FOR CONTRACT NO.: 04-0G1704

INFORMATION HANDOUT

PERMITS

COASTAL DEVELOPMENT PERMIT (PDP-001-12)
For the City of Half Moon Bay
March 1, 2012

AGREEMENTS

UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE
Informal Consultation for the State Route 1 Traffic Signalization at Poplar Street Project in Half Moon Bay, San Mateo County, California
April 26, 2012

MATERIALS INFORMATION

PRELIMINARY SITE INVESTIGATION REPORT
SR-1 AT POPLAR STREET HALF MOON BAY, CALIFORNIA
October 2011

ROUTE: 04-SM-1-28.2

CITY OF HALF MOON BAY
City Hall • 501 Main Street • Half Moon Bay • CA • 94019

March 1, 2012

Jeffrey G. Jensen
Office of Biological Sciences
111 Grand Avenue
Oakland, CA 94612

Re: PDP-001-12, Approval of a Coastal Development Permit to construct a new traffic signal and associated components at the intersection of State Route 1 and Poplar Street within public rights of way/Notice of Final Action

Dear Mr. Jensen:

The request for a Coastal Development Permit to construct a new traffic signal and associated components at the intersection of State Route 1 and Poplar Street within public rights of way was approved by the Planning Director on February 15, 2012 by Resolution PDR-02-12. The Notice of Final Action document has been mailed to the Coastal Commission for their review. All projects that require Coastal Development Permits and received approvals are reviewed by the Coastal Commission.

Enclosed you will find two copies of the Notice of Final Action. One copy is for your records, the other requires your signature on the last page. This signature follows a list of Conditions of Approval that are attached to the approval of the Coastal Development Permit. Please review and sign where indicated and return to the Planning Department. Please call the Planning Department at (650) 726-8251 if you have any questions.

Sincerely,

Tonya Ward

Tonya Ward
Associate Planner

NOTICE OF FINAL ACTION
Coastal Development Permit

City of Half Moon Bay Planning Department
501 Main Street, Half Moon Bay, CA 94019
(650) 726-8250 FAX (650) 726-8261

Date:	March 1, 2012	File: PDP-001-12
Applicant/Owner:	Jeffrey G. Jensen Office of Biological Sciences 111 Grand Avenue Oakland, CA 94612	California Dept. of Transportation 111 Grand Avenue Oakland, CA 94612
Planner:	Tonya Ward, Associate Planner	

This notice is being distributed to the Coastal Commission and to those who requested notice. The following project is not located within the appealable area of the Coastal Zone. The Planning Director approved the Coastal Development Permit on February 15, 2012, by Resolution No.PDR-02-12. The Planning Director's decision was not appealed to the Half Moon Bay Planning Commission within the ten working-day appeal period.

Project Description: Coastal Development Permit to construct a new traffic signal and associated components at the intersection of State Route 1 and Poplar Street within public rights of way as shown on plans with City date stamp of January 3, 2012, including any conditions of approval imposed by the Planning Director.

Project Location: Intersection of State Route 1 and Poplar Street within Caltrans rights-of-way, Half Moon Bay, CA 94019

APPROVED by the Planning Director on February 15, 2012, based upon Findings for Approval contained in the attached Resolution for Approval.

PLANNING DIRECTOR RESOLUTION PDR-02-12
RESOLUTION FOR APPROVAL
PDP-001-12
A RESOLUTION OF THE PLANNING DIRECTOR TO ACCEPT CALTRANS CATEGORICAL EXEMPTION FROM CEQA AS LEAD AGENCY AND APPROVE A COASTAL DEVELOPMENT PERMIT TO CONSTRUCT A NEW TRAFFIC SIGNAL AND ASSOCIATED COMPONENTS AT THE INTERSECTION OF STATE ROUTE 1 AND POPLAR STREET WITHIN PUBLIC RIGHTS OF WAY IN THE CITY OF HALF MOON BAY

WHEREAS, Caltrans submitted an application requesting approval of the construction of a new traffic signal and associated components at the intersection of State Route 1 and Poplar Street located entirely within Caltrans rights-of-way; and

WHEREAS, the procedures for processing the application have been followed as required by law; and

WHEREAS, the Planning Director conducted a duly noticed public hearing on the project on February 15, 2012, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the Planning Director considered all written and oral testimony presented for their consideration; and

WHEREAS, the project has been determined to be categorically exempt from CEQA by Caltrans as the lead agency; and

WHEREAS, the Planning Director has made the required findings for approval of the project, set forth in Exhibit A to this resolution;

NOW, THEREFORE, BE IT RESOLVED that, based upon the Findings in Exhibit A, and subject to the Conditions of Approval contained in Exhibit B, the Planning Director approves the application (PDP-001-12).

PASSED AND ADOPTED by the City of Half Moon Bay Planning Director at a duly noticed public hearing held on February 15, 2012.

APPROVED:

Steve Flint, Planning Director

ATTEST:

for Sigrid White
Secretary to the Planning Director

EXHIBIT A
FINDINGS AND EVIDENCE
PDP-001-12
A COASTAL DEVELOPMENT PERMIT TO CONSTRUCT A NEW TRAFFIC SIGNAL AND ASSOCIATED COMPONENTS AT THE INTERSECTION OF STATE ROUTE 1 AND POPLAR STREET WITHIN PUBLIC RIGHTS OF WAY IN THE CITY OF HALF MOON BAY

Coastal Development Permit – Findings for Approval

The required Coastal Development Permit for this project may be approved or conditionally approved only after the approving authority has made the following findings per Municipal Code Section 18.20.070:

1. **Local Coastal Program Finding–** The development as proposed or as modified by conditions, conforms to the Local Coastal Program.

   Policy 4-9: *All development shall be designed and constructed to prevent increases in runoff that would erode natural drainage courses. Flows from graded areas shall be kept to an absolute minimum, not exceeding the normal rate of erosion and runoff from that of the undeveloped land. Storm water outfall, gutters, and conduit discharge shall be dissipated.*

   Compliance: Stormwater sheet flows off the pavement into undeveloped Caltrans right-of-way, which dissipates the runoff. The project will not exceed the rate of erosion and runoff compared to the undeveloped land.

   Policy 10-3: *The City will limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve buildout of the Land Use Plan.*

   Compliance: This intersection improvement project is proposed to provide greater vehicular and pedestrian safety in the subject area and will not expand capacity of the highway.

   Planning Director Evidence: The Director finds that the project is necessary to improve the level of service, pedestrian and vehicle safety at the Highway 1 and Poplar Street intersection. The installation of the new traffic signal and associated components will be constructed within existing paved State rights-of-way that will not interfere with the public's access to any designated coastal trail, beach or sea. The project has been reviewed for conformance with all policies of the Coastal Land Use Plan and has been determined to be consistent.

2. **Growth Management System** – The development is consistent with the annual population limitation system established in the Land Use Plan and Zoning Ordinance.

Planning Director Evidence: The proposed project does not propose any new residential units; therefore, it is not subject to the City's growth management system.

3. **Zoning Provisions** – The development is consistent with the use limitations and property development standards of the base district as well as the other requirements of the Zoning Ordinance.

   Planning Director Evidence: The project is a public service improvement located within paved rights-of-ways. Development standards are not established for public utility upgrades, however consistent with the residential and commercial uses established.

4. **Adequate Services** – Evidence has been submitted with the permit application that the proposed development will be provided with adequate services and infrastructure at the time of occupancy in a manner that is consistent with the Local Coastal Program.

   Planning Director Evidence: The project will not require water or sewer service. The project will increase the safety of the City's circulation system.

5. **California Coastal Act** – Any development to be located between the sea and the first public road parallel to the sea conforms to the public access and public recreation policies of Chapter 3 of the California Coastal Act.

   Planning Director Evidence: The proposed project will not restrict or otherwise adversely affect public coastal access or public coastal recreational opportunities and will not have any effect on access/recreation because they will not alter points of access or access ways, or opportunities for recreational opportunities and during project construction, conditions on project approval will ensure that any potential impacts are minimized to a level of insignificance. The signal may enhance the ability of visitors to access the beach via Poplar Street.

Environmental Review – Findings

6. **CEQA** – The project is consistent with CEQA guidelines and will not have a significant effect on the environment.

   Planning Director Evidence: As the agency responsible for carrying out the proposed project, Caltrans assumed the role of Lead Agency pursuant to CEQA. Following its review of the project, Caltrans made a determination that the proposed project was subject to a Categorical Exemption pursuant to Section 15300 of the State CEQA Guidelines. This exemption consists of maintenance and minor alteration of existing public facilities, including highways and the construction of small structures. The City's role under CEQA is that of a Responsible Agency. The determination of the Lead Agency is final and conclusive for all persons, including Responsible Agencies, unless circumstances or conditions have changed or a Responsible Agency becomes a Lead Agency under Section 15052. The Planning Director has considered the environmental determination by Caltrans and hereby concludes that there are no substantially changed conditions since April 2009 and that it hereby accepts the environmental determination made by Caltrans in its role as Lead Agency.

EXHIBIT B
CONDITIONS OF APPROVAL
PDP-001-12
A COASTAL DEVELOPMENT PERMIT TO CONSTRUCT A NEW TRAFFIC SIGNAL AND ASSOCIATED COMPONENTS AT THE INTERSECTION OF STATE ROUTE 1 AND POPLAR STREET WITHIN PUBLIC RIGHTS OF WAY IN THE CITY OF HALF MOON BAY

Authorization: Approval of this permit authorizes the construction of a new traffic signal and associated components as shown on plans identified with City date stamp of January 3, 2012, except as modified by the conditions of approval set forth herein.

The following Conditions apply to this project:

1. CONFORMANCE WITH APPROVED PLANS. Development shall be in substantial conformance with the approved plans, with a City date stamp of January 3, 2012, except for any changes that may be required by these conditions of approval. The Planning Director shall review and approve any deviation from the approved plans. In the event that the Planning Director determines that any proposed changes warrant further Planning Director review and approval, the applicant shall submit the revised plans for consideration at a public hearing before the Planning Director. _____(Planning)

2. WATER LINE/SERVICE IDENTIFICATION. Applicant shall identify water lines and services on plans submitted to City prior to issuance of permit. _____(Public Works)

3. PUBLIC NOTICES. In the event construction activities occur after 6 pm, regardless of day, Caltrans shall provide notices to all affected property owners prior to anticipated activities. All construction shall be per the approved plans and permits and the applicable codes and standards. _____(Public Works/Planning)

4. TRAFFIC CONTROL PLAN (TCP).The haul and detour routes shall be identified by the City's Contractor and be approved by the City Engineer. The TCP should avoid residential streets at peak hours when possible. The TCP shall include provisions for advanced notification (i.e., signage) of the proposed detour routes, lane closures, and coordination with emergency service providers._____(Public Works)

5. LIGHTING. The intersection lighting shall use hoods, louvers, or other techniques to direct the light downward rather than upward or outward to minimize glare and light pollution in the surrounding rural area._____(Planning)

6. NOISE. The contractor shall comply with Caltrans standard specifications Section 7-1.01I. Equipment shall be fitted with adequate mufflers according to the manufacturer's specifications. Noise levels produced by construction activities will not exceed the 80 dBA level at any one moment during permitted construction hours/days._____(Planning)

7. TEMPORARY SIGNAGE. Whenever feasible, temporary signage shall be installed to notify the public of closures or detours and the expected duration of closures or detours._____(Planning)

8. STAGING AREA-WHEN APPLICABLE. In order to reduce construction impacts to the residential uses adjacent to the project, the following provisions shall be adhered to:

    - Access to residences and commercial buildings shall not be blocked at anytime.
    - Prior to the commencement of grading, the applicant shall submit a plan to, and obtain approval from the Planning Director and City Engineer, which includes the location of all construction staging areas.
    - The staging area shall not be located on any private parcels without prior written consent from the owner.
    - The staging area shall be located in an area that minimizes impacts to residences and environmental resources. _____(Public Works)

9. DISCOVERY OF ARCHAELOGICAL RESOURCES. If historic or archaeological resources are uncovered during grading activities, all work shall stop and the applicant shall retain a qualified archaeologist. At the applicant's expense the qualified archaeologist will perform an archaeological reconnaissance and develop mitigation measures to protect archaeological resources. _____ (Public Works/Planning)

10. DISRUPTION OF UTILITIES. During construction underground utility alert services (USA) shall be used to identify the location of all underground services and to avoid the unplanned disruption of pipes or services lines during excavation and other activities._____(Public Works)

11. RECYCLING OF WASTE MATERIALS. Concrete, asphalt, soil, and wood waste materials shall be reused in the project or shall be recycled. _____(Public Works)

12. STORMWATER MANAGEMENT / EROSION CONTROL. During Construction the applicant shall minimize the transport and discharge of storm water from the project site by incorporation of the following measures into the construction site practices:

    - Identify all storm drains, drainage swales and creeks located near the construction site and make sure all subcontractors are aware of their locations to prevent pollutants from entering them. Use silt fence barrier, straw bale barrier, sand bags, brush or rock filter or other appropriate measures, as necessary to minimize the quantity of sediment laden runoff from the site. _____

    - Stabilize any areas that have been stripped of vegetation, and maintain erosion control measures between October 15 and April 15. _____

- Ensure that erosion control by re-vegetation is performed just prior to the rainy season unless on site irrigation is provided. Select seed to minimize fertilizer and water use. Limit watering to the amount and frequency, which can be absorbed on site. _____

