Layer: White Semi-Fibrous Material		Amosite	**7 %**	Chrysotile	**3 %**		
Layer: Light Grey Fibrous Material		Chrysotile	**80 %**				
Layer: Silver Woven Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (5 %)		**Asbestos (20%)**					
A40	11508407						
Layer: Beige Fibrous Material		Chrysotile	**80 %**				
Total Composite Values of Fibrous Components: Synthetic (15 %)		**Asbestos (80%)**					
A41	11508408						
Layer: Brown Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace) Talc (2 %)		**Asbestos (ND)**					
A42	11508409						
Layer: Brown Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace) Talc (2 %)		**Asbestos (ND)**					
A43	11508410						
Layer: White Stones			**ND**				
Layer: Grey Grout			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					

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Report Number: B190396

Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A44	11508411						
Layer: White Stones			**ND**				
Layer: Grey Grout			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A45	11508412						
Layer: Black Non-Fibrous Material			**ND**				
Layer: Grey Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A46	11508413						
Layer: Off-White Non-Fibrous Material			**ND**				
Layer: White Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A47	11508414						
Layer: Grey Cementitious Material			**ND**				
Layer: Beige Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A48	11508415						
Layer: Grey Cementitious Material			**ND**				
Layer: Beige Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A49	11508416						
Layer: Grey Cementitious Material			**ND**				
Layer: Beige Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A50	11508417						
Layer: Grey Cementitious Material			**ND**				
Layer: Beige Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					

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Report Number: B190396

Client Name: Forensic Analytical Consulting Svcs **Date Printed:** 04/30/14

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A51	11508418						
Layer: Grey Cementitious Material			**ND**				
Layer: Beige Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A52	11508419						
Layer: White Putty			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A53	11508420						
Layer: Green Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace) Synthetic (85 %)		**Asbestos (ND)**					

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA./S.P. PM: **Wilson Wong**	Date: 4/21/14, 4/25/14
Contact:	**Wilson Wong** Phone: **(510) 266-4600**	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & mawarez@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	**C1114** **FACS Job #: PJ22392**	Analysis:	☒ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-1	White Paint over Black Mastic	DAF Tanks, Metal Pipe, NE	N	F	
A-2	Black Pipe Gasket	↓	↓	↓	
A-3	Gray Grout/putty or concrete	DAF Tanks, East			
A-4	*Gray Expansion Joint	↓, South			
A-5	Cinderblock Grout	DAF Tank, Stair Access, SE			
A-6	↓	↓, NW			
A-7	Gray Grout/Putty on concrete	DAF Tank, West			
A-8	Gray Roof Sealant	↓, Stair Access Roof, NE			
A-9	Green Pipe Gasket	Digester 8, Gas pipe, North			
A-10	Gray Expansion Joint	Digester 8, Along Bottom, North			

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No — Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	*Date & Time:* 4/25/14 3:30P.M.	*Received by:* 04-25-14P03:34 RCVD	*Date & Time:* Condition Acceptable ☒ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA	PM: **Wilson Wong** Date: 04/21/14, 4/25/14
Contact:	**Wilson Wong** Phone: **(510) 266-4600**	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & malvarez@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	**C1114** **FACS Job #: PJ22392**	Analysis:	☑ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-11	~~White~~ Exterior Skim Coat	Digester 8, North	X	F	
A-12	↓	Digester 7, North	↓	↓	
A-13		Digester 7, South			
A-14		Digester 5, South			
A-15		↓, East			
A-16		Digester 6, NE			
A-17	↓	↓, South	↓	↓	
A-18	Gray/Black Roof Sealant	Digester 8, Roof, center	N	F	
A-19	↓	Digester 7, Roof, North	↓	↓	
A-20	~~Black~~ Roof Field	Digester 8, Roof, center	↓	↓	

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No — Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	*Date & Time:*	*Received by:* 04-25-14P03:35 RCVD	*Date & Time:* 4/25 Condition Acceptable ☒ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA / S.P. PM: **Wilson Wong**	Date: 04/21/14, 4/25/14
Contact:	**Wilson Wong** Phone: **(510) 266-4600**	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & mawarez@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	**C1114** **FACS Job #: PJ22392**	Analysis:	☒ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-21	Black Roof Field	Digester 7, Roof, North	N	F	
A-22	White Window Putty	Digester 7, Pump Shed, Window, West			
A-23	Gray ~~Roof~~ Sealant	Digester 5, East			
A-24	Bark Asphalt Roof Field	↓			
A-25	↓	Digester 6, West			
A-26	Gray Roof Sealant	↓			
A-27	White Window Putty	Digester 8, Pump Shed, Window, West			
~~A-28~~ VOID	VOID	VOID			
A-29	Black Mastic	DAFT Gallery, Sludge Pump Concrete Pad			
A-30	Black ~~Concrete~~ Mastic	DAFT Gallery, Sludge pump 3 Concrete pad			

