



Project No. S9805-01-18
June 24, 2014

Steve Werner, Task Order Manager
Caltrans District 1
Environmental Engineering Office
1656 Union Street
Eureka, California 95501

Subject: ASBESTOS, LEAD-CONTAINING PAINT, AND TREATED WOOD SURVEY REPORT
ALBION RIVER BRIDGE (10-0136)
MENDOCINO COUNTY, CALIFORNIA
CONTRACT NO. 03A2132, E-FIS 01 0000 0154 (EA 01-40110)
TASK ORDER NO. 18

Dear Mr. Werner:

In accordance with California Department of Transportation (Caltrans) Contract No. 03A2132 and Task Order (TO) No. 18, we have performed an asbestos, lead-containing paint (LCP) and treated wood survey of the Albion River Bridge (10-0136) in Mendocino County, California. The scope of services included surveying the bridge for suspect asbestos-containing materials (ACM) and lead-containing paint, collecting bulk ACM and paint samples, and submitting the samples to laboratories for analyses. We also collected samples of wood structural members of the bridge to evaluate concentrations of arsenic, chromium, copper, and semi-volatile organic compounds (SVOCs).

PROJECT DESCRIPTION

The project consists of the Albion River Bridge at Post Mile (PM) 43.74 on Highway 1 in Mendocino County, California. The bridge was constructed in 1944 and is composed of timber stringer spans on A-Frame deck trusses with a steel deck truss on reinforced concrete tower bents over the Albion River.

We performed asbestos, LCP, and wood member survey activities in support of a bridge demolition and replacement alternative being considered. The project location is depicted on the Vicinity Map, Figure 1, and Site Plan, Figure 2.

GENERAL OBJECTIVES

The scope of services outlined in TO No. 18 included the determination of the presence and quantity of asbestos and LCP at the project location prior to demolition. Assuming that no asbestos is added during future operations, our survey would satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. The information obtained from this investigation will be used by Caltrans for waste profiling, determining California Occupational Safety and Health Administration (Cal/OSHA) applicability, and coordinating asbestos and LCP disturbance activities.

BACKGROUND

Asbestos

The Code of Federal Regulations (CFR), 40 CFR 61, Subpart M, NESHAP and Federal Occupational Safety and Health Administration (FED OSHA) classify ACM as any material or product that contains *greater than* 1% asbestos. Nonfriable ACM is classified by NESHAP as either Category I or Category II material defined as follows:

- **Category I** – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- **Category II** – all remaining types of nonfriable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated asbestos-containing material (RACM), a hazardous waste when friable, is classified as any manufactured material that contains *greater than* 1% asbestos by dry weight *and* is:

- Friable (can be crumbled, pulverized, or reduced to powder by hand pressure); or
- Category I material that has become friable; or
- Category I material that has been subjected to sanding, grinding, cutting, or abrading; or
- Category II nonfriable material that has a high probability of becoming crumbled, pulverized, or reduced to a powder during demolition or renovation activities.

Activities that disturb materials containing *any* amount of asbestos are subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8, California Code of Regulations (CCR) §1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor, but associated waste labeling is not required if the material contains 1% or less asbestos. When the asbestos content of a material exceeds 1%, virtually all requirements of the standard become effective.

Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M). RACM (friable ACM and nonfriable ACM that will become friable during demolition operations) must be removed from structures prior to demolition. Certain nonfriable ACM and materials containing 1% or less asbestos may remain in structures during demolition; however, there are waste handling/disposal issues and Cal/OSHA work requirements that must be addressed. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

With respect to potential worker exposure, notification, and registration requirements, Cal/OSHA defines asbestos-containing construction material (ACCM) as construction material that contains more than 0.1% asbestos (Title 8, CCR 341.6).

Lead Paint

Construction activities (including demolition) that disturb materials or paints containing *any* amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR §1532.1. Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8 §35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a substrate. Demolition of a deteriorated paint component would require waste characterization

and appropriate disposal. Intact paint on a component is currently accepted by most landfills and recycling facilities; however, contractors are responsible for segregating and characterizing waste streams prior to disposal.

For a solid waste containing lead, the waste is classified as California hazardous when: 1) the representative total lead content equals or exceeds the respective Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg); or 2) the representative soluble lead content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l) based on the standard Waste Extraction Test (WET). A waste has the potential for exceeding the lead STLC when the waste's representative total lead content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when total lead is detected at a concentration greater than or equal to 50 mg/kg, and assuming that 100 percent of the total lead is soluble, soluble lead analysis is required. Lead-containing waste is classified as "Resource, Conservation, and Recovery Act" (RCRA) hazardous, or Federal hazardous, when the representative soluble lead content equals or exceeds the Federal regulatory level of 5 mg/l based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability; however, for the purposes of this investigation, toxicity (i.e., lead concentration) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California-hazardous or RCRA-hazardous requires management as a hazardous waste.

Potential hazards exist to workers who remove or cut through paint coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with paint. Torching of these materials may produce hazardous fumes. Therefore, air monitoring and/or respiratory protection may be required during the demolition of materials coated with lead-containing paint. Guidelines regarding regulatory provisions for construction work where workers may be exposed to lead are presented in Title 8, CCR §1532.1.

Treated Wood Waste

Treated wood waste (TWW) typically contains hazardous chemicals that are subject to Title 22 CCR waste management regulations. The California Department of Toxic Substances Control (DTSC) has developed Alternative Management Standards (Title 22, CCR §67386) to facilitate proper management and disposal of TWW. The Alternative Management Standards apply to TWW that is subject to California hazardous waste classification solely due to the presence of a wood preservative that is registered with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is not subject to Federal RCRA waste classification, and is not an exempt wood waste due to utility service (e.g. utility poles). Per 40 CFR 261.4 (b90) (see attached), arsenically treated wood waste are exempt from RCRA hazardous waste management and disposal requirements.

Prohibited uses of TWW include burning, scavenging (i.e. salvage), and commingling with other wastes. TWW may only be recycled for reuse onsite in accordance with applicable management standards. Additional TWW information may be obtained from DTSC's website https://dtsc.ca.gov/PollutionPrevention/ToxicsInProducts/Treated_Wood_Waste.cfm and the attached DTSC TWW Fact Sheet.

Architectural Drawings and Bridge Inspection Report

We reviewed structure architectural plans provided by Caltrans prior to field activities. We did not observe specifications or notes regarding the use of asbestos-containing materials or lead paint in the architectural plans provided. Previous asbestos survey reports were not available for our review.

Caltrans provided a *Supplementary Bridge Report* prepared for the Albion River bridge dated January 1949. The bridge report states that “All the timber members are of Douglas Fir salt treated by the Wolman method.” It is noted that the wood preservative “Wolman Concentrate 72%” consisting of arsenic oxide, chromic acid and cupric oxide is identified in the April 11, 2014 Federal Register as a cancelled product under FIFRA.

The bridge report further states that “The structural steel members were painted in May to July 1944, with one prime coat of No. 1 red lead, a second coat of red lead metalead [sic] and a finish coat of dull black.” The report recommended that the steel members on the bridge be sand blasted and repainted. A copy of the 1949 bridge report is attached.

SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2014), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2014), performed the asbestos and LCP survey at the project location on May 13, 2014.

Asbestos

Suspect ACM were grouped into homogeneous areas with representative samples randomly collected from each. In addition, each potential ACM was evaluated for friability. A total of six bulk asbestos samples representing three suspect materials were collected.

Our procedures for inspection and sampling in accordance with TO-18 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a light mist of water. The samples were then cut from the substrate and transferred to labeled containers.
- Relinquished bulk asbestos samples to EMSL Analytical, Inc., a California-licensed and Caltrans-approved subcontractor, for asbestos analysis in accordance with United States Environmental Protection Agency (EPA) Test Method 600/R-93/116 using polarized light microscopy (PLM) under chain-of-custody protocol. EMSL Analytical, Inc. is a laboratory accredited by the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NIST-NVLAP) for bulk asbestos fiber analysis. The laboratory analyses were requested on a turnaround period of five days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

Lead Paint

A total of six bulk paint samples were collected from suspect LCP observed at the project location. Mr. Watts field-composited the suspect LCP samples into three paint schemes prior to submittal to the laboratory. We did not observe deteriorated LCP during our survey. Our sampling procedures in accordance with TO-18 are discussed below:

- Collected bulk samples of suspect LCP using techniques presented in HUD guidelines. In addition, the painted areas were evaluated for evidence of deterioration such as flaking or cracking.
- Relinquished the bulk LCP sample under chain-of-custody protocol to Advanced Technology Laboratories, a California-licensed and Caltrans-approved subcontractor, for lead analysis in accordance with EPA Test Method 6010B. Advanced Technology Laboratories is accredited by the DPH for lead analysis. The laboratory analyses were requested on a turnaround period of five days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

The steel deck truss was not accessible and thus it's paint system could not be evaluated or sampled. Bridge records indicate that the paint system was, at least, at one point lead containing and it's likely that remnants of that paint system remain within crevasses and pores of the metal.

Wood Members

A total of twelve bulk samples of wood structural members (1 through 12) were collected at the project location using an 11/16-inch drill bit. The wood members sampled included decking material, and structural timbers of varying dimensions. The wood members were cored to a depth of approximately 6 inches. The drill cuttings were placed in resealable plastic bag and field homogenized.

Geocon relinquished the bulk samples under chain-of-custody protocol in a chilled container to Advanced Technology Laboratories for arsenic, chromium, and copper analysis using EPA Test Method 6010B, and pentachlorophenol and SVOC tentatively identified compounds (TICs) using EPA Test Method 8270C. The laboratory analyses were requested on a turnaround period of five days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

INVESTIGATIVE RESULTS

Asbestos

Chrysotile and crocidolite asbestos concentrations totaling 30% were detected in samples of nonfriable asbestos cement drainpipe used in the bridge abutments. We were not able to quantify the material.

Asbestos was not detected in the remaining samples of the suspect materials collected during our survey. Sample identification numbers, material descriptions, approximate quantities, friability assessments, and a summary of the analytical laboratory test results for asbestos are summarized below. Reproductions of the laboratory report and chain-of-custody documentation are attached.

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116				
Sample No.	Description of Material	Approximate Quantity	Friable	Asbestos Content
1A and B	Concrete (painted)	NA	NA	ND
2A and B	Drainpipe (abutments)	Unable to quantify	No	30%
3A and B	Joint fill material (painted)	NA	NA	ND

NA = Not applicable (no asbestos detected)

ND = Not detected

Lead Paint

Composite samples representing intact paints at the site exhibited representative total lead concentrations ranging from 6.2 to 81,000 mg/kg. Further analysis of the yellow traffic striping and white paint applied to wood railing indicated representative TCLP lead concentrations of 0.2 and 65 mg/l, respectively.

Sample identification numbers, descriptions, peeling and flaking quantities, and a summary of the analytical laboratory test results for paint are summarized below. Reproductions of the laboratory reports and chain-of-custody documentation are attached.

Total and Soluble Lead				
Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Total Lead (mg/kg)	TCLP Lead (mg/l)
P1A/B	White traffic striping	Intact	6.2	---
P2A/B	Yellow traffic striping	Intact	2,200	0.2
P3A/B	White paint (wood railing)	Intact	81,000	65

mg/kg = milligrams per kilogram (EPA Test Method 6010B)

mg/l = milligrams per liter

TCLP = Toxicity Characteristic Leaching Procedure (EPA Test Method 6010B)

--- = Not analyzed

Wood Members

Samples representing wood structural members of the bridge exhibited total arsenic concentrations ranging from 130 to 3,000 mg/kg. Total chromium concentrations ranged from 140 to 5,500 mg/kg. Total copper was not detected at or above the laboratory reporting limits which ranged from 4.0 to 200 mg/kg. Pentachlorophenol was not detected above the laboratory reporting limit of 9,900 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Twenty-two SVOC TICs were detected at concentrations ranging from 1,000 to 250,000 $\mu\text{g}/\text{kg}$.

Further analysis of the eight samples that exceeded the 500 mg/kg TTLC for arsenic indicated TCLP arsenic concentrations ranging from 1.7 to 11 mg/l, with five of the samples exceeding the arsenic TCLP of 5.0 mg/l. In concurrence with Caltrans, no further analyses were requested.

Sample location numbers and wood member descriptions and a summary of the analytical laboratory test results are summarized on the attached tables. Reproductions of the laboratory reports and chain-of-custody documentation are also attached.

RECOMMENDATIONS

Asbestos

NESHAP regulations require that asbestos cement drainpipe (a Category II nonfriable material) identified during our survey be removed and disposed of prior to demolition or other activities that would disturb the material. Activities disturbing the material must be performed by a contractor registered with Cal/OSHA for asbestos related work, or a contractor who has received the Cal/OSHA asbestos-cement pipe training with current refreshers.

We also recommend the notification of contractors (that will be conducting demolition, renovation, or related activities) of the presence of asbestos in their work areas (i.e., provide the contractor[s] with a copy of this report and a list of asbestos removed by contractor[s] during subsequent abatement activities). Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Contractors are responsible for informing the landfill of the contractor's intent to dispose of asbestos waste. Some landfills and recycling facilities may require additional waste characterization. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

Written notification to the Mendocino County Air Quality Management District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Lead Paint

Yellow traffic striping represented by samples collected during our survey would be classified as California hazardous based on lead content if stripped, blasted, or otherwise separated from the substrate.

White paint (applied to wood railing) represented by samples collected during our survey would be classified as California and Federal hazardous based on lead content if stripped, blasted, or otherwise separated from the substrate.

We recommend that all paint at the project location be treated as lead-containing for purposes of determining the applicability of the Cal/OSHA lead standard during maintenance, renovation, and demolition activities. This recommendation is based on the fact that lead was a common ingredient of paints manufactured before 1978 and is still an ingredient of some paints. In accordance with Title 8, CCR §1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work. Compliance and training requirements regarding construction activities where workers may be exposed to lead are presented in Title 8, CCR §1532.1, subsections (e) and (l), respectively. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

Wood Members

Eight of twelve wood samples contained total arsenic and chromium concentrations greater than respective California TTLC hazardous waste threshold. Five of eight wood samples analyzed contained soluble arsenic concentrations greater than Federal RCRA TCLP hazardous waste threshold. The calculated mean, and 90% and 95% upper confidence limits (UCLs) for total arsenic and chromium exceed the California TTLC hazardous waste thresholds. No correlation could be made between total and TCLP soluble arsenic concentrations indicating significant sample heterogeneity.

Pentachlorophenol, a common wood preservative chemical, was not detected above the laboratory reporting limit for each wood sample analyzed. Twenty-two SVOC TICs representing wood treatment chemicals were detected. None of the SVOC TICs have corresponding hazardous waste thresholds or relevant disposal screening levels.

The reported arsenic and chromium concentrations in the wood samples collected during our survey exceed California and Federal RCRA hazardous waste thresholds. However, TTW is exempt from RCRA hazardous waste regulations, and DTSC's Alternative Management Standards allows for onsite reuse or disposal of TTW to non-hazardous waste landfills. The TTW may not be scavenged (salvaged), disposed of by burning or commingled with other wastes prior to disposal. The Cal/OSHA arsenic standard would apply during activities that disturb the material.

It is unknown whether the "salt treated by the Wolman method" stated in the 1949 bridge survey report refers to the same wood preservative product as the cancelled "Wolman Concentrate 72%." It is further unknown whether the "Wolman" FIFRA product cancellation has any impact on the applicability of DTSC's Alternative Management Standards. DTSC should be consulted to confirm the applicability of the Alternative Management Standards.

