



October 2, 2007

Mr. Bill Janes
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
410 Willoughby Avenue, Suite 303
Juneau, Alaska 99811-1800

Project No. 33107-007637.00

Subject: Removal Action Work Plan (Revision 1.0)
Thane Bunker Fuel Tanks Site, Juneau, Alaska
Alaska Department of Environmental Conservation ID No. 1990110111601

Dear Mr. Janes:

Enclosed is the revised Removal Action Work Plan for the Thane Bunker Fuel Tanks Site in Juneau, Alaska submitted on behalf of AJT Mining Properties, Inc. The revised Removal Action Work Plan incorporates the comments provided by Alaska Department of Environmental Conservation via email on October 1, 2007.

If you have any questions or concerns, please contact me at 925.426.2626 or john.werfal@us.bureauveritas.com.

Sincerely,

John Werfal
Senior Project Manager
Environmental Services

JPW/

Enclosures

Cc: Mr. David Stone, AJT Mining Properties, Inc.
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Removal Action Work Plan (Revision 1.0)

Thane Bunker Fuel Tanks Site
Juneau, Alaska

October 1, 2007
Project Number 33107-007637.00

Prepared for
AJT Mining Properties, Inc.
Juneau, Alaska



For the benefit of business and people

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1.0 INTRODUCTION

This Removal Action Work Plan (the Work Plan) has been prepared by Bureau Veritas North America, Inc. ("Bureau Veritas") to describe various removal activities that will occur at the Thane Bunker Fuel Tanks Site in Juneau, Alaska (the "Site"). The activities described in this Work Plan will be performed on behalf of AJT Mining Properties, Inc. This Work Plan describes the technical processes for the removal, management, treatment, transportation, disposal, and recycling of the waste products contained in the eight tanks on the Site. This Work Plan also provides the analytical results for wastes that were sampled during July and August 2007.

1.1 OBJECTIVES

The objective of the activities described in this Work Plan is to safely remove and dispose of the waste products contained in the eight tanks on the Site in a cost-effective manner and in accordance with applicable regulations.

1.2 REPORT ORGANIZATION

The contents and scope of this work plan are as follows:

- Section 2 describes Site background information.
- Section 3 presents the project team for the removal action.
- Section 4.1 describes the site preparation activities that will be completed prior to implementing removal actions.
- Section 4.2 describes the removal, treatment and transportation methods for the oil phase contained in tanks at the Site. The proposed treatment, storage, disposal or recycling (TSD/Recycling) facility(s) is also identified.
- Section 4.3 describes the removal plan for the wastewater phase contained in tanks. This section also provides the waste characteristics for the wastewater and describes the treatment and disposal alternatives for the wastewater.
- Section 4.4 provides a description of removal, treatment, and disposal alternatives for the sludge contained in tanks. TSD/Recycling facilities are also identified.
- Section 4.5 describes waste management procedures for "Other" inert solid wastes (i.e. construction debris, steel roof debris, wood timbers, etc) that may be generated during removal action activities.
- Section 5 provides the decontamination plan for tanks.
- Section 6 describes spill prevention measures that will be implemented during the removal action.



- Section 7 describes project management and reporting activities.
- Section 8 provides a time schedule for anticipated actions to be undertaken on site.

2.0 BACKGROUND

The Site is located near the cruise ship docks on South Franklin Street in Juneau, Alaska. The location of the Site is shown on Figure 1. The City and Borough of Juneau (CBJ) Assessor's Database identifies the property as Parcel No. 1C1001070060 and the current owner as Alaska Trams Corporation.

In the early 1900s, the Alaska Juneau Gold Mine installed two 115-foot diameter steel tanks at the Site to store Bunker fuel oil to supply fuel to a power plant. The south tank was removed in 1930, with the exception of the tank bottom that remains on-site. The north tank was abandoned partially full of Bunker fuel oil. The roof to this tank collapsed in the winter of 1971-1972. Since that time, the walls of the tank were cut to an approximate height of 4 feet and the roof remnants were removed from the tank.

In 1994, wood chips were added to the north tank as part of a cleanup plan to solidify the oil and then incinerate the solidified oil waste. The cleanup plan was not completed. At that time, the north tank reportedly contained a mixture of Bunker C oil, water, wood chips, contaminated soil, and other debris. In 2005, another attempt was made to incinerate the oil and mixed debris in the north tank. This effort was suspended due to technical difficulties and freezing conditions.

In July 2007, NORTECH Environmental Engineering, Health and Safety (NORTECH) measured the north tank's contents and collected a water sample for laboratory analysis. NORTECH reported the tank to contain a ¼-inch thick layer of oil estimated at 1,700 gallons, a 12-inch thick layer of water estimated at 80,000 gallons, and a 13-inch thick layer of sludge estimated at 85,000 gallons. Debris piles consisting of concrete, garbage, lumber, steel, and wood were also present within the tank. In addition, NORTECH reported four 3,000-gallon and three 5,000-gallon steel tanks containing Bunker oil at the Site.

Bureau Veritas recently measured the eight tanks at the Site and the thickness of the waste layers within each tank. The north tank was found to contain a ¼-inch thick layer of oil estimated at 1,600 gallons; a 10-inch thick layer of water estimated at 64,750 gallons; and a 13-inch to 17-inch thick layer of sludge estimated at 97,125 gallons. Debris piles consisting of concrete, garbage, lumber, steel, and wood were also evident within the tank. The discrepancy between the waste measurements collected in July and August 2007 appear to be related to slight topographic slope beneath the north tank. The ground surface beneath the north tank slopes gently from east to west resulting in a thicker sludge layer in the eastern portion of the tank.

Based on tank measurements, the remaining tanks were determined to be four 4,000 gallon tanks containing primarily Bunker oil, one 5,300-gallon tank containing primarily Bunker oil, one 7,000-gallon tank containing primarily Bunker oil, and one 15,000-gallon tank containing primarily water. In total, the tanks at the Site were estimated to contain 26,820 gallons of oil, 77,735 gallons of water, and 97,125 gallons of sludge and solids on August 23, 2007. It is anticipated that the volume of water in the tanks will be greater when the removal action is implemented as a result of rain accumulation in the tanks. The



tank and waste layer measurement data are presented in Table 1. The estimated waste volumes are summarized in Table 2.

3.0 PROJECT TEAM

Bureau Veritas has assembled a highly-qualified team to complete the removal action that has worked together on numerous projects over the past decade.

3.1 BUREAU VERITAS

Bureau Veritas will provide engineering and technical oversight of the removal action. Bureau Veritas has more than 3,600 employees in over 70 offices within the U.S. Our staff of engineers, geologists, scientists, and industrial hygienists offers a diverse range of expertise in areas of site investigation, remediation, hazardous waste management, regulatory compliance, and occupational health and safety.

John Werfal will serve as Project Manager for the Thane Bunker Fuel Tanks Site removal action. Mr. Werfal has more than 21 years of experience in environmental consulting, project management and construction management. Mr. Werfal was also the Project Manager for a number of similar projects including the PRC Superfund removal action and has the requisite experience to complete the Thane Bunker Fuel Tanks Site project. Mr. Werfal will be responsible for the field execution of the removal action including Site safety, identification and resolution of potential problems, monitoring project costs and schedule, conformance with project plans and specifications, and communications with identified stakeholders.

Jon Rosso will serve as Project Director to support the implementation of the removal action. Mr. Rosso is a licensed Professional Engineer with a Masters Degree in Construction Management. Mr. Rosso oversees Bureau Veritas' environmental risk management and remediation practice in Northern California and has substantial experience with diverse cleanup approaches and technologies, such as large-scale removal, groundwater extraction/treatment, encapsulation, dual phase extraction, soil vapor extraction, air sparge systems, biodegradation, oxidation, chemical fixation, barrier systems, hydraulic control, and waste stabilization.

3.2 NRC ENVIRONMENTAL SERVICES

NRC Environmental Services (NRCES) has been selected as the waste removal contractor. NRCES has provided remediation, waste management, and emergency spill response services for more than two decades and is recognized today as the West Coast's largest emergency response contractor.

Kevin Krause will be assigned as NRCES's Project Manager for the Thane Bunker Fuel Tanks Site removal action. Mr. Krause's technical expertise includes broad based knowledge in industrial cleaning and vacuuming operations, mass excavation and associated components of earthwork related services, and waste processing/disposal technologies. Mr. Krause's has comprehensive experience directing waste removal, tank cleaning and demolition, and waste management activities.