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No — Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	*Date & Time:* 4/25/14 3:30 P.M.	*Received by:* 04-25-14 P03:35 RCVD	*Date & Time:* 4/0 Condition Acceptable ☒ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA / S.P. PM: **Wilson Wong**	Date: 4/24/14, 4/25/14
Contact: **Wilson Wong** Phone: **(510) 266-4600**		Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & malware@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.: **C1114**	**FACS Job #: PJ22392**	Analysis:	☒ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-31	Silver Paint over Black Mastic	DAFT Gallery, Digester Gas Pipe, West	N	F	
A-32	↓	↓ ↓ below digester 7	↓	↓	
A-33	[redacted] TSI Straight Run	DAFT Gallery, Heat Loop return pipe, West	Y	F	
A-34	↓	↓ Below Digester 6	↓	↓	
A-35	↓	, Heat Supply, Below Digester 7	↓	↓	
A-36	TSI Elbow	, Heat Return, Below Digester 5	↓	↓	
A-37	↓	, Heat Supply, Below Digester 8	↓	↓	
A-38	TSI T-Insulation	, Heat Return, Below Digester 6	↓	↓	
A-39	↓	, Heat Supply, Below Digester 8	↓	↓	
A-40	Black Pipe Gasket	, Bottom Sludge Pipe, North	N	F	

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No — Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: [signature]	*Date & Time:* 4/25/14 3:30P.M.	*Received by:* [signature] 04-25-14P03:35 RCVD	*Date & Time:* d/o Condition Acceptable ☒ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA / SP PM: **Wilson Wong**	Date: 04/25/14
Contact:	**Wilson Wong** Phone: **(510) 266-4600**	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & malvarez@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	**C1114** **FACS Job #: PJ22392**	Analysis:	☑ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-41	Brown BBM	Nudge Control Bldg, Electrical Room, SE	N	F	
A-42	↓	↓ ↓, North Area	↓	↓	
A-43	Decorative Stone + Grout Exterior Wall	↓, Exterior, South			
A-44	↓	↓, Exterior, West			
A-45	Gray over Black Seam caulking	↓, Exterior, South			
A-46	↓	↓ ↓, North			
A-47	Stucco (Beige over Gray)	↓ ↓, South			
A-48	↓	↓ ↓, SE			
A-49	↓	↓ ↓, SW			
A50	↓	↓ ↓, North	↓	↓	

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No — Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	*Date & Time:* 4/25/14 3:30P.M.	*Received by:* 04-25-14P03:35 RCVD	*Date & Time:* d/o Condition Acceptable ☑ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Forensic Analytical
ENVIRONMENTAL HEALTH CONSULTANTS

BULK SAMPLE REQUEST FORM

Client:	**HAY01 FACS San Francisco** **Brown and Caldwell**	Sampled by: MA / SP PM: **Wilson Wong**	Date: 04/25/14
Contact:	**Wilson Wong** Phone: **(510) 266-4600**	Special Instructions:	E-mail results to wwong@forensicanalytical.com and rtenorio@forensicanalytical.com & malvarez@forensicanalytical.com
Site:	**700 Los Esteros Road** **San Jose CA**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other ☐ Due Date and Time:
Client No.:	**C1114** **FACS Job #:** **PJ22392**	Analysis:	☑ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
A-51	Stucco (Beige over Gray)	Sludge Control Bldg. ↓, Exterior ↓, North ↓ South	N	F	
A-52	White window putty		↓	↓	
A-53	Green pipe gasket	Digester 6, South	↓	↓	
AP					

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Yes / No Good / Fair / Poor

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	*Date & Time:* 4/25/14 3:30 P.M.	*Received by:* 04-25-14P03:36 RCVD	*Date & Time:* d/c Condition Acceptable ☒ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

CHAIN OF CUSTODY

Chain of Custody # : _____

C&T LOGIN # 256172

Project No: PJ22392
Project Name: Brownt Caldwell SanJose WPCP
EDD Format: _____ **Rpt Level:** ☐ II ☐ III ☐ IV
Turnaround Time: Standard