Caltrans has estimated the weight and volume of the wood members at the bridge to be 1,958 tons and 3,222 cubic yards, respectively. For budgetary planning purposes, we obtained a quote for the transportation and disposal of the wood members to an accepting landfill facility. NRC Environmental provided the following cost estimate information assuming the wood waste from the project is suitable for disposal under DTSC's Alternative Management Standards:

Loading/Bundling	\$130,000
Trucking (\$1,850/load)	\$259,000
Disposal fees (\$78/ton)	<u>\$152,724</u>
Total Non-haz Disposal	\$541,724

The following cost estimate was provided by NRC Environmental should the wood waste require disposal as a California hazardous waste (DTSC's Alternative Management Standards determined to be non-applicable):

Loading/Bundling	\$130,000
Trucking (\$2,500/load)	\$350,000
Disposal fees (\$90/ton)	<u>\$176,220</u>
Total CA Haz Disposal	\$656,220

The actual transportation and disposal costs will vary based on landfill acceptance criteria, the weight/volume of the wood waste requiring disposal and when the work is performed. A list of DTSC-approved landfills (current update July 2013) that accept TTW can be found at https://dtsc.ca.gov/PollutionPrevention/ToxicsInProducts/Treated_Wood_Waste.cfm.

REPORT LIMITATIONS

The asbestos and LCP survey was conducted in conformance with generally accepted standards of practice for identifying and evaluating asbestos and LCP in structures. The survey addressed only the structure identified above. Due to the nature of structure surveys, asbestos and LCP use, and laboratory analytical limitations, some ACM or LCP at the project location may not have been identified. Spaces such as cavities, voids, crawlspaces, and pipe chases may have been concealed to our investigator. Previous renovation work may have concealed or covered spaces or materials or may have partially demolished materials and left debris in inaccessible areas. Additionally, renovation activities may have partially replaced ACM with indistinguishable non-ACM. Asbestos and/or LCP may exist in areas of the structure that were not accessible or sampled in conjunction with this TO.

During renovation or demolition operations, suspect materials may be uncovered which are different from those accessible for sampling during this assessment. Personnel in charge of renovation/demolition should be alerted to note materials uncovered during such activities that differ substantially from those included in this or previous assessment reports. If suspect ACM and/or LCP are found, additional sampling and analysis should be performed to determine if the materials contain asbestos or lead.

This report has been prepared exclusively for Caltrans. The information contained herein is only valid as of the date of the report and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

Please contact us should you have any questions concerning the contents of this report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS INC.



David A. Watts, CAC No. 98-2404
Senior Project Scientist



John E. Juhrend, PE, CEG
Principal/Senior Engineer

(2 + 2 CDs) Addressee

Attachments: Figure 1, Vicinity Map
 Figure 2, Site Plan
 Site Photographs (1 through 9)
 Table 1, Summary of Wood Sample Analytical Results – Metals and
 Pentachlorophenol
 Table 2, Summary of Wood Sample Analytical Results – Semi-Volatile Organic
 Compounds – TICs
 CFR 261.4
 2008 DTSC TWW Fact Sheet
 1949 Supplementary Bridge Report
 Analytical Laboratory Reports and Chain-of-custody Documentation



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Albion River Bridge (Bridge 10-0136)

Mendocino County,
California

VICINITY MAP

GEOCON Proj. No. S9805-01-18
Task Order No. 18
E-FIS 01 0000 0127 0 (EA 01-366000)
Caltrans Contract 03A2132

June 2014

Figure 1



Photo 1 – Albion River Bridge (10-0136) in Mendocino County, California



Photo 2 – Bridge deck and barriers



Photo 3 – North abutment with asbestos drainpipe



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PHOTOGRAPHS 1, 2, & 3

Albion River Bridge
Mendocino County, California

S9805-01-18

June 2014



Photo 4 – Steel conduit (non-suspect)



Photo 5 – Wood decking, 12 by 12-inch timbers, and 6 by 18-inch timbers at the south abutment



Photo 6 – Levelling compound beneath a 12 by 12-inch timber near bent 4



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PHOTOGRAPHS 4, 5, & 6

Albion River Bridge
Mendocino County, California

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Photo 7 – Base of Bent 15 (12 by 12 and 3 by 18-inch timbers)



Photo 8 – Wood decking



Photo 9 – Wood decking, 12 by 12-inch timbers, and 6 by 18-inch timbers at the north abutment



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PHOTOGRAPHS 7, 8, & 9

Albion River Bridge
Mendocino County, California

S9805-01-18

June 2014

TABLE 1
 SUMMARY OF WOOD SAMPLE ANALYTICAL RESULTS - METALS AND PENTACHLOROPHENOL
 ALBION RIVER BRIDGE (10-0136)
 MENDOCINO COUNTY, CALIFORNIA

Sample Location No.	Sample ID/Description	Total Arsenic (mg/kg)	Soluble Arsenic - TCLP (mg/l)	Total Chromium (mg/kg)	Total Copper (mg/kg)	Pentachlorophenol (µg/kg)
1	ABUT 1 (DECKING) - CENTER	750	9.5	1,100	<8.0	<9,900
2	BENT 2 (DECKING) - LEFT	3,000	3.8	5,400	<200	<9,900
3	ABUT 35 (DECKING) - RIGHT	2,900	1.7	5,500	<20	<9,900
4	ABUT 35 (DECKING) - CENTER	650	3.3	1,100	<8.0	<9,900
5	BENT 3 (12X12) - CENTER	750	5.5	980	<8.0	<9,900
6	BENT 5 (12X12) - LEFT	220	---	170	<4.0	<9,900
7	BENT 15 (12X12) - RIGHT	2,000	5.1	3,500	<40	<9,900
8	BENT 32 (12X12) - RIGHT	410	---	140	<4.0	<9,900
9	ABUT 1 (6X18) - CENTER	240	---	200	<4.0	<9,900
10	BENT 3 (6X18) - CENTER	130	---	170	<4.0	<9,900
11	BENT 18 (3X18) - LEFT	1,200	7.9	2,100	<20	<9,900
12	BENT 34 (6X18) - RIGHT	2,800	11	4,300	<40	<9,900
MEAN		1,254	NC	2,055	NC	NC
90% UCL		1,658	NC	2,786	NC	NC
95% UCL		1,764	NC	3,016	NC	NC
TTLC		500	NA	2,500	2,500	NA
TCLP		NA	5	5	25	NA

Notes:

TCLP = Toxicity Characteristic Leaching Procedure

UCL = Upper Confidence Limit

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

NC = Not Calculated

NA = Not Applicable

Values in bold exceed TTLC and/or TCLP concentrations

mg/kg = milligrams per kilogram

mg/l = milligrams per liter

µg/kg = micrograms per kilogram

< = Less than the laboratory reporting limit

--- = Not Analyzed

TABLE 2
 SUMMARY OF WOOD SAMPLE ANALYTICAL RESULTS - SEMI-VOLATILE ORGANIC COMPOUNDS - TICs
 ALBION RIVER BRIDGE (10-0136)
 MENDOCINO COUNTY, CALIFORNIA

Sample Location ID	Sample Name	2,4-Dinitrophenol	Borneol	Ergost-7-en-3-beta-ol	Ergost-5-en-3-beta-ol	P-Cymene	beta-Sitosterol	gamma-Sitosterol	(Z)-9-Octadecenamide	alpha-Pinene	Gramisterol	Stigmast-4-en-3-one	1-Octadecenol	3b-Cyclooctacaleneol	1-Eicosanol	6-Phenylisovaleric acid	24-Methylenecyclooctanol	4-Methylphenol	O-Cymene	Vanillin	Oleic Acid	Dehydroabietic Acid	Ergostanol
1	ABUT 1 (DECKING) - CENTER	16,000	4,300	15,000	---	4,800	---	24,000	24,000	4,700	---	---	---	---	---	---	---	---	---	---	---	---	---
2	BENT 2 (DECKING) - LEFT	42,000	---	---	---	---	47,000	---	21,000	---	7,700	3,500	2,200	9,800	---	---	---	---	---	---	---	---	---
3	ABUT 35 (DECKING) - RIGHT	14,000	---	16,000	---	---	---	17,000	17,000	---	---	10,000	1,400	---	1,000	---	---	---	---	---	---	---	---
4	ABUT 35 (DECKING) - CENTER	---	---	32,000	---	---	---	---	4,700	---	---	---	---	---	---	21,000	---	---	---	---	---	---	---
5	BENT 3 (12X12) - CENTER	80,000	---	---	20,000	---	---	---	31,000	---	---	---	---	---	---	---	15,000	---	---	---	---	---	---
6	BENT 5 (12X12) - LEFT	23,000	---	---	18,000	---	---	28,000	14,000	11,000	---	---	---	---	---	---	---	3,100	---	---	---	---	---
7	BENT 15 (12X12) - RIGHT	11,000	---	23,000	---	---	---	25,000	15,000	---	9,300	12,000	---	---	---	---	---	---	---	---	---	---	---
8	BENT 32 (12X12) - RIGHT	---	---	---	---	---	---	---	31,000	2,800	---	---	---	---	---	---	---	---	3,100	---	---	---	---
9	ABUT 1 (6X18) - CENTER	---	---	---	19,000	---	---	---	20,000	---	---	---	3,500	---	---	---	---	---	---	2,400	---	---	---
10	BENT 3 (6X18) - CENTER	---	---	15,000	---	---	---	21,000	---	8,000	---	---	---	---	---	---	---	---	---	---	5,300	19,000	---
11	BENT 18 (3X18) - LEFT	20,000	---	---	19,000	---	---	43,000	---	---	6,500	---	---	---	---	---	---	---	---	---	8,000	---	6,600
12	BENT 34 (6X18) - RIGHT	250,000	---	18,000	---	---	---	24,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes: Results are in micrograms per kilogram
 TICs = Tentatively Identified Compounds
 < = Less than the laboratory reporting limit
 --- = Not Analyzed

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Title 40: Protection of Environment
 PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE
 Subpart A—General

§261.4 Exclusions.

- (a) *Materials which are not solid wastes.* The following materials are not solid wastes for the purpose of this part:
- (1)(i) Domestic sewage; and
- (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
- (2) Industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended.
- [*Comment:* This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]
- (3) Irrigation return flows.
- (4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq.*
- (5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.
- (6) Pulping liquors (*i.e.*, black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in §261.1(c) of this chapter.
- (7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in §261.1(c) of this chapter.
- (8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
- (i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
- (ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
- (iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and
- (iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.
- (9)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and
- (ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.
- (iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in paragraphs (a)(9)(i) and (a)(9)(ii) of this section, so long as they meet all of the following conditions:
- (A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in part 265, subpart W of this chapter, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator prepares a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records until closure of the facility. The exclusion applies so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the appropriate Regional Administrator or state Director for reinstatement. The Regional Administrator or state Director may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that the violations are not likely to recur.

(10) EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in section 261.24 of this part when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

(12)(i) Oil-bearing hazardous secondary materials (*i.e.*, sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911—including, but not limited to, distillation, catalytic cracking, fractionation, gasification (as defined in 40 CFR 260.10) or thermal cracking units (*i.e.*, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in paragraph (a)(12)(ii) of this section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (*i.e.*, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph (a)(12)(i), where such materials as generated would have otherwise met a listing under subpart D of this part, are designated as F037 listed wastes when disposed of or intended for disposal.

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph (a)(12)(i) of this section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172.) Recovered oil does not include oil-bearing hazardous wastes listed in subpart D of this part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in 40 CFR 279.1.

(13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(14) Shredded circuit boards being recycled provided that they are:

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.

(15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(16) Comparable fuels or comparable syngas fuels that meet the requirements of §261.38.

(17) Spent materials (as defined in §261.1) (other than hazardous wastes listed in subpart D of this part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that:

(i) The spent material is legitimately recycled to recover minerals, acids, cyanide, water or other values;

(ii) The spent material is not accumulated speculatively;

(iii) Except as provided in paragraph (a)(17)(iv) of this section, the spent material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 40 CFR 260.10), and be manufactured of a material suitable for containment of its

contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials.

(iv) The Regional Administrator or State Director may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads rather than tanks containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.

(A) The decision-maker must also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, air exposure pathways are: The volume and physical and chemical properties of the secondary material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

(B) Pads must meet the following minimum standards: Be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs.

(C) Before making a determination under this paragraph, the Regional Administrator or State Director must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

(v) The owner or operator provides notice to the Regional Administrator or State Director providing the following information: The types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

(vi) For purposes of paragraph (b)(7) of this section, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

(18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in §261.21) and/or toxicity for benzene (§261.24, waste code D018); and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in §261.1(c).

(20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied:

(i) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in §261.1 (c)(8).

(ii) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must:

(A) Submit a one-time notice to the Regional Administrator or State Director in whose jurisdiction the exclusion is being claimed, which contains the name, address and EPA ID number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this paragraph (a)(20).

(B) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and must have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound

condition. Containers that are stored outdoors must be managed within storage areas that:

(1) Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation; and

(2) Provide for effective drainage and removal of leaks, spills and accumulated precipitation; and

(3) Prevent run-on into the containment system.

(C) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of this paragraph (a)(20).

(D) Maintain at the generator's or intermediate handlers's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records must at a minimum contain the following information:

(1) Name of the transporter and date of the shipment;

(2) Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and

(3) Type and quantity of excluded secondary material in each shipment.

(iii) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must:

(A) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in paragraph (a)(20)(ii)(B) of this section.

(B) Submit a one-time notification to the Regional Administrator or State Director that, at a minimum, specifies the name, address and EPA ID number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this paragraph (a)(20).

(C) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

(D) Submit to the Regional Administrator or State Director an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process(s) from which they were generated.

(iv) Nothing in this section preempts, overrides or otherwise negates the provision in §262.11 of this chapter, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(v) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in paragraph (a)(20)(ii)(A) of this section, and that afterward will be used only to store hazardous secondary materials excluded under this paragraph, are not subject to the closure requirements of 40 CFR Parts 264 and 265.

(21) Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under paragraph (a)(20) of this section, provided that:

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

Constituent	Maximum Allowable Total Concentration in Fertilizer, per Unit (1%) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer must contain no more than eight (8) parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of paragraph (a)(21)(ii) of this section. Such records must at

a minimum include:

- (A) The dates and times product samples were taken, and the dates the samples were analyzed;
- (B) The names and qualifications of the person(s) taking the samples;
- (C) A description of the methods and equipment used to take the samples;
- (D) The name and address of the laboratory facility at which analyses of the samples were performed;
- (E) A description of the analytical methods used, including any cleanup and sample preparation methods; and
- (F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this paragraph (a)(21).

(22) Used cathode ray tubes (CRTs)

(i) Used, intact CRTs as defined in §260.10 of this chapter are not solid wastes within the United States unless they are disposed, or unless they are speculatively accumulated as defined in §261.1(c)(8) by CRT collectors or glass processors.

(ii) Used, intact CRTs as defined in §260.10 of this chapter are not solid wastes when exported for recycling provided that they meet the requirements of §261.40.

(iii) Used, broken CRTs as defined in §260.10 of this chapter are not solid wastes provided that they meet the requirements of §261.39.

(iv) Glass removed from CRTs is not a solid waste provided that it meets the requirements of §261.39(c).

(23) Hazardous secondary material generated and reclaimed within the United States or its territories and managed in land-based units as defined in §260.10 of this chapter is not a solid waste provided that:

- (i) The material is contained;
- (ii) The material is a hazardous secondary material generated and reclaimed under the control of the generator, as defined in §260.10;
- (iii) The material is not speculatively accumulated, as defined in §261.1(c)(8);
- (iv) The material is not otherwise subject to material-specific management conditions under paragraph (a) of this section when reclaimed, it is not a spent lead acid battery (see §266.80 and §273.2 of this chapter), and it does not meet the listing description for K171 or K172 in §261.32;
- (v) The reclamation of the material is legitimate, as specified under §260.43 of this chapter; and
- (vi) In addition, persons claiming the exclusion under this paragraph (a)(23) must provide notification as required by §260.42 of this chapter. (For hazardous secondary material managed in a non-land-based unit, see §261.2(a)(2)(ii)).