- Avoid stockpiling of soils or materials, when rain is forecast. Cover with a waterproof tarp during periods of rainy weather to control runoff. Monitor the site for minimization of erosion and sediment runoff every 24 hours during and after every storm event. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels. _____

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or creek. Recycle, return to supplier or donate unwanted water-based (latex) paint. Dried latex paint may be disposed of in the garbage. Unwanted paint (that is not recycled), thinners, and sludge must be disposed of as hazardous waste. _____

- Avoid cleaning, fueling, or maintaining vehicles on site, except in an area designated to contain and treat runoff. Clean up leaks, drips, and other spills immediately so they do not contact stormwater. Never wash down pavement or surfaces where materials have spilled. Use dry cleanup methods whenever possible. _____

- Avoid mixing excess amounts of fresh concrete or cement mortar. Whenever possible, return contents of mixer barrel to the yard for recycling. Dispose of small amounts of excess concrete, grout, and mortar in the trash. ____

- Practice source reduction. Reduce waste by only ordering the amount you need to finish the job. Recycle leftover materials whenever possible. Materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, and batteries are recyclable. _____

- Inspect portable toilets for leaks. Do not place on or near storm drain outlets. Be sure the leasing company adequately maintains, promptly repairs, and replaces units as needed. _____ (Building)

13. EROSION CONTROL. The applicant shall provide for review by the City an Erosion Control Plan to ensure that erosion is reduced to the maximum extent practicable, retain sediment on-site during and after construction. The plan shall be designed to minimize the potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, apply nutrients at rates necessary to establish and maintain vegetation

without causing significant nutrient runoff to surface waters. The Erosion Control Plan shall incorporate the Best Management Practices (BMPs) subject to the approval of the City Engineer._____(Public Works)

14. GRADING, MATERIALS, EQUIPMENT AND VEHICLE STORAGE. An erosion and sediment control plan shall be submitted to the City Engineer and the City Planning Department for review and approval prior to issuance of a grading permit. No grading or preparation nor storage or placement of construction materials, equipment or vehicles shall take place prior to submittal and approval of building plans by the Public Works Department. Any earth movement on or off the site in excess of 50 cubic yards shall require the submittal of a grading plan for review and approval by the Public Works Department. Grading includes, but is not limited to, any leveling, scraping, clearing, grubbing or removal of surface area._____(Public Works)

15. HOURS OF CONSTRUCTION. The hours of construction shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. Saturday, and 10:00 a.m. to 6:00 p.m. Sundays and Holidays unless permitted by City Engineer prior to activity. _____ (Public Works)

16. HAZARDOUS MATERIALS. Any materials deemed hazardous by the San Mateo County Department of Health that are uncovered or discovered during the course of work under this permit shall be disposed in accordance with regulations of the San Mateo County of Health. _____ (Building/County Health)

17. DAMAGE TO STREETS. All work shall be undertaken in a manner that will prevent damage to public streets and utilities and that will maintain streets free and clear of any construction materials, debris, or mud. The applicant shall be responsible for restoring any damaged street improvements or utilities to the satisfaction of the City Engineer. _____ (Public Works)

18. EFFECTIVE DATE. The Coastal Development Permit shall take effect after final local action or 10 working days after receipt of the Notice of Final Action by the Coastal Commission for projects that are located in the Coastal Appeal Areas. The applicant/owner's shall submit a signed copy of these conditions of approval to the Planning Department before they can obtain a grading permit. _____

19. ACCURACY OF APPLICATION MATERIALS. The applicant shall be responsible for the completeness and accuracy of all forms and material submitted for this application. Any errors or discrepancies found therein may be grounds for the revocation or modification of this permit and/or any other City approvals. ____

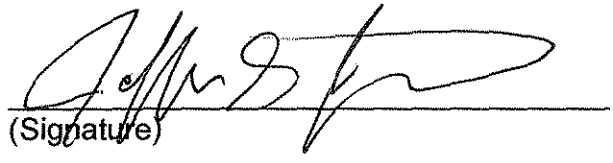
20. EXPIRATION. The Coastal Development Permit shall expire on the latest expiration date applicable to any other discretionary or ministerial permit or approval required for the development, including any extension granted for other permits or approvals. Should the development not require City permits or approvals other than a Coastal Development Permit, the Coastal Development Permit shall expire one year from its date of approval if the development has not begun during that time.

21. HOLD HARMLESS. The applicant agrees as a condition of approval of this application to indemnify, protect, defend with counsel selected by the City, and hold harmless, the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents, from and against an and all liabilities, claims, actions, causes of action, proceedings, suits, damages, judgments, liens, levies, costs and expenses of whatever nature, including reasonable attorney's fees and disbursements (collectively, "Claims") arising out of or in any way relating to the approval of this application, any actions taken by the City related to this entitlement, any review by the California Coastal Commission conducted under the California Coastal Act Public Resources Code Section 30000 et seq., or any environmental review conducted under the California Environmental Quality Act, Public Resources Code Section 210000 et seq., for this entitlement and related actions. The indemnification shall include any Claims that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent, passive or active negligence on the part of the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents. The applicant's duty to defend the City shall not apply in those instances when the applicant has asserted the Claims, although the applicant shall still have a duty to indemnify, protect and hold harmless the City. _____

22. PERMIT RUNS WITH THE LAND. The Coastal Development Permit runs with the land and the rights and obligations thereunder, including the responsibility to comply with conditions of approval, shall be binding upon successors in interest in the real property unless or until such permits are expressly abandoned.

OWNER'S/PERMITTEE'S CERTIFICATION:
I have read and understand and hereby accept and agree to implement the foregoing conditions of approval of the Coastal Development Permit.

APPLICANT:



(Signature)

03/07/2012
(Date)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
08ESMF00-2012-I-0319

APR 26 2012

Ms. Melanie Brent, Office Chief
Caltrans District 4 Environmental Analysis
California Department of Transportation
P.O. Box 23660
Oakland, California 94623-0660

Subject: Informal Consultation for the State Route 1 Traffic Signalization at Poplar Street Project in Half Moon Bay, San Mateo County, California

Dear Ms. Brent:

This is in response to a letter from the California Department of Transportation (Caltrans), dated March 1, 2012, to notify the U.S. Fish and Wildlife Service (Service) of the proposed State Route 1 (SR-1) Traffic Signalization at Poplar Street Project in Contra Costa County, California (EA 04-0G170K). This letter was received in our office on March 2, 2012, and requested concurrence with the not likely to adversely affect determination for the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) and threatened California red-legged frog (*Rana draytonii*). This letter is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Although critical habitat has been designated for the California red-legged frog, none exists within the action area.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users legislation (23 U.S.C. 327) allows the Secretary of the U.S. Department of Transportation acting through the Federal Highway Administration (FHWA) to establish a Surface Transportation Project Delivery Pilot Program, whereby a State may assume the FHWA responsibilities under the National Environmental Policy Act (NEPA) for environmental review, agency consultation and other action pertaining to the review or approval of a specific project. Caltrans assumed these responsibilities for the FHWA on July 1, 2007 through a Memorandum of Understanding (MOU) within the State of California (http://www.dot.ca.gov/ser/downloads/MOUs/nepa_delegation/sec6005mou.pdf).

The proposed action has an anticipated start date of August 2012, will be completed by October 15, 2012, and includes:

- Installation of traffic signal poles, consisting of:
  - Two signal light and light poles with mast arms for SR-1 direction of travel. The poles will be located adjacent to the edge of paved roadway within concrete footings measuring 3 feet in diameter by 9 feet deep.

- Additional signal light poles will be installed within the existing paved surfaces and have foundation dimensions of 2.5 feet in diameter by 5 feet deep (2 poles) or 2 feet in diameter by 3 feet deep (4 poles).

- New pavement landing areas will be constructed to provide a pedestrian refuge area at the northeast, northwest, and southeast corners of the intersection adjacent to the roadway. Each of the landing areas are approximately 5 feet wide and have various lengths at approximately 60 feet. Installation of electrical conduit will be constructed primarily on existing paved surfaces. The trenches for conduits will be 6 to 12 inches wide and 6 to 24 inches deep.

- A controller box with foundation dimensions of 4 feet wide by 5 feet long by 1-foot deep will be constructed in the northwest quadrant of the intersection near the edge of the roadway.

The action area is defined in 50 CFR §402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the purposes of the proposed action the Service considers the action area to comprise 2.10 acres, as specified in the letter submitted to the Service dated March 1, 2012.

The action area is set within an urban landscape on a two-lane highway. A Class I bicycle-pedestrian path parallels SR-1 in the northwest and southwest quadrants. Vegetation communities within the action area comprises ruderal grassland habitat that are regularly mowed and tilled. Two water features are present within the action area: a drainage inlet in the southwest quadrant and a low-lying depression in the northwest quadrant. Neither location contained standing water or saturated soils at the time of the January 5, February 15, and March 12, 2012, site visits; however, these areas convey surface water and pond water, respectively, during and following storm events.

Suitable San Francisco garter snake and California red-legged frog habitat (breeding, upland and/or foraging) is present approximately ½-mile to the north and south within Pilarcitos Creek and undeveloped non-native annual grasslands, respectively. Surrounding land use within and adjacent to the action area is urban comprising single-family residences and access to the action area is limited to the roadside verge and vegetated drainages along SR-1. Given the timing and location of the work relative to the biology and ecology of the species, San Francisco garter snakes and California red-legged frogs are unlikely to be present within the action area.

The Service concurs that the proposed action is not likely to adversely affect the San Francisco garter snake and California red-legged frog based on the following: (1) construction activities will be restricted to the dry season from August 1 and October 15; (2) the project footprint has been designed with the minimal area of disturbance necessary with most work occurring within paved or disturbed areas; (3) environmentally sensitive area fencing will be installed adjacent to the work areas to prevent contractors from encroaching into the drainage inlet and the depression in the northwest quadrant; (4) trenches and excavations will be covered at night to dissuade species from entering or becoming trapped: (5) the potential for taking San Francisco garter snakes and California red-legged frogs will be minimized by incorporating environmental awareness training and stop work protocols if listed species are identified within the active construction areas, conducting preconstruction surveys prior to vegetation clearing or ground disturbing activities, and employing Service-approved biological monitors to conduct daily surveys, verify the integrity of the environmentally sensitive area fencing and monitor construction activities; (6) requiring the contractor to implement Caltrans Best Management

Practices to minimize wind and water-related erosion; (7) prohibiting construction materials from being stored in vegetated area; and (8) hydroseeding disturbed areas after construction is complete per Erosion Control Plans 1 and 2 provided as an attachment to the letter to the Service dated March 1, 2012.

The Service recommends that Caltrans adopt the following avoidance measures in addition to those presented in the letter to the Service dated March 1, 2012:

1. To the extent practicable, nighttime construction shall be minimized to avoid effects to nocturnally active listed species. Work lights shall be directed away from adjacent habitat areas.
2. To prevent San Francisco garter snakes and California red-legged frogs from becoming entangled, trapped or injured, erosion control materials that use plastic or synthetic mono-filament netting shall not be used within the action area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute or twine, or tackified hydroseeding compounds.

Based on the location, timing and description of the proposed action and implementation of the proposed avoidance and minimization measures, the Service concurs that the proposed action is not likely to adversely affect the San Francisco garter snake and California red-legged frog. The Service concurs that the effects of the action are extremely unlikely to occur and therefore qualify as insignificant and discountable.

This concludes informal consultation on the proposed SR-1 Traffic Signalization at Poplar Street Project in Contra Costa County, California. Unless new information reveals effects of the proposed action that may affect listed species or critical habitat in a manner or to an extent not considered; or the proposed action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered; or new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act, is necessary. If you have questions concerning this letter in reference to the proposed SR-1 Traffic Signalization at Poplar Street Project, please contact Jerry Roe or Ryan Olah, Coast Bay/Forest Foothills Division Chief, at the letterhead address or at (916) 414-6600.