Sampler: Martin Alvarez
Report To: Wilson Wong
Company : Forensic Analytical Consulting Services
Telephone: 510-265-4600
Email: wwong@forensicanalytical.com

Lab No.	Sample ID.	Sampling Date	Sampling Time	Matrix: Water	Soil	Solid	# of Containers	Chemical Preservative: HCl	H_2SO_4	HNO_3	NaOH	None	Analytical Request: PCB by 8082
1	PCB-1	4/21/14				X	1						X
2	PCB-2					X	1						X
3	PCB-3					X	1						X
4	PCB-4					X	1						X
5	PCB-5	4/25/14				X	1						X

Notes:

SAMPLE RECEIPT
☐ Intact ☐ Cold
☐ On Ice ☐ Ambient

RELINQUISHED BY:
04/29/14 DATE/TIME
DATE/TIME
DATE/TIME

RECEIVED BY:
4/29/14 1845 DATE/TIME
DATE/TIME
DATE/TIME

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 256172
ANALYTICAL REPORT

Forensic Analytical Consulting	Project : PJ22392
3777 Depot Rd	Location : Brown & Caldwell San Jose WPCP
Hayward, CA 94545	Level : II

Sample ID	Lab ID
PCB-1	256172-001
PCB-2	256172-002
PCB-3	256172-003
PCB-4	256172-004
PCB-5	256172-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 05/07/2014

Will S Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**256172**
Client:	**Forensic Analytical Consulting**
Project:	**PJ22392**
Location:	**Brown & Caldwell San Jose WPCP**
Request Date:	**04/29/14**
Samples Received:	**04/29/14**

This data package contains sample and QC results for two foam samples, two rubber samples, and one wood chips sample, requested for the above referenced project on 04/29/14. The samples were received cold and intact.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Low surrogate recovery was observed for decachlorobiphenyl in PCB-3 (lab # 256172-003); the corresponding TCMX surrogate recovery was within limits. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Detections Summary for 256172

Client : Forensic Analytical Consulting
Project : PJ22392
Location : Brown & Caldwell San Jose WPCP

Client Sample ID : PCB-1 Laboratory Sample ID : 256172-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1248	2,000		420	190	ug/Kg	As Recd	50.00	EPA 8082	EPA 3540
Aroclor-1254	1,400		420	150	ug/Kg	As Recd	50.00	EPA 8082	EPA 3540

Client Sample ID : PCB-2 Laboratory Sample ID : 256172-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1254	110,000,000		3,400,000	1,200,000	ug/Kg	As Recd	400000	EPA 8082	EPA 3540

Client Sample ID : PCB-3 Laboratory Sample ID : 256172-003

No Detections

Client Sample ID : PCB-4 Laboratory Sample ID : 256172-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1254	1,200		410	150	ug/Kg	As Recd	50.00	EPA 8082	EPA 3540

Client Sample ID : PCB-5 Laboratory Sample ID : 256172-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1254	5,400		790	290	ug/Kg	As Recd	50.00	EPA 8082	EPA 3540
Aroclor-1260	2,200		790	180	ug/Kg	As Recd	50.00	EPA 8082	EPA 3540

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Basis:	as received
Units:	ug/Kg	Received:	04/29/14

Field ID:	PCB-1	Batch#:	210681
Type:	SAMPLE	Sampled:	04/21/14
Lab ID:	256172-001	Prepared:	05/01/14
Diln Fac:	50.00	Analyzed:	05/06/14

Analyte	Result	RL
Aroclor-1016	ND	420
Aroclor-1221	ND	850
Aroclor-1232	ND	420
Aroclor-1242	ND	420
Aroclor-1248	2,000	420
Aroclor-1254	1,400	420
Aroclor-1260	ND	420

Surrogate	%REC	Limits
TCMX	DO	60-140
Decachlorobiphenyl	DO	36-133

Field ID:	PCB-2	Batch#:	210681
Type:	SAMPLE	Sampled:	04/21/14
Lab ID:	256172-002	Prepared:	05/01/14
Diln Fac:	400,000	Analyzed:	05/06/14

Analyte	Result	RL
Aroclor-1016	ND	3,400,000
Aroclor-1221	ND	6,700,000
Aroclor-1232	ND	3,400,000
Aroclor-1242	ND	3,400,000
Aroclor-1248	ND	3,400,000
Aroclor-1254	110,000,000	3,400,000
Aroclor-1260	ND	3,400,000