(24) Hazardous secondary material that is generated and then transferred to another person for the purpose of reclamation is not a solid waste, provided that:

- (i) The material is not speculatively accumulated, as defined in §261.1(c)(8);
- (ii) The material is not handled by any person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility or a reclaimer, and, while in transport, is not stored for more than 10 days at a transfer facility, as defined in §260.10 of this chapter, and is packaged according to applicable Department of Transportation regulations at 49 CFR Parts 173, 178, and 179 while in transport;
- (iii) The material is not otherwise subject to material-specific management conditions under paragraph (a) of this section when reclaimed, it is not a spent lead-acid battery (see §266.80 and §273.2 of this chapter), and it does not meet the listing description for K171 or K172 in §261.32;
- (iv) The reclamation of the material is legitimate, as specified under §260.43 of this chapter;
- (v) The hazardous secondary material generator satisfies all of the following conditions:
 - (A) The material must be contained.

(B) Prior to arranging for transport of hazardous secondary materials to a reclamation facility (or facilities) where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards, the hazardous secondary material generator must make reasonable efforts to ensure that each reclaimer intends to properly and legitimately reclaim the hazardous secondary material and not discard it, and that each reclaimer will manage the hazardous secondary material in a manner that is protective of human health and the environment. If the hazardous secondary material will be passing through an intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards, the hazardous secondary material generator must make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the hazardous secondary material generator, and the hazardous secondary material generator must perform reasonable efforts to ensure that the intermediate facility will manage the hazardous secondary material in a manner that is protective of human health and the environment. Reasonable efforts must be repeated at a minimum of every three years for the hazardous secondary material generator to claim the exclusion and to send the hazardous secondary materials to each

reclaimer and any intermediate facility. In making these reasonable efforts, the generator may use any credible evidence available, including information gathered by the hazardous secondary material generator, provided by the reclaimer or intermediate facility, and/or provided by a third party. The hazardous secondary material generator must affirmatively answer all of the following questions for each reclamation facility and any intermediate facility:

(1) Does the available information indicate that the reclamation process is legitimate pursuant to §260.43 of this chapter? In answering this question, the hazardous secondary material generator can rely on their existing knowledge of the physical and chemical properties of the hazardous secondary material, as well as information from other sources (e.g., the reclamation facility, audit reports, etc.) about the reclamation process. (By responding to this question, the hazardous secondary material generator has also satisfied its requirement in §260.43(a) of this chapter to be able to demonstrate that the recycling is legitimate).

(2) Does the publicly available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator notified the appropriate authorities of hazardous secondary materials reclamation activities pursuant to §260.42 of this chapter and have they notified the appropriate authorities that the financial assurance condition is satisfied per paragraph (a)(24)(vi)(F) of this section? In answering these questions, the hazardous secondary material generator can rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements per §260.42 of this chapter, including the requirement in §260.42(a)(5) to notify EPA whether the reclaimer or intermediate facility has financial assurance.

(3) Does publicly available information indicate that the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has not had any formal enforcement actions taken against the facility in the previous three years for violations of the RCRA hazardous waste regulations and has not been classified as a significant non-complier with RCRA Subtitle C? In answering this question, the hazardous secondary material generator can rely on the publicly available information from EPA or the state. If the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has had a formal enforcement action taken against the facility in the previous three years for violations of the RCRA hazardous waste regulations and has been classified as a significant non-complier with RCRA Subtitle C, does the hazardous secondary material generator have credible evidence that the facilities will manage the hazardous secondary materials properly? In answering this question, the hazardous secondary material generator can obtain additional information from EPA, the state, or the facility itself that the facility has addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the hazardous secondary materials.

(4) Does the available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator have the equipment and trained personnel to safely recycle the hazardous secondary material? In answering this question, the generator may rely on a description by the reclamation facility or by an independent third party of the equipment and trained personnel to be used to recycle the generator's hazardous secondary material.

(5) If residuals are generated from the reclamation of the excluded hazardous secondary materials, does the reclamation facility have the permits required (if any) to manage the residuals? If not, does the reclamation facility have a contract with an appropriately permitted facility to dispose of the residuals? If not, does the hazardous secondary material generator have credible evidence that the residuals will be managed in a manner that is protective of human health and the environment? In answering these questions, the hazardous secondary material generator can rely on publicly available information from EPA or the state, or information provided by the facility itself.

(C) The hazardous secondary material generator must maintain for a minimum of three years documentation and certification that reasonable efforts were made for each reclamation facility and, if applicable, intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards prior to transferring hazardous secondary material. Documentation and certification must be made available upon request by a regulatory authority within 72 hours, or within a longer period of time as specified by the regulatory authority. The certification statement must:

(1) Include the printed name and official title of an authorized representative of the hazardous secondary material generator company, the authorized representative's signature, and the date signed;

(2) Incorporate the following language: "I hereby certify in good faith and to the best of my knowledge that, prior to arranging for transport of excluded hazardous secondary materials to [insert name(s) of reclamation facility and any intermediate facility], reasonable efforts were made in accordance with §261.4(a)(24)(v)(B) to ensure that the hazardous secondary materials would be recycled legitimately, and otherwise managed in a manner that is protective of human health and the environment, and that such efforts were based on current and accurate information."

(D) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years records of all off-site shipments of hazardous secondary materials. For each shipment, these records must, at a minimum, contain the following information:

(1) Name of the transporter and date of the shipment;

(2) Name and address of each reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent;

(3) The type and quantity of hazardous secondary material in the shipment.

(E) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years confirmations of receipt from each reclaimer and, if applicable, each intermediate facility for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt); and

(vi) Reclaimers of hazardous secondary material excluded from regulation under this exclusion and intermediate facilities as defined in §260.10 of this chapter satisfy all of the following conditions:

(A) The reclaimer and intermediate facility must maintain at its facility for no less than three (3) years records of all shipments of hazardous secondary material that were received at the facility and, if applicable, for all shipments of hazardous secondary materials that were received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records must at a minimum contain the following information:

(1) Name of the transporter and date of the shipment;

(2) Name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility which the hazardous secondary materials were received from;

(3) The type and quantity of hazardous secondary material in the shipment; and

(4) For hazardous secondary materials that, after being received by the reclaimer or intermediate facility, were subsequently transferred off-site for further reclamation, the name and address of the (subsequent) reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent.

(B) The intermediate facility must send the hazardous secondary material to the reclaimer(s) designated by the hazardous secondary materials generator.

(C) The reclaimer and intermediate facility must send to the hazardous secondary material generator confirmations of receipt for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).

(D) The reclaimer and intermediate facility must manage the hazardous secondary material in a manner that is at least as protective as that employed for analogous raw material and must be contained. An "analogous raw material" is a raw material for which a hazardous secondary material is a substitute and serves the same function and has similar physical and chemical properties as the hazardous secondary material.

(E) Any residuals that are generated from reclamation processes will be managed in a manner that is protective of human health and the environment. If any residuals exhibit a hazardous characteristic according to subpart C of 40 CFR part 261, or if they themselves are specifically listed in subpart D of 40 CFR part 261, such residuals are hazardous wastes and must be managed in accordance with the applicable requirements of 40 CFR parts 260 through 272.

(F) The reclaimer and intermediate facility has financial assurance as required under subpart H of 40 CFR part 261.

(vii) In addition, all persons claiming the exclusion under this paragraph (a)(24) of this section must provide notification as required under §260.42 of this chapter.

(25) Hazardous secondary material that is exported from the United States and reclaimed at a reclamation facility located in a foreign country is not a solid waste, provided that the hazardous secondary material generator complies with the applicable requirements of paragraph (a)(24)(i)-(v) of this section (excepting paragraph (a)(v)(B)(2) of this section for foreign reclaimers and foreign intermediate facilities), and that the hazardous secondary material generator also complies with the following requirements:

(i) Notify EPA of an intended export before the hazardous secondary material is scheduled to leave the United States. A complete notification must be submitted at least sixty (60) days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the hazardous secondary material generator, and include the following information:

(A) Name, mailing address, telephone number and EPA ID number (if applicable) of the hazardous secondary material generator;

(B) A description of the hazardous secondary material and the EPA hazardous waste number that would apply if the hazardous secondary material was managed as hazardous waste and the U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous secondary material as identified in 49 CFR parts 171 through 177;

(C) The estimated frequency or rate at which the hazardous secondary material is to be exported and the period of time over which the hazardous secondary material is to be exported;

(D) The estimated total quantity of hazardous secondary material;

(E) All points of entry to and departure from each foreign country through which the hazardous secondary material will pass;

(F) A description of the means by which each shipment of the hazardous secondary material will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.);

(G) A description of the manner in which the hazardous secondary material will be reclaimed in the receiving country;

(H) The name and address of the reclaimer, any intermediate facility and any alternate reclaimer and intermediate

facilities; and

(I) The name of any transit countries through which the hazardous secondary material will be sent and a description of the approximate length of time it will remain in such countries and the nature of its handling while there (for purposes of this section, the terms "Acknowledgement of Consent", "receiving country" and "transit country" are used as defined in 40 CFR 262.51 with the exception that the terms in this section refer to hazardous secondary materials, rather than hazardous waste):

(ii) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered notifications should be delivered to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export."

(iii) Except for changes to the telephone number in paragraph (a)(25)(i)(A) of this section and decreases in the quantity of hazardous secondary material indicated pursuant to paragraph (a)(25)(i)(D) of this section, when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous secondary material specified in the original notification), the hazardous secondary material generator must provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to paragraph (a)(25)(i)(I) of this section and in the ports of entry to and departure from transit countries pursuant to paragraphs (a)(25)(i)(E) of this section) has been obtained and the hazardous secondary material generator receives from EPA an Acknowledgment of Consent reflecting the receiving country's consent to the changes.

(iv) Upon request by EPA, the hazardous secondary material generator shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(v) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of paragraph (a)(25)(i) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by paragraph (a)(25)(i) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(vi) The export of hazardous secondary material under this paragraph (a)(25) is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the hazardous secondary material, EPA will send an Acknowledgment of Consent to the hazardous secondary material generator. Where the receiving country objects to receipt of the hazardous secondary material or withdraws a prior consent, EPA will notify the hazardous secondary material generator in writing. EPA will also notify the hazardous secondary material generator of any responses from transit countries.

(vii) For exports to OECD Member countries, the receiving country may respond to the notification using tacit consent. If no objection has been lodged by any receiving country or transit countries to a notification provided pursuant to paragraph (a)(25)(i) of this section within thirty (30) days after the date of issuance of the acknowledgement of receipt of notification by the competent authority of the receiving country, the transboundary movement may commence. In such cases, EPA will send an Acknowledgment of Consent to inform the hazardous secondary material generator that the receiving country and any relevant transit countries have not objected to the shipment, and are thus presumed to have consented tacitly. Tacit consent expires one (1) calendar year after the close of the thirty (30) day period; renotification and renewal of all consents is required for exports after that date.

(viii) A copy of the Acknowledgment of Consent must accompany the shipment. The shipment must conform to the terms of the Acknowledgment of Consent.

(ix) If a shipment cannot be delivered for any reason to the reclaimer, intermediate facility or the alternate reclaimer or alternate intermediate facility, the hazardous secondary material generator must re-notify EPA of a change in the conditions of the original notification to allow shipment to a new reclaimer in accordance with paragraph (iii) of this section and obtain another Acknowledgment of Consent.

(x) Hazardous secondary material generators must keep a copy of each notification of intent to export and each Acknowledgment of Consent for a period of three years following receipt of the Acknowledgment of Consent.

(xi) Hazardous secondary material generators must file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency and ultimate destination of all hazardous secondary materials exported during the previous calendar year. Annual reports submitted by mail should be sent to the following address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered reports should be delivered to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004. Such reports must include the following information:

(A) Name, mailing and site address, and EPA ID number (if applicable) of the hazardous secondary material generator;

(B) The calendar year covered by the report;

(C) The name and site address of each reclaimer and intermediate facility;

(D) By reclaimer and intermediate facility, for each hazardous secondary material exported, a description of the

hazardous secondary material and the EPA hazardous waste number that would apply if the hazardous secondary material was managed as hazardous waste, DOT hazard class, the name and U.S. EPA ID number (where applicable) for each transporter used, the total amount of hazardous secondary material shipped and the number of shipments pursuant to each notification;

(E) A certification signed by the hazardous secondary material generator which states: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

(xii) All persons claiming an exclusion under this paragraph (a)(25) must provide notification as required by §260.42 of this chapter.

(26) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that

(i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

(ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;

(iii) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes must contain no free liquids as defined in §260.10 of this chapter.

(iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 40 CFR parts 260 through 273;

(v) Generators must maintain at their site the following documentation:

(A) Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;

(B) Documentation that the 180-day accumulation time limit in 40 CFR 261.4(a)(26)(ii) is being met;

(C) Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning;

(vi) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.

(b) *Solid wastes which are not hazardous wastes.* The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle, if such facility:

(i) Receives and burns only

(A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources) and

(B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

(ii) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste, generated primarily from the combustion of coal or other fossil fuels, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6)(i) Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in subpart D due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(B) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(C) The waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in paragraphs (b)(6)(i) (A), (B), and (C) (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

(A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(F) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(H) Wastewater treatment sludges from the production of TiO₂ pigment using chromium-bearing ores by the chloride process.

(7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.

(i) For purposes of §261.4(b)(7) beneficiation of ores and minerals is restricted to the following activities; crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching.

(ii) For the purposes of §261.4(b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:

(A) Slag from primary copper processing;

(B) Slag from primary lead processing;

(C) Red and brown muds from bauxite refining;

(D) Phosphogypsum from phosphoric acid production;

(E) Slag from elemental phosphorus production;

(F) Gasifier ash from coal gasification;

(G) Process wastewater from coal gasification;

(H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;

(I) Slag tailings from primary copper processing;

(J) Fluorogypsum from hydrofluoric acid production;

(K) Process wastewater from hydrofluoric acid production;

- (L) Air pollution control dust/sludge from iron blast furnaces;
 - (M) Iron blast furnace slag;
 - (N) Treated residue from roasting/leaching of chrome ore;
 - (O) Process wastewater from primary magnesium processing by the anhydrous process;
 - (P) Process wastewater from phosphoric acid production;
 - (Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
 - (R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
 - (S) Chloride process waste solids from titanium tetrachloride production;
 - (T) Slag from primary zinc processing.
- (iii) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under paragraph (b) of this section if the owner or operator:
- (A) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and,
 - (B) Legitimately reclaims the secondary mineral processing materials.
- (8) Cement kiln dust waste, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
- (9) Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- (10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of §261.24 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under part 280 of this chapter.
- (11) Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) in §261.24 of this part that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until [insert date six months after publication]. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:
- (i) Operations are performed pursuant to a written state agreement that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed; and
 - (ii) A copy of the written agreement has been submitted to: Waste Identification Branch (5304), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.
- (12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- (13) Non-terne plated used oil filters that are not mixed with wastes listed in subpart D of this part if these oil filters have been gravity hot-drained using one of the following methods:
- (i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
 - (ii) Hot-draining and crushing;
 - (iii) Dismantling and hot-draining; or
 - (iv) Any other equivalent hot-draining method that will remove used oil.
- (14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:
- (i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, K178 and K181 if these wastes had been generated after the effective date of the listing;
 - (ii) The solid wastes described in paragraph (b)(15)(i) of this section were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169-K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. As of November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph (b)(15)(v) after the emergency ends.