4.0 REMOVAL PLAN FOR TANK CONTENTS

This section describes the current plans for removal operations and waste management for oil, water, and sludge from the tanks. While this plan provides detailed information on the specific handling and treatment of all phases of waste from tanks, it should be understood that this plan is crafted based on field and preliminary laboratory data that is currently available that is limited in nature. Modifications and adjustments to this plan may be necessary as additional analytical results are obtained, removal actions progress, and the effectiveness of waste handling and the proposed treatment scheme is evaluated under field conditions.

A Health and Safety Plan will be prepared in accordance with federal OSHA requirements contained in Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120). Lastly, a Contingency Plan describing the responsibilities and actions of Site personnel in response to a fire or spill or release of hazardous substances or materials including emergency organization, notification procedures, and emergency response procedures will be prepared.

The following scope of work will be completed during implementation of the removal action:

1. Procure all permits, licenses, and other proper authorizations that may be required for the performance of the work.
2. Prepare a health and safety plan (HASP). The minimum protective measures are described in the Bureau Veritas HASP. The tank removal contractor may elect to implement more stringent measures for its own workers as necessary.
3. Comply and implement the Work Plan and Contingency Plan.
4. Prepare site, as necessary (Section 3.1).
5. Mobilize all labor, supervision, equipment, and materials to the Site, including any necessary toilet facilities, field office, and health and safety equipment required by the HASP.
6. Provide and maintain all necessary utilities for the performance of the work, including but not limited to tankage for waste storage, fuel, electrical, water, telephone (cellular or land-line), and treated waste storage.
7. Provide on-site supervision and management. Provide daily work force reports and schedule updates. Daily site safety meetings are mandatory.
8. Participate in weekly project update meetings at the Site to review work and to update the work completion schedule.
9. Secure project area and maintain site boundary control measures.



10. Create necessary access to the tank and waste material contained therein.
11. Remove all oil, water, sludge, and any debris from the tanks.
12. Minimize odors emanating from their work on the Site.
13. Provide and store any materials for processing the waste material. All work will be performed in a manner that minimizes the generation of waste materials. All process equipment will be set up to protect against soil and surface water contamination.
14. Sample and test waste streams, as necessary.
15. Clean, decontaminate, and demolish the tanks.
16. Profile, load, transport, and dispose of all waste products associated with oil, wastewater, and sludge removal, processing, and/or treatment. All waste shipments must be accompanied with an appropriate waste manifest.
17. Profile, load, transport, and dispose of waste products associated with the tank cleaning process.
18. Clean-up, demobilize, and remove any equipment, materials or waste associated with work activities.

4.1 SITE PREPARATION

Site preparation activities will include mobilization of required equipment and facilities, the establishment of site boundary and exclusion zone control measures, and construction of spill containment areas. Equipment and facilities that will be mobilized to the Site include a job trailer, personal protective equipment, a generator, fire extinguishers, first aid supplies, portable eyewash stations, portable toilet, and various transfer pumps and associated hoses. Heavy equipment including an excavator, front-end loader, dump truck, and vacuum truck will also be mobilized to the Site. Temporary storage tanks will also be mobilized to the Site. The temporary storage tanks will be utilized for the staging of wastewater as described in Section 4.3 of this work plan. Each temporary storage tank will be thoroughly inspected prior to being placed into service at the Site. Temporary fencing will be installed to delineate and control access to the work area. The perimeter of the exclusion zone will be clearly delineated. Clearing of vegetation and debris along with minor grading may be necessary to establish a safe and suitable work area.

An earthen containment basin will encompass the primary work area. Other smaller containment basins will consist of a 24-inch high wood frame supported by steel forming stakes, and a lining of 40-mil HDPE with taped or welded seams. The containment basin will encompass the access portals in the tank work areas to protect against soil contamination during sludge, oil and water removal, tank cleaning, and equipment decontamination activities. A spill containment area will also be constructed adjacent to the smaller tanks to accommodate vacuum trucks or pumps utilized in the liquids removal process.



4.2 OIL

The total volume of oil contained in the tanks is approximately 26,280 gallons with 1,600 gallons contained in the North Tank and 25,150 gallons in six smaller tanks (Table 2). Based on a visual inspection of the ¼-inch thick layer of oil scum in the North Tank on August 23, 2007, it was determined that this oil layer was unsuitable for recycling or use as alternative fuel. The oil layer in the North Tank will be solidified with the sludge wastes as described in Section 4.4. The oil removal activities described in this Section will apply to the contents of the six smaller tanks.

4.2.1 Oil Sampling and Analysis

A composite oil sample was collected from the six smaller tanks and submitted for laboratory testing. The composite oil sample was analyzed for polychlorinated biphenyls (PCBs), lead, sulfur content, flash point, total organic halides, water content, basic sediments and water (BS&W), and gross heat value in British Thermal Units per pound (BTU/lb). PCBs and total organic halides were not detected in the oil sample. Lead was detected at a concentration of 23 milligrams per kilogram (mg/Kg). The sulfur content of the oil was 0.965 % by mass. The water content and BS&W were both 52% by volume. The gross heat value was 8,604 BTU/lb. The results of the laboratory testing for the composite oil sample are summarized in Table 3. The laboratory reports are presented in Appendix A.

4.2.2 Oil Removal Methods

The oil phase will be removed from the six smaller tanks according to the following methods and procedures. All oil removal work is planned without physical entry into the tank. Access to the tanks will be made via existing access fittings or openings in the tanks, or portals cold cut into the side(s) of the tanks. Prior to cold cutting any access portals, the level of the waste contents in tanks will be measured from the top of the tank to ensure that the portals are placed above the tank contents.

Adjustments to the plan during more detailed logistical planning may be made and documented in refinements to this work plan. Actual conditions during execution of this plan may require that adjustments to the plan be identified and implemented in the field to address unforeseen circumstances.

Based on the oil sample test results, three alternatives are being considered for the removal and disposal of the oil waste. Because of the high water content and low BTU value, the oil is unsuitable for use as a fuel in its current condition. The first alternative is blending the oil with a cutter stock (i.e., diesel) to enhance the fuel characteristics of the oil and utilizing the blended oil as a fuel at a local asphalt batch plant. This alternative appears to be the most cost effective option provided that less than 30% cutter stock is required to achieve a suitable fuel blend. Concurrent with initial mobilization activities, a test batch of oil blended with cutter stock will be prepared and delivered to a local asphalt batch plant (Southeast Paving) to test the suitability of the material as a fuel. Two 55-gallon drums of oil blended with cutter stock will be prepared for the batch test. The following procedures will be utilized if fuel blending is found to be a viable alternative.



The oil will be blended with cutter stock to create a homogenous mixture suitable for asphalt batch plant fuel. It is expected that a maximum of 8,000 gallons of cutter stock would be utilized during the oil removal actions. The blending will occur within the existing tanks or other appropriate containers at the Site. Once a consistent material is created, the mixture will be pumped into DOT-approved 3,000-gallon oil shipping totes for transport to the asphalt batch plant. The DOT-approved 3,000-gallon oil shipping totes will be provided by Southeast Paving.

- The pumps and hoses used during the transfer of oil and cutter stock will primarily occur within containment basins.
- Personnel will work from scaffolding or platforms as necessary to access the oil layer through existing fittings or openings in the tanks or through portals cold cut into the side(s) of the tanks. The portals will be of sufficient size to allow for the introduction of equipment but not so large as to make it difficult to control the opening for vagrant odors. The tank headspace will be monitored for vapors utilizing a photoionization detector (PID) and explosivity meter prior to cold cutting any access portals.
- Pumps and hoses will be used to transfer the oil and cutter stock from the tanks. The hoses will be connected with cam-lock devices, and the camlock fittings secured with wireties, tape, or equivalent. The hoses will also be fitted with ball valves at their terminations to ensure that no siphoning will occur from the tank during truck changes or any other hose disconnection operations. The hoses will be drained back into the tank or into transport containers prior to the end of each work shift.
- All offloading and loading of oil and cutter stock will take place on a temporary loading area created by placing impermeable poly sheeting surrounded by an appropriate berm to contain inadvertent minor oil releases.

If fuel blending is not viable, solidification and land disposal of the oil appears to be the second most cost effective alternative based on preliminary information from the disposal facilities. Based on visual inspection of the waste materials during the Site reconnaissance on August 23, 2007, the oil present in the six smaller tanks appears similar in nature (i.e., viscosity, color, etc.) to the sludge found in the North Tank, expect for the absence of wood chips and other debris. The oil from the six smaller tanks would be transferred to the North Tank and solidified with the sludge as described in Section 4.4.