Surrogate	%REC	Limits
TCMX	DO	60-140
Decachlorobiphenyl	DO	36-133

*= Value outside of QC limits; see narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Basis:	as received
Units:	ug/Kg	Received:	04/29/14

Field ID:	PCB-3	Batch#:	210770
Type:	SAMPLE	Sampled:	04/21/14
Lab ID:	256172-003	Prepared:	05/05/14
Diln Fac:	1.000	Analyzed:	05/06/14

Analyte	Result	RL
Aroclor-1016	ND	54
Aroclor-1221	ND	110
Aroclor-1232	ND	54
Aroclor-1242	ND	54
Aroclor-1248	ND	54
Aroclor-1254	ND	54
Aroclor-1260	ND	54

Surrogate	%REC	Limits
TCMX	88	60-140
Decachlorobiphenyl	23 *	36-133

Field ID:	PCB-4	Batch#:	210681
Type:	SAMPLE	Sampled:	04/21/14
Lab ID:	256172-004	Prepared:	05/01/14
Diln Fac:	50.00	Analyzed:	05/05/14

Analyte	Result	RL
Aroclor-1016	ND	410
Aroclor-1221	ND	820
Aroclor-1232	ND	410
Aroclor-1242	ND	410
Aroclor-1248	ND	410
Aroclor-1254	1,200	410
Aroclor-1260	ND	410

Surrogate	%REC	Limits
TCMX	DO	60-140
Decachlorobiphenyl	DO	36-133

*= Value outside of QC limits; see narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Basis:	as received
Units:	ug/Kg	Received:	04/29/14

Field ID:	PCB-5	Batch#:	210681
Type:	SAMPLE	Sampled:	04/25/14
Lab ID:	256172-005	Prepared:	05/01/14
Diln Fac:	50.00	Analyzed:	05/03/14

Analyte	Result	RL
Aroclor-1016	ND	790
Aroclor-1221	ND	1,600
Aroclor-1232	ND	790
Aroclor-1242	ND	790
Aroclor-1248	ND	790
Aroclor-1254	5,400	790
Aroclor-1260	2,200	790

Surrogate	%REC	Limits
TCMX	DO	60-140
Decachlorobiphenyl	DO	36-133

Type:	BLANK	Batch#:	210681
Lab ID:	QC738621	Prepared:	05/01/14
Diln Fac:	1.000	Analyzed:	05/02/14

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	99	60-140
Decachlorobiphenyl	89	36-133

*= Value outside of QC limits; see narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Basis:	as received
Units:	ug/Kg	Received:	04/29/14

Type:	BLANK	Batch#:	210770
Lab ID:	QC738968	Prepared:	05/05/14
Diln Fac:	1.000	Analyzed:	05/06/14

Analyte	Result	RL
Aroclor-1016	ND	9.6
Aroclor-1221	ND	19
Aroclor-1232	ND	9.6
Aroclor-1242	ND	9.6
Aroclor-1248	ND	9.6
Aroclor-1254	ND	9.6
Aroclor-1260	ND	9.6

Surrogate	%REC	Limits
TCMX	106	60-140
Decachlorobiphenyl	82	36-133

*= Value outside of QC limits; see narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Batch#:	210681
Units:	ug/Kg	Prepared:	05/01/14
Diln Fac:	1.000	Analyzed:	05/03/14

Type: BS Lab ID: QC738622

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	163.3	98	58-144
Aroclor-1260	166.7	186.2	112	55-146

Surrogate	%REC	Limits
TCMX	106	60-140
Decachlorobiphenyl	89	36-133

Type: BSD Lab ID: QC738623

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.7	177.1	106	58-144	8	38
Aroclor-1260	166.7	200.0	120	55-146	7	54

Surrogate	%REC	Limits
TCMX	119	60-140
Decachlorobiphenyl	99	36-133

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	256172	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Prep:	EPA 3540
Project#:	PJ22392	Analysis:	EPA 8082
Matrix:	Miscell.	Batch#:	210770
Units:	ug/Kg	Prepared:	05/05/14
Diln Fac:	1.000	Analyzed:	05/06/14

Type: BS Lab ID: QC738969

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	135.4	81	58-144
Aroclor-1260	166.7	156.5	94	55-146

Surrogate	%REC	Limits
TCMX	93	60-140
Decachlorobiphenyl	70	36-133

Type: BSD Lab ID: QC738970

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.7	154.3	93	58-144	13	38
Aroclor-1260	166.7	161.1	97	55-146	3	54