(16) [Reserved]

(17) Solid waste that would otherwise meet the definition of low-level mixed wastes (LLMW) pursuant to §266.210 of this chapter that is generated at the Ortho-McNeil Pharmaceutical, Inc. (OMP Spring House) research and development facility in Spring House, Pennsylvania and treated on-site using a bench-scale high temperature catalytic oxidation unit is not a hazardous waste provided that:

(i) The total volume of LLMW generated and treated is no greater than 50 liters/year, (ii) OMP Spring House submits a written report to the EPA Region III office once every six months beginning six months after June 27, 2005, that must contain the following:

(A) Analysis demonstrating the destruction and removal efficiency of the treatment technology for all organic components of the wastestream,

(B) Analysis demonstrating the capture efficiencies of the treatment technology for all radioactive components of the wastestream and an estimate of the amount of radioactivity released during the reporting period,

(C) Analysis (including concentrations of constituents, including inorganic constituents, present and radioactivity) of the wastestream prior to and after treatment,

(D) Volume of the wastestream being treated per batch, as well as a total for the duration of the reporting period, and

(E) Final disposition of the radioactive residuals from the treatment of the wastestream.

(iii) OMP Spring House makes no significant changes to the design or operation of the high temperature catalytic oxidation unit or the wastestream.

(iv) This exclusion will remain in affect for 5 years from June 27, 2005.

(18) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that

(i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

(ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;

(iii) At the point of being transported for disposal, the solvent-contaminated wipes must contain no free liquids as defined in §260.10 of this chapter.

(iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 40 CFR parts 260 through 273;

(v) Generators must maintain at their site the following documentation:

(A) Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;

(B) Documentation that the 180 day accumulation time limit in 40 CFR 261.4(b)(18)(ii) is being met;

(C) Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal;

(vi) The solvent-contaminated wipes are sent for disposal

(A) To a municipal solid waste landfill regulated under 40 CFR part 258, including 40 CFR 258.40, or to a hazardous waste landfill regulated under 40 CFR parts 264 or 265; or

(B) To a municipal waste combustor or other combustion facility regulated under section 129 of the Clean Air Act or to a hazardous waste combustor, boiler, or industrial furnace regulated under 40 CFR parts 264, 265, or 266 subpart H.

(c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under parts 262 through 265, 268, 270, 271 and 124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

(d) *Samples.* (1) Except as provided in paragraph (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this part or parts 262 through 268 or part 270 or part 124 of this chapter or to the notification requirements of section 3010 of RCRA, when:

- (i) The sample is being transported to a laboratory for the purpose of testing; or
- (ii) The sample is being transported back to the sample collector after testing; or
- (iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or
- (iv) The sample is being stored in a laboratory before testing; or
- (v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
- (vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(2) In order to qualify for the exemption in paragraphs (d)(1) (i) and (ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

- (i) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
- (ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

(A) Assure that the following information accompanies the sample:

- (1) The sample collector's name, mailing address, and telephone number;
- (2) The laboratory's name, mailing address, and telephone number;
- (3) The quantity of the sample;
- (4) The date of shipment; and
- (5) A description of the sample.

(B) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in paragraph (d)(1) of this section.

(e) *Treatability Study Samples.* (1) Except as provided in paragraph (e)(2) of this section, persons who generate or collect samples for the purpose of conducting treatability studies as defined in section 260.10, are not subject to any requirement of parts 261 through 263 of this chapter or to the notification requirements of Section 3010 of RCRA, nor are such samples included in the quantity determinations of §261.5 and §262.34(d) when:

- (i) The sample is being collected and prepared for transportation by the generator or sample collector; or
- (ii) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or
- (iii) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

(2) The exemption in paragraph (e)(1) of this section is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(i) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and

(ii) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste; and

(iii) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and

the requirements of paragraph A or B of this subparagraph are met.

(A) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(B) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

- (1) The name, mailing address, and telephone number of the originator of the sample;
- (2) The name, address, and telephone number of the facility that will perform the treatability study;
- (3) The quantity of the sample;
- (4) The date of shipment; and
- (5) A description of the sample, including its EPA Hazardous Waste Number.

(iv) The sample is shipped to a laboratory or testing facility which is exempt under §261.4(f) or has an appropriate RCRA permit or interim status.

(v) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:

- (A) Copies of the shipping documents;
- (B) A copy of the contract with the facility conducting the treatability study;
- (C) Documentation showing:
 - (1) The amount of waste shipped under this exemption;
 - (2) The name, address, and EPA identification number of the laboratory or testing facility that received the waste;
 - (3) The date the shipment was made; and
 - (4) Whether or not unused samples and residues were returned to the generator.
- (vi) The generator reports the information required under paragraph (e)(2)(v)(C) of this section in its biennial report.

(3) The Regional Administrator may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Regional Administrator may grant requests on a case-by-case basis for quantity limits in excess of those specified in paragraphs (e)(2) (i) and (ii) and (f)(4) of this section, for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste and 1 kg of acute hazardous waste:

(i) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.

(ii) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(iii) The additional quantities and timeframes allowed in paragraph (e)(3) (i) and (ii) of this section are subject to all the provisions in paragraphs (e) (1) and (e)(2) (iii) through (vi) of this section. The generator or sample collector must apply to the Regional Administrator in the Region where the sample is collected and provide in writing the following information:

(A) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed;

(B) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results on each treatability study;

(C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(D) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(E) Such other information that the Regional Administrator considers necessary.

(f) *Samples Undergoing Treatability Studies at Laboratories and Testing Facilities.* Samples undergoing treatability

studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this part, part 124, parts 262-266, 268, and 270, or to the notification requirements of Section 3010 of RCRA provided that the conditions of paragraphs (f) (1) through (11) of this section are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraphs (f) (1) through (11) of this section. Where a group of MTUs are located at the same site, the limitations specified in (f) (1) through (11) of this section apply to the entire group of MTUs collectively as if the group were one MTU.

(1) No less than 45 days before conducting treatability studies, the facility notifies the Regional Administrator, or State Director (if located in an authorized State), in writing that it intends to conduct treatability studies under this paragraph.

(2) The laboratory or testing facility conducting the treatability study has an EPA identification number.

(3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.

(5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

(6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

(7) The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

- (i) The name, address, and EPA identification number of the generator or sample collector of each waste sample;
- (ii) The date the shipment was received;
- (iii) The quantity of waste accepted;
- (iv) The quantity of "as received" waste in storage each day;
- (v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
- (vi) The date the treatability study was concluded;
- (vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

(8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.

(9) The facility prepares and submits a report to the Regional Administrator, or state Director (if located in an authorized state), by March 15 of each year, that includes the following information for the previous calendar year:

- (i) The name, address, and EPA identification number of the facility conducting the treatability studies;
- (ii) The types (by process) of treatability studies conducted;
- (iii) The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);
- (iv) The total quantity of waste in storage each day;
- (v) The quantity and types of waste subjected to treatability studies;
- (vi) When each treatability study was conducted;
- (vii) The final disposition of residues and unused sample from each treatability study.

(10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under §261.3 and, if so, are subject to parts 261 through 268, and part 270 of this chapter, unless the residues and unused samples are returned to the sample originator under the §261.4(e) exemption.

(11) The facility notifies the Regional Administrator, or State Director (if located in an authorized State), by letter

when the facility is no longer planning to conduct any treatability studies at the site.

(g) *Dredged material that is not a hazardous waste.* Dredged material that is subject to the requirements of a permit that has been issued under 404 of the Federal Water Pollution Control Act (33 U.S.C.1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For this paragraph (g), the following definitions apply:

(1) The term *dredged material* has the same meaning as defined in 40 CFR 232.2;

(2) The term *permit* means:

(i) A permit issued by the U.S. Army Corps of Engineers (Corps) or an approved State under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) A permit issued by the Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of Corps civil works projects, the administrative equivalent of the permits referred to in paragraphs (g)(2)(i) and (ii) of this section, as provided for in Corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

(h) *Carbon dioxide stream injected for geologic sequestration.* Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI Underground Injection Control wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act, are not a hazardous waste, provided the following conditions are met:

(1) Transportation of the carbon dioxide stream must be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190-199) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable.

(2) Injection of the carbon dioxide stream must be in compliance with the applicable requirements for Class VI Underground Injection Control wells, including the applicable requirements in 40 CFR Parts 144 and 146;

(3) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

(4)(i) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this paragraph (h), must have an authorized representative (as defined in 40 CFR 260.10) sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 40 CFR 261.4(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with) Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190-199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of the Safe Drinking Water Act.

(ii) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under paragraph (h) of this section, must have an authorized representative (as defined in 40 CFR 260.10) sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 40 CFR 261.4(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the Underground Injection Control (UIC) Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 40 CFR Parts 144 and 146.

(iii) The signed certification statement must be kept on-site for no less than three years, and must be made available within 72 hours of a written request from the Administrator, Regional Administrator, or state Director (if located in an authorized state), or their designee. The signed certification statement must be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in 40 CFR 260.10) annually prepare and sign a new copy of the certification statement within one year of the date of the previous statement. The signed certification statement must also be readily accessible on the facility's publicly-available Web site (if such Web site exists) as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

[45 FR 33119, May 19, 1980]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §261.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

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Department of
Toxic Substances
Control

*Our Mission is
to provide the
highest level of
safety, and to
protect public
health and the
environment
from toxic
harm.*



State of California



California
Environmental
Protection Agency

Fact Sheet, December 2008

Requirements for Generators of Treated Wood Waste (TWW)

What is Treated Wood Waste (TWW)?

TWW is wood commonly used in ground or water contact applications that has been removed from service. This wood is typically treated with preserving chemicals that protect the wood from insect attack and fungal decay during its use. Examples include fence posts, sill plates, landscape timbers, pilings, guardrails, and decking.

What are the Health and Environmental Hazards?

TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW, or from inhalation or ingestion of TWW particulate (e.g., sawdust and smoke).

What are the Hazardous Waste/Alternative Management Standards (AMS)?

Because TWW contains hazardous chemicals, at elevated levels, it is subject to California's Hazardous Waste Control Law. The Department of Toxic Substances Control (DTSC) has developed alternative management standards (AMS) for TWW that are based upon full hazardous waste requirements but are adjusted for the unique circumstances associated with TWW. The AMS is in California Code Regulations (Cal. Code Regs.) title 22, division 4.5, chapter 34. In summary, AMS lessen storage requirements, extend accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific non-hazardous waste landfills. The AMS simplify and facilitate the safe and economical disposal of TWW. (Note -TWW that is removed from utility services or is a RCRA hazardous waste is not eligible for AMS.)

What are the Handling and Disposal Requirements for TWW?

The AMS, which went into effect on July 1, 2007, are intended to ease regulatory burdens. Although hazardous waste generators are required to properly classify their waste through knowledge or laboratory analysis, generators of TWW can presume their TWW is hazardous waste and avoid expensive laboratory testing. Generators can then manage their waste in accordance with the AMS, including disposal at certain non-hazardous waste landfills. Upon acceptance at these certain landfills, the TWW, at that point, becomes non-hazardous waste pursuant to Health and Safety Code section 25150.8. Specific generator requirements for households, small business, and all others are presented in the following sections:



Households.

Households typically generate TWW when a fence or deck is replaced. Under AMS, households must:

1. Keep TWW segregated from other materials.
2. Store less than 1,000 pounds of TWW for no more than 30 days following its removal from use.
3. Transport TWW to an authorized TWW facility. If the TWW is going to a Household Hazardous Waste (HHW) Collection Center, call and confirm the acceptance of TWW (not all HHW Collection Centers handle treated wood waste or can only collect limited amounts).
4. Identify TWW to TWW facility personnel.

It is important to note that the AMS also prohibit TWW from being burned, chipped, ground, or mulched. TWW stored for more than 30 days would invoke additional requirements on households that apply to businesses.

Businesses generating TWW incidental to the normal course of business.

Incidental generation occurs when a business generates TWW as a result of activities not associated with the business's core operation. For example, a retail store, a doctor's office, or an auto body repair shop might generate TWW when repairing or replacing signage or fencing at their place of business. This TWW is considered "incidentally generated" because these businesses are not routinely involved in construction, demolition, or other activities that involve treated wood. Under AMS, businesses that "incidentally" generate TWW can generally comply with handling and disposal requirements by:

1. Keeping TWW segregated from other materials.
2. Labeling all TWW bundle/shipments with the following information.

TREATED WOOD WASTE – Do not burn or scavenge.

TWW Handler

Name: _____

Address: _____

Accumulation Date: _____

3. Storing no more than 1,000 pounds of TWW for no longer than 30 days. Incidental generators who store TWW for more than 30 days are subject to the additional requirements for businesses that are routine generators of TWW.
4. Transporting TWW to an authorized TWW facility.
5. Identifying TWW to TWW facility personnel.

Businesses generating TWW during the normal course of business.

Businesses that generate, handle, or accumulate more than 1,000 pounds of TWW in 30 days engaged in activities expected to routinely generate or handle TWW, such as, construction/demolition contractors, and business and homeowners generating large quantities (i.e., accumulating more than 1,000 pounds in 30 days) must meet the requirements listed below. In complying with the TWW AMS, these businesses will minimize their liability concerns and eliminate possible future cleanup cost associated with mismanagement of TWW.

1. Get prior confirmation that the solid waste facility or hazardous waste facility will accept TWW shipment. Not all facilities accept TWW, so check with the facility before transporting to ensure that their load will not be rejected. (Cal. Code Regs., tit. 22, § 67386.7(b)).
2. Store TWW off the ground by placing it on blocks, on concrete surfaces, or in containers. Movement of large quantities of TWW can be facilitated by bailing and or palletizing TWW, which may also prevent ground contact. (Cal. Code Regs., tit. 22, § 67386.6(a)).
3. Do not store TWW beyond the allowed limits (90 days – block and tarp, 180 days – containment pad, 1 year – container and storage building). (Cal. Code Regs., tit. 22, § 67386.6(a)(2)).
4. Cover TWW during inclement weather to prevent rain water from leaching chemicals out of the TWW. (Cal. Code Regs., tit. 22, § 67386.6 (a)(2)).
5. Accumulate TWW away from public access. (Cal. Code Regs., tit. 22, § 67386.6(a)(1)).
6. Do not burn TWW. It is illegal to burn TWW without a hazardous waste permit. (Cal. Code Regs., tit. 22, § 67386.3(a)(1))

7. Contact DTSC if planning to reuse the removed TWW to ensure compliance with existing hazardous waste laws. (Cal. Code Regs., tit. 22, § 67386.3(c)).
8. Keep TWW from mixing with other waste. (Cal. Code Regs., tit. 22, § 67386.3(a)(3)).
9. Label all TWW bundle/shipments with the following information. (Cal. Code Regs., tit. 22, § 67386.5(b)).

<p><i>TREATED WOOD WASTE – Do not burn or scavenge.</i></p> <p><i>TWW Handler</i></p> <p><i>Name:</i> _____</p> <p><i>Address:</i> _____</p> <p><i>Accumulation Date:</i> _____</p>
--

10. Keep records for at least three years from date of shipment or receipt to demonstrate that TWW was properly managed. Records should include: (1) name and address of the TWW facility to which the TWW was sent; (2) estimated weight of TWW, or the weight of the TWW as measured by the receiving TWW facility; and (3) date of the shipment of TWW. (Cal. Code Regs., tit. 22, §§ 67386.8(a) and (e)(1)).
11. Notify DTSC within 30 days if generating more than 10,000 pounds of TWW per calendar year. See the listings at the end of this fact sheet for the online notification web site.