A third alternative involves removing the oil from the six smaller tanks utilizing a pump or vacuum truck and transferring the material into USDOT-approved 4,000 gallon vacuum boxes for transport. The pumps and hoses used during the transfer of oil from the tanks will primarily occur within containment basins.

4.2.3 TSD/Recycling Facilities

If fuel blending is determined to be a viable alternative, the blended oil will be transported in DOT-approved oil shipping totes to Southeast Paving in Juneau, Alaska for use as fuel in an asphalt batch plant. Southeast Paving has a storage capacity of 60,000 gallons in DOT-approved shipping totes and two 10,000 gallon aboveground storage tanks for a total storage capacity of 80,000 gallons. It is our understanding that Southeast Paving anticipates a large paving workload during October and November, and a significant portion of the blended fuel would be used during that period. The remaining blended



fuel would be used through the winter during kiln maintenance activities and in the spring when paving project commence. If fuel blending is not viable, the oil will either be solidified with the sludge and transported to Allied Waste's Roosevelt Regional Landfill located in Roosevelt, Washington or transported as a liquid in USDOT-approved containers to the Emerald Recycling facility located in Seattle, Washington.

4.3 WATER

The total volume of water contained in the tanks is approximately 77,735 gallons. It is anticipated that the volume of water in the tanks will be greater when the removal action is implemented as a result of rain accumulation in the tanks. The accumulation of additional rain water is also anticipated during the implementation of the removal action.

4.3.1 Water Sampling and Analysis

A water sample was collected from the North Tank by NORTECH on July 19, 2007 and submitted for laboratory testing. The water sample was analyzed for volatile organic compounds (VOCs) by EPA Method 602, polyaromatic hydrocarbons (PAHs) by EPA Method 625, total metal concentrations, inorganic anions, and pH. VOCs were not detected in the water sample. Acenaphthalene was the only PAH detected at a concentration of 0.0028 mg/L. Low concentrations of calcium, iron, magnesium, manganese, sodium, zinc, chloride, and sulfate were also detected in the water sample. The pH of the water sample was 5.44. The results of the laboratory testing for the water sample are summarized in Table 4. The laboratory reports are presented in Appendix A.

4.3.2 Water Removal Methods

The water layers will be pumped from the tanks, passed through a screening filter to remove solids, and discharged to the City and Borough of Juneau (CBJ) sanitary sewer system. Due to the absence of organic compounds in the water, activated carbon filtration is not necessary and is not anticipated at this time unless required by the CBJ Wastewater Utility Division. Settlement or weir tanks will be utilized as necessary to ensure solids, sheens, or oil are not discharged to sanitary sewer. Based on conversations with the CBJ Wastewater Utility Division, volume flow limitations to the sanitary sewer are not expected. An initial discharge rate of 20,000 to 25,000 gallons of water per day is estimated for the first 3 days with lower discharge rates over the remainder of the project primarily to accommodate the removal of rainwater. The water will be discharged to a lift station located on the east side of South Franklin Street and adjacent to the cruise ship docks. The water will be conveyed to the lift station using new 2-inch diameter hard hoses in accordance with Coast Guard regulations for over the water transfers of petroleum products (MTR Regulations). These regulations include, but are not limited to: hoses must be capable of withstanding a pressure test at 150% of the maximum allowable working pressure, hoses must have the ears and/or locking levers of the cam-lock fittings secured with a physical devices (i.e., taped or wired shut), hoses must be free of substantial defects, and a method for the rapid cessation of pumping operations must be in place.



The laboratory analytical results for the water sample collected from the tank on July 19, 2007 have been provided to the CBJ Wastewater Utility Division for review. The water is slightly acidic with a pH of 5.44. The slightly acidic nature of the water is suspected to be the result of the decomposition of organic materials (i.e., leaves, wood) that have accumulated in the tank over the years. The volume of water in the tank has increased since the water sample was collected in July 2007 due to rain water accumulation which has likely resulted in the tank water having a less acidic pH. If required by the CBJ Wastewater Utility Division, the pH of the water will be adjusted by adding a small volume sodium hydroxide prior to discharge to the sanitary sewer. The treatment and discharge of water from the Site will be conducted in compliance with the CBJ Wastewater Utility Division's requirements.

4.4 SLUDGE

The total volume of sludge contained in the North Tank is approximately 97,125 gallons. During the Site reconnaissance on August 23, 2007, the sludge layer was observed to resemble weathered Bunker oil with a density greater than water rather than typical oil tank bottom sludge. Wood and other debris was mixed within the oily matrix. The weight of the sludge was found to range between about 8.75 and 9.0 pounds per gallon depending upon the quantity and nature of the debris contained in the sludge. The North Tank contains an estimated 425 to 440 tons of sludge.

4.4.1 Sludge Sampling and Analysis

A sludge sample was collected from the North Tank for bench-scale testing to determine the optimum recipe for solidification and waste characterization analysis. The sludge sample was collected by inserting a circular column through the oil, water and sludge layers to the base of the tank. The oil and water were removed from the column to provide access to the sludge for bulk sample collection. The sludge was subsequently mixed with various quantities of diatomaceous earth to determine a mix ratio that would solidify the sludge sufficiently to pass the paint filter test for free liquids. Samples were retained of the sludge mixed with approximately 20% diatomaceous earth by weight (Sample DE-1) and 25% diatomaceous earth by weight (Sample DE-2) for waste characterization testing. The sludge samples were analyzed for VOCs by USEPA Method 8260, Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270 SIM, PCBs by USEPA Method 8080, RCRA 8 metals by USEPA Method Series 6010/7000, Total Petroleum Hydrocarbons (TPH) by USEPA Method 8015M, Reactivity, Corrosivity, and Ignitability. Preliminary field tests were performed and both samples DE-1 and DE-2 did not contain free liquids.

The waste characterization results indicate that the sludge samples were not reactive, corrosive, or ignitable. The sludge samples did not contain any chemical constituents above the Toxicity Characteristic Leaching Procedure (TCLP) screening level limits. The predominant chemical constituents detected in the sludge samples were TPH in the Bunker C range (C12-C40) and PAH compounds. Arsenic, barium, chromium, lead and mercury were detected at relatively low concentrations. Based on the waste characterization results, the solidified sludge will be managed as a non-hazardous waste. The results of



the laboratory testing for the sludge samples are summarized in Table 4. The laboratory reports are presented in Appendix A.

4.4.2 Sludge Removal Methods

Following the removal of the water layer, the sludge layer will be solidified to prepare the material for transport and land disposal. Diatomaceous earth will be used as a binding agent for solidification. Based on bench-scale tests and waste characterization analysis, the sludge will be mixed with diatomaceous earth at an approximate ratio of 25% by weight. It is anticipated that 120 tons of diatomaceous earth will be required to solidify the sludge for transport and disposal.

After the water layer has been removed, the sludge surface and debris will be contoured and covered with plastic sheeting to divert rainwater away from the mixing area and towards an area where it can be decanted from the tank. To minimize the effects of precipitation during the solidification process, the plastic sheeting be rolled back from a small area so as to only expose sludge in the active mixing area. The diatomaceous earth will be mixed with the sludge within the tank in batches by mechanical means using an excavator. The solidification process should not be impeded by average precipitation events. During periods of extreme heavy precipitation, solidification efforts will be temporarily suspended. During field bench-scale tests, mix ratios of 20% and 25% diatomaceous earth by weight was sufficient to solidify the sludge. During the removal action, a mix ratio of approximately 25% by weight will be used, which provides a minimum rain water absorption capacity of approximately 5,500 gallons. Additional diatomaceous earth can be mobilized to the Site if required.

The solidified sludge will then be transferred to lined USDOT-approved bins for shipment. Solidified sludge batch samples will be collected at the Site for paint filter tests using USEPA Method 9095B prior to transport. Transporting the solidified sludge in lined bins offers several significant advantages including: 1) the lined bins provide additional containment and spill protection during shipment of the waste, 2) in the event free liquids are released during marine transport, the bins can be safely off loaded from the barge and moved to an appropriate location for additional solidification prior to delivery to the landfill; and 3) additional solidification would only be required on individual bins containing free liquids rather than the entire waste volume if transported in bulk.