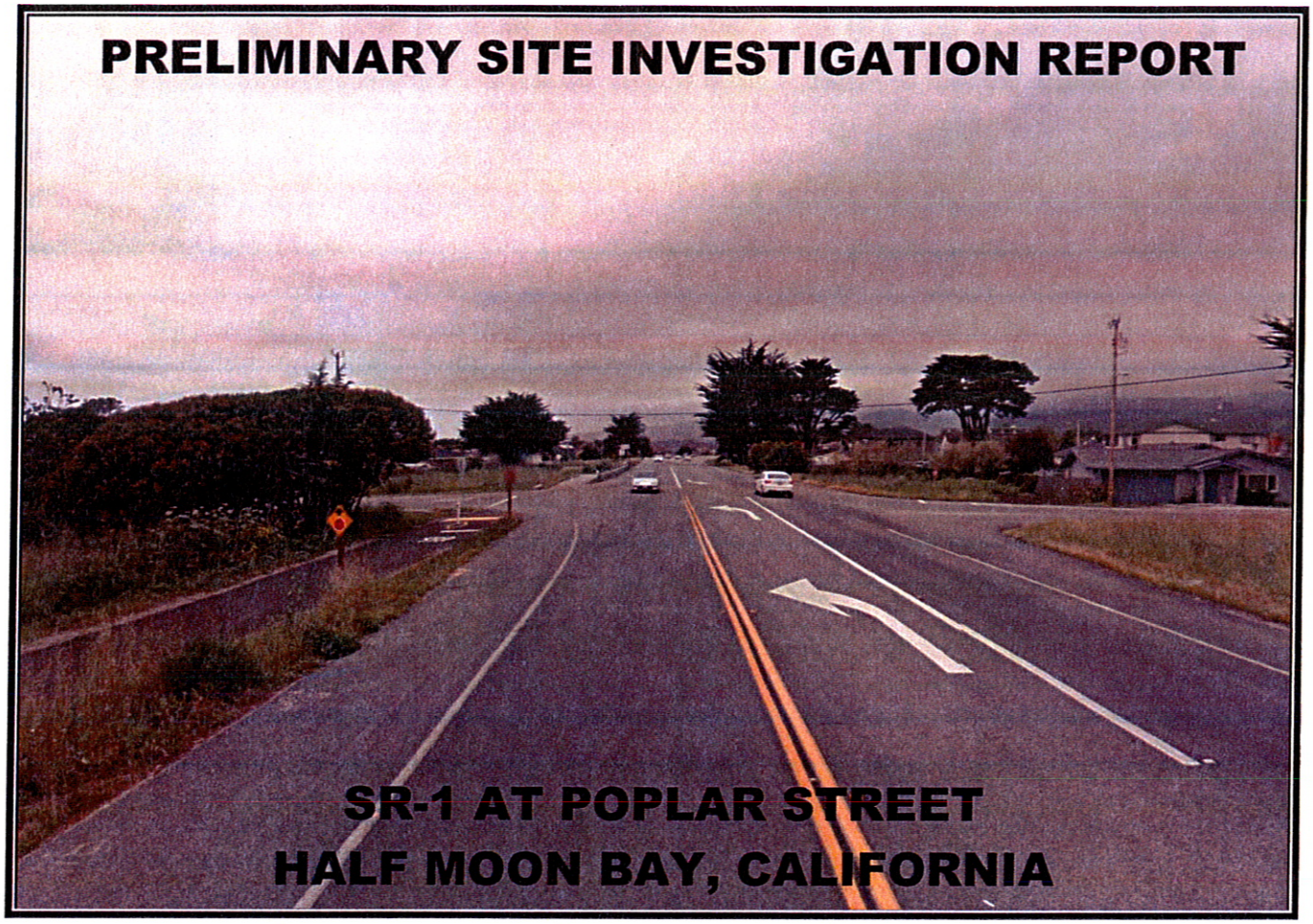
Sincerely,

E. Tattersall

Eric Tattersall
Deputy Assistant Field Supervisor

cc:
Frances Malamud-Roam, California Department of Transportation, Oakland, California
Marcia Grefsrud, California Department of Fish and Game, Yountville, California
Liam Davis, California Department of Fish and Game, Yountville, California

PRELIMINARY SITE INVESTIGATION REPORT



SR-1 AT POPLAR STREET
HALF MOON BAY, CALIFORNIA

PREPARED FOR:
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE, MS8C
OAKLAND, CA 94612

Caltrans®

PREPARED BY:
GEOCON CONSULTANTS, INC.
6671 BRISA STREET
LIVERMORE, CA 94550

GEOCON

GEOCON PROJECT NO. E8560-06-29
CALTRANS EA 04-0G1701
CALTRANS PROJECT # 04-0002-0865-1

OCTOBER 2011

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REPORT LIMITATIONS

This report has been prepared exclusively for the State of California Department of Transportation (Caltrans) District 4. The information contained herein is only valid as of the date of the report and will require an update to reflect additional information obtained.

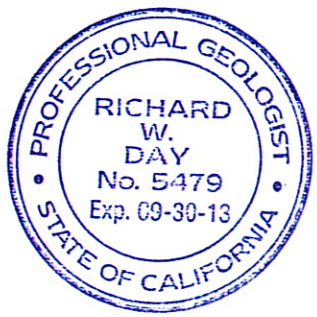
This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts 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.

GEOCON CONSULTANTS, INC.

Luann Beadle
Sr. Staff Scientist

Richard Day, CEG, CHG
Senior Geologist



CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING

Reviewed By:	Recommended By:	Approved By:
Keith Fang Task Order Manager	Chris Wilson, PE District Branch Chief	Alan Baradar, PE, REA District Office Chief

PROJECT TEAM

Contact	Affiliation	Responsibility
Romy Fuentes, PE 510.622.8803 510.622.0198 fax romy_f_fuentes@dot.ca.gov	Caltrans – District 4 Consultant Services 111 Grand Avenue, MS7B Oakland, California 94612	Contract Manager
Keith Fang 510.622.8795 510.286.5639 fax keith_fang@dot.ca.gov	Caltrans – District 4 Environmental Engineering 111 Grand Avenue, MS8C Oakland, California 94612	Task Order Manager
Richard Day, CEG, CHG Luann Beadle 925.371.5900 925.371.5915 fax livermore@geoconinc.com	Geocon Consultants, Inc. 6671 Brisa Street Livermore, CA 94550 *(Caltrans Consultant)*	Project Management Sample Collection Field QA/QC Investigation Report
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Diane Galvan 562.989.4045 562.989.4040 fax diane@atlglobal.com	Advanced Technology Laboratories 1510 E. 33rd Street Signal Hill, CA 90807 (*Geocon Subcontractor*)	Soil Sample Analysis

PRELIMINARY SITE INVESTIGATION REPORT

1.0 INTRODUCTION

This Preliminary Site Investigation Report for an area along State Route 1 (SR-1) in San Mateo County, California was prepared by Geocon Consultants, Inc. under California Department of Transportation (Caltrans) Contract No. 04A3578 and Task Order No. 29 (TO-29), EA 04-0G1701.

1.1 Project Description and Proposed Improvements

The project location consists of Caltrans right-of-way (ROW) at the intersection of SR-1 and Poplar Street in the city of Half Moon Bay, California. Caltrans proposes to install traffic signals and pedestrian pads at the intersection of SR-1 and Poplar Street in order to improve traffic safety. The project location is depicted on the attached Vicinity Map, Figure 1.

1.2 General Objectives

The purpose of the site investigation was to evaluate concentrations of metals, including aerially-deposited lead (ADL), total petroleum hydrocarbons (TPH), and chlorinated pesticides in the surface soils within the project boundaries.

The information obtained from this investigation will be used by Caltrans to evaluate soil disposal costs and identify health and safety concerns.

2.0 BACKGROUND

2.1 Hazardous Waste Determination Criteria

Regulatory criteria to classify a waste as California hazardous for handling and disposal purposes are contained in the CCR, Title 22, Division 4.5, Chapter 11, Article 3, §66261.24. Criteria to classify a waste as Resource, Conservation, and Recovery Act (RCRA) hazardous are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), Section 261.

For waste containing metals, the waste is classified as California hazardous when: 1) the total metal content exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the soluble metal content exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste has the potential of exceeding the STLC when the waste's total metal content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal

analysis is required. A material is classified as RCRA hazardous, or Federal hazardous, when the soluble metal content exceeds the Federal regulatory level 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 and corrosivity; however, for the purposes of this investigation, toxicity (i.e., lead concentrations) 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.

2.2 Environmental Screening Levels

The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) has prepared a technical report entitled *Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, Interim Final* (May 2008), which presents Environmental Screening Levels (ESLs) for soil, groundwater, soil gas, and surface water, to assist in evaluating sites impacted by releases of hazardous chemicals. The ESLs are conservative values for more than 100 commonly detected contaminants, which may be used to compare with environmental data collected at a site. ESLs are strictly risk assessment tools and "not regulatory clean up standards." The presence of a chemical at concentrations in excess of an ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring; this simply indicates that a potential for adverse risk may exist and that additional evaluation is or "may be" warranted (SFRWQCB, 2008).

The most conservative ESL table was used for this characterization: Table A – Shallow Soil (≤3 meters below ground surface; bgs) – Groundwater is a Current or Potential Source of Drinking Water. The respective ESLs are listed at the end of Tables 3 through 5 for comparative purposes.

3.0 SCOPE OF SERVICES

The scope of services requested by Caltrans under TO-29, EA 04-0G1701 included the following:

3.1 Pre-field Activities

- Retained the services of Advanced Technology Laboratories (ATL), a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of soil samples.

3.2 Field Activities

The field investigation was performed on September 27, 2011, by Geocon staff. The following field activities were performed during the sampling efforts:

- Advanced 18 soil borings at the project location using hand-auger techniques. The borings were advanced to a maximum depth of 0.5 foot.
- Collected 6 soil samples for selected analysis of CAM 17 metals.
- Collected 12 soil samples for total lead analysis.
- Collected 6 soil samples for organochlorine pesticide analysis.
- Collected 6 soil samples for total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPHmo) analyses.
- Collected 3 soil samples for pH analysis.
- Transported samples to California-certified environmental laboratories for analysis under standard chain-of-custody (COC) documentation.

4.0 INVESTIGATIVE METHODS

4.1 Sampling Procedures

Soil samples were collected from 18 boring locations identified by the Caltrans TO Manager. Geocon recorded the boring locations using Differential Global Positioning System (DGPS) equipment. Boring coordinates are presented on Table 1 and boring locations are shown on the Site Plan, Figure 2.

The soil samples for analysis of CAM 17 metals and pesticides were collected in new stainless steel tubes sealed with Teflon tape and plastic end-caps. Soil samples for total lead analysis were collected into new resealable plastic bags. Sample containers were labeled and transported to a Caltrans-approved, State-certified environmental laboratory using standard COC documentation. Soil borings were backfilled to surface with soil cuttings.

Geocon provided QA/QC procedures during the field activities. These procedures included washing the sampling equipment with a Liqui-Nox® solution followed by a double rinse with deionized water. Decontamination water was disposed of to the ground surface within Caltrans right-of-way in a manner not to create runoff, away from drain inlets or potential water bodies.

4.2 Laboratory Analyses

Laboratory analyses were performed by ATL under standard turnaround-time (TAT). The laboratory reports and COC documentation are included in Appendix A.

The soil samples were analyzed as follows:

- 12 samples for total lead using Environmental Protection Agency (EPA) Test Method 6010 ICAP.
- 6 samples for CAM 17 metals according to Title 22 CCR, EPA Test Methods 6010 ICAP and 7471A.
- 10 samples with total lead concentrations equal to or exceeding 50 mg/kg (i.e. equal to or exceeding ten times the STLC of 5.0 mg/l) were further analyzed for WET lead.
- 6 samples for total petroleum hydrocarbons as TPHg, TPHd, and TPHmo using EPA Test Method 8015.
- 3 samples were analyzed using EPA Test Method 9045 for pH.
- 6 samples for organochlorine pesticide analysis using EPA Test Method 8081.

4.3 Laboratory QA/QC

QA/QC procedures were performed for each method of analysis with specificity for each analyte listed in the test method's QA/QC. The laboratory QA/QC procedures included the following:

- One method blank for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every ten samples, batch of samples or type of matrix; whichever was more frequent, with spike made at ten times the detection limit or at the analyte level.

Prior to submitting the samples to the laboratory, the COC documentation was reviewed for accuracy and completeness.

5.0 INVESTIGATIVE RESULTS

5.1 Subsurface Conditions

Observations during field activities indicated that surface soil at the project location generally consists of loose fine-grained materials, consisting of mostly sand in the upper 0.5 foot.

5.2 Laboratory Analytical Results

The analytical results are summarized in Tables 2 to 5 and are summarized below:

- The following metals were not detected above their respective laboratory reporting limits: antimony, beryllium, mercury, molybdenum, selenium, silver, and thallium.
- Total lead was reported at concentrations ranging from less than (<) the laboratory reporting limit of 5.0 to 110 mg/kg.
- WET lead was reported at concentrations ranging from 1.6 to 3.9 mg/l.
- Remaining CAM 17 metals were reported in the samples at total concentrations below ten times their respective STLCs.
- TPHg was not detected at the reporting limit of 1.0 mg/kg.
- TPHd was reported at concentrations of 56 to 130 mg/kg.
- TPHmo was reported at concentrations of 210 to 620 mg/kg.
- Organochlorine pesticide 4,4-DDT was reported in two samples at concentrations of 2.3 and 2.5 µg/kg; alpha-Chlordane was reported in three samples at concentrations of 1.6 to 4.5 µg/kg; gamma-Chlordane was reported in three samples at concentrations of 1.4 to 3.4 µg/kg; and Chlordane was reported in 5 samples at concentrations ranging from 9.8 to 36 µg/kg. No other pesticides were reported at or above reporting limits.

5.3 Laboratory Quality Assurance/Quality Control

We reviewed the QA/QC results provided with the laboratory analytical reports. The data indicate non-detect results for the method blanks at or above reporting limits. Dilution was necessary for several samples. The Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) was outside recovery criteria for several samples. The relative percent differences (RPD) for MS/MSD was outside of recovery limits for two samples. The data was validated by Laboratory Control Samples (LCS). Surrogate recovery was biased low for one sample. Remaining samples and internal laboratory QA/QC samples showed acceptable recoveries and relative percent differences (RPDs). Based on this limited data review, no additional qualifications of the soil data are necessary, and the data are of sufficient quality for the purposes of this report.

6.0 CONCLUSIONS

Metals, petroleum hydrocarbons, and organochlorine pesticides concentrations reported in soil samples collected from the Site were compared to California hazardous waste classification criteria and ESL values. The data are summarized in Tables 2 through 5 and discussed below.

6.1 Lead in Soil

Based on the data presented in Table 2, soil excavated from the Site would be classified as non-hazardous since the total lead concentrations are less than the TTLC of 1,000 mg/kg and the WET lead concentrations are less than the lead STLC of 5.0 mg/l.