The following information must be submitted: (1) name and mailing address; (2) Identification Number; (3) name and telephone number of the TWW contact person; (4) address or physical location of the TWW management activities; (5) date exceeding the 10,000 pound limit; and (6) a statement indicating that the business is generating more than 10,000 pounds of TWW per calendar year. An Identification Number can be obtained by calling 1-800-618-6942. (Cal. Code Regs., tit. 22, § 67386.9).
12. Arrange for shipment to a TWW facility. Disposal is allowed at a hazardous waste landfill or a qualified solid waste landfill. See the listings at the end of the fact sheet for information on facilities that have been authorized to accept TWW. Contact the TWW

facility to obtain costs as they may be adjusted based upon volume. (Cal. Code Regs., tit. 22, § 67386.11).

13. Train employees involved in TWW handling and keep the training records for three years. The training shall include applicable requirements of Cal/OSHA and regulations relating to hazardous waste, methods for identifying and segregating TWW, safe handling practices, requirements of AMS; and proper disposal methods. (Cal. Code Regs., tit. 22, § 67386.12(a)).

Frequently Asked Questions (FAQs)

- Q:** Does TWW need to be transported with a hazardous waste manifest or use a hazardous waste hauler?
- A:** No, you can transport TWW using a shipping document, bill of lading, or invoice as documentation and you can use any hauler to transport your TWW off-site.
- Q:** What information needs to be provided to TWW facility personnel?
- A:** ID Number or site name, address, contact person's name, phone, and mailing address.
- Q:** Can I reuse my TWW after its initial removal from service?
- A:** Yes, with the restriction that you use it on-site for its intended use and if you store it no longer than the allowed time limits.
- Q:** Am I allowed to cut TWW?
- A:** Yes, but solely for resizing to accommodate for shipping limitations. Any sawdust must be captured and managed as TWW.
- Q:** Is it possible that creosote treated wood waste becomes a hazardous waste?
- A:** Yes, a generator is required to properly classify the waste through knowledge or laboratory analyses.
- Q:** Am I charged the fees for generating TWW?
- A:** Yes, TWW is considered to be hazardous waste prior to the point of acceptance at authorized solid waste landfills and therefore is subject to generator fees. For further information, you can contact our Fees Unit at (916) 322-2448 or Environmental Fees Division of Board of Equalization at (916)-323-9555.
- Q:** What facilities are authorized to accept TWW?
- A:** See listings at the end of the fact sheet.

Additional Information

For more information on TWW requirements, call the Regulatory Assistance Officers at: (800) 72TOXIC (1-800-728-6942) or (916) 255-3618 if you are calling from outside of California.

For Identification Number issuances contact DTSC at: (800) 618-6942.

Treated Wood Waste Web Page Listings

The following items are found on our TWW Web page at:

http://www.dtsc.ca.gov/HazardousWaste/Treated_Wood_Waste.cfm

Final Regulations

Regulatory Background

Treated Wood Waste Tracking System (TWWTS)

Treated Wood Waste Online Notification Form

Permanent Identification Number Form

Treated Wood Waste Training Materials

Fact Sheets and Other Information on Treated Wood Waste

Sampling and Analysis Study of Treated Wood

List of Landfills That Accept Treated Wood Waste

Caution:

This fact sheet is intended as a basic overview and guidance document for the management of TWW. It does not replace or supersede Federal or State statutes and regulations.

SUPPLEMENTARY BRIDGE REPORT

Date of Investigation January 25, 1949

Name ALBION RIVER I-Man-56-D
43.2
Location 45.7 miles north of Sonoma County line. Dist.-Co.-Rt.-Sec.

Reference is made to the bridge inspection report dated August 18, 1944.

CONDITION OF BRIDGE

Timber members of bents and trusses - As stated in the previous report, "All the timber members are of Douglas Fir salt treated by the Wolman method."

Many of the wheelguard timbers, bent columns and outside lines of stringers are checked to such an extent that the checks extend inward for a distance of from one-fourth to one-third of the thickness of the member. The checks are likely places for water to collect and cause decay of the members.

Some of the other timber members are checked, but to a lesser degree.

Many of timber members have shrunk cross wise with the grain to the extent that a great number of the joints in the bents and trusses, also those between the braces and the columns and caps, which were tight immediately after the bridge was completed, are now open in varying amounts up to three-eighths of an inch (3/8").

The split rings, which can be seen by looking into many of the open joints, now do not act as intended.

Paint on structural steel members - The structural steel members were painted in May to July 1944, with one "prime coat of No. 1 red lead, a second coat of red lead metal lead and a finish coat of dull black."

"Due to the very windy conditions, the paint could not be applied satisfactorily by spraying, much paint being lost and the coating being either too thin or so thick that the paint would run...", for which reason future specifications for

cc: T. H. Dennis
G. F. Hellesoe
G. F. Hellesoe for E. J. Smart

BRIDGE No. 10-136

SHEET 2

DATE January 25, 1949

repainting the structure should require that all paint be applied with a brush, except for those few locations which cannot be reached with a brush.

A great amount of rust has now broken through the paint on practically all of the structural steel members.

It is necessary that the entire surface area of all the structural steel members be cleaned with a sandblast and repainted at the earliest possible date, but not later than within the year 1949.

Floor - The riding qualities of the bridge floor have gradually deteriorated since the structure was first opened to traffic, possibly because of high joints, or increased deflections in the stringers.

The floor now seems to be more rough riding than it was after the wearing surface was first placed.

Otherwise, - the structure is in good condition. There are no defects in any of the other members that are in need of being repaired.

RECOMMENDATIONS

RECOMMENDATIONS FOR REPAIRS

Check all the nuts on all the bolts on all the timber bents and all the timbertruss spans.

Tighten all the nuts that are loose, also all those where joints between the timbers have opened, because of shrinkage of the timber, to bring all the timbers in all the joints tightly together.

Assign only those men to the job who are used to working at considerable heights above the ground.

Make certain to take all precautions in every way that is necessary to provide adequately for the safety of those who are assigned to the work.

Estimated Cost

\$ 1700.00

RECOMMENDATION FOR PAINTING TO BE DONE BY CONTRACT WITHIN THE YEAR 1949.

Clean the entire surface area of all of the structural steel members with a sandblast and heat in a way that will

BRIDGE No. 10-136
SHEET B
DATE January 25, 1949

remove all rust, paint, dirt, salt and all other injurious materials, then re-paint them with three coats of red lead and oil paint and one coat of No. 3-C Finishing Coat (graphite-dull black) and with a brush.

Estimated cost - to be made by the Bridge Design Department.

Albert A. Lernhart

Albert A. Lernhart

DONE 8-5-49
W.O. 1119-2
COST 1571.26

This was for tightening bolts which took 20± working days 5 days John Miller, (Br. Maint. Foreman now. Was carpenter then) 1/26/49



EMSL Analytical, Inc

2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577

Phone/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com>

sanleandrolab@emsl.com

EMSL Order:	091407291
CustomerID:	GECN21
CustomerPO:	03A2132
ProjectID:	

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street

Livermore, CA 94550

Phone: (925) 371-5900
 Fax: (925) 371-5915
 Received: 05/16/14 9:00 AM
 Analysis Date: 5/22/2014
 Collected: 5/13/2014

Project: **03A2132 ALBION RIVER S9805-01-18**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A-Concrete <i>091407291-0001</i>		Gray Non-Fibrous Homogeneous		20% Quartz 30% Ca Carbonate 50% Non-fibrous (other)	None Detected
1B-Concrete <i>091407291-0002</i>		Gray Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-fibrous (other)	None Detected
2A-Drain Pipe <i>091407291-0003</i>		Gray/White/Blue Fibrous Homogeneous		40% Ca Carbonate 30% Non-fibrous (other)	20% Chrysotile 10% Crocidolite
2B <i>091407291-0004</i>					Stop Positive (Not Analyzed)
3A-Leveling Compound <i>091407291-0005</i>		Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (other)	None Detected
3B-Leveling Compound <i>091407291-0006</i>		Gray Non-Fibrous Homogeneous		20% Quartz 30% Ca Carbonate 50% Non-fibrous (other)	None Detected

Analyst(s)
 Amber Albon (2)
 Matthew Batongbacal (3)


 Israel Gutierrez
 or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
 Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from 05/22/2014 11:02:48



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

NO 091407291

03A2132

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: <u>GEOCON</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>6671 BRISA ST</u>		Third Party Billing requires written authorization from third party	
City: <u>LIVERMORE</u>	State/Province: <u>CA</u>	Zip/Postal Code: <u>94550</u>	Country: <u>USA</u>
Report To (Name): <u>D. WATTS</u>		Fax #: <u>925-371-5900</u>	
Telephone #: <u>925-371-5915</u>		Email Address: <u>WATTS@GEOCONINC.COM</u>	
Project Name/Number: <u>ALBION RIVER 59805-01-18</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken: <u>CA</u>

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)
PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5	Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)
TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking		Other: <input type="checkbox"/>

Check For Positive Stop - Clearly Identify Homogenous Group 7190 - Any Layer

Samplers Name: D. WATTS Samplers Signature: [Signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
<u>1A/B</u>	<u>CONCRETE</u>	<u>NA</u>	<u>5/13/14</u>
<u>2 ↓</u>	<u>DRAIN PIPE</u>	<u>↓</u>	<u>↓</u>
<u>3 ↓</u>	<u>LEVELLING COMPOUND</u>	<u>↓</u>	<u>↓</u>

Client Sample # (s):	-	Total # of Samples:	<u>6</u>
Relinquished (Client):	<u>[Signature]</u>	Date:	<u>5/14/14</u>
Received (Lab):	<u>REV EX</u>	Date:	<u>5/14/14</u>
Comments/Special Instructions:	<u>Recon 5-16</u>	Time:	<u>1600</u> <u>1600</u> <u>9:00am</u>

June 17, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1401440
Client Reference : ALBION RIVER BRIDGE, S9805-01-18

Enclosed are the results for sample(s) received on May 15, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,



Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P1A/B	1401440-01	Paint	5/13/14 0:00	5/15/14 9:40
P2A/B	1401440-02	Paint	5/13/14 0:00	5/15/14 9:40
P3A/B	1401440-03	Paint	5/13/14 0:00	5/15/14 9:40
ABUT 1 (DECKING)-CENTER	1401440-04	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 2 (DECKING)-LEFT	1401440-05	Wood Preservative	5/13/14 0:00	5/15/14 9:40
ABUT 35 (DECKING)-RIGHT	1401440-06	Wood Preservative	5/13/14 0:00	5/15/14 9:40
ABUT 35 (DECKING)-CENTER	1401440-07	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 3 (12X12)-CENTER	1401440-08	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 5 (12X12)-LEFT	1401440-09	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 15 (12X12)-RIGHT	1401440-10	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 32 (12X12)-RIGHT	1401440-11	Wood Preservative	5/13/14 0:00	5/15/14 9:40
ABUT 1 (6X18)-CENTER	1401440-12	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 3 (6X18)-CENTER	1401440-13	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 18 (3X18)-LEFT	1401440-14	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 34(6X18)-RIGHT	1401440-15	Wood Preservative	5/13/14 0:00	5/15/14 9:40



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Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID P1A/B

Lab ID: 1401440-01

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	6.2	2.0	NA	1	B4E0467	05/21/2014	05/22/14 09:31	



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Geocon Consultants, Inc.
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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID P2A/B

Lab ID: 1401440-02

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	2200	100	NA	50	B4E0467	05/21/2014	05/22/14 09:04	



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Geocon Consultants, Inc.
6671 Brisa Street
Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID P3A/B

Lab ID: 1401440-03

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	81000	100	NA	50	B4E0467	05/21/2014	05/22/14 09:06	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 1 (DECKING)-CENTER

Lab ID: 1401440-04

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	750	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:47	D6
Chromium	1100	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:47	D6
Copper	ND	8.0	NA	2	B4E0467	05/21/2014	05/22/14 09:47	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4-Dinitrophenol	16000	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 1 (DECKING)-CENTER

Lab ID: 1401440-04

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:16	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
 Report To : Dave Watts
 Reported : 06/17/2014

Client Sample ID ABUT 1 (DECKING)-CENTER

Lab ID: 1401440-04

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Borneol	4300	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
Ergost-7-en-3-ol, (3.beta.)-	15000	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
p-Cymene	4800	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
.gamma.-Sitosterol	24000	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
9-Octadecenamide, (Z)-	24000	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
.alpha.-Pinene	4700	800	NA	1	B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	79.2 %		42 - 119		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 2,4,6-Tribromophenol</i>	94.1 %		27 - 150		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 2-Chlorophenol-d4</i>	90.2 %		40 - 126		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 2-Fluorobiphenyl</i>	79.3 %		54 - 128		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 2-Fluorophenol</i>	89.6 %		33 - 133		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: 4-Terphenyl-d14</i>	95.1 %		37 - 160		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: Nitrobenzene-d5</i>	71.4 %		41 - 128		B4E0398	05/19/2014	05/20/14 03:16	
<i>Surrogate: Phenol-d5</i>	89.5 %		33 - 127		B4E0398	05/19/2014	05/20/14 03:16	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 2 (DECKING)-LEFT

Lab ID: 1401440-05

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	3000	100	NA	50	B4E0467	05/21/2014	05/22/14 09:15	D6
Chromium	5400	100	NA	50	B4E0467	05/21/2014	05/22/14 09:15	D6
Copper	ND	200	NA	50	B4E0467	05/21/2014	05/22/14 09:15	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,4-Dinitrophenol	42000	20000	NA	2	B4E0398	05/19/2014	05/22/14 10:11	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	



Certificate of Analysis

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6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 2 (DECKING)-LEFT

Lab ID: 1401440-05

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 03:42	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID BENT 2 (DECKING)-LEFT

Lab ID: 1401440-05

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Gramisterol	7700	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
Stigmast-4-en-3-one	3500	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
1-Octadecanol	2200	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
.beta.-Sitosterol	47000	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
9-Octadecenamide, (Z)-	21000	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
3b-Cycloeucaenol	9800	800	NA	1	B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	76.7 %		42 - 119		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	70.8 %		42 - 119		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 2,4,6-Tribromophenol</i>	103 %		27 - 150		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 2,4,6-Tribromophenol</i>	88.3 %		27 - 150		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 2-Chlorophenol-d4</i>	78.4 %		40 - 126		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 2-Chlorophenol-d4</i>	80.0 %		40 - 126		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 2-Fluorobiphenyl</i>	89.1 %		54 - 128		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 2-Fluorobiphenyl</i>	72.3 %		54 - 128		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 2-Fluorophenol</i>	72.0 %		33 - 133		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 2-Fluorophenol</i>	78.6 %		33 - 133		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: 4-Terphenyl-d14</i>	109 %		37 - 160		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: 4-Terphenyl-d14</i>	89.1 %		37 - 160		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: Nitrobenzene-d5</i>	68.9 %		41 - 128		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: Nitrobenzene-d5</i>	66.4 %		41 - 128		B4E0398	05/19/2014	05/20/14 03:42	
<i>Surrogate: Phenol-d5</i>	69.9 %		33 - 127		B4E0398	05/19/2014	05/22/14 10:11	
<i>Surrogate: Phenol-d5</i>	76.6 %		33 - 127		B4E0398	05/19/2014	05/20/14 03:42	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-RIGHT

Lab ID: 1401440-06

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	2900	10	NA	5	B4E0467	05/21/2014	05/22/14 09:49	D6
Chromium	5500	10	NA	5	B4E0467	05/21/2014	05/22/14 09:49	D6
Copper	ND	20	NA	5	B4E0467	05/21/2014	05/22/14 09:49	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4-Dinitrophenol	14000	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-RIGHT

Lab ID: 1401440-06

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 04:08	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-RIGHT