4.4.3 TSD/Recycling Facilities

The solidified sludge will be transported for disposal via lined USDOT-approved bins loaded on barges to Seattle, Washington where they will be transported by rail or truck to Allied Waste's Roosevelt Regional Landfill located in Roosevelt, Washington. A non-hazardous waste manifest will occupy each bin from the Site to the disposal facility to document the transportation and final disposal of the waste



4.5 OTHER WASTES

Inert solid waste materials (i.e., construction debris, steel roof debris, wood timbers, etc.) may be segregated, if practical, pressure-washed to remove any oil or sludge in preparation for disposal at the Capital Landfill in Juneau, Alaska. The volume of inert solid waste materials generated during the removal action is expected to be small and disposal of these materials at the Capital Landfill will require the landfill's acceptance of the wastes. If the inert solid waste materials are not acceptable to the Capital Landfill, it is our intention at this time to dispose of the inert solid waste materials with the sludge waste.

5.0 DECONTAMINATION PLAN FOR TANKS

When the large tank is fundamentally free of all sludge and is ready for the final pressure washing, appropriate pressure washers and other equipment as necessary will be introduced into the tanks to begin the final cleaning. Any remaining "heel", large debris, and heavy sands or fines will be removed from the tanks to prepare for the hydroblasting/pressure washing of the interior tank walls. The "heel", heavy sands or fines will be solidified as necessary and disposed of with the solidified sludge. Large debris will be managed in a manner consistent with the inert solid waste materials as described in Section 4.5. The interiors of the storage tank will be thoroughly washed using high-pressure washers and detergents. No chlorinated solvents or hazardous degreasers will be used. To prevent soil contamination from wash water, secondary containment will be placed adjacent to the tank where access portals exist and/or the access portals will be sealed with visquene or other suitable materials during tank cleaning activities. Tank cleaning rinsate may be recycled during the tank decontamination process if it can be filtered sufficiently to remove solids for reuse in tank decontamination activities. Decontamination of the tank will be verified by visual observation. The empty smaller tanks will also be cleaned in the same manner. The tanks will be cleaned in a manner to minimize the need for further maintenance and to protect human health and the environment from releases of hazardous substances while being prepared for scrapping. The decontamination liquids will be handled in the same manner as the water phase of the waste material. After the tanks have been decontaminated, they will be cut into sections and transported as scrap steel for recycling.

6.0 SPILL PREVENTION

The treatment, handling, and transfer of the waste streams into appropriate USDOT containers for transport will occur within the tank(s) and surrounding containment basins. Any conveyance piping or hoses outside of the containment basins used to convey liquid material will be staged in accordance with Coast Guard regulations for over the water transfers of petroleum products (MTR Regulations). These regulations include, but are not limited to: hoses must be capable of withstanding a pressure test at 150% of the maximum allowable working pressure, hoses must have the ears and/or locking levers of the cam-lock fittings secured with a physical devices (i.e., taped or wired shut), hoses must be free of substantial defects, and a method for the rapid cessation of pumping operations must be in place. These



strict over-the-water standards will be utilized to ensure the maximum margin of safety. Spill prevention and response procedures will also be detailed in a Contingency Plan.

7.0 PROJECT MANAGEMENT AND REPORTING

During implementation of the removal action, Bureau Veritas will submit weekly progress report to ADEC and identified stakeholders. Bureau Veritas will contact ADEC for approval if any deviations to the Work Plan become necessary during implementation of the removal action. The weekly progress reports will include a description of the work completed the prior week and scheduled work for the upcoming week, any deviations from the project schedule, any deviation in the anticipated quantity or nature of the wastes, and any safety or environmental incidents. At the completion of the removal action, a Project Completion Report will be prepared documenting field activities, the results of any waste sampling, and the volume and disposition of the wastes. The report will also include copies of the waste manifests, project photographs, project permits, and laboratory analytical reports.

8.0 SCHEDULE

The removal action site work is scheduled to begin on October 8, 2007. We estimate that the removal action site work will require four weeks to complete. A projected schedule of the various work elements is presented in Appendix B.

This report prepared by:

John Werfal
Senior Project Manager
Environmental Services

This report reviewed by:

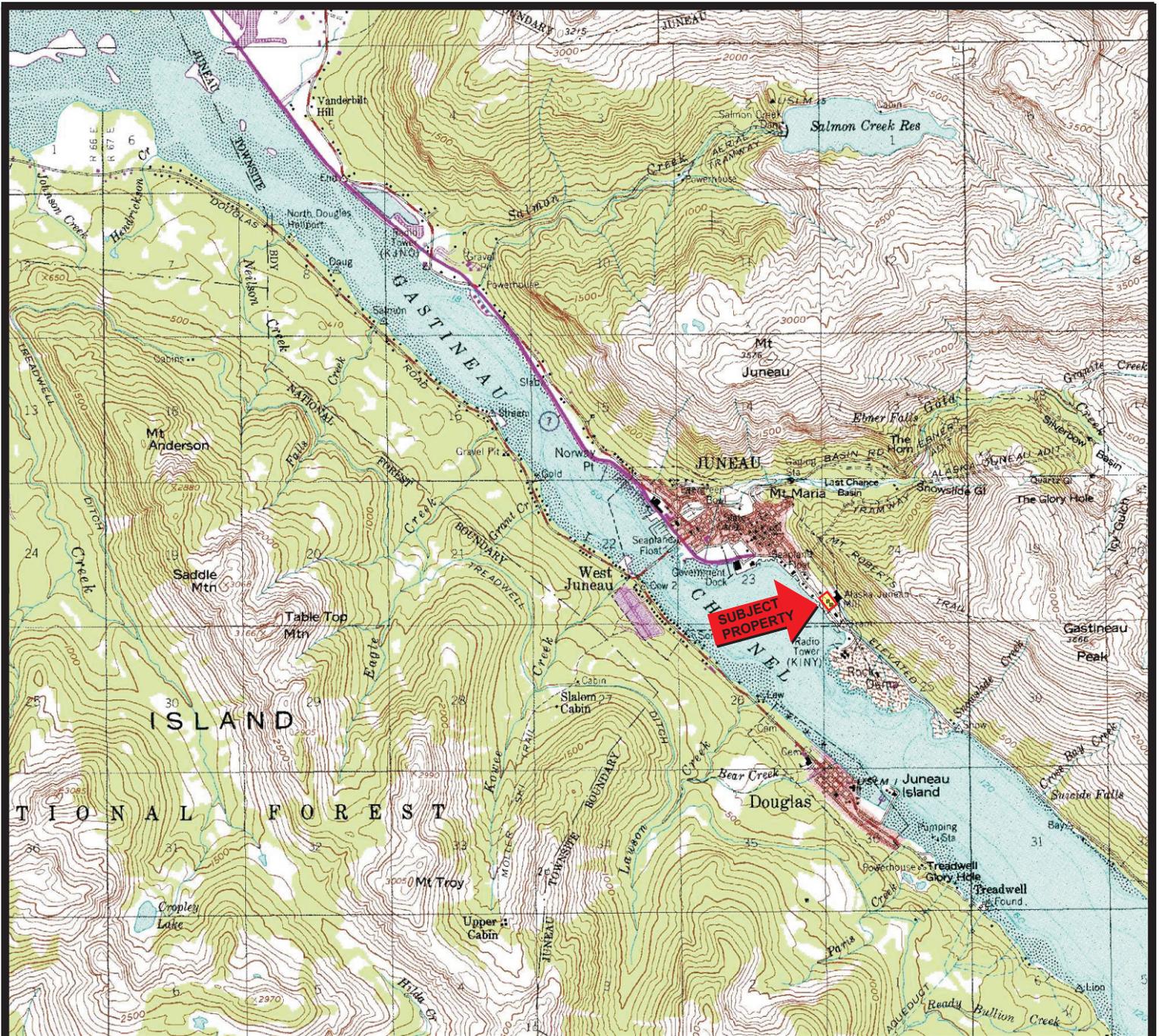
Jon Rosso, P.E.
Director
Environmental Services

October 2, 2007

Project No. 33107-007637.00

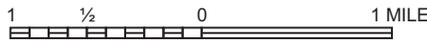


FIGURES



Source: TOPO! © 2000 National Geographic Holdings

Note: Location Information is Approximate



Portion of the 7.5-Minute Series Juneau (B-2), Alaska
 Quadrangle Topographic Map (Datum: NAD 27)
 United States Department of the Interior
 Geological Survey
 1974 Photorevised from 1962



SUBJECT PROPERTY LOCATION

Thane Road Bunker Fuel Tanks Site
 South Franklin Street
 Juneau, Alaska

Project No. 33107-007637.00

FIGURE

1



**BUREAU
 VERITAS**



TABLES

Table 1
Summary of Tank and Waste Layer Measurement Data
Thane Bunker Fuel Tanks Site in Juneau, Alaska