6.2 CAM 17 Metals in Soil

Based on a comparison of the total CAM17 metals concentrations to their respective STLCs and TTLCs, soil excavated from the Site would not be considered a hazardous waste based on metal content.

The maximum CAM 17 metals concentrations in site soil were compared to ESLs (SFRWQCB, May 2008, Tables A and K-3) and published background levels typically present in California soils as presented in *Background Concentrations of Trace and Major Elements in California Soils* (Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, March, 1996.

Arsenic and vanadium were reported with concentrations greater than ESLs. Arsenic was reported in only one sample, with a reported concentration of 1.6 mg/kg, above the residential ESL of 0.39 mg/kg and equal to the commercial/industrial land use ESL of 1.6 mg/kg, but below the construction exposure ESL of 15 mg/kg. Vanadium was reported in the soil samples at a maximum concentration of 23 mg/kg, above the residential land use ESL of 16 mg/kg, and below the commercial and construction exposure ESLs of 200 and 770 mg/kg, respectively. ESLs and published background concentrations for these elements are summarized in the table below:

Metal	Mean	Maximum	Shallow Soil Residential ESL	Shallow Soil Commercial/ Industrial ESL	Worker Direct Exposure ESL	PUBLISHED BACKGROUND MEAN[1]	PUBLISHED BACKGROUND RANGE [1]
Arsenic	NA	1.6	0.39	1.6	15	3.5	0.6 to 11.0
Vanadium	19.5	23	16	200	770	112	39 to 288

NA – Not applicable, as arsenic was reported in only one of six samples

Concentrations reported in mg/kg

[1] Kearney Foundation of Soil Science, March 1996

The single reported arsenic concentration in the soil samples analyzed exceeds the residential ESL and is equal to the commercial/industrial land use ESL, however, it is within the published background range. The SFRWQCB *Update to Environmental Screening Levels (ESLs) Technical Document (November 2007, Revised May 2008)* states that ambient background concentrations of arsenic typically exceed risk-based screening levels. In such instances, it may be more appropriate to compare site data to regionally-specific established background levels.

The maximum reported vanadium concentration for the soil samples collected at the Site is greater than the residential land use ESL; however, it is less than the commercial/industrial land use and construction exposure ESLs and less than the published background range.

Based on the reported results for arsenic and vanadium, offsite reuse or disposal of excavated soil may be restricted based on metals content, depending on proposed use.

6.3 Petroleum Hydrocarbons in Soil

TPHg was not detected above the laboratory reporting limit of 1.0 mg/kg. TPHd was reported at concentrations ranging from 56 mg/kg to 130 mg/kg, exceeding the residential and commercial/industrial ESLs of 83 mg/kg, but below the construction exposure ESL of 4,200 mg/kg. TPHmo was reported at concentrations ranging from 210 to 620 mg/kg, exceeding the residential ESL of 370 mg/kg but less than the commercial/industrial ESL of 2,500 mg/kg.

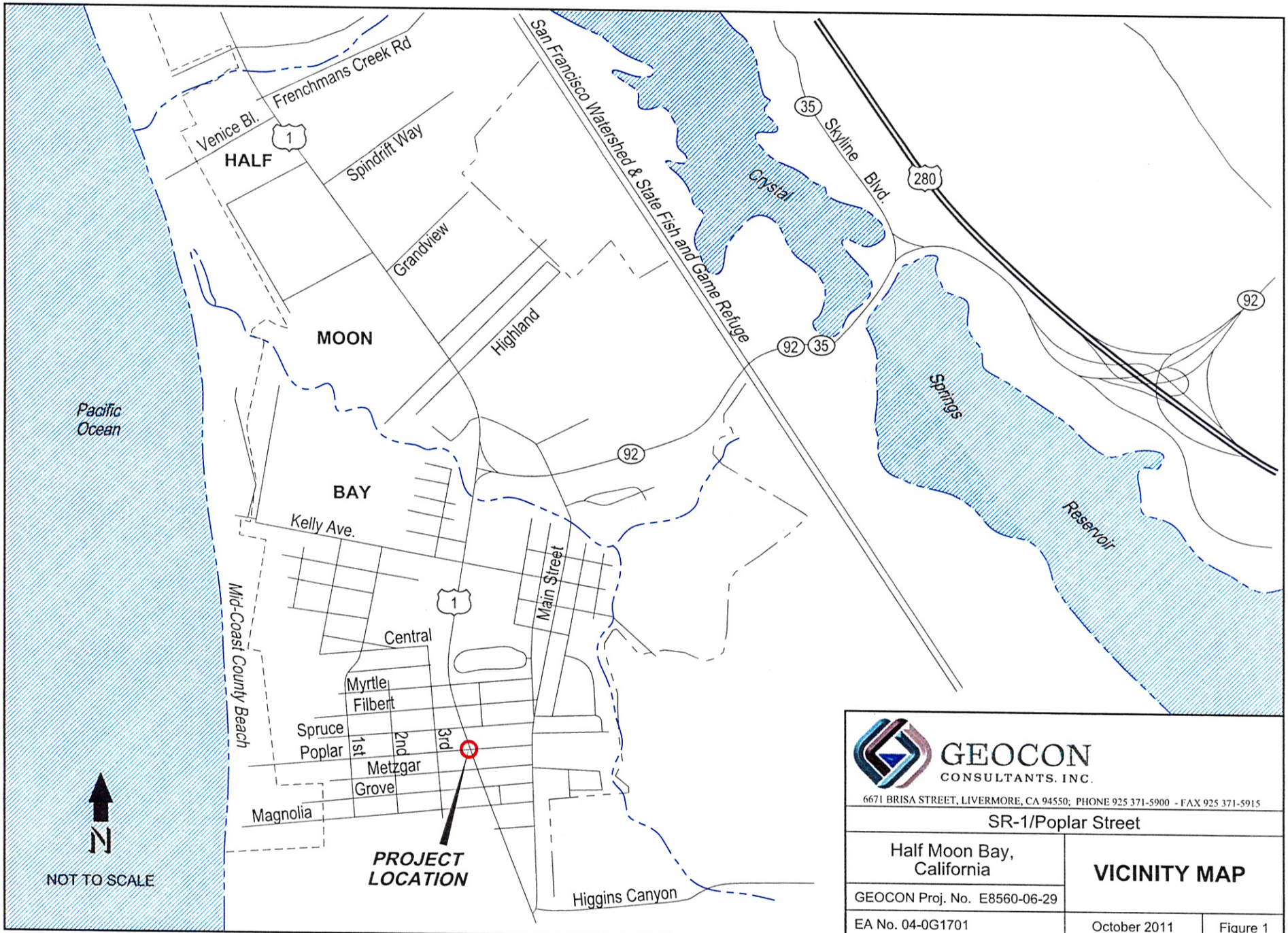
Based on the reported TPHd/mo concentrations exceeding the residential ESL and TPHd exceeding the commercial/industrial ESL, offsite reuse may be restricted due to petroleum hydrocarbon content.

6.4 Organochlorine Pesticides

Organochlorine pesticides were reported at concentrations ranging from <1.0 µg/kg to 36 µg/kg, below the residential, commercial/industrial, and construction exposure ESLs for these compounds. Based on the reported pesticides concentrations, offsite reuse should not be restricted due to pesticides content.

6.5 Worker Protection

The contractor(s) should prepare a project-specific health and safety plan to prevent or minimize worker exposure to metals, petroleum hydrocarbons, and pesticides in soil. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of soil.



GEOCON CONSULTANTS, INC.

6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

SR-1/Poplar Street

Half Moon Bay, California

VICINITY MAP

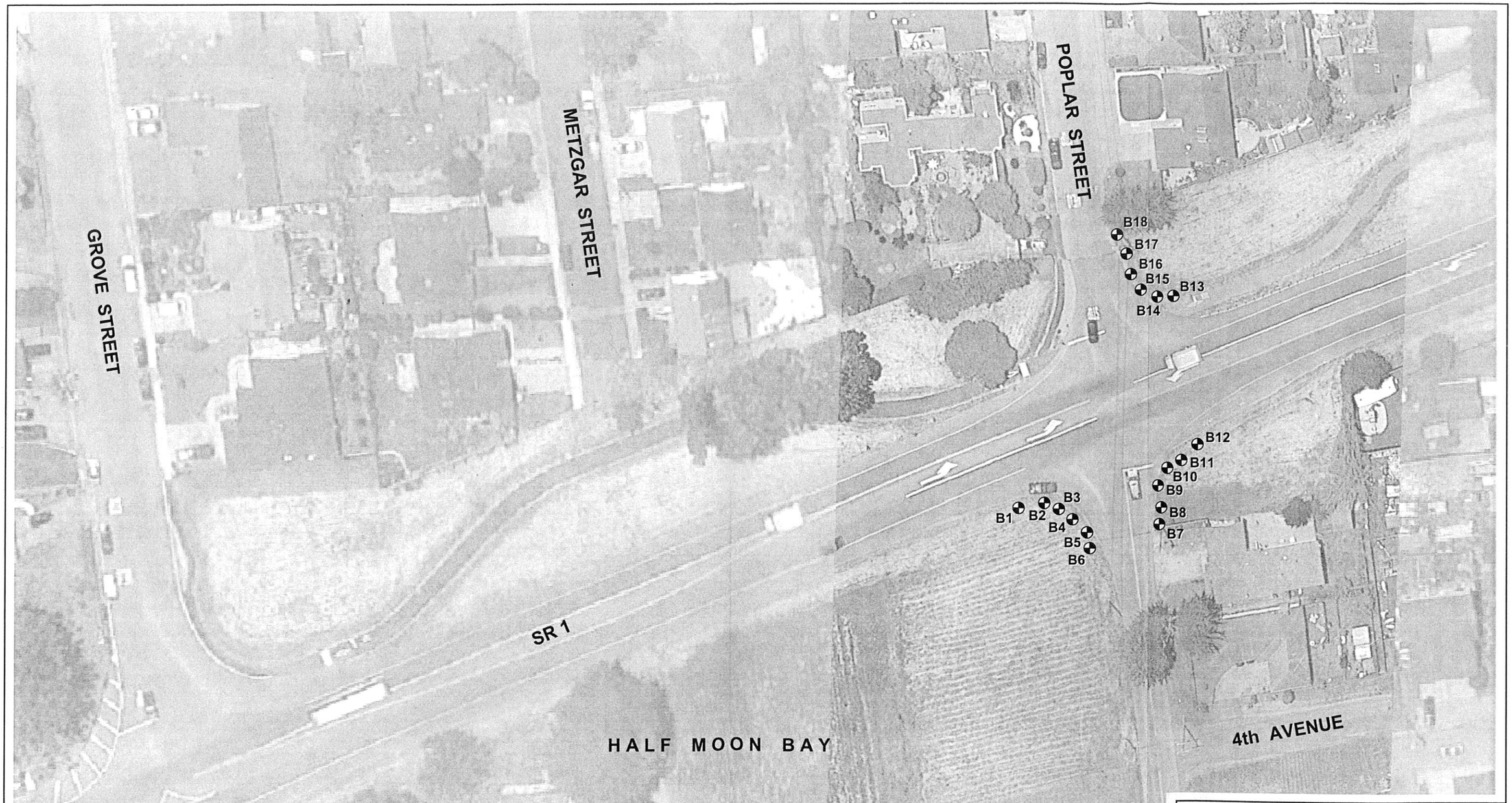
GEOCON Proj. No. E8560-06-29

EA No. 04-0G1701

October 2011

Figure 1

SITE1011



LEGEND:

Boring Location

N

0 30 60

SCALE: feet

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SR-1/Poplar Street

Half Moon Bay, California

SITE PLAN

GEOCON Proj. No. E8560-06-29

EA No. 04-0G1701

October 2011

Figure 2

SITE1011

TABLE 1
Boring Coordinates
SR-1/Poplar Street Project
Half Moon Bay, California

Boring	Northing	Easting	Latitude	Longitude
B1	1,994,499.567	6,000,642.286	37.456539097	-122.433009670
B2	1,994,515.335	6,000,639.330	37.456582227	-122.433020974
B3	1,994,524.320	6,000,643.060	37.456607109	-122.433008766
B4	1,994,532.740	6,000,649.502	37.456630594	-122.432987177
B5	1,994,541.750	6,000,657.559	37.456655791	-122.432960064
B6	1,994,543.355	6,000,667.206	37.456660746	-122.432926951
B7	1,994,586.948	6,000,652.450	37.456779608	-122.432980879
B8	1,994,588.193	6,000,642.136	37.456782443	-122.433016495
B9	1,994,586.090	6,000,628.663	37.456775904	-122.433062752
B10	1,994,591.991	6,000,617.888	37.456791495	-122.433100284
B11	1,994,600.694	6,000,613.031	37.456815118	-122.433117633
B12	1,994,610.662	6,000,603.248	37.456841933	-122.433152041
B13	1,994,595.399	6,000,512.322	37.456794864	-122.433464144
B14	1,994,585.306	6,000,512.927	37.456767185	-122.433461344
B15	1,994,574.707	6,000,508.675	37.456737841	-122.433475233
B16	1,994,568.505	6,000,499.007	37.456720262	-122.433508092
B17	1,994,565.838	6,000,486.412	37.456712224	-122.433551286
B18	1,994,559.951	6,000,474.632	37.456695392	-122.433591441

Coordinates are shown in feet, NAD 1983 (Zone 3)

TABLE 2
Summary of Lead and pH Results
SR-1/Poplar Street Project
Half Moon Bay, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	pH
B1-0	0	62	1.9	7.0
B2-0	0	28	---	---
B3-0	0	37	---	---
B4-0	0	100	2.2	---
B5-0	0	110	3.9	---
B6-0	0	85	2.7	---
B7-0	0	36	---	---
B8-0	0	58	1.6	---
B9-0	0	69	2.4	6.8
B10-0	0	88	2.6	---
B11-0	0	38	---	---
B12-0	0	39	---	---
B13-0	0	<5.0	---	---
B14-0	0	21	---	---
B15-0	0	63	3.0	6.7
B16-0	0	110	3.6	---
B17-0	0	43	---	---
B18-0	0	50	1.8	---
Rinse Blank 1	---	<0.25 mg/l	---	---
Rinse Blank 2	---	<0.25 mg/l	---	---
Hazardous Waste Criteria				
TTLC (mg/kg)		1,000	---	---
STLC (mg/l)		---	5.0	---
TCLP (mg/l)		---	---	---

Notes:
mg/kg = Milligrams per kilogram
mg/l = Milligrams per liter
--- = Not analyzed or no standard
<5.0 = Not detected above the laboratory reporting limit
WET = Waste Extraction Test using citric acid as the extraction fluid
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration

TABLE 3
Summary of CAM17 Metals Results
SR-1/Poplar Street Project
Half Moon Bay, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B3-0	0	<2.0	<1.0	100	<1.0	<1.0	14	4.7	26	37	<0.10	<1.0	11	<1.0	<1.0	<1.0	19	79
B4-0	0	<2.0	1.6	140	<1.0	<1.0	11	5.2	22	100	<0.10	<1.0	14	<1.0	<1.0	<1.0	19	84
B9-0	0	<2.0	<1.0	88	<1.0	<1.0	9.8	3.5	16	69	<0.10	<1.0	13	<1.0	<1.0	<1.0	14	65
B10-0	0	<2.0	<1.0	120	<1.0	1.1	13	5.4	29	88	<0.10	<1.0	19	<1.0	<1.0	<1.0	21	110
B15-0	0	<2.0	<1.0	120	<1.0	<1.0	10	5.4	28	63	<0.10	<1.0	12	<1.0	<1.0	<1.0	23	89
B16-0	0	<2.0	<1.0	92	<1.0	<1.0	11	5.8	33	110	<0.10	<1.0	16	<1.0	<1.0	<1.0	21	140
ESLs																		
Residential Land Use		6.3	0.39	750	4.0	1.7	750	40	230	200	1.3	40	150	10	20	1.3	16	600
Comm/Ind Land Use		40	1.6	1500	8.0	7.4	750	80	230	750	10	40	150	10	40	16	200	600
Construction Exposure		310	15	2,600	98	39	1,200,000	94	310,000	750	58	3,900	260	3,900	3,900	62	770	230,000
Hazardous Waste Criteria																		
TTLC		500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC		15	5.0	100	0.75	1.0	5.0	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250
TCLP		---	5.0	100	---	1.0	6.0	---	---	5.0	0.2	---	---	1.0	5.0	---	---	---

Notes:

Total metal results are shown in milligrams per kilogram (mg/kg)
< = Analyte was not detected above the laboratory reporting limit.
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, Revised May 2008.
ESL and Hazardous Waste Criteria Values listed for chromium are for Chromium III, as there is no standard for total chromium.
TTLC = total threshold limit concentration
STLC = soluble threshold limit concentration
TCLP = toxicity characteristic leaching procedure
--- = no standard

TABLE 4
Summary of Petroleum Hydrocarbons Results
SR-1/Poplar Street Project
Half Moon Bay, California

Sample ID	Sample Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
B3-0	0	<1.0	70	290
B5-0	0	<1.0	97	440
B9-0	0	<1.0	95	430
B12-0	0	<1.0	56	210
B15-0	0	<1.0	98	490
B17-0	0	<1.0	130	620
ESLs				
Residential		83	83	370
Commercial/Industrial		83	83	2,500
Construction Exposure		4,200	4,200	12,000

Notes:
mg/kg = milligrams per kilogram
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil
--- = Not Analyzed
< = Not detected above the stated laboratory reporting limit
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, May 2008.

TABLE 5
Summary of Pesticides Results
SR-1/Poplar Street Project
Half Moon Bay, California

Sample ID	Sample Depth (feet)	4,4'-DDT (µg/kg)	alpha-Chlordane (µg/kg)	gamma-Chlordane (µg/kg)	Chlordane (µg/kg)	Other Pesticides (µg/kg)
B3-0	0	<2.0	<1.0	<1.0	9.8	ND
B5-0	0	2.3	1.6	1.4	16	ND
B9-0	0	<2.0	<1.0	<1.0	9.7	ND
B12-0	0	<2.0	<1.0	<1.0	<8.5	ND
B15-0	0	2.5	4.5	3.4	36	ND
B17-0	0	<2.0	4.1	2.6	32	ND
ESLs						
Residential		1,700	---	---	440	---
Commercial/Industrial		4,000	---	---	1,700	---
Construction Exposure		87,000	---	---	21,000	---

Notes:
µg/kg = micrograms per kilogram
< = Not detected above the stated laboratory reporting limit
ND = None detected
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, May 2008.
--- ESL does not exist for this compound

APPENDIX A

October 06, 2011

R. Day, C. Merritt, L. Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 120041

RE: CALTRANS-SR1/POPLAR, E8560-06-29

Attention: R. Day, C. Merritt, L. Beadle

Enclosed are the results for sample(s) received on September 28, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT:	Geocon Consultants, Inc.
Project:	CALTRANS-SR1/POPLAR, E8560-06-29
Lab Order:	120041

CASE NARRATIVE

Analytical Comments for Method 6010

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are/is outside recovery criteria for sample 120041-017AMS; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

RPD for Duplicate (DUP) and/or Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for samples 120041-002ADUP, 120041-003ADUP and 120041-017AMSD; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for Method 8015 (DRO/ORO)

Dilution was necessary for samples 120041-003A, 120041-003ADUP, 120041-005A, 120041-009A, 120041-013A, 120041-016A, 120041-018A, 120060-005AMS and 120060-005AMSD, due to sample matrix.

Surrogate recovery was dliuted out for samples 120041-003A, 120041-005A, 120041-009A, 120041-013A, 120041-016A and 120041-018A.

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are/is outside recovery criteria for sample 120060-005AMS; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for sample 120060-005AMSD; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for Method 8081

Surrogate recovery biased low for sample 120041-009A, possibly due to matrix interferences.

Advanced Technology Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

Date: 10/6/2011

ANALYTICAL RESULTS

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	120041
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Date Received**	9/28/2011 8:34:00 AM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	IL

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
120041-001A	B1-0	62	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-002A	B2-0	28	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-005A	B5-0	110	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-006A	B6-0	85	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-007A	B7-0	36	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-008A	B8-0	58	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-012A	B11-0	38	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-013A	B12-0	39	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-014A	B13-0	ND	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-015A	B14-0	21	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-018A	B17-0	43	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011
120041-019A	B18-0	50	mg/Kg	76009	5.0	1	9/27/2011	10/3/2011

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out

Advanced Technology Laboratories

Date: 10/6/2011

ANALYTICAL RESULTS

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	120041
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Date Received**	9/28/2011 8:34:00 AM
Project No:		**Matrix:**	Water
Analyte:	Lead	**Analyst:**	IL

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
120041-010A	RB1	ND	mg/L	76024	0.25	1	9/27/2011	10/4/2011
120041-020A	RB2	ND	mg/L	76024	0.25	1	9/27/2011	10/4/2011

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B3-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:10:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_111003E	QC Batch: 76013			PrepDate: 10/3/2011		Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	10/3/2011 03:46 PM
Arsenic	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Barium	100	1.0		mg/Kg	1	10/3/2011 03:46 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Cadmium	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Chromium	14	1.0		mg/Kg	1	10/3/2011 03:46 PM
Cobalt	4.7	1.0		mg/Kg	1	10/3/2011 03:46 PM
Copper	26	2.0		mg/Kg	1	10/3/2011 03:46 PM
Lead	37	1.0		mg/Kg	1	10/3/2011 03:46 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Nickel	11	1.0		mg/Kg	1	10/3/2011 03:46 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 03:46 PM
Vanadium	19	1.0		mg/Kg	1	10/3/2011 03:46 PM
Zinc	79	1.0		mg/Kg	1	10/3/2011 03:46 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B(M)**		
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: **CBR**
DRO	70	8.0		mg/Kg	2	10/5/2011 09:54 AM
ORO	290	8.0		mg/Kg	2	10/5/2011 09:54 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 09:54 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	10/3/2011 04:01 PM
Surr: Bromofluorobenzene (FID)	106	69-158		%REC	1	10/3/2011 04:01 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
4,4´-DDE	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
4,4´-DDT	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B3-0
Lab Order:	120041	Collection Date:	9/27/2011 10:10:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			EPA 8081A		
RunID: GC10_111004A	QC Batch: 76030				PrepDate: 10/3/2011	Analyst: HL
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Chlordane	9.8	8.5		µg/Kg	1	10/4/2011 02:27 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 02:27 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 02:27 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 02:27 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 02:27 PM
Surr: Decachlorobiphenyl	64.5	39-104		%REC	1	10/4/2011 02:27 PM
Surr: Tetrachloro-m-xylene	48.9	43-100		%REC	1	10/4/2011 02:27 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011				PrepDate: 10/3/2011	Analyst: VV
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:17 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B4-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:13:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_111003E	QC Batch: 76013			PrepDate:	10/3/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	10/3/2011 03:49 PM
Arsenic	1.6	1.0		mg/Kg	1	10/3/2011 03:49 PM
Barium	140	1.0		mg/Kg	1	10/3/2011 03:49 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Cadmium	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Chromium	11	1.0		mg/Kg	1	10/3/2011 03:49 PM
Cobalt	5.2	1.0		mg/Kg	1	10/3/2011 03:49 PM
Copper	22	2.0		mg/Kg	1	10/3/2011 03:49 PM
Lead	100	1.0		mg/Kg	1	10/3/2011 03:49 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Nickel	14	1.0		mg/Kg	1	10/3/2011 03:49 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 03:49 PM
Vanadium	19	1.0		mg/Kg	1	10/3/2011 03:49 PM
Zinc	84	1.0		mg/Kg	1	10/3/2011 03:49 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011			PrepDate:	10/3/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B5-0
Lab Order:	120041	Collection Date:	9/27/2011 10:15:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-005A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			EPA 8015B(M)		
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: CBR
DRO	97	8.0		mg/Kg	2	10/5/2011 10:51 AM
ORO	440	8.0		mg/Kg	2	10/5/2011 10:51 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 10:51 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: TP
GRO	ND	1.0		mg/Kg	1	10/3/2011 04:16 PM
Surr: Bromofluorobenzene (FID)	105	69-158		%REC	1	10/3/2011 04:16 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			EPA 8081A		
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: HL
4,4'-DDD	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
4,4'-DDE	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
4,4'-DDT	2.3	2.0		µg/Kg	1	10/4/2011 02:55 PM
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
alpha-Chlordane	1.6	1.0		µg/Kg	1	10/4/2011 02:55 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
Chlordane	16	8.5		µg/Kg	1	10/4/2011 02:55 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 02:55 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
gamma-Chlordane	1.4	1.0		µg/Kg	1	10/4/2011 02:55 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 02:55 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 02:55 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 02:55 PM
Surr: Decachlorobiphenyl	61.1	39-104		%REC	1	10/4/2011 02:55 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:15:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-005A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B				**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate:	10/3/2011	Analyst: **HL**
Surr: Tetrachloro-m-xylene	46.8	43-100		%REC	1	10/4/2011 02:55 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B9-0
Lab Order:	120041	Collection Date:	9/27/2011 10:35:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-009A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
EPA 3050B / EPA 6010B						
RunID: ICP8_111003E	QC Batch: 76013			PrepDate: 10/3/2011		Analyst: IL
Antimony	ND	2.0		mg/Kg	1	10/3/2011 03:53 PM
Arsenic	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Barium	88	1.0		mg/Kg	1	10/3/2011 03:53 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Cadmium	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Chromium	9.8	1.0		mg/Kg	1	10/3/2011 03:53 PM
Cobalt	3.5	1.0		mg/Kg	1	10/3/2011 03:53 PM
Copper	16	2.0		mg/Kg	1	10/3/2011 03:53 PM
Lead	69	1.0		mg/Kg	1	10/3/2011 03:53 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Nickel	13	1.0		mg/Kg	1	10/3/2011 03:53 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 03:53 PM
Vanadium	14	1.0		mg/Kg	1	10/3/2011 03:53 PM
Zinc	65	1.0		mg/Kg	1	10/3/2011 03:53 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B / EPA 8015B(M)						
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: CBR
DRO	95	8.0		mg/Kg	2	10/5/2011 10:17 AM
ORO	430	8.0		mg/Kg	2	10/5/2011 10:17 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 10:17 AM
GASOLINE RANGE ORGANICS BY GC/FID						
EPA 8015B(M)						
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: TP
GRO	ND	1.0		mg/Kg	1	10/3/2011 04:31 PM
Surr: Bromofluorobenzene (FID)	106	69-158		%REC	1	10/3/2011 04:31 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B / EPA 8081A						
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: HL
4,4'-DDD	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
4,4'-DDE	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
4,4'-DDT	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B9-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:35:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-009A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate:	10/3/2011	Analyst: **HL**
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Chlordane	9.7	8.5		µg/Kg	1	10/4/2011 03:22 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 03:22 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 03:22 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 03:22 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 03:22 PM
Surr: Decachlorobiphenyl	50.3	39-104		%REC	1	10/4/2011 03:22 PM
Surr: Tetrachloro-m-xylene	40.6	43-100	S	%REC	1	10/4/2011 03:22 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011			PrepDate:	10/3/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:25 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B10-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:45:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-011A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			EPA 6010B		
RunID: ICP8_111003E	QC Batch: 76013			PrepDate:	10/3/2011	Analyst: IL
Antimony	ND	2.0		mg/Kg	1	10/3/2011 03:56 PM
Arsenic	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Barium	120	1.0		mg/Kg	1	10/3/2011 03:56 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Cadmium	1.1	1.0		mg/Kg	1	10/3/2011 03:56 PM
Chromium	13	1.0		mg/Kg	1	10/3/2011 03:56 PM
Cobalt	5.4	1.0		mg/Kg	1	10/3/2011 03:56 PM
Copper	29	2.0		mg/Kg	1	10/3/2011 03:56 PM
Lead	88	1.0		mg/Kg	1	10/3/2011 03:56 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Nickel	19	1.0		mg/Kg	1	10/3/2011 03:56 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 03:56 PM
Vanadium	21	1.0		mg/Kg	1	10/3/2011 03:56 PM
Zinc	110	1.0		mg/Kg	1	10/3/2011 03:56 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011			PrepDate:	10/3/2011	Analyst: VV
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:27 PM