Lab ID: 1401440-06

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Ergost-7-en-3-ol, (3.beta.)-	16000	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
Stigmast-4-en-3-one	10000	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
.gamma.-Sitosterol	17000	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
1-Octadecanol	1400	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
1-Eicosanol	1000	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
9-Octadecenamide, (Z)-	17000	800	NA	1	B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	72.3 %		42 - 119		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 2,4,6-Tribromophenol</i>	84.0 %		27 - 150		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 2-Chlorophenol-d4</i>	81.1 %		40 - 126		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 2-Fluorobiphenyl</i>	73.1 %		54 - 128		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 2-Fluorophenol</i>	79.8 %		33 - 133		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: 4-Terphenyl-d14</i>	88.8 %		37 - 160		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: Nitrobenzene-d5</i>	69.0 %		41 - 128		B4E0398	05/19/2014	05/20/14 04:08	
<i>Surrogate: Phenol-d5</i>	75.8 %		33 - 127		B4E0398	05/19/2014	05/20/14 04:08	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-CENTER

Lab ID: 1401440-07

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	650	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:52	D6
Chromium	1100	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:52	D6
Copper	ND	8.0	NA	2	B4E0467	05/21/2014	05/22/14 09:52	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4-Dinitrophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-CENTER

Lab ID: 1401440-07

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 09:42	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID ABUT 35 (DECKING)-CENTER

Lab ID: 1401440-07

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
b-Phenylisovaleric acid	21000	800	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
Ergost-7-en-3-ol, (3.beta.)-	32000	800	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
9-Octadecenamide, (Z)-	4700	800	NA	1	B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	67.4 %		42 - 119		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 2,4,6-Tribromophenol</i>	97.7 %		27 - 150		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 2-Chlorophenol-d4</i>	79.9 %		40 - 126		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 2-Fluorobiphenyl</i>	75.9 %		54 - 128		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 2-Fluorophenol</i>	77.7 %		33 - 133		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: 4-Terphenyl-d14</i>	96.7 %		37 - 160		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: Nitrobenzene-d5</i>	61.9 %		41 - 128		B4E0398	05/19/2014	05/20/14 09:42	
<i>Surrogate: Phenol-d5</i>	79.0 %		33 - 127		B4E0398	05/19/2014	05/20/14 09:42	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 3 (12X12)-CENTER

Lab ID: 1401440-08

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	750	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:54	D6
Chromium	980	4.0	NA	2	B4E0467	05/21/2014	05/22/14 09:54	D6
Copper	ND	8.0	NA	2	B4E0467	05/21/2014	05/22/14 09:54	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,4-Dinitrophenol	80000	25000	NA	2.5	B4E0398	05/19/2014	05/20/14 10:08	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 3 (12X12)-CENTER

Lab ID: 1401440-08

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:00	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 3 (12X12)-CENTER

Lab ID: 1401440-08

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
Ergost-5-en-3-ol, (3.beta.)-	20000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
9-Octadecenamide, (Z)-	31000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
24-Methylenecycloartanol	15000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	69.4 %		42 - 119		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	75.3 %		42 - 119		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 2,4,6-Tribromophenol</i>	96.0 %		27 - 150		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 2,4,6-Tribromophenol</i>	94.6 %		27 - 150		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 2-Chlorophenol-d4</i>	83.7 %		40 - 126		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 2-Chlorophenol-d4</i>	80.4 %		40 - 126		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 2-Fluorobiphenyl</i>	82.2 %		54 - 128		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 2-Fluorobiphenyl</i>	73.7 %		54 - 128		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 2-Fluorophenol</i>	79.4 %		33 - 133		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 2-Fluorophenol</i>	78.0 %		33 - 133		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: 4-Terphenyl-d14</i>	100 %		37 - 160		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: 4-Terphenyl-d14</i>	92.0 %		37 - 160		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: Nitrobenzene-d5</i>	62.7 %		41 - 128		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: Nitrobenzene-d5</i>	69.6 %		41 - 128		B4E0398	05/19/2014	05/20/14 10:08	
<i>Surrogate: Phenol-d5</i>	76.5 %		33 - 127		B4E0398	05/19/2014	05/20/14 05:00	
<i>Surrogate: Phenol-d5</i>	79.6 %		33 - 127		B4E0398	05/19/2014	05/20/14 10:08	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 5 (12X12)-LEFT

Lab ID: 1401440-09

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	220	2.0	NA	1	B4E0467	05/21/2014	05/22/14 09:56	
Chromium	170	2.0	NA	1	B4E0467	05/21/2014	05/22/14 09:56	
Copper	ND	4.0	NA	1	B4E0467	05/21/2014	05/22/14 09:56	

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4-Dinitrophenol	23000	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Methylphenol	3100	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 5 (12X12)-LEFT

Lab ID: 1401440-09

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:27	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
 Report To : Dave Watts
 Reported : 06/17/2014

Client Sample ID BENT 5 (12X12)-LEFT
Lab ID: 1401440-09

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
Ergost-5-en-3-ol, (3.beta.)-	18000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
.gamma.-Sitosterol	28000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
.alpha.-Pinene	11000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
9-Octadecenamide, (Z)-	14000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	71.2 %		42 - 119		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 2,4,6-Tribromophenol</i>	90.6 %		27 - 150		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 2-Chlorophenol-d4</i>	81.6 %		40 - 126		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 2-Fluorobiphenyl</i>	72.7 %		54 - 128		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 2-Fluorophenol</i>	79.5 %		33 - 133		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: 4-Terphenyl-d14</i>	86.9 %		37 - 160		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: Nitrobenzene-d5</i>	60.8 %		41 - 128		B4E0398	05/19/2014	05/20/14 05:27	
<i>Surrogate: Phenol-d5</i>	77.2 %		33 - 127		B4E0398	05/19/2014	05/20/14 05:27	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 15 (12X12)-RIGHT

Lab ID: 1401440-10

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	2000	20	NA	10	B4E0467	05/21/2014	05/22/14 10:49	D6
Chromium	3500	20	NA	10	B4E0467	05/21/2014	05/22/14 10:49	D6
Copper	ND	40	NA	10	B4E0467	05/21/2014	05/22/14 10:49	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4-Dinitrophenol	11000	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 15 (12X12)-RIGHT

Lab ID: 1401440-10

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 05:53	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
 Report To : Dave Watts
 Reported : 06/17/2014

Client Sample ID BENT 15 (12X12)-RIGHT
Lab ID: 1401440-10

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Ergost-7-en-3-ol, (3.beta.)-	23000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
.gamma.-Sitosterol	25000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Stigmast-4-en-3-one	12000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
Gramisterol	9300	800	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
9-Octadecenamide, (Z)-	15000	800	NA	1	B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	60.4 %		42 - 119		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 2,4,6-Tribromophenol</i>	87.0 %		27 - 150		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 2-Chlorophenol-d4</i>	70.5 %		40 - 126		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 2-Fluorobiphenyl</i>	66.2 %		54 - 128		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 2-Fluorophenol</i>	68.0 %		33 - 133		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: 4-Terphenyl-d14</i>	88.2 %		37 - 160		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: Nitrobenzene-d5</i>	56.4 %		41 - 128		B4E0398	05/19/2014	05/20/14 05:53	
<i>Surrogate: Phenol-d5</i>	69.0 %		33 - 127		B4E0398	05/19/2014	05/20/14 05:53	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 32 (12X12)-RIGHT

Lab ID: 1401440-11

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	410	2.0	NA	1	B4E0468	05/21/2014	05/22/14 10:51	
Chromium	140	2.0	NA	1	B4E0468	05/21/2014	05/22/14 10:51	
Copper	ND	4.0	NA	1	B4E0468	05/21/2014	05/22/14 10:51	

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4-Dinitrophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 32 (12X12)-RIGHT

Lab ID: 1401440-11

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:19	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID BENT 32 (12X12)-RIGHT

Lab ID: 1401440-11

Semivolatle Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
.alpha.-Pinene	2800	800	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
o-Cymene	3100	800	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
9-Octadecenamide, (Z)-	31000	800	NA	1	B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	77.6 %		42 - 119		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 2,4,6-Tribromophenol</i>	95.2 %		27 - 150		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 2-Chlorophenol-d4</i>	89.7 %		40 - 126		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 2-Fluorobiphenyl</i>	75.3 %		54 - 128		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 2-Fluorophenol</i>	87.4 %		33 - 133		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: 4-Terphenyl-d14</i>	90.4 %		37 - 160		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: Nitrobenzene-d5</i>	69.4 %		41 - 128		B4E0398	05/19/2014	05/20/14 06:19	
<i>Surrogate: Phenol-d5</i>	83.5 %		33 - 127		B4E0398	05/19/2014	05/20/14 06:19	



Certificate of Analysis

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6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 1 (6X18)-CENTER

Lab ID: 1401440-12

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	240	2.0	NA	1	B4E0468	05/21/2014	05/22/14 10:59	
Chromium	200	2.0	NA	1	B4E0468	05/21/2014	05/22/14 10:59	
Copper	ND	4.0	NA	1	B4E0468	05/21/2014	05/22/14 10:59	

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4-Dinitrophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Chloronaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Chlorophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Methylnaphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
2-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
3-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Chloroaniline	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Methylphenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Nitroaniline	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
4-Nitrophenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Acenaphthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Acenaphthylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID ABUT 1 (6X18)-CENTER

Lab ID: 1401440-12

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzidine (M)	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzo(a)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzo(a)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzoic acid	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Benzyl alcohol	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Butylbenzylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Chrysene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Di-n-butylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Di-n-octylphthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Dibenzofuran	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Diethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Dimethyl phthalate	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Fluoranthene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Fluorene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Hexachlorobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Hexachlorobutadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Hexachloroethane	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Isophorone	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Naphthalene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Nitrobenzene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Pentachlorophenol	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Phenanthrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Phenol	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Pyrene	ND	2000	NA	1	B4E0398	05/19/2014	05/20/14 06:45	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID ABUT 1 (6X18)-CENTER

Lab ID: 1401440-12

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
TIC:	0.0	NA	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
9-Octadecenamide, (Z)-	20000	800	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
1-Octadecanol	3500	800	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Vanillin	2400	NA	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
Ergost-5-en-3-ol, (3.beta.)-	19000	800	NA	1	B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	72.2 %		42 - 119		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 2,4,6-Tribromophenol</i>	90.4 %		27 - 150		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 2-Chlorophenol-d4</i>	83.8 %		40 - 126		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 2-Fluorobiphenyl</i>	73.9 %		54 - 128		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 2-Fluorophenol</i>	80.4 %		33 - 133		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: 4-Terphenyl-d14</i>	89.2 %		37 - 160		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: Nitrobenzene-d5</i>	62.9 %		41 - 128		B4E0398	05/19/2014	05/20/14 06:45	
<i>Surrogate: Phenol-d5</i>	77.6 %		33 - 127		B4E0398	05/19/2014	05/20/14 06:45	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 3 (6X18)-CENTER

Lab ID: 1401440-13

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	130	2.0	NA	1	B4E0468	05/21/2014	05/22/14 11:01	
Chromium	170	2.0	NA	1	B4E0468	05/21/2014	05/22/14 11:01	
Copper	ND	4.0	NA	1	B4E0468	05/21/2014	05/22/14 11:01	

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4-Dinitrophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Chloronaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Chlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Methylnaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
2-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
3-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Chloroaniline	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
4-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Acenaphthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Acenaphthylene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 3 (6X18)-CENTER

Lab ID: 1401440-13

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzidine (M)	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzo(a)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzo(a)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzoic acid	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Benzyl alcohol	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Butylbenzylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Chrysene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Di-n-butylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Di-n-octylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Dibenzofuran	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Diethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Dimethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Fluorene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Hexachlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Hexachlorobutadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Hexachloroethane	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Isophorone	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Naphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Nitrobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Pentachlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Phenanthrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Phenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:17	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
 Report To : Dave Watts
 Reported : 06/17/2014

Client Sample ID BENT 3 (6X18)-CENTER
Lab ID: 1401440-13

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
TIC:	0.0	NA	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
.alpha.-Pinene	8000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
.gamma.-Sitosterol	21000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Oleic Acid	5300	800	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Ergost-7-en-3-ol, (3.beta.)-	15000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
Dehydroabietic acid	19000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	85.0 %		42 - 119		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 2,4,6-Tribromophenol</i>	98.1 %		27 - 150		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 2-Chlorophenol-d4</i>	88.1 %		40 - 126		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 2-Fluorobiphenyl</i>	86.0 %		54 - 128		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 2-Fluorophenol</i>	80.5 %		33 - 133		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: 4-Terphenyl-d14</i>	102 %		37 - 160		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: Nitrobenzene-d5</i>	75.4 %		41 - 128		B4E0435	05/20/2014	05/20/14 23:17	
<i>Surrogate: Phenol-d5</i>	84.0 %		33 - 127		B4E0435	05/20/2014	05/20/14 23:17	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 18 (3X18)-LEFT

Lab ID: 1401440-14

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	1200	10	NA	5	B4E0468	05/21/2014	05/22/14 11:07	D6
Chromium	2100	10	NA	5	B4E0468	05/21/2014	05/22/14 11:07	D6
Copper	ND	20	NA	5	B4E0468	05/21/2014	05/22/14 11:07	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4-Dinitrophenol	20000	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Chloronaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Chlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Methylnaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
2-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
3-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Chloroaniline	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
4-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Acenaphthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Acenaphthylene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 18 (3X18)-LEFT

Lab ID: 1401440-14

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzidine (M)	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzo(a)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzo(a)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzoic acid	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Benzyl alcohol	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Butylbenzylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Chrysene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Di-n-butylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Di-n-octylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Dibenzofuran	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Diethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Dimethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Fluorene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Hexachlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Hexachlorobutadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Hexachloroethane	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Isophorone	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Naphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Nitrobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Pentachlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Phenanthrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Phenol	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/20/14 23:44	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Client Sample ID BENT 18 (3X18)-LEFT

Lab ID: 1401440-14

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
TIC:	0.0	NA	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Gramisterol	6500	800	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
.gamma.-Sitosterol	43000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Oleic Acid	8000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Ergost-5-en-3-ol, (3.beta.)-	19000	800	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
Ergostanol	6600	800	NA	1	B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	79.7 %		42 - 119		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 2,4,6-Tribromophenol</i>	101 %		27 - 150		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 2-Chlorophenol-d4</i>	82.8 %		40 - 126		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 2-Fluorobiphenyl</i>	83.1 %		54 - 128		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 2-Fluorophenol</i>	73.7 %		33 - 133		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: 4-Terphenyl-d14</i>	98.1 %		37 - 160		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: Nitrobenzene-d5</i>	77.0 %		41 - 128		B4E0435	05/20/2014	05/20/14 23:44	
<i>Surrogate: Phenol-d5</i>	78.5 %		33 - 127		B4E0435	05/20/2014	05/20/14 23:44	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 34(6X18)-RIGHT

Lab ID: 1401440-15

Total Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	2800	20	NA	10	B4E0468	05/21/2014	05/22/14 11:09	D6
Chromium	4300	20	NA	10	B4E0468	05/21/2014	05/22/14 11:09	D6
Copper	ND	40	NA	10	B4E0468	05/21/2014	05/22/14 11:09	D6

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
1,2-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
1,3-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
1,4-Dichlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,4,5-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,4,6-Trichlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,4-Dichlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,4-Dimethylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,4-Dinitrophenol	250000	99000	NA	10	B4E0435	05/20/2014	05/22/14 10:38	
2,4-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2,6-Dinitrotoluene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Chloronaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Chlorophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Methylnaphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
2-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
3,3'-Dichlorobenzidine	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
3-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4,6-Dinitro-2-methylphenol	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Bromophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Chloro-3-methylphenol	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Chloroaniline	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Chlorophenyl-phenylether	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Methylphenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Nitroaniline	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
4-Nitrophenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Acenaphthene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Acenaphthylene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Client Sample ID BENT 34(6X18)-RIGHT