Surrogate	%REC	Limits
TCMX	107	60-140
Decachlorobiphenyl	75	36-133

RPD= Relative Percent Difference

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(510)486-0532 Fax

CHAIN OF CUSTODY

Chain of Custody # : _____

C&T LOGIN # 256171

Project No: PJ22392
Project Name: Brown Caldwell San Jose WPCP
EDD Format: _____ **Rpt Level:** ☐ II ☐ III ☐ IV
Turnaround Time: Standard

Sampler: Martin Alvarez
Report To: Wilson Wong
Company: Forensic Analytical Consulting Services
Telephone: 510-266-4600
Email: wwong@forensicanalytical.com

Analytical Request

Lab No.	Sample ID.	Sampling Date	Sampling Time	Matrix: Water	Soil	Solid	# of Containers	Chemical Preservative: HCl	H_2SO_4	HNO_3	NaOH	None	Hex Chromium by 7196
	Cr-1	04/25/14				X	1						X
	Cr-2	"				X	1						X

Notes:

SAMPLE RECEIPT
☐ Intact ☐ Cold
☐ On Ice ☐ Ambient

RELINQUISHED BY:	RECEIVED BY:
04/29/14 DATE/TIME	4/29/14 1545 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 256171
ANALYTICAL REPORT

Forensic Analytical Consulting	Project : PJ22392
3777 Depot Rd	Location : Brown & Caldwell San Jose WPCP
Hayward, CA 94545	Level : II

Sample ID	Lab ID
CR-1	256171-001
CR-2	256171-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 05/06/2014

Will S Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**256171**
Client:	**Forensic Analytical Consulting**
Project:	**PJ22392**
Location:	**Brown & Caldwell San Jose WPCP**
Request Date:	**04/29/14**
Samples Received:	**04/29/14**

This data package contains sample and QC results for two solid samples, requested for the above referenced project on 04/29/14. The samples were received cold and intact.

Hexavalent Chromium (EPA 7196A):

Low recovery was observed for hexavalent chromium in the matrix spike for batch 210648; the parent sample was not a project sample. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Detections Summary for 256171

Client : Forensic Analytical Consulting
Project : PJ22392
Location : Brown & Caldwell San Jose WPCP

Client Sample ID : CR-1 Laboratory Sample ID : 256171-001

No Detections

Client Sample ID : CR-2 Laboratory Sample ID : 256171-002

No Detections

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	256171	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Analysis:	EPA 7196A
Project#:	PJ22392		
Analyte:	Hexavalent Chromium	Sampled:	04/25/14
Units:	mg/Kg	Received:	04/29/14
Basis:	as received	Prepared:	05/01/14 18:05
Diln Fac:	1.000	Analyzed:	05/01/14 18:10
Batch#:	210648		

Field ID	Type	Lab ID	Matrix	Result	RL
CR-1	SAMPLE	256171-001	Miscell.	ND	0.40
CR-2	SAMPLE	256171-002	Miscell.	ND	0.40
	BLANK	QC738469	Soil	ND	0.40

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	256171	Location:	Brown & Caldwell San Jose WPCP
Client:	Forensic Analytical Consulting	Analysis:	EPA 7196A
Project#:	PJ22392		
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	210648
MSS Lab ID:	256031-001	Sampled:	04/15/14 08:34
Matrix:	Soil	Received:	04/15/14
Units:	mg/Kg	Prepared:	05/01/14 18:05
Basis:	as received	Analyzed:	05/01/14 18:10

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC738470		40.00	38.64		97	80-120		
SDUP	QC738471	<0.4000		<0.4000	0.4000			NC	20
SSPIKE	QC738472	<0.4000	40.98	31.52		77 *	85-115		

*= Value outside of QC limits; see narrative
NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	03/09/2015
Project Monitor	03/09/2015

Steve M. Parpan ID #: **13312**

State of California
Division of Occupational Safety and Health

Certified Asbestos Consultant

Steve M Parpan
Name

Certification No. **07-4302**

Expires on **02/21/15**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	07/22/2014
Project Monitor	07/22/2014

28286

Martin G. Alvarez ID #: 2494

STATE OF CALIFORNIA
Edmund G. Brown, Jr. *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov

805042382C **163**

April 08, 2014

Martin G Alvarez
344 Egret Place
Pittsburg **, CA 94565**

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (Revised 10/24/2012)

Forensic Analytical

ENVIRONMENTAL HEALTH CONSULTANTS

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