Qualifiers:			
	B	Analyte detected in the associated Method Blank	E Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO	Surrogate Diluted Out	

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B12-0
Lab Order:	120041	**Collection Date:**	9/27/2011 10:55:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-013A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B(M)**		
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: **CBR**
DRO	56	8.0		mg/Kg	2	10/5/2011 09:43 AM
ORO	210	8.0		mg/Kg	2	10/5/2011 09:43 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 09:43 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	10/3/2011 04:47 PM
Surr: Bromofluorobenzene (FID)	104	69-158		%REC	1	10/3/2011 04:47 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B				**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
4,4´-DDE	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
4,4´-DDT	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Chlordane	ND	8.5		µg/Kg	1	10/4/2011 03:50 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 03:50 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 03:50 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 03:50 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 03:50 PM
Surr: Decachlorobiphenyl	65.2	39-104		%REC	1	10/4/2011 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B12-0
Lab Order:	120041	Collection Date:	9/27/2011 10:55:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-013A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B				EPA 8081A		
RunID: GC10_111004A	QC Batch: 76030			PrepDate:	10/3/2011	Analyst: HL
Surr: Tetrachloro-m-xylene	54.0	43-100		%REC	1	10/4/2011 03:50 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B15-0
Lab Order:	120041	**Collection Date:**	9/27/2011 11:13:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-016A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_111003E	QC Batch: 76013			PrepDate: 10/3/2011		Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	10/3/2011 04:07 PM
Arsenic	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Barium	120	1.0		mg/Kg	1	10/3/2011 04:07 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Cadmium	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Chromium	10	1.0		mg/Kg	1	10/3/2011 04:07 PM
Cobalt	5.4	1.0		mg/Kg	1	10/3/2011 04:07 PM
Copper	28	2.0		mg/Kg	1	10/3/2011 04:07 PM
Lead	63	1.0		mg/Kg	1	10/3/2011 04:07 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Nickel	12	1.0		mg/Kg	1	10/3/2011 04:07 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 04:07 PM
Vanadium	23	1.0		mg/Kg	1	10/3/2011 04:07 PM
Zinc	89	1.0		mg/Kg	1	10/3/2011 04:07 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B(M)**		
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: **CBR**
DRO	98	8.0		mg/Kg	2	10/5/2011 10:29 AM
ORO	490	8.0		mg/Kg	2	10/5/2011 10:29 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 10:29 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	10/3/2011 05:02 PM
Surr: Bromofluorobenzene (FID)	109	69-158		%REC	1	10/3/2011 05:02 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: **HL**
4,4'-DDD	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
4,4'-DDE	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
4,4'-DDT	2.5	2.0		µg/Kg	1	10/4/2011 04:45 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B15-0
Lab Order:	120041	Collection Date:	9/27/2011 11:13:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-016A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			EPA 8081A		
RunID: GC10_111004A	QC Batch: 76030			PrepDate:	10/3/2011	Analyst: HL
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
alpha-Chlordane	4.5	1.0		µg/Kg	1	10/4/2011 04:45 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
Chlordane	36	8.5		µg/Kg	1	10/4/2011 04:45 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 04:45 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
gamma-Chlordane	3.4	1.0		µg/Kg	1	10/4/2011 04:45 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 04:45 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 04:45 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 04:45 PM
Surr: Decachlorobiphenyl	71.3	39-104		%REC	1	10/4/2011 04:45 PM
Surr: Tetrachloro-m-xylene	57.4	43-100		%REC	1	10/4/2011 04:45 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011			PrepDate:	10/3/2011	Analyst: VV
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B16-0
Lab Order:	120041	**Collection Date:**	9/27/2011 11:18:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-017A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_111003E	QC Batch: 76013			PrepDate:	10/3/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	10/3/2011 04:10 PM
Arsenic	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Barium	92	1.0		mg/Kg	1	10/3/2011 04:10 PM
Beryllium	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Cadmium	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Chromium	11	1.0		mg/Kg	1	10/3/2011 04:10 PM
Cobalt	5.8	1.0		mg/Kg	1	10/3/2011 04:10 PM
Copper	33	2.0		mg/Kg	1	10/3/2011 04:10 PM
Lead	110	1.0		mg/Kg	1	10/3/2011 04:10 PM
Molybdenum	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Nickel	16	1.0		mg/Kg	1	10/3/2011 04:10 PM
Selenium	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Silver	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Thallium	ND	1.0		mg/Kg	1	10/3/2011 04:10 PM
Vanadium	21	1.0		mg/Kg	1	10/3/2011 04:10 PM
Zinc	140	1.0		mg/Kg	1	10/3/2011 04:10 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA1_111004A	QC Batch: 76011			PrepDate:	10/3/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	10/4/2011 01:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Geocon Consultants, Inc.	Client Sample ID:	B17-0
Lab Order:	120041	Collection Date:	9/27/2011 11:20:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Matrix:	SOIL
Lab ID:	120041-018A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				EPA 8015B(M)		
RunID: GC16_111004A	QC Batch: 76015			PrepDate: 10/3/2011		Analyst: CBR
DRO	130	8.0		mg/Kg	2	10/5/2011 10:41 AM
ORO	620	8.0		mg/Kg	2	10/5/2011 10:41 AM
Surr: p-Terphenyl	0	39-123	SDO	%REC	2	10/5/2011 10:41 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_111003A	QC Batch: E11VS338			PrepDate:		Analyst: TP
GRO	ND	1.0		mg/Kg	1	10/3/2011 05:18 PM
Surr: Bromofluorobenzene (FID)	105	69-158		%REC	1	10/3/2011 05:18 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B				EPA 8081A		
RunID: GC10_111004A	QC Batch: 76030			PrepDate: 10/3/2011		Analyst: HL
4,4'-DDD	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
4,4'-DDE	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
4,4'-DDT	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Aldrin	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
alpha-BHC	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
alpha-Chlordane	4.1	1.0		µg/Kg	1	10/4/2011 05:13 PM
beta-BHC	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
Chlordane	32	8.5		µg/Kg	1	10/4/2011 05:13 PM
delta-BHC	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
Dieldrin	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Endosulfan I	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
Endosulfan II	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Endrin	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
Endrin ketone	ND	2.0		µg/Kg	1	10/4/2011 05:13 PM
gamma-BHC	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
gamma-Chlordane	2.6	1.0		µg/Kg	1	10/4/2011 05:13 PM
Heptachlor	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	10/4/2011 05:13 PM
Methoxychlor	ND	5.0		µg/Kg	1	10/4/2011 05:13 PM
Toxaphene	ND	50		µg/Kg	1	10/4/2011 05:13 PM
Surr: Decachlorobiphenyl	72.1	39-104		%REC	1	10/4/2011 05:13 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B17-0
Lab Order:	120041	**Collection Date:**	9/27/2011 11:20:00 AM
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Matrix:**	SOIL
Lab ID:	120041-018A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
EPA 3550B				**EPA 8081A**		
RunID: GC10_111004A	QC Batch: 76030			PrepDate:	10/3/2011	Analyst: HL
Surr: Tetrachloro-m-xylene	60.1	43-100		%REC	1	10/4/2011 05:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

Date: 06-Oct-11

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: MB-76013	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137213
Client ID: PBS	Batch ID: 76013	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 10/3/2011	SeqNo: 2252758

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.211	2.0									
Arsenic	ND	1.0									
Barium	0.025	1.0									
Beryllium	0.041	1.0									
Cadmium	ND	1.0									
Chromium	0.082	1.0									
Cobalt	0.023	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	0.060	1.0									
Nickel	0.082	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	0.136	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: LCS-76013	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137213
Client ID: LCSS	Batch ID: 76013	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 10/3/2011	SeqNo: 2252759

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.913	2.0	50.00	0.2110	95.4	80	120				
Arsenic	45.745	1.0	50.00	0	91.5	80	120				
Barium	50.435	1.0	50.00	0.02527	101	80	120				
Beryllium	49.471	1.0	50.00	0.04134	98.9	80	120				
Cadmium	47.937	1.0	50.00	0	95.9	80	120				
Chromium	46.941	1.0	50.00	0.08225	93.7	80	120				
Cobalt	49.371	1.0	50.00	0.02314	98.7	80	120				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **LCS-76013** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **10/3/2011** RunNo: **137213**
Client ID: **LCSS** Batch ID: **76013** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **10/3/2011** SeqNo: **2252759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	49.269	2.0	50.00	0	98.5	80	120				
Lead	48.976	1.0	50.00	0	98.0	80	120				
Molybdenum	50.727	1.0	50.00	0.06028	101	80	120				
Nickel	48.536	1.0	50.00	0.08185	96.9	80	120				
Selenium	45.479	1.0	50.00	0	91.0	80	120				
Silver	48.421	1.0	50.00	0	96.8	80	120				
Thallium	47.025	1.0	50.00	0.1361	93.8	80	120				
Vanadium	50.383	1.0	50.00	0	101	80	120				
Zinc	48.301	1.0	50.00	0	96.6	80	120				

Sample ID: **120041-017A-DUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **10/3/2011** RunNo: **137213**
Client ID: **B16-0** Batch ID: **76013** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **10/3/2011** SeqNo: **2252770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.282	2.0						0.3297	0	20	
Arsenic	ND	1.0						0	0	20	
Barium	92.484	1.0						92.39	0.106	20	
Beryllium	ND	1.0						0	0	20	
Cadmium	0.823	1.0						0.8052	0	20	
Chromium	11.990	1.0						10.98	8.76	20	
Cobalt	5.498	1.0						5.751	4.49	20	
Copper	33.960	2.0						33.23	2.18	20	
Lead	101.439	1.0						113.0	10.8	20	
Molybdenum	ND	1.0						0	0	20	
Nickel	14.000	1.0						16.49	16.3	20	
Selenium	ND	1.0						0	0	20	
Silver	ND	1.0						0	0	20	
Thallium	ND	1.0						0	0	20	
Vanadium	22.001	1.0						20.76	5.80	20	
Zinc	136.738	1.0						140.1	2.41	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 120041-017A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137213
Client ID: B16-0	Batch ID: 76013	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 10/3/2011	SeqNo: 2252771

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	98.486	2.0	125.0	0.3297	78.5	44	105				
Arsenic	104.625	1.0	125.0	0	83.7	57	103				
Barium	209.478	1.0	125.0	92.39	93.7	36	134				
Beryllium	107.578	1.0	125.0	0	86.1	64	106				
Cadmium	100.034	1.0	125.0	0.8052	79.4	58	102				
Chromium	110.727	1.0	125.0	10.98	79.8	55	105				
Cobalt	109.605	1.0	125.0	5.751	83.1	59	105				
Copper	334.606	2.0	125.0	33.23	241	64	117				S
Lead	192.369	1.0	125.0	113.0	63.5	46	116				
Molybdenum	112.012	1.0	125.0	0	89.6	59	108				
Nickel	115.566	1.0	125.0	16.49	79.3	52	109				
Selenium	105.219	1.0	125.0	0	84.2	56	100				
Silver	110.485	1.0	125.0	0	88.4	65	107				
Thallium	95.442	1.0	125.0	0	76.4	47	100				
Vanadium	134.529	1.0	125.0	20.76	91.0	64	110				
Zinc	224.269	1.0	125.0	140.1	67.4	37	123				

Sample ID: 120041-017A-MSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137213
Client ID: B16-0	Batch ID: 76013	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 10/3/2011	SeqNo: 2252772

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.518	2.0	125.0	0.3297	81.8	44	105	98.49	4.01	20	
Arsenic	109.188	1.0	125.0	0	87.4	57	103	104.6	4.27	20	
Barium	215.509	1.0	125.0	92.39	98.5	36	134	209.5	2.84	20	
Beryllium	114.721	1.0	125.0	0	91.8	64	106	107.6	6.43	20	
Cadmium	107.191	1.0	125.0	0.8052	85.1	58	102	100.0	6.91	20	
Chromium	118.135	1.0	125.0	10.98	85.7	55	105	110.7	6.47	20	
Cobalt	117.986	1.0	125.0	5.751	89.8	59	105	109.6	7.37	20	
Copper	162.020	2.0	125.0	33.23	103	64	117	334.6	69.5	20	R
Lead	208.247	1.0	125.0	113.0	76.2	46	116	192.4	7.93	20	

Qualifiers:

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- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **120041-017A-MSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **10/3/2011** RunNo: **137213**
Client ID: **B16-0** Batch ID: **76013** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **10/3/2011** SeqNo: **2252772**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	114.499	1.0	125.0	0	91.6	59	108	112.0	2.20	20	
Nickel	124.186	1.0	125.0	16.49	86.2	52	109	115.6	7.19	20	
Selenium	109.597	1.0	125.0	0	87.7	56	100	105.2	4.08	20	
Silver	115.041	1.0	125.0	0	92.0	65	107	110.5	4.04	20	
Thallium	100.771	1.0	125.0	0	80.6	47	100	95.44	5.43	20	
Vanadium	140.310	1.0	125.0	20.76	95.6	64	110	134.5	4.21	20	
Zinc	245.297	1.0	125.0	140.1	84.2	37	123	224.3	8.96	20	

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: MB-76009A	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137221
Client ID: PBS	Batch ID: 76009	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 10/3/2011	SeqNo: 2252875

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.607	5.0									

Sample ID: LCS-76009	SampType: LCS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137221
Client ID: LCSS	Batch ID: 76009	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 10/3/2011	SeqNo: 2252876

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	259.459	5.0	250.0	0.6069	104	80	120				

Sample ID: 120041-002A-DUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137221
Client ID: B2-0	Batch ID: 76009	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 10/3/2011	SeqNo: 2252887

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	21.886	5.0						27.60	23.1	20	R

Sample ID: 120041-002A-MS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137221
Client ID: B2-0	Batch ID: 76009	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 10/3/2011	SeqNo: 2252888

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	231.747	5.0	250.0	27.60	81.7	46	116				

Sample ID: MB-76009B	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137221
Client ID: PBS	Batch ID: 76009	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 10/3/2011	SeqNo: 2252889

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **120041-019A-DUP**	SampType: **DUP**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **10/3/2011**	RunNo: **137221**
Client ID: **B18-0**	Batch ID: **76009**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **10/3/2011**	SeqNo: **2252900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	59.728	5.0						49.81	18.1	20	

Sample ID: **120041-019A-MS**	SampType: **MS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **10/3/2011**	RunNo: **137221**
Client ID: **B18-0**	Batch ID: **76009**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **10/3/2011**	SeqNo: **2252901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	257.420	5.0	250.0	49.81	83.0	46	116				

Sample ID: **120041-019A-MSD**	SampType: **MSD**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **10/3/2011**	RunNo: **137221**
Client ID: **B18-0**	Batch ID: **76009**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **10/3/2011**	SeqNo: **2252902**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	261.443	5.0	250.0	49.81	84.7	46	116	257.4	1.55	20	

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPB

Sample ID: MB-76024	SampType: MBLK	TestCode: 6010_WPB	Units: mg/L	Prep Date: 10/3/2011	RunNo: 137228
Client ID: PBW	Batch ID: 76024	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 10/4/2011	SeqNo: 2253094

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: LCS-76024	SampType: LCS	TestCode: 6010_WPB	Units: mg/L	Prep Date: 10/3/2011	RunNo: 137228
Client ID: LCSW	Batch ID: 76024	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 10/4/2011	SeqNo: 2253095

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.094	0.25	1.000	0	109	85	115				

Sample ID: 120041-010A-MS	SampType: MS	TestCode: 6010_WPB	Units: mg/L	Prep Date: 10/3/2011	RunNo: 137228
Client ID: RB1	Batch ID: 76024	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 10/4/2011	SeqNo: 2253097

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.429	0.25	2.500	0	97.2	78	117				

Sample ID: 120041-010A-MSD	SampType: MSD	TestCode: 6010_WPB	Units: mg/L	Prep Date: 10/3/2011	RunNo: 137228
Client ID: RB1	Batch ID: 76024	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 10/4/2011	SeqNo: 2253098

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.473	0.25	2.500	0	98.9	78	117	2.429	1.80	20	

Sample ID: 120041-020A-DUP	SampType: DUP	TestCode: 6010_WPB	Units: mg/L	Prep Date: 10/3/2011	RunNo: 137228
Client ID: RB2	Batch ID: 76024	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 10/4/2011	SeqNo: 2253100

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25						0	0	20	

Qualifiers:

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Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-76011	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137236
Client ID: PBS	Batch ID: 76011	TestNo: EPA 7471A		Analysis Date: 10/4/2011	SeqNo: 2253215

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID: LCS-76011	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137236
Client ID: LCSS	Batch ID: 76011	TestNo: EPA 7471A		Analysis Date: 10/4/2011	SeqNo: 2253216

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.895	0.10	0.8300	0	108	80	120				

Sample ID: 120041-017A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137236
Client ID: B16-0	Batch ID: 76011	TestNo: EPA 7471A		Analysis Date: 10/4/2011	SeqNo: 2253217

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.894	0.10	0.8300	0.04651	102	70	130				

Sample ID: 120041-017A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137236
Client ID: B16-0	Batch ID: 76011	TestNo: EPA 7471A		Analysis Date: 10/4/2011	SeqNo: 2253218

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.760	0.10	0.8300	0.04651	86.0	70	130	0.8935	16.1	20	

Sample ID: 120041-017A-DUP	SampType: DUP	TestCode: 7471_S	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137236
Client ID: B16-0	Batch ID: 76011	TestNo: EPA 7471A		Analysis Date: 10/4/2011	SeqNo: 2253220

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.046	0.10						0.04651	0	20	

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: MB-76015	SampType: MBLK	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137242
Client ID: PBS	Batch ID: 76015	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253318

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	1.0									
ORO	ND	1.0									
Surr: p-Terphenyl	1.621		2.670		60.7	39	123				

Sample ID: LCS-76015	SampType: LCS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137242
Client ID: LCSS	Batch ID: 76015	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253319

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	18.500	1.0	33.00	0	56.1	37	109				
Surr: p-Terphenyl	2.130		2.670		79.8	39	123				

Sample ID: 120060-005AMS	SampType: MS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137242
Client ID: ZZZZZZ	Batch ID: 76015	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253321

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	107.603	8.0	33.00	54.82	160	29	107				S
Surr: p-Terphenyl	0		2.670		0	39	123				SDO

Sample ID: 120060-005AMSD	SampType: MSD	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137242
Client ID: ZZZZZZ	Batch ID: 76015	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253322

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	69.232	8.0	33.00	54.82	43.7	29	107	107.6	43.4	20	R
Surr: p-Terphenyl	0		2.670		0	39	123		0	0	SDO

Sample ID: 120041-003ADUP	SampType: DUP	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 10/3/2011	RunNo: 137242
Client ID: B3-0	Batch ID: 76015	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 10/5/2011	SeqNo: 2253742

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **120041-003ADUP**	SampType: **DUP**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **10/3/2011**	RunNo: **137242**
Client ID: **B3-0**	Batch ID: **76015**	TestNo: **EPA 8015B(M**	**EPA 3550B**	Analysis Date: **10/5/2011**	SeqNo: **2253742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	100.779	8.0						69.82	36.3	20	R
ORO	363.547	8.0						286.8	23.6	20	R
Surr: p-Terphenyl	0		2.670		0	39	123		0	0	SDO

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
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CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: E111003LC1	SampType: LCS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:				RunNo: 137211		
Client ID: LCSS	Batch ID: E11VS338	TestNo: EPA 8015B(M		Analysis Date: 10/3/2011				SeqNo: 2252724		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.144	1.0	5.000	0	103	70	130				
Surr: Bromofluorobenzene (FID)	103.936		100.0		104	69	158				

Sample ID: E111003MB1MS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:				RunNo: 137211		
Client ID: ZZZZZZ	Batch ID: E11VS338	TestNo: EPA 8015B(M		Analysis Date: 10/3/2011				SeqNo: 2252725		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.139	1.0	5.000	0	103	46	135				
Surr: Bromofluorobenzene (FID)	128.977		100.0		129	69	158				

Sample ID: E111003MB1MSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:				RunNo: 137211		
Client ID: ZZZZZZ	Batch ID: E11VS338	TestNo: EPA 8015B(M		Analysis Date: 10/3/2011				SeqNo: 2252726		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.736	1.0	5.000	0	94.7	46	135	5.139	8.16	20	
Surr: Bromofluorobenzene (FID)	110.701		100.0		111	69	158		0	0	

Sample ID: E111003MB1	SampType: MBLK	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:				RunNo: 137211		
Client ID: PBS	Batch ID: E11VS338	TestNo: EPA 8015B(M		Analysis Date: 10/3/2011				SeqNo: 2252733		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	86.676		100.0		86.7	69	158				

Sample ID: 120041-018AMS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:				RunNo: 137211		
Client ID: B17-0	Batch ID: E11VS338	TestNo: EPA 8015B(M		Analysis Date: 10/3/2011				SeqNo: 2252961		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.081	1.0	5.000	0	81.6	46	135				

Qualifiers:

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- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: **120041-018AMS**	SampType: **MS**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:	RunNo: **137211**
Client ID: **B17-0**	Batch ID: **E11VS338**	TestNo: **EPA 8015B(M**		Analysis Date: **10/3/2011**	SeqNo: **2252961**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	122.912		100.0		123	69	158				

Sample ID: **120041-018AMSD**	SampType: **MSD**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:	RunNo: **137211**
Client ID: **B17-0**	Batch ID: **E11VS338**	TestNo: **EPA 8015B(M**		Analysis Date: **10/3/2011**	SeqNo: **2252962**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.961	1.0	5.000	0	79.2	46	135	4.081	2.98	20	
Surr: Bromofluorobenzene (FID)	119.188		100.0		119	69	158		0	0	

Sample ID: **120041-018ADUP**	SampType: **DUP**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:	RunNo: **137211**
Client ID: **B17-0**	Batch ID: **E11VS338**	TestNo: **EPA 8015B(M**		Analysis Date: **10/3/2011**	SeqNo: **2252988**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0						0	0	20	
Surr: Bromofluorobenzene (FID)	99.861		100.0		99.9	69	158		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: MB-76030	SampType: MBLK	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: PBS	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253341

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	ND	2.0									
4,4'-DDE	ND	2.0									
4,4'-DDT	ND	2.0									
Aldrin	ND	1.0									
alpha-BHC	ND	1.0									
alpha-Chlordane	ND	1.0									
beta-BHC	ND	1.0									
Chlordane	ND	8.5									
delta-BHC	ND	1.0									
Dieldrin	ND	2.0									
Endosulfan I	ND	1.0									
Endosulfan II	ND	2.0									
Endosulfan sulfate	ND	2.0									
Endrin	ND	2.0									
Endrin aldehyde	ND	2.0									
Endrin ketone	ND	2.0									
gamma-BHC	ND	1.0									
gamma-Chlordane	ND	1.0									
Heptachlor	ND	1.0									
Heptachlor epoxide	ND	1.0									
Methoxychlor	ND	5.0									
Toxaphene	ND	50									
Surr: Tetrachloro-m-xylene	11.784		16.67		70.7	43	100				
Surr: Decachlorobiphenyl	13.577		16.67		81.4	39	104				

Sample ID: LCS-76030	SampType: LCS	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: LCSS	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253342

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	11.917	1.0	16.67	0	71.5	56	108				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: LCS-76030	SampType: LCS	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: LCSS	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253342

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dieldrin	12.447	2.0	16.67	0	74.7	53	115				
Endrin	13.152	2.0	16.67	0	78.9	55	125				
gamma-BHC	11.792	1.0	16.67	0	70.7	59	110				
Heptachlor	11.931	1.0	16.67	0	71.6	53	114				
Surr: Tetrachloro-m-xylene	11.644		16.67		69.8	43	100				
Surr: Decachlorobiphenyl	12.260		16.67		73.5	39	104				

Sample ID: 120035-007AMS	SampType: MS	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: ZZZZZZ	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253343

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	14.011	2.0	16.67	0	84.0	17	165				
Aldrin	13.259	1.0	16.67	0	79.5	34	130				
Dieldrin	14.330	2.0	16.67	0	86.0	33	143				
Endrin	15.187	2.0	16.67	0	91.1	39	152				
gamma-BHC	13.155	1.0	16.67	0	78.9	37	131				
Heptachlor	13.737	1.0	16.67	0	82.4	31	140				
Surr: Tetrachloro-m-xylene	12.973		16.67		77.8	43	100				
Surr: Decachlorobiphenyl	14.569		16.67		87.4	39	104				

Sample ID: 120035-007AMSD	SampType: MSD	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: ZZZZZZ	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253344

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	13.817	2.0	16.67	0	82.9	17	165	14.01	1.39	20	
Aldrin	13.267	1.0	16.67	0	79.6	34	130	13.26	0.0578	20	
Dieldrin	14.310	2.0	16.67	0	85.8	33	143	14.33	0.140	20	
Endrin	15.127	2.0	16.67	0	90.7	39	152	15.19	0.394	20	
gamma-BHC	13.242	1.0	16.67	0	79.4	37	131	13.16	0.658	20	
Heptachlor	13.886	1.0	16.67	0	83.3	31	140	13.74	1.08	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: 120035-007AMSD	SampType: MSD	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: ZZZZZZ	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253344