Lab ID: 1401440-15

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzidine (M)	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzo(a)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzo(a)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzo(b)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzo(g,h,i)perylene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzo(k)fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzoic acid	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Benzyl alcohol	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
bis(2-chloroethoxy)methane	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
bis(2-Chloroethyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
bis(2-chloroisopropyl)ether	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
bis(2-ethylhexyl)phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Butylbenzylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Chrysene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Di-n-butylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Di-n-octylphthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Dibenz(a,h)anthracene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Dibenzofuran	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Diethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Dimethyl phthalate	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Fluoranthene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Fluorene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Hexachlorobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Hexachlorobutadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Hexachlorocyclopentadiene	ND	4000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Hexachloroethane	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Indeno(1,2,3-cd)pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Isophorone	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
N-Nitroso-di-n propylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
N-Nitrosodiphenylamine	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Naphthalene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Nitrobenzene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Pentachlorophenol	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Phenanthrene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Phenol	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Pyrene	ND	2000	NA	1	B4E0435	05/20/2014	05/21/14 00:11	



Certificate of Analysis

Geocon Consultants, Inc.
 6671 Brisa Street
 Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
 Report To : Dave Watts
 Reported : 06/17/2014

Client Sample ID BENT 34(6X18)-RIGHT
Lab ID: 1401440-15

Semivolatile Organic Compounds by EPA 8270C

Analyst: MFR

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Pyridine	ND	9900	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
TIC:	0.0	NA	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
Ergost-7-en-3-ol, (3.beta.)-	18000	800	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
.gamma.-Sitosterol	24000	800	NA	1	B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	68.1 %		42 - 119		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	65.8 %		42 - 119		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 2,4,6-Tribromophenol</i>	93.6 %		27 - 150		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 2,4,6-Tribromophenol</i>	89.6 %		27 - 150		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 2-Chlorophenol-d4</i>	63.7 %		40 - 126		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 2-Chlorophenol-d4</i>	71.0 %		40 - 126		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 2-Fluorobiphenyl</i>	76.8 %		54 - 128		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 2-Fluorobiphenyl</i>	75.7 %		54 - 128		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 2-Fluorophenol</i>	57.7 %		33 - 133		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 2-Fluorophenol</i>	63.0 %		33 - 133		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: 4-Terphenyl-d14</i>	95.4 %		37 - 160		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: 4-Terphenyl-d14</i>	95.7 %		37 - 160		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: Nitrobenzene-d5</i>	66.7 %		41 - 128		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: Nitrobenzene-d5</i>	55.5 %		41 - 128		B4E0435	05/20/2014	05/22/14 10:38	
<i>Surrogate: Phenol-d5</i>	69.9 %		33 - 127		B4E0435	05/20/2014	05/21/14 00:11	
<i>Surrogate: Phenol-d5</i>	57.2 %		33 - 127		B4E0435	05/20/2014	05/22/14 10:38	



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QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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Batch B4E0467 - EPA 3050B

Blank (B4E0467-BLK1)

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	ND	1.0			NR				
Chromium	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				

LCS (B4E0467-BS1)

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	51.3905	1.0	50.0000		103	80 - 120			
Chromium	56.2515	1.0	50.0000		113	80 - 120			
Copper	55.1525	2.0	50.0000		110	80 - 120			
Lead	54.4697	1.0	50.0000		109	80 - 120			

Duplicate (B4E0467-DUP1)

Source: 1401440-01

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	0.923375	2.0		1.28838	NR	33.0	20	R
Chromium	1.58177	2.0		4.97694	NR	104	20	R
Copper	2.79131	4.0		9.56905	NR	110	20	R
Lead	4.66729	2.0		6.20825	NR	28.3	20	R

Matrix Spike (B4E0467-MS1)

Source: 1401440-01

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	221.602	2.0	250.000	1.28838	88.1	52 - 109		
Chromium	229.722	2.0	250.000	4.97694	89.9	52 - 120		
Copper	237.920	4.0	250.000	9.56905	91.3	53 - 127		
Lead	217.555	2.0	250.000	6.20825	84.5	43 - 120		

Matrix Spike Dup (B4E0467-MSD1)

Source: 1401440-01

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	232.097	2.0	250.000	1.28838	92.3	52 - 109	4.63	20
Chromium	236.024	2.0	250.000	4.97694	92.4	52 - 120	2.71	20
Copper	245.199	4.0	250.000	9.56905	94.3	53 - 127	3.01	20
Lead	221.781	2.0	250.000	6.20825	86.2	43 - 120	1.92	20

Batch B4E0468 - EPA 3050B

Blank (B4E0468-BLK1)

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	ND	1.0			NR			
Chromium	ND	1.0			NR			
Copper	ND	2.0			NR			
Lead	ND	1.0			NR			

LCS (B4E0468-BS1)

Prepared: 5/21/2014 Analyzed: 5/22/2014

Arsenic	49.8004	1.0	50.0000		99.6	80 - 120		
Chromium	55.0500	1.0	50.0000		110	80 - 120		



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Project Number : ALBION RIVER BRIDGE, S9805-01-18

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Reported : 06/17/2014

Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4E0468 - EPA 3050B (continued)									
LCS (B4E0468-BS1) - Continued									
				Prepared: 5/21/2014 Analyzed: 5/22/2014					
Copper	51.0326	2.0	50.0000		102	80 - 120			
Lead	52.6554	1.0	50.0000		105	80 - 120			
Duplicate (B4E0468-DUP1)									
				Source: 1401440-11		Prepared: 5/21/2014 Analyzed: 5/22/2014			
Arsenic	450.922	2.0		407.758	NR	10.1	20		
Chromium	220.854	2.0		143.830	NR	42.2	20		R
Copper	0.578141	4.0		0.489180	NR	16.7	20		
Lead	0.482518	2.0		0.393750	NR	20.3	20		R
Matrix Spike (B4E0468-MS1)									
				Source: 1401440-11		Prepared: 5/21/2014 Analyzed: 5/22/2014			
Arsenic	820.494	2.0	250.000	407.758	165	52 - 109			M1
Chromium	642.571	2.0	250.000	143.830	199	52 - 120			M1
Copper	261.963	4.0	250.000	0.489180	105	53 - 127			
Lead	258.183	2.0	250.000	0.393750	103	43 - 120			
Matrix Spike Dup (B4E0468-MSD1)									
				Source: 1401440-11		Prepared: 5/21/2014 Analyzed: 5/22/2014			
Arsenic	1189.44	2.0	250.000	407.758	313	52 - 109	36.7	20	M1, R
Chromium	1227.41	2.0	250.000	143.830	433	52 - 120	62.6	20	R, M1
Copper	242.093	4.0	250.000	0.489180	96.6	53 - 127	7.88	20	
Lead	240.414	2.0	250.000	0.393750	96.0	43 - 120	7.13	20	



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Reported : 06/17/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes
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Batch B4E0398 - MSSEMI

Blank (B4E0398-BLK1)

Prepared: 5/19/2014 Analyzed: 5/19/2014

Pentachlorophenol	ND	1600			NR				
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	2471		3333.33		74.1	42 - 119			
<i>Surrogate: 2,4,6-Tribromophenol</i>	2520		3333.33		75.6	27 - 150			
<i>Surrogate: 2-Chlorophenol-d4</i>	2794		3333.33		83.8	40 - 126			
<i>Surrogate: 2-Fluorobiphenyl</i>	2404		3333.33		72.1	54 - 128			
<i>Surrogate: 2-Fluorophenol</i>	2772		3333.33		83.2	33 - 133			
<i>Surrogate: 4-Terphenyl-d14</i>	3041		3333.33		91.2	37 - 160			
<i>Surrogate: Nitrobenzene-d5</i>	2235		3333.33		67.1	41 - 128			
<i>Surrogate: Phenol-d5</i>	2726		3333.33		81.8	33 - 127			

LCS (B4E0398-BS1)

Prepared: 5/19/2014 Analyzed: 5/19/2014

1,2,4-Trichlorobenzene	2353.00	330	3333.33		70.6	52 - 110			
1,4-Dichlorobenzene	2819.00	330	3333.33		84.6	51 - 102			
2,4-Dinitrotoluene	3666.33	330	3333.33		110	68 - 132			
2-Chlorophenol	2981.00	330	3333.33		89.4	59 - 108			
4-Chloro-3-methylphenol	2871.67	660	3333.33		86.2	62 - 121			
4-Nitrophenol	2752.00	330	3333.33		82.6	52 - 133			
Acenaphthene	2765.67	330	3333.33		83.0	66 - 121			
N-Nitroso-di-n propylamine	2709.67	330	3333.33		81.3	53 - 122			
Pentachlorophenol	2856.67	1600	3333.33		85.7	45 - 124			
Phenol	3063.67	330	3333.33		91.9	59 - 112			
Pyrene	2900.00	330	3333.33		87.0	50 - 135			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	2578		3333.33		77.4	42 - 119			
<i>Surrogate: 2,4,6-Tribromophenol</i>	2868		3333.33		86.0	27 - 150			
<i>Surrogate: 2-Chlorophenol-d4</i>	2948		3333.33		88.4	40 - 126			
<i>Surrogate: 2-Fluorobiphenyl</i>	2591		3333.33		77.7	54 - 128			
<i>Surrogate: 2-Fluorophenol</i>	2944		3333.33		88.3	33 - 133			
<i>Surrogate: 4-Terphenyl-d14</i>	3106		3333.33		93.2	37 - 160			
<i>Surrogate: Nitrobenzene-d5</i>	2419		3333.33		72.6	41 - 128			
<i>Surrogate: Phenol-d5</i>	2931		3333.33		87.9	33 - 127			

Matrix Spike (B4E0398-MS1)

Source: 1401431-02

Prepared: 5/19/2014 Analyzed: 5/19/2014

1,2,4-Trichlorobenzene	14376.0	2000	20000.0	ND	71.9	43 - 133			
1,4-Dichlorobenzene	17056.0	2000	20000.0	ND	85.3	48 - 122			
2,4-Dinitrotoluene	21180.0	2000	20000.0	ND	106	65 - 152			
2-Chlorophenol	18008.0	2000	20000.0	ND	90.0	54 - 132			
4-Chloro-3-methylphenol	16756.0	4000	20000.0	ND	83.8	53 - 143			
4-Nitrophenol	15844.0	2000	20000.0	ND	79.2	66 - 143			
Acenaphthene	16238.0	2000	20000.0	ND	81.2	60 - 140			
N-Nitroso-di-n propylamine	16182.0	2000	20000.0	ND	80.9	55 - 138			
Pentachlorophenol	16786.0	9900	20000.0	ND	83.9	57 - 145			



Certificate of Analysis

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6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes
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Batch B4E0398 - MSSEMI (continued)

Matrix Spike (B4E0398-MS1) - Continued

Source: 1401431-02

Prepared: 5/19/2014 Analyzed: 5/19/2014

Phenol	18604.0	2000	20000.0	ND	93.0	39 - 138			
Pyrene	16866.0	2000	20000.0	ND	84.3	51 - 157			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>15270</i>		<i>20000.0</i>		<i>76.3</i>	<i>42 - 119</i>			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>16500</i>		<i>20000.0</i>		<i>82.5</i>	<i>27 - 150</i>			
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>17750</i>		<i>20000.0</i>		<i>88.8</i>	<i>40 - 126</i>			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>15040</i>		<i>20000.0</i>		<i>75.2</i>	<i>54 - 128</i>			
<i>Surrogate: 2-Fluorophenol</i>	<i>17460</i>		<i>20000.0</i>		<i>87.3</i>	<i>33 - 133</i>			
<i>Surrogate: 4-Terphenyl-d14</i>	<i>17780</i>		<i>20000.0</i>		<i>88.9</i>	<i>37 - 160</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>14360</i>		<i>20000.0</i>		<i>71.8</i>	<i>41 - 128</i>			
<i>Surrogate: Phenol-d5</i>	<i>16980</i>		<i>20000.0</i>		<i>84.9</i>	<i>33 - 127</i>			

Matrix Spike Dup (B4E0398-MSD1)

Source: 1401431-02

Prepared: 5/19/2014 Analyzed: 5/19/2014

1,2,4-Trichlorobenzene	14164.0	2000	20000.0	ND	70.8	43 - 133	1.49	20	
1,4-Dichlorobenzene	16874.0	2000	20000.0	ND	84.4	48 - 122	1.07	20	
2,4-Dinitrotoluene	21082.0	2000	20000.0	ND	105	65 - 152	0.464	20	
2-Chlorophenol	17724.0	2000	20000.0	ND	88.6	54 - 132	1.59	20	
4-Chloro-3-methylphenol	16508.0	4000	20000.0	ND	82.5	53 - 143	1.49	20	
4-Nitrophenol	15904.0	2000	20000.0	ND	79.5	66 - 143	0.378	20	
Acenaphthene	16140.0	2000	20000.0	ND	80.7	60 - 140	0.605	20	
N-Nitroso-di-n propylamine	16062.0	2000	20000.0	ND	80.3	55 - 138	0.744	20	
Pentachlorophenol	17048.0	9900	20000.0	ND	85.2	57 - 145	1.55	20	
Phenol	18410.0	2000	20000.0	ND	92.0	39 - 138	1.05	20	
Pyrene	17058.0	2000	20000.0	ND	85.3	51 - 157	1.13	20	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>15260</i>		<i>20000.0</i>		<i>76.3</i>	<i>42 - 119</i>			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>16720</i>		<i>20000.0</i>		<i>83.6</i>	<i>27 - 150</i>			
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>17570</i>		<i>20000.0</i>		<i>87.8</i>	<i>40 - 126</i>			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>14990</i>		<i>20000.0</i>		<i>74.9</i>	<i>54 - 128</i>			
<i>Surrogate: 2-Fluorophenol</i>	<i>17270</i>		<i>20000.0</i>		<i>86.4</i>	<i>33 - 133</i>			
<i>Surrogate: 4-Terphenyl-d14</i>	<i>17310</i>		<i>20000.0</i>		<i>86.5</i>	<i>37 - 160</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>14330</i>		<i>20000.0</i>		<i>71.6</i>	<i>41 - 128</i>			
<i>Surrogate: Phenol-d5</i>	<i>16980</i>		<i>20000.0</i>		<i>84.9</i>	<i>33 - 127</i>			

Batch B4E0435 - MSSEMI

Blank (B4E0435-BLK1)

Prepared: 5/20/2014 Analyzed: 5/20/2014

Pentachlorophenol	ND	1600		NR					
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>2754</i>		<i>3333.33</i>		<i>82.6</i>	<i>42 - 119</i>			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>3648</i>		<i>3333.33</i>		<i>109</i>	<i>27 - 150</i>			
<i>Surrogate: 2-Chlorophenol-d4</i>	<i>2832</i>		<i>3333.33</i>		<i>85.0</i>	<i>40 - 126</i>			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>2861</i>		<i>3333.33</i>		<i>85.8</i>	<i>54 - 128</i>			
<i>Surrogate: 2-Fluorophenol</i>	<i>2742</i>		<i>3333.33</i>		<i>82.3</i>	<i>33 - 133</i>			



Certificate of Analysis

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Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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Batch B4E0435 - MSSEMI (continued)

Blank (B4E0435-BLK1) - Continued

Prepared: 5/20/2014 Analyzed: 5/20/2014

Surrogate: 4-Terphenyl-d14	3484		3333.33		105	37 - 160
Surrogate: Nitrobenzene-d5	2810		3333.33		84.3	41 - 128
Surrogate: Phenol-d5	2805		3333.33		84.2	33 - 127

LCS (B4E0435-BS1)