Tank	Dimensions (Dia. x H/L) (feet)	Tank Capacity Approximate (gallons)	Identified Waste Layer	Layer Thickness (inches) August 2007 ¹	Estimated Volume (gallons) August 2007 ¹	Layer Thickness (inches) July 2007 ²	Estimated Volume (gallons) July 2007 ²
North Tank	115 x 4 H	310,800	Oil	0.25	1,600	0.25	1,700
			Water	10	64,750	12	80,000
			Sludge	15	97,125	13	85,000
O-1	8 x 14 L	5,300	Oil	48	2,700	--	5,000 ³
			Water	4	285	--	--
O-2	6.25 x 17.33 L	4,000	Oil	67	3,750	--	3,000 ³
O-3	6.25 x 17.33 L	4,000	Oil	71	3,900	--	3,000 ³
O-4	6.25 x 17.33 L	4,000	Oil	71	3,900	--	3,000 ³
O-5	6.25 x 17.33 L	4,000	Oil	71	3,900	--	3,000 ³
O-6	8 x 19 L	7,000	Oil	92	7,000	--	5,000 ³
O-7	10 x 26 L	15,000	Oil	0.5	70	--	5,000 ³
			Water	93	12,700	--	--

Notes:

1. Data obtained in field by Bureau Veritas, August 23, 2007
2. Data obtained from Nortech's August 7, 2007 Work Plan
3. Reference from Nortech's August 7, 2007 Work Plan to four 3,000 gallon and three 5,000 gallon steel tanks containing oil and sludge.

Table 2
Estimated Material Volumes in Storage Tanks
Thane Bunker Fuel Tanks Site in Juneau, Alaska

Tank	Estimated Oil Volume (gallons)	Estimated Water Volume (gallons)	Estimated Sludge Volume (gallons)
North Tank	1,600	64,750	97,125
O-1	2,700	285	0
O-2	3,750	0	0
O-3	3,900	0	0
O-4	3,900	0	0
O-5	3,900	0	0
O-6	7,000	0	0
O-7	70	12,700	0
Total	26,820	77,735	97,125

Table 3
Analytical Summary: Oil Samples
Thane Bunker Fuel Tanks Site, Juneau, Alaska

		Sample Identification
Chemical	Units	OIL COMP 1 8/23/07
PCBs	mg/kg	<1.0
Lead	mg/kg	23
Sulfur Content	%	0.965
Total Organic Halides	mg/kg	<250
Water & Sediment	% vol.	52
Water (by Distillation)	% vol.	52
BTU	BTU/lb	8,604

Notes:

1. <x = Analyte not detected above detection limit of x.

Table 4
Analytical Summary: Water Sample
Thane Bunker Fuel Tanks Site, Juneau, Alaska

Category	Chemical	Sample Identification/Date	
		Units	TT-01 7/19/2007 ¹
Volatile Organic Compounds (EPA 602)	Benzene	ug/L	<1.0
	Chlorobenzene	ug/L	<1.0
	Toluene	ug/L	<1.0
	Xylenes, Total	ug/L	<2.0
	1,2-Dichlorobenzene	ug/L	<1.0
	1,3-Dichlorobenzene	ug/L	<1.0
	1,4-Dichlorobenzene	ug/L	<1.0
Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 625)	Acenaphthene	ug/L	<0.47
	Acenaphthylene	ug/L	2.8
	Anthracene	ug/L	<0.45
	Benzo(a)anthracene	ug/L	<0.35
	Benzo(a)pyrene	ug/L	<0.27
	Benzo(b)fluoranthene	ug/L	<0.30
	Benzo(g,h,i)perylene	ug/L	<0.40
	Benzo(k)fluoranthene	ug/L	<0.39
	Chrysene	ug/L	<0.21
	Dibenzo(a,h)anthracene	ug/L	<0.35
	Fluoranthene	ug/L	<0.53
	Fluorene	ug/L	<0.49
	Indeno(1,2,3-cd)pyrene	ug/L	<0.23
	Naphthalene	ug/L	<0.64
	Phenanthrene	ug/L	<0.45
Pyrene	ug/L	<0.41	
Metals EPA Series 6000 & 7000 Analyses	Aluminum	mg/L	<0.050
	Arsenic	mg/L	<0.10
	Beryllium	mg/L	<0.0010
	Cadmium	mg/L	<0.0060
	Calcium	mg/L	2.9
	Chromium	mg/L	<0.010
	Iron	mg/L	2.1
	Lead	mg/L	<0.050
	Magnesium	mg/L	1.2
	Manganese	mg/L	0.081
	Mercury	mg/L	<0.00020
	Nickel	mg/L	<0.040
	Potassium	mg/L	<1.0
	Sodium	mg/L	11
Zinc	mg/L	0.0080	
	pH	pH Units	5.44
	Chloride	mg/L	15.7
	Sulfate	mg/L	1.78
	Sulfide	mg/L	<0.050

Notes:

1. Sample collected by NORTECH Environmental Engineering

<x = Analyte not detected above detection limit of x.

ug/L = micrograms per liter.

mg/L = milligrams per liter.

Table 5
Analytical Summary: Sludge Samples
Thane Bunker Fuel Tanks Site, Juneau, Alaska

Category	Chemical	Units	Sample Identification & Date		Hazardous Waste Criteria	
			DE-1 8/23/07	DE-2 8/23/07	Total Concentration Threshold (mg/Kg) ¹	TCLP (mg/L)
Volatile Organic Compounds (EPA 8260B)	Acetone	mg/Kg	<2.5	1.4	--	--
	Benzene	mg/Kg	<0.5	<0.25	100	5.0
	1,3,5-Trimethylbenzene	mg/Kg	<0.5	0.28	--	--
	1,2,4-Trimethylbenzene	mg/Kg	0.6	<0.25	--	--
	Naphthalene	mg/Kg	1.6	0.86	--	--
	Other VOCs	mg/Kg	ND	ND	--	--
Total Petroleum Hydrocarbons (EPA 8015M)	TPH-Diesel (C10-C24)	mg/Kg	70,000	56,000	--	--
	TPH-Oil (C24-C36)	mg/Kg	83,000	69,000	--	--
	TPH-Bunker (C12-C40)	mg/Kg	390,000	310,000	--	--
Polychlorinated biphenyls (EPA 8081)	PCBs	ug/Kg	ND	ND	--	--
Semivolatile Organic Compounds (EPA 8270)	Naphthalene	mg/Kg	<5.1	5.9	--	--
	Acenaphthylene	mg/Kg	5.1	5.1	--	--
	Acenaphthene	mg/Kg	14	12	--	--
	Fluorene	mg/Kg	24	24	--	--
	Phenanthrene	mg/Kg	110	96	--	--
	Anthracene	mg/Kg	26	22	--	--
	Fluoranthene	mg/Kg	11	11	--	--
	Pyrene	mg/Kg	59	41	--	--
	Benzo(a)anthracene	mg/Kg	20	24	--	--
	Chrysene	mg/Kg	41	39	--	--
	Benzo(b)fluoranthene	mg/Kg	5.1	5.1	--	--
	Benzo(k)fluoranthene	mg/Kg	<5.1	<5.1	--	--
	Benzo(a)pyrene	mg/Kg	7.7	11	--	--
	Indeno(1,2,3-cd)pyrene	mg/Kg	<5.1	<5.1	--	--
	Dibenzo(a,h)anthracene	mg/Kg	<5.1	<5.1	--	--
Benzo(g,h,i)perylene	mg/Kg	<5.1	<5.1	--	--	
RCRA 8 Metals - Total Concentration	Arsenic	mg/Kg	1.6	1.0	100	5.0
	Barium	mg/Kg	34	15	2000	100
	Cadmium	mg/Kg	<0.25	<0.25	20	1.0
	Chromium	mg/Kg	13	6.3	100	5.0
	Lead	mg/Kg	29	19	100	5.0
	Mercury	mg/Kg	0.051	0.023	4.0	0.2
	Selenium	mg/Kg	<0.5	<0.5	20	1.0
	Silver	mg/Kg	<0.25	<0.25	100	5.0
pH	pH	SU	6.3	6.7		
	Reactive Sulfide	mg/kg	<10	<10		
	Reactive Cyanide	mg/kg	<10	<10		
	Flash point	Degrees F	Not Ignitable	Not Ignitable		

Notes:

1. TCLP threshold concentration times 20 to provide total concentration screening value that could theoretically exceed TCLP.
2. Sample DE-1 consisted of sludge mixed with diatomaceous earth at an approximate ratio of 20% by weight.
Sample DE-2 consisted of sludge mixed with diatomaceous earth at an approximate ratio of 25% by weight.

mg/kg = milligrams per kilogram

ND = No Analytes Detected.

<x = Analyte not detected at or above detection limit of x.



APPENDIX A
LABORATORY ANALYTICAL REPORTS



Analytica Alaska, Inc. - Juneau
5438 Shaune Drive
Juneau, AK 99801
Phone: 907-780-6668

8/15/2007

Nortech
119 Seward St. # 10
Juneau, AK 99801
Attn: Jason Ginter

Work Order #: J0707156
Date: 8/15/2007
Work ID: Thane Tank
Date Received: 7/20/2007

Sample Identification

<u>Lab Sample Number</u>	<u>Client Description</u>	<u>Lab Sample Number</u>	<u>Client Description</u>
J0707156-01	TT-01	J0707156-02	TRIP BLANK

Enclosed are the analytical results, in summary format, for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues.

Sincerely,

Robin Jung
Manager

Case Narrative

Analytica Environmental Laboratories, Inc.

Work Order: J0707156

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Pfaff, J. D., C. A. Brockhoff and J. W. O'Dell. 1994. The Determination of Inorganic Anions in Water by Ion Chromatography. Method 300.0A. U. S. Environmental Protection Agency. Environmental Monitoring Systems Lab.

Methods for Chemical Analysis of Water and Wastes, USEPA 600/4-79-020, March 1983.

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December 1996.

Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR, Part 136, 7-1-99 Edition.

Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA 600/4-82-057, July 1982.

SAMPLE RECEIPT:

One (1) sample was received on 7/20/2007 9:30:00 AM, at a temperature of 7.0 deg C., in cooler 1 at Analytica-Juneau. The cooler was opened on 7/20/2007. The sample was received in good condition and in order per chain of custody.

The sample was transferred for various analyses to Analytica Environmental Laboratories (AEL); 12189 Pennsylvania St. Thornton, CO 80241, where it was received at a temperature of 2.8°C in good condition and in order per chain of custody on 7/25/2007. There were no custody seals present on the cooler.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below.

All analytical results contained in this report have been reviewed under Analytica's internal quality assurance and quality control program. Any deviations in quality control parameters for specific analyses are noted in the following text. A complete quality assurance report, including laboratory control, matrix spike, and sample duplicate recoveries is kept on file in our office and is available upon request.

All method specifications were met for the following tests, unless otherwise noted:

Test Method: 150.1 - pH, Electrometric - (pH) - Aqueous

Test Method: 376.2 - Colorimetric, Methylene Blue - (Total Sulfide) - Aqueous

Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes - Aqueous

Test Method: Inorganic Anions by Ion Chromatography - Anions by IC - Aqueous

Test Method: SW6010B - ICP - Total - Aqueous

Test Method: SW7470A - Mercury in Liquid Waste by CVAA - Total Hg - Aqueous

Test Method: 625 - Base-Neutrals and Acids by GC/MS - PAH - Aqueous

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

OPENING CONTINUING CALIBRATIONS:

Several targets were recovered out of limits in the opening and continuing CCVs shown below. Since these are elevated recoveries, and these targets were not detected in the samples, there is no impact on the data.

Case Narrative

Analytica Environmental Laboratories, Inc.

Work Order: J0707156

(continued)

RunDate	Data File	Analyte	Recovery	LCL	UCL
8/2/2007 7:56:00 PM	07080204.D	Benzo(a)anthracene		128.	80 120
8/2/2007 7:56:00 PM	07080204.D	Benzo(b)fluoranthene		123.	80 120
8/2/2007 7:56:00 PM	07080204.D	Benzo(g,h,i)perylene		128.	80 120
8/2/2007 7:56:00 PM	07080204.D	Dibenzo(a,h)anthracene		135.	80 120
8/2/2007 7:56:00 PM	07080204.D	Indeno(1,2,3-cd)pyrene		125.	80 120

CLOSING CONTINUING CALIBRATIONS:

RunDate	Data File	Analyte	Recovery	LCL	UCL
8/3/2007 7:44:00 AM	07080224.D	Benzo(b)fluoranthene		122.	80 120
8/3/2007 7:44:00 AM	07080224.D	Benzo(k)fluoranthene		123.	80 120
8/3/2007 7:44:00 AM	07080224.D	D14-Terphenyl		155.	80 120
8/3/2007 7:44:00 AM	07080224.D	Indeno(1,2,3-cd)pyrene		124.	80 120
8/3/2007 7:44:00 AM	07080224.D	Pyrene		150.	80 120

LCS OUTLIERS:

Acenaphthylene was recovered out of limits in the LCS/LCSD, as shown below. This is an elevated recovery, and this target was not detected in the associated sample.

Type	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCS	T070731006	Acenaphthylene	186.	48	133	Complete
LCSD	T070731006	Acenaphthylene	178.	48	133	Complete

Summary of Detected Analytes

Analytica Environmental Laboratories, Inc.

Workorder (SDG): **J0707156**
Project: **Thane Tank**
Client: **Nortech**
Client Project Number: **2007**

Client Sample Name: **TRIP BLANK**

Matrix: Aqueous

Collection Date: 7/19/2007 2:00:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
1,2-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
1,3-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
1,4-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Benzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Chlorobenzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Ethylbenzene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Toluene	<1.0	1.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Xylenes, Total	<2.0	2.0	ug/L	8/1/07 22:58		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): **J0707156**
 Project: **Thane Tank**
 Client: **Nortech**
 Client Project Number: **2007**

Client Sample Name: **TT-01**

Matrix: Aqueous

Collection Date: 7/19/2007 2:00:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Aluminum	<0.050	0.050	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Arsenic	<0.10	0.10	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Beryllium	<0.0010	0.0010	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Cadmium	<0.0060	0.0060	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Calcium	2.9	0.10	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Chromium	<0.010	0.010	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Iron	2.1	0.050	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Lead	<0.050	0.050	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Magnesium	1.2	0.10	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Manganese	0.081	0.010	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Nickel	<0.040	0.040	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Potassium	<1.0	1.0	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Sodium	11	3.0	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Zinc	0.0080	0.0050	mg/L	7/26/07 18:57		rm	SW6010B - ICP - Total
Mercury	<0.00020	0.00020	mg/L	7/27/07 21:04		CC	SW7470A - Mercury in Liquid Waste by CVAA - Total Hg
pH	5.44	0.10	pH	7/20/07 16:20		lc	150.1 - pH, Electrometric - (pH)
Chloride	15.7	0.50	mg/L	8/8/07 12:55		rj	Inorganic Anions by Ion Chromatography - Anions by IC
Sulfate	1.78	0.10	mg/L	8/8/07 12:55		rj	Inorganic Anions by Ion Chromatography - Anions by IC
Sulfide	<0.050	0.050	mg/L	7/26/07 11:45		rj	376.2 - Colorimetric, Methylene Blue - (Total Sulfide)
1,2-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
1,3-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
1,4-Dichlorobenzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Benzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Chlorobenzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Ethylbenzene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Toluene	<1.0	1.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Xylenes, Total	<2.0	2.0	ug/L	8/1/07 23:35		RA	602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Acenaphthene	<0.47	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Acenaphthylene	2.8	5.2	ug/L	8/2/07 22:55	J	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Anthracene	<0.45	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Benzo(a)anthracene	<0.35	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Benzo(a)pyrene	<0.27	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Benzo(b)fluoranthene	<0.30	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Benzo(g,h,i)perylene	<0.40	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): **J0707156**
Project: **Thane Tank**
Client: **Nortech**
Client Project Number: **2007**

Client Sample Name: **TT-01**

Matrix: Aqueous

Collection Date: 7/19/2007 2:00:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Benzo(k)fluoranthene	<0.39	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Chrysene	<0.21	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Dibenzo(a,h)anthracene	<0.35	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Fluoranthene	<0.53	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Fluorene	<0.49	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Indeno(1,2,3-cd)pyrene	<0.23	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Naphthalene	<0.64	10	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Phenanthrene	<0.45	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH
Pyrene	<0.41	5.2	ug/L	8/2/07 22:55	TO MDL	SM	625 - Base-Neutrals and Acids by GC/MS - PAH



Cooler Receipt Form

Client: Nortech
Project: Thane Tank

Client Code: 801147

Order #: J0707156

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 7/20/2007
Cooler opened by: lw

Signature: lw

- 1. Was airbill Attached? N/A Airbill #: _____ Carrier Name: Client
- 2. Custody Seals? N/A How many? 0 Location: under custody Seal Name: _____
- 3. Seals intact? N/A
- 4. COC Attached? Yes Properly Completed? Yes Signed by AEL employee? Yes
- 5. Project Identification from custody paper: Thane Tank
- 6. Preservative: WetIce Temperature: 7.0

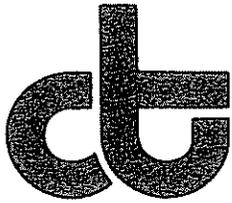
Designated person initial here to acknowledge receipt: _____ Date: _____

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 7/20/2007 Log-in By: rj

- 1. Packing Type: Ice
- 2. Were samples in separate bags? No
- 3. Were containers intact? Yes Labels agree with COC? Yes
- 4. Number of bottles received: 6 Number of samples received: 1
- 5. Correct containers used? Yes Correct preservatives added? Yes
- 6. Sufficient sample volume? Yes
- 7. Bubbles in VOA samples? No
- 8. Was Project manager called and status discussed? No
- 9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 197485
ANALYTICAL REPORT

Bureau Veritas North America
6920 Koll Center Parkway
Pleasanton, CA 94566

Project : 33107-007637.00
Location : Thane Road
Level : II

Sample ID

DE-1

DE-2

Lab ID

197485-001

197485-002

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

Signature: 
Project Manager

Date: 09/21/2007

Signature: 
Operations Manager

Date: 09/21/2007

CASE NARRATIVE

Laboratory number: 197485
Client: Bureau Veritas North America
Project: 33107-007637.00
Location: Thane Road
Request Date: 09/07/07
Samples Received: 09/07/07

This hardcopy data package contains sample and QC results for two soil samples, requested for the above referenced project on 09/07/07. The samples were received intact.

TPH-Extractables by GC (EPA 8015B):

197485-001 and 197485-002 were received and analyzed outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

197485-001 and 197485-002 were received and analyzed outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

197485-001 and 197485-002 were received and prepared outside of hold time; affected data was qualified with "b". DE-2 (lab # 197485-002) was diluted due to high non-target analytes. DE-1 (lab # 197485-001) and DE-2 (lab # 197485-002) were diluted due to the dark and viscous nature of the sample extracts. Matrix spikes were not reported for this analysis because the parent sample required a dilution that would have diluted out the spikes. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

197485-001 and 197485-002 were received and prepared outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

High recovery was observed for barium in the MS for batch 129312; the parent sample was not a project sample, and the BS/BSD were within limits. High RPD was also observed for barium in the MS/MSD for batch 129312; the RPD was acceptable in the BS/BSD. No other analytical problems were encountered.

Reactive Cyanide (SW-846 CH.7):

No analytical problems were encountered.

Reactive Sulfide (SW-846 CH.7):

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 197485
Client: Bureau Veritas North America
Project: 33107-007637.00
Location: Thane Road
Request Date: 09/07/07
Samples Received: 09/07/07

pH (EPA 9045C):

No analytical problems were encountered.

Ignitability (SW-846 CH.7):

No analytical problems were encountered.

Total Extractable Hydrocarbons			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	SHAKER TABLE
Project#:	33107-007637.00	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	08/23/07
Units:	mg/Kg	Received:	09/07/07
Basis:	as received	Prepared:	09/14/07
Batch#:	129481		

Field ID: DE-1 Diln Fac: 200.0
 Type: SAMPLE Analyzed: 09/17/07
 Lab ID: 197485-001

Analyte	Result	RL
Diesel C10-C24	70,000 H b	800
Motor Oil C24-C36	83,000 H L b	4,000
Bunker C C12-40	390,000 H b	4,000

Surrogate	%REC	Limits
Hexacosane	DO b	46-128

Field ID: DE-2 Diln Fac: 200.0
 Type: SAMPLE Analyzed: 09/17/07
 Lab ID: 197485-002

Analyte	Result	RL
Diesel C10-C24	56,000 H b	810
Motor Oil C24-C36	69,000 H L b	4,000
Bunker C C12-40	310,000 H b	4,000

Surrogate	%REC	Limits
Hexacosane	DO b	46-128

Type: BLANK Diln Fac: 1.000
 Lab ID: QC406165 Analyzed: 09/15/07

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0
Bunker C C12-40	ND	5.0

Surrogate	%REC	Limits
Hexacosane	78	46-128

H= Heavier hydrocarbons contributed to the quantitation
 L= Lighter hydrocarbons contributed to the quantitation
 b= See narrative
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	SHAKER TABLE
Project#:	33107-007637.00	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC406166	Batch#:	129481
Matrix:	Soil	Prepared:	09/14/07
Units:	mg/Kg	Analyzed:	09/14/07
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.67	42.29	85	55-131

Surrogate	%REC	Limits
Hexacosane	84	46-128

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	SHAKER TABLE
Project#:	33107-007637.00	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	129481
MSS Lab ID:	197604-002	Sampled:	09/13/07
Matrix:	Soil	Received:	09/13/07
Units:	mg/Kg	Prepared:	09/14/07
Basis:	as received	Analyzed:	09/15/07
Diln Fac:	5.000		

Type: MS Lab ID: QC406167

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	336.1	49.80	509.5	348 NM	31-150

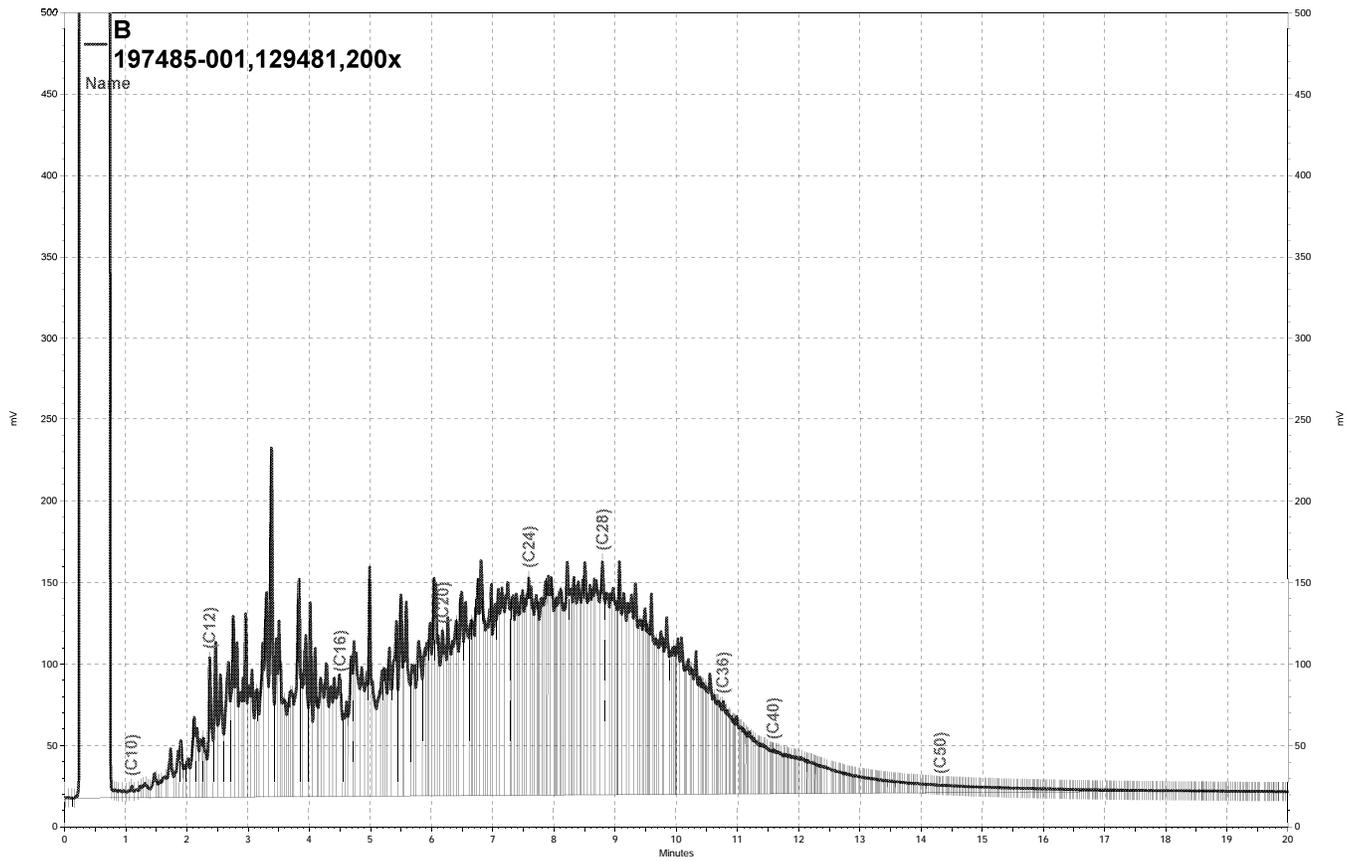
Surrogate	%REC	Limits
Hexacosane	88	46-128

Type: MSD Lab ID: QC406168

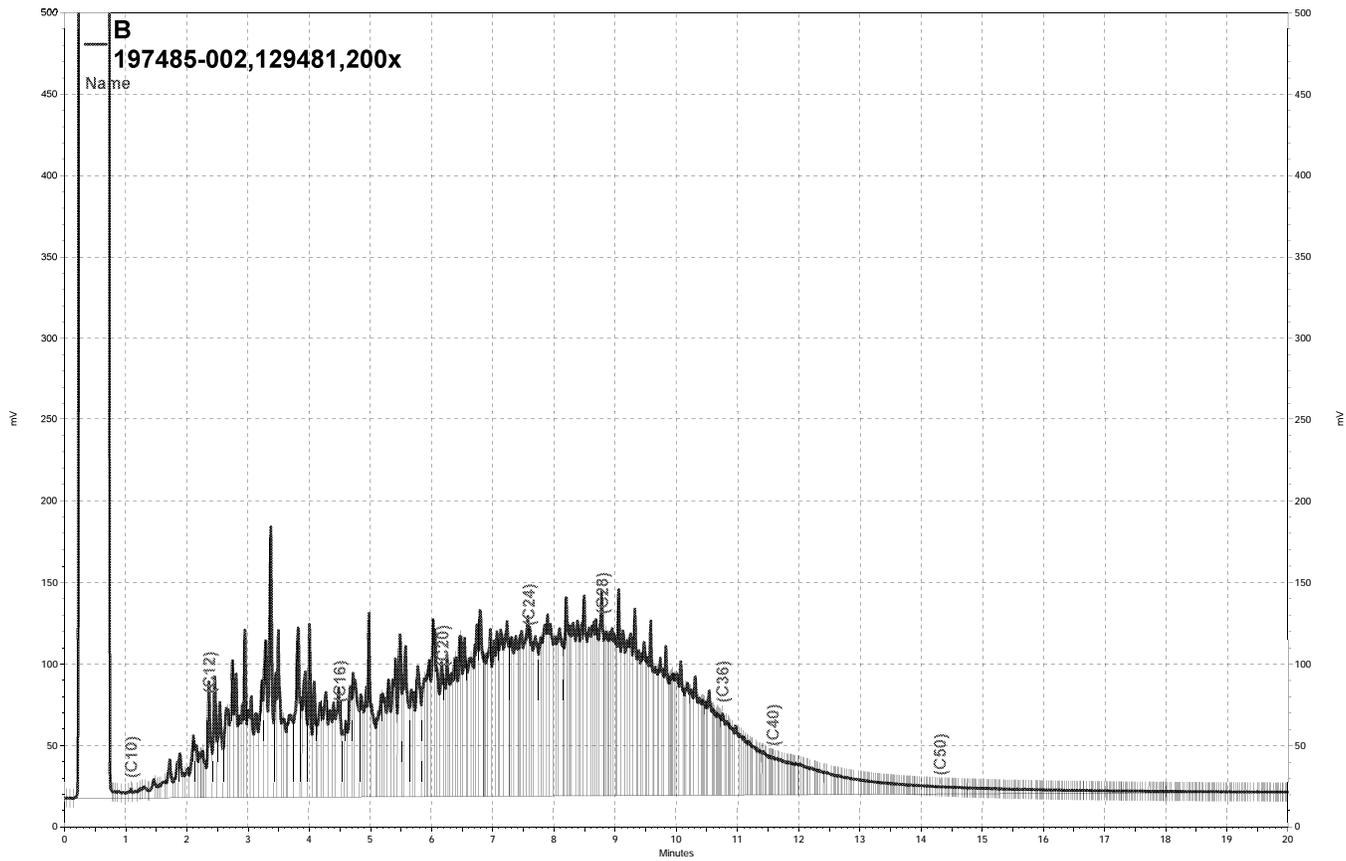
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.78	615.8	562 NM	31-150	19	42

Surrogate	%REC	Limits
Hexacosane	102	46-128

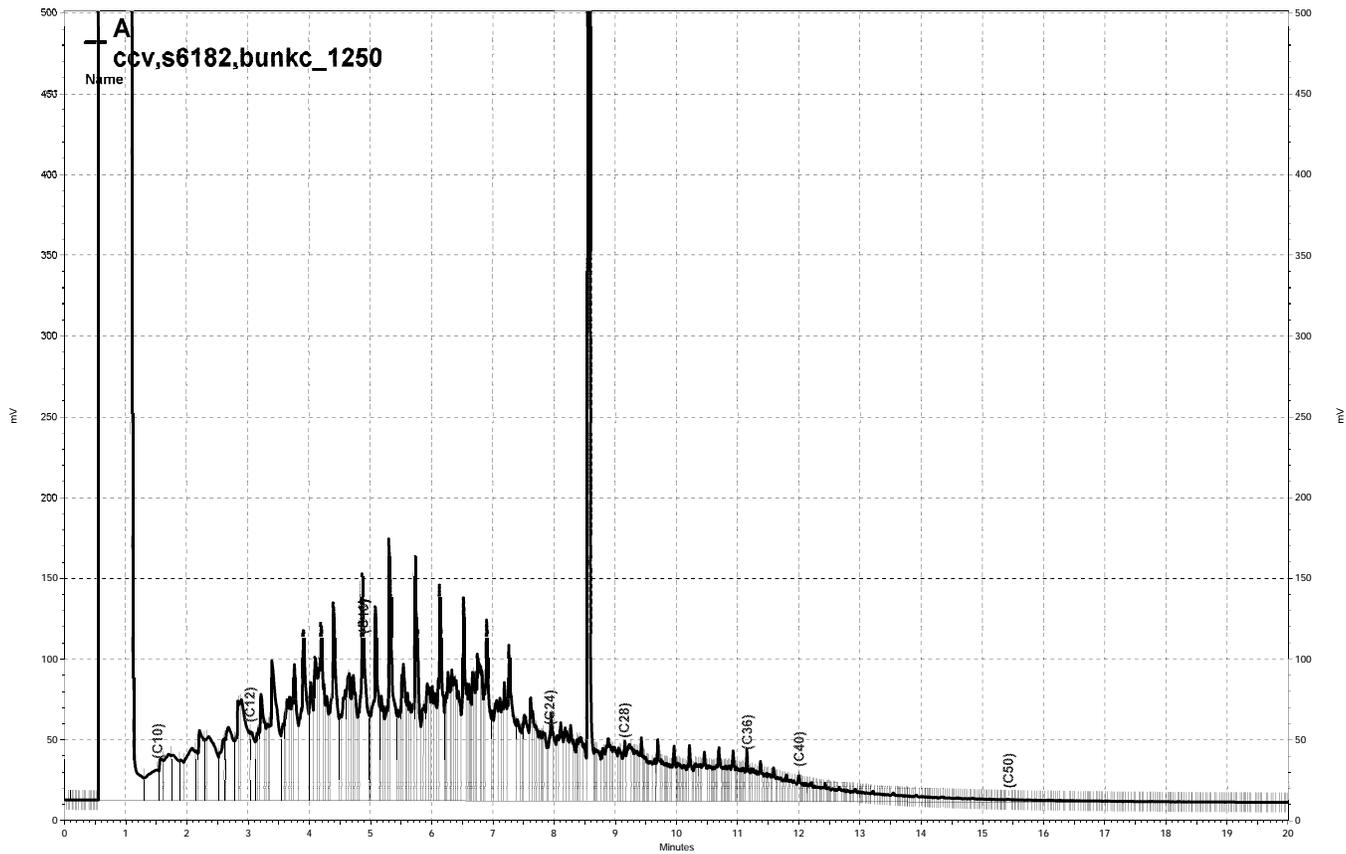
NM= Not Meaningful: Sample concentration > 4X spike concentration
 RPD= Relative Percent Difference