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tetrachloro-m-xylene	13.260		16.67		79.5	43	100		0	0	
Surr: Decachlorobiphenyl	14.608		16.67		87.6	39	104		0	0	

Sample ID: 120041-013ADUP	SampType: DUP	TestCode: 8081_S	Units: µg/Kg	Prep Date: 10/3/2011	RunNo: 137244
Client ID: B12-0	Batch ID: 76030	TestNo: EPA 8081A	EPA 3550B	Analysis Date: 10/4/2011	SeqNo: 2253629

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	ND	2.0						0	0	20	
4,4'-DDE	ND	2.0						0	0	20	
4,4'-DDT	ND	2.0						0	0	20	
Aldrin	ND	1.0						0	0	20	
alpha-BHC	ND	1.0						0	0	20	
alpha-Chlordane	ND	1.0						0	0	20	
beta-BHC	ND	1.0						0	0	20	
Chlordane	ND	8.5						0	0	20	
delta-BHC	ND	1.0						0	0	20	
Dieldrin	ND	2.0						0	0	20	
Endosulfan I	ND	1.0						0	0	20	
Endosulfan II	ND	2.0						0	0	20	
Endosulfan sulfate	ND	2.0						0	0	20	
Endrin	ND	2.0						0	0	20	
Endrin aldehyde	ND	2.0						0	0	20	
Endrin ketone	ND	2.0						0	0	20	
gamma-BHC	ND	1.0						0	0	20	
gamma-Chlordane	ND	1.0						0	0	20	
Heptachlor	ND	1.0						0	0	20	
Heptachlor epoxide	ND	1.0						0	0	20	
Methoxychlor	ND	5.0						0	0	20	
Toxaphene	ND	50						0	0	20	
Surr: Tetrachloro-m-xylene	9.414		16.67		56.5	43	100		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: **120041-013ADUP**	SampType: **DUP**	TestCode: **8081_S**	Units: **µg/Kg**		Prep Date: **10/3/2011**			RunNo: **137244**			
Client ID: **B12-0**	Batch ID: **76030**	TestNo: **EPA 8081A**	**EPA 3550B**		Analysis Date: **10/4/2011**			SeqNo: **2253629**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	11.368		16.67		68.2	39	104		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CHAIN OF CUSTODY RECORD

Pg 1 of 2

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: _____ Quote #: _____
Logged By: _____ Date: 9/27/11
NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:

Method of Transport: ☐ Client ☐ ATL ☐ FedEx ☐ OnTrac ☑ GSO ☐ Other: _____

Sample Condition Upon Receipt: 4.4°
1. CHILLED Y☑ N☐ 4. CUSTODY SEAL 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.
Attn: R. DAY, C. MERRITT, L. BEABLE
Address: 6671 Brisa Street
City Livermore State CA Zip Code 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Project Name: CALTRANS - SR1/POPLAR Project #: E45560-06-29 Sampler: (Printed Name) C. MERRITT (Signature) CHRIS MERRITT

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 9-27-11 Time: 1700 Received by: (Signature and Printed Name) Margi Date: 9/28/11 Time: 8:34
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
CM (Print Name) 9-27-11 (Date)
CM (Signature)

Send Report To: Attn: A/A Co: A/A Addr: City: State: Zip:

Bill To: Attn: A/A Co: A/A Addr: City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) | 8270C (BNA) | 6010B (Total Metal) LEAD (Pb) | 8015B (GRO) & 8021 (BTEX) + MTBE | 8015B (DRO) + MO | TITLE 22 / CAM 17 (6010 / 7000)

SPECIFY APPROPRIATE MATRIX: SEDIMENT | SOLID | SOIL | DRINKING WATER | GROUND WATER | WASTEWATER | STORMWATER | AQUEOUS | AIR

PRESERVATION

QA/QC: RTNE ☐ CT ☑ Legal ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch # / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	12004 1	B1-0	9/27/11	1005	E	1	T/P	C/N	
	2	B2		08			0&G P/B		
	3	B3		10					
	4	B4		13					
	5	B5		15					
	6	B6		18					
	7	B7		28					
	8	B8		30					
	9	B9		35					
	10	BB1		40					

- TAT starts 8 a.m. following day if samples received after 5 p.m.

TAT: ☐A= Overnight ≤ 24 hrs ☐B= Emergency Next workday ☐C= Critical 2 Workdays ☐D= Urgent 3 Workdays ☐E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=Zn(AC)$_2$ O=NaOH T=$Na_2S_2O_3$

Rev. 2011.05

DISTRIBUTION: White with report, Yellow folder, Pink submittal

CHAIN OF CUSTODY RECORD

Pg 2 of 2

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: _____ Quote #: _____

Logged By: _____ Date: _____

NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:

Method of Transport
☐ Client ☐ ATL
☐ FedEx ☐ OnTrac
☐ GSO
☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☐ N☐ 4. CUSTODY SEAL 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 TEL: (925) 371-5900

Attn: R.DAY, C.MERRITT, L.BEADLE City Livemore State CA Zip Code 94550 FAX: (925) 371-5915

Project Name: CALTRANS - SR1/POPLAR Project #: E8560-06-29 Sampler: (Printed Name) C.MERRITT (Signature) CHRIS MERRITT

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 9-27-11 Time: 1700 Received by: (Signature and Printed Name) [signature] Date: 9/28/11 Time: 834

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
CM — Print Name; 9-27-11 — Date
CM — Signature

Send Report To:
Attn: A/A
Co: A/A
Addr:
City: State: Zip:

Bill To:
Attn: A/A
Co: A/A
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metals) LEAD (Pb), 8015B (GRO) / 8021 (BTEX), 8015B (DRO) TPH, TITLE 22 / CAM 17 (6010 / 7000)

SPECIFY APPROPRIATE MATRIX: SEDIMENT, SOLID, SOIL, DRINKING WATER, GROUND WATER, WASTEWATER, STORMWATER, AQUEOUS, WATER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s): #	Type	PRESERVATION	REMARKS
	1109041 - 11	B10 - 0	9-27-11	1045	E	1	T/M	C/N	
	12	B11		50					
	13	B12		1455			P/B		
	14	B13		1105					
	15	B14		10					
	16	B15		13					
	17	B16		15					
	18	B17		20					
	19	B18		25					
	20	RB2		30	W		P		

QA/QC: RTNE ☐ CT ☑ Legal ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 5 p.m.

TAT: ☐A= Overnight ≤ 24 hrs ☐B= Emergency Next workday ☐C= Critical 2 Workdays ☐D= Urgent 3 Workdays ☐E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

October 19, 2011

R. Day, C. Merritt, L. Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 120041

RE: CALTRANS-SR1/POPLAR, E8560-06-29

Attention: R. Day, C. Merritt, L. Beadle

Enclosed are the results for sample(s) received on September 28, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

for Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: 10/19/2011

ANALYTICAL RESULTS

LEAD BY ATOMIC ABSORPTION (STLC)
WET/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	120041
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	**Date Received**	9/28/2011 8:34:00 AM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
120041-001A	B1-0	1.9	mg/L	76255	0.50	1	9/27/2011	10/18/2011
120041-004A	B4-0	2.2	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-005A	B5-0	3.9	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-006A	B6-0	2.7	mg/L	76255	0.50	1	9/27/2011	10/18/2011
120041-008A	B8-0	1.6	mg/L	76255	0.50	1	9/27/2011	10/18/2011
120041-009A	B9-0	2.4	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-011A	B10-0	2.6	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-016A	B15-0	3.0	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-017A	B16-0	3.6	mg/L	76151	0.50	1	9/27/2011	10/13/2011
120041-019A	B18-0	1.8	mg/L	76255	0.50	1	9/27/2011	10/18/2011

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ANALYTICAL RESULTS

pH
EPA 9045C

CLIENT:	Geocon Consultants, Inc.	Lab Order:	120041
Project:	CALTRANS-SR1/POPLAR, E8560-06-29	Date Received	9/28/2011 8:34:00 AM
Project No:		Matrix:	Soil
Analyte:	pH	Analyst:	PT

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
120041-001A	B1-0	7.0	pH Units	R137465	0.10	1	9/27/2011	10/13/2011
120041-009A	B9-0	6.8	pH Units	R137465	0.10	1	9/27/2011	10/13/2011
120041-016A	B15-0	6.7	pH Units	R137465	0.10	1	9/27/2011	10/13/2011

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID: **MB-76151A**	SampType: **MBLK**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/11/2011**	RunNo: **137482**
Client ID: **PBS**	Batch ID: **76151**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/13/2011**	SeqNo: **2257924**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.148	0.50									

Sample ID: **LCS-76151**	SampType: **LCS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/11/2011**	RunNo: **137482**
Client ID: **LCSS**	Batch ID: **76151**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/13/2011**	SeqNo: **2257925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	4.996	0.50	5.000	0.1484	96.9	80	120				

Sample ID: **120041-004A-DUP**	SampType: **DUP**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/11/2011**	RunNo: **137482**
Client ID: **B4-0**	Batch ID: **76151**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/13/2011**	SeqNo: **2257927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.837	0.50						2.207	18.3	20	

Sample ID: **120041-004A-MS**	SampType: **MS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/11/2011**	RunNo: **137482**
Client ID: **B4-0**	Batch ID: **76151**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/13/2011**	SeqNo: **2257928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	6.717	0.50	5.000	2.207	90.2	80	120				

Sample ID: **120041-004A-MSD**	SampType: **MSD**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/11/2011**	RunNo: **137482**
Client ID: **B4-0**	Batch ID: **76151**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/13/2011**	SeqNo: **2257929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.053	0.50	5.000	2.207	96.9	80	120	6.717	4.88	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID: MB-76255A	SampType: MBLK	TestCode: 7420_ST	Units: mg/L	Prep Date: 10/15/2011	RunNo: 137577
Client ID: PBS	Batch ID: 76255	TestNo: WET/ EPA 74 WET		Analysis Date: 10/18/2011	SeqNo: 2259765

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.311	0.50									

Sample ID: LCS-76255	SampType: LCS	TestCode: 7420_ST	Units: mg/L	Prep Date: 10/15/2011	RunNo: 137577
Client ID: LCSS	Batch ID: 76255	TestNo: WET/ EPA 74 WET		Analysis Date: 10/18/2011	SeqNo: 2259766

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.125	0.50	5.000	0.3111	96.3	80	120				

Sample ID: 120262-001A-DUP	SampType: DUP	TestCode: 7420_ST	Units: mg/L	Prep Date: 10/15/2011	RunNo: 137577
Client ID: ZZZZZZ	Batch ID: 76255	TestNo: WET/ EPA 74 WET		Analysis Date: 10/18/2011	SeqNo: 2259775

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.025	0.50						1.859	8.54	20	

Sample ID: 120262-001A-MS	SampType: MS	TestCode: 7420_ST	Units: mg/L	Prep Date: 10/15/2011	RunNo: 137577
Client ID: ZZZZZZ	Batch ID: 76255	TestNo: WET/ EPA 74 WET		Analysis Date: 10/18/2011	SeqNo: 2259776

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.266	0.50	5.000	1.859	108	80	120				

Sample ID: MB-76255B	SampType: MBLK	TestCode: 7420_ST	Units: mg/L	Prep Date: 10/15/2011	RunNo: 137577
Client ID: PBS	Batch ID: 76255	TestNo: WET/ EPA 74 WET		Analysis Date: 10/18/2011	SeqNo: 2259777

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.196	0.50									

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID: **120265-001A-DUP**	SampType: **DUP**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/15/2011**	RunNo: **137577**
Client ID: **ZZZZZZ**	Batch ID: **76255**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/18/2011**	SeqNo: **2259781**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.934	0.50						1.037	10.5	20	

Sample ID: **120265-001A-MS**	SampType: **MS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/15/2011**	RunNo: **137577**
Client ID: **ZZZZZZ**	Batch ID: **76255**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/18/2011**	SeqNo: **2259782**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.893	0.50	5.000	1.037	97.1	80	120				

Sample ID: **120265-001A-MSD**	SampType: **MSD**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **10/15/2011**	RunNo: **137577**
Client ID: **ZZZZZZ**	Batch ID: **76255**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **10/18/2011**	SeqNo: **2259783**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.735	0.50	5.000	1.037	94.0	80	120	5.893	2.71	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories *3275 Walnut Avenue, Signal Hill, CA 90755* *Tel: 562.989.4045* *Fax: 562.989.4040*

CLIENT: Geocon Consultants, Inc.
Work Order: 120041
Project: CALTRANS-SR1/POPLAR, E8560-06-29

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID: **120041-009ADUP** SampType: **DUP** TestCode: **9045_S** Units: **pH Units** Prep Date: RunNo: **137465**
Client ID: **B9-0** Batch ID: **R137465** TestNo: **EPA 9045C** Analysis Date: **10/13/2011** SeqNo: **2257646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	6.830	0.10						6.770	0.882	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Diane Galvan

From: Luann Beadle [beadle@geoconinc.com]
Sent: Monday, October 10, 2011 11:39 AM
To: Diane Galvan
Subject: E8560-06-29 SR-1/Poplar St Half Moon Bay

Hi Diane,
Our client has requested that we run WET analysis for lead on these samples associated with Lab Work Order Number 120041:
B1-0
B4-0
B5-0
B6-0
B8-0
B9-0
B10-0
B15-0
B16-0
B18-0

Also, please do a pH analysis on samples:
B1-0
B9-0
B15-0

Regular TAT. Thank you very much,
Luann

Luann Beadle | *Senior Staff Scientist*
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