Prepared: 5/20/2014 Analyzed: 5/20/2014

1,2,4-Trichlorobenzene	2769.00	330	3333.33	83.1	52 - 110
1,4-Dichlorobenzene	2602.33	330	3333.33	78.1	51 - 102
2,4-Dinitrotoluene	3675.67	330	3333.33	110	68 - 132
2-Chlorophenol	2655.00	330	3333.33	79.7	59 - 108
4-Chloro-3-methylphenol	3132.67	660	3333.33	94.0	62 - 121
4-Nitrophenol	3364.00	330	3333.33	101	52 - 133
Acenaphthene	3108.67	330	3333.33	93.3	66 - 121
N-Nitroso-di-n propylamine	2730.00	330	3333.33	81.9	53 - 122
Pentachlorophenol	3427.33	1600	3333.33	103	45 - 124
Phenol	2790.67	330	3333.33	83.7	59 - 112
Pyrene	3375.33	330	3333.33	101	50 - 135

Surrogate: 1,2-Dichlorobenzene-d4	2502		3333.33	75.1	42 - 119
Surrogate: 2,4,6-Tribromophenol	3136		3333.33	94.1	27 - 150
Surrogate: 2-Chlorophenol-d4	2635		3333.33	79.1	40 - 126
Surrogate: 2-Fluorobiphenyl	2892		3333.33	86.8	54 - 128
Surrogate: 2-Fluorophenol	2535		3333.33	76.0	33 - 133
Surrogate: 4-Terphenyl-d14	3273		3333.33	98.2	37 - 160
Surrogate: Nitrobenzene-d5	2617		3333.33	78.5	41 - 128
Surrogate: Phenol-d5	2670		3333.33	80.1	33 - 127

Matrix Spike (B4E0435-MS1)

Source: 1401493-04

Prepared: 5/20/2014 Analyzed: 5/20/2014

1,2,4-Trichlorobenzene	2272.00	330	3333.33	ND	68.2	43 - 133
1,4-Dichlorobenzene	2150.33	330	3333.33	ND	64.5	48 - 122
2,4-Dinitrotoluene	3555.67	330	3333.33	ND	107	65 - 152
2-Chlorophenol	2173.33	330	3333.33	ND	65.2	54 - 132
4-Chloro-3-methylphenol	2911.00	660	3333.33	ND	87.3	53 - 143
4-Nitrophenol	3123.00	330	3333.33	ND	93.7	66 - 143
Acenaphthene	2852.67	330	3333.33	ND	85.6	60 - 140
N-Nitroso-di-n propylamine	2258.67	330	3333.33	ND	67.8	55 - 138
Pentachlorophenol	3064.00	1600	3333.33	ND	91.9	57 - 145
Phenol	2302.33	330	3333.33	ND	69.1	39 - 138
Pyrene	3184.33	330	3333.33	ND	95.5	51 - 157

Surrogate: 1,2-Dichlorobenzene-d4	2011		3333.33	60.3	42 - 119
Surrogate: 2,4,6-Tribromophenol	2946		3333.33	88.4	27 - 150
Surrogate: 2-Chlorophenol-d4	2100		3333.33	63.0	40 - 126
Surrogate: 2-Fluorobiphenyl	2442		3333.33	73.3	54 - 128



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 06/17/2014

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes
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Batch B4E0435 - MSSEMI (continued)

Matrix Spike (B4E0435-MS1) - Continued

Source: 1401493-04

Prepared: 5/20/2014 Analyzed: 5/20/2014

<i>Surrogate: 2-Fluorophenol</i>	2017		3333.33		60.5	33 - 133			
<i>Surrogate: 4-Terphenyl-d14</i>	3170		3333.33		95.1	37 - 160			
<i>Surrogate: Nitrobenzene-d5</i>	2113		3333.33		63.4	41 - 128			
<i>Surrogate: Phenol-d5</i>	2157		3333.33		64.7	33 - 127			

Matrix Spike Dup (B4E0435-MSD1)

Source: 1401493-04

Prepared: 5/20/2014 Analyzed: 5/20/2014

1,2,4-Trichlorobenzene	2245.67	330	3333.33	ND	67.4	43 - 133	1.17	20	
1,4-Dichlorobenzene	2122.67	330	3333.33	ND	63.7	48 - 122	1.29	20	
2,4-Dinitrotoluene	3202.33	330	3333.33	ND	96.1	65 - 152	10.5	20	
2-Chlorophenol	2168.00	330	3333.33	ND	65.0	54 - 132	0.246	20	
4-Chloro-3-methylphenol	2671.67	660	3333.33	ND	80.2	53 - 143	8.57	20	
4-Nitrophenol	2858.00	330	3333.33	ND	85.7	66 - 143	8.86	20	
Acenaphthene	2657.67	330	3333.33	ND	79.7	60 - 140	7.08	20	
N-Nitroso-di-n propylamine	2189.00	330	3333.33	ND	65.7	55 - 138	3.13	20	
Pentachlorophenol	2627.67	1600	3333.33	ND	78.8	57 - 145	15.3	20	
Phenol	2208.00	330	3333.33	ND	66.2	39 - 138	4.18	20	
Pyrene	2843.33	330	3333.33	ND	85.3	51 - 157	11.3	20	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	2144		3333.33		64.3	42 - 119			
<i>Surrogate: 2,4,6-Tribromophenol</i>	2863		3333.33		85.9	27 - 150			
<i>Surrogate: 2-Chlorophenol-d4</i>	2272		3333.33		68.2	40 - 126			
<i>Surrogate: 2-Fluorobiphenyl</i>	2528		3333.33		75.8	54 - 128			
<i>Surrogate: 2-Fluorophenol</i>	2073		3333.33		62.2	33 - 133			
<i>Surrogate: 4-Terphenyl-d14</i>	3159		3333.33		94.8	37 - 160			
<i>Surrogate: Nitrobenzene-d5</i>	2231		3333.33		66.9	41 - 128			
<i>Surrogate: Phenol-d5</i>	2289		3333.33		68.7	33 - 127			



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 06/17/2014

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
D6	Sample required dilution due to high concentration of target analyte.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

CHAIN OF CUSTODY RECORD 03A2432

FOR LABORATORY USE ONLY:



3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

P.O.#: _____
Logged By: _____ Date: _____

Method of Transport
 Client
 ATL
 CA OverN
 FEDEX
 Other: USA

Sample Condition Upon Receipt
 1. CHILLED Y N 4. SEALED Y N
 2. HEADSPACE (VOA) Y N 5. # OF SPLS MATCH COC Y N
 3. CONTAINER INTACT Y N 6. PRESERVED Y N

Client: GEOCON CONSULTANTS, INC.
 Address: 6671 Brisa Street
 City: Livermore State: CA Zip Code: 94550
 TEL: (925) 371-5900 FAX: (925) 371-5915

Attn: D. WATTS (Printed Name)
 Project #: 29905-01-18 Sampler: D. WATTS (Printed Name)
 Date: 5/13/14 Time: 1830

Relinquished by: WILLY (Signature and Printed Name)
 Date: 5/13/14 Time: 1830

Relinquished by: WILLY (Signature and Printed Name)
 Date: 5/13/14 Time: 1830

Relinquished by: WILLY (Signature and Printed Name)
 Date: 5/13/14 Time: 1830

Relinquished by: WILLY (Signature and Printed Name)
 Date: 5/13/14 Time: 1830

Send Report To:
 Attn: _____
 Co: SAME AS ABOVE
 Address: _____
 City: _____ State: _____ Zip: _____

Special Instructions/Comments:
Anticistate Soluble Requests
Pentachloroethanal - 8270
SAMPLES SHIPPED CALLED

LAB USE ONLY: Batch #: Lab No.	Sample I.D. / Location	Sample Description	Date		Time	TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays	Preservatives: H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
			Emergency	Next workday			
1401440	P1A/B	ABUT 1 (DECKING) - CENTER	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P2A/B	ABUT 2 - LEFT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P3A/B	ABUT 35 - RIGHT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P4A/B	ABUT 35 - CENTER	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P5A/B	ABUT 35 - LEFT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P6A/B	ABUT 35 - RIGHT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P7A/B	ABUT 35 - CENTER	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P8A/B	ABUT 35 - LEFT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P9A/B	ABUT 35 - RIGHT	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃
	P10A/B	ABUT 35 - CENTER	5/13/14	5/13/14	1830	C	H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(Ac) O=NaOH T=Na ₂ S ₂ O ₃

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal
 Distribution: White with rannet Yellow in folder Pink to submitter

Diane Galvan

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Wednesday, May 14, 2014 10:25 AM
To: Diane Galvan
Cc: Steve S@DOT Werner; customer.relations@atglobal.com
Subject: Re: Pentachlorophenol

Ok. Thx. Please add TIC to the 12 wood samples you will be receiving.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

From: John Juhrend [juhend@geoconinc.com]
Sent: Thursday, June 12, 2014 8:59 AM
To: Diane Galvan; Kari Cook
Cc: Dave Watts, CAC
Subject: RE: 1401440 SVOC compound names

Hi Diane – the chain only listed PCP by 8270 which were all ND but the other 4 or so listed compounds have detections that we now need to address.

Is it possible to get an amended report for full list 8270?

Do you know why other compounds were listed when only PCP requested?



John Juhrend, PE, CEG, CEM | *Principal / Senior Engineer*
Geocon Consultants, Inc.
3160 Gold Valley Drive Suite 800, Rancho Cordova, CA 95742
Tel 916.852.9118, ext. 501 Mobile 916.508.1911
www.geoconinc.com



May 30, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1401440
Client Reference : ALBION RIVER BRIDGE, S9805-01-18

Enclosed are the results for sample(s) received on May 15, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eddie Rodriguez', with a small 'Er' monogram to the left.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P2A/B	1401440-02	Paint	5/13/14 0:00	5/15/14 9:40
P3A/B	1401440-03	Paint	5/13/14 0:00	5/15/14 9:40
ABUT 1 (DECKING)-CENTER	1401440-04	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 2 (DECKING)-LEFT	1401440-05	Wood Preservative	5/13/14 0:00	5/15/14 9:40
ABUT 35 (DECKING)-RIGHT	1401440-06	Wood Preservative	5/13/14 0:00	5/15/14 9:40
ABUT 35 (DECKING)-CENTER	1401440-07	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 3 (12X12)-CENTER	1401440-08	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 15 (12X12)-RIGHT	1401440-10	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 18 (3X18)-LEFT	1401440-14	Wood Preservative	5/13/14 0:00	5/15/14 9:40
BENT 34(6X18)-RIGHT	1401440-15	Wood Preservative	5/13/14 0:00	5/15/14 9:40



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID P2A/B

Lab ID: 1401440-02

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	0.20	0.050	NA	1	B4E0567	05/28/2014	05/28/14 17:20	



Certificate of Analysis

Geocon Consultants, Inc.
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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID P3A/B

Lab ID: 1401440-03

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	65	0.25	NA	1	B4E0567	05/28/2014	05/28/14 17:22	



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Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID ABUT 1 (DECKING)-CENTER

Lab ID: 1401440-04

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	9.5	1.2	NA	1	B4E0567	05/28/2014	05/28/14 17:24	



Certificate of Analysis

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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID BENT 2 (DECKING)-LEFT

Lab ID: 1401440-05

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	3.8	0.12	NA	1	B4E0567	05/28/2014	05/28/14 17:27	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID ABUT 35 (DECKING)-RIGHT

Lab ID: 1401440-06

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	1.7	0.050	NA	1	B4E0567	05/28/2014	05/28/14 17:29	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID ABUT 35 (DECKING)-CENTER

Lab ID: 1401440-07

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	3.3	0.62	NA	1	B4E0567	05/28/2014	05/28/14 17:31	



Certificate of Analysis

Geocon Consultants, Inc.
6671 Brisa Street
Livermore , CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID BENT 3 (12X12)-CENTER
Lab ID: 1401440-08

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	5.5	0.083	NA	1	B4E0567	05/28/2014	05/28/14 17:34	



Certificate of Analysis

Geocon Consultants, Inc.
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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID BENT 15 (12X12)-RIGHT

Lab ID: 1401440-10

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	5.1	0.050	NA	1	B4E0567	05/28/2014	05/28/14 17:40	



Certificate of Analysis

Geocon Consultants, Inc.
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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID BENT 18 (3X18)-LEFT

Lab ID: 1401440-14

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	7.9	0.050	NA	1	B4E0567	05/28/2014	05/28/14 17:42	



Certificate of Analysis

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Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18
Report To : Dave Watts
Reported : 05/30/2014

Client Sample ID BENT 34(6X18)-RIGHT
Lab ID: 1401440-15

TCLP Metals by ICP-AES EPA 6010B

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	11	0.050	NA	1	B4E0567	05/28/2014	05/28/14 17:45	



Certificate of Analysis

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Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 05/30/2014

QUALITY CONTROL SECTION

TCLP Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4E0567 - EPA 3010A_SOIL									
Blank (B4E0567-BLK1)				Prepared: 5/28/2014 Analyzed: 5/28/2014					
Arsenic	ND	0.050			NR				
Lead	ND	0.050			NR				
Blank (B4E0567-BLK2)				Prepared: 5/28/2014 Analyzed: 5/28/2014					
Arsenic	ND	0.050			NR				
Lead	ND	0.050			NR				
Blank (B4E0567-BLK3)				Prepared: 5/28/2014 Analyzed: 5/28/2014					
Arsenic	ND	0.050			NR				
Lead	ND	0.050			NR				
Blank (B4E0567-BLK4)				Prepared: 5/28/2014 Analyzed: 5/28/2014					
Arsenic	ND	0.050			NR				
Lead	ND	0.050			NR				
LCS (B4E0567-BS1)				Prepared: 5/28/2014 Analyzed: 5/28/2014					
Arsenic	0.993185	0.050	1.00000		99.3	80 - 120			
Lead	1.04071	0.050	1.00000		104	80 - 120			
Duplicate (B4E0567-DUP1)				Source: 1401420-61		Prepared: 5/28/2014 Analyzed: 5/28/2014			
Arsenic	ND	0.050		ND	NR			20	
Lead	0.092426	0.050		0.092459	NR		0.0354	20	
Duplicate (B4E0567-DUP2)				Source: 1401420-01		Prepared: 5/28/2014 Analyzed: 5/28/2014			
Arsenic	ND	0.050		ND	NR			20	
Lead	0.023748	0.050		0.022771	NR		4.20	20	
Matrix Spike (B4E0567-MS1)				Source: 1401420-61		Prepared: 5/28/2014 Analyzed: 5/28/2014			
Arsenic	2.60671	0.050	2.50000	ND	104	81 - 108			
Lead	2.39439	0.050	2.50000	0.092459	92.1	81 - 105			
Matrix Spike (B4E0567-MS2)				Source: 1401420-01		Prepared: 5/28/2014 Analyzed: 5/28/2014			
Arsenic	2.59791	0.050	2.50000	ND	104	81 - 108			
Lead	2.36645	0.050	2.50000	0.022771	93.7	81 - 105			
Matrix Spike Dup (B4E0567-MSD1)				Source: 1401420-61		Prepared: 5/28/2014 Analyzed: 5/28/2014			
Arsenic	2.61475	0.050	2.50000	ND	105	81 - 108	0.308	20	
Lead	2.41599	0.050	2.50000	0.092459	92.9	81 - 105	0.898	20	



Certificate of Analysis

Geocon Consultants, Inc.

6671 Brisa Street

Livermore, CA 94550

Project Number : ALBION RIVER BRIDGE, S9805-01-18

Report To : Dave Watts

Reported : 05/30/2014

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

Diane Galvan

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Friday, May 23, 2014 9:05 AM
To: Diane Galvan
Cc: Steve S@DOT Werner
Subject: Fwd: Results/EDD/Invoice - ALBION RIVER BRIDGE (1401440)

Please run Pb TCLPs on paint samples that failed TTLC.

Please run As TCLPs on wood samples that failed As TTLC.

Same tat. Thanks.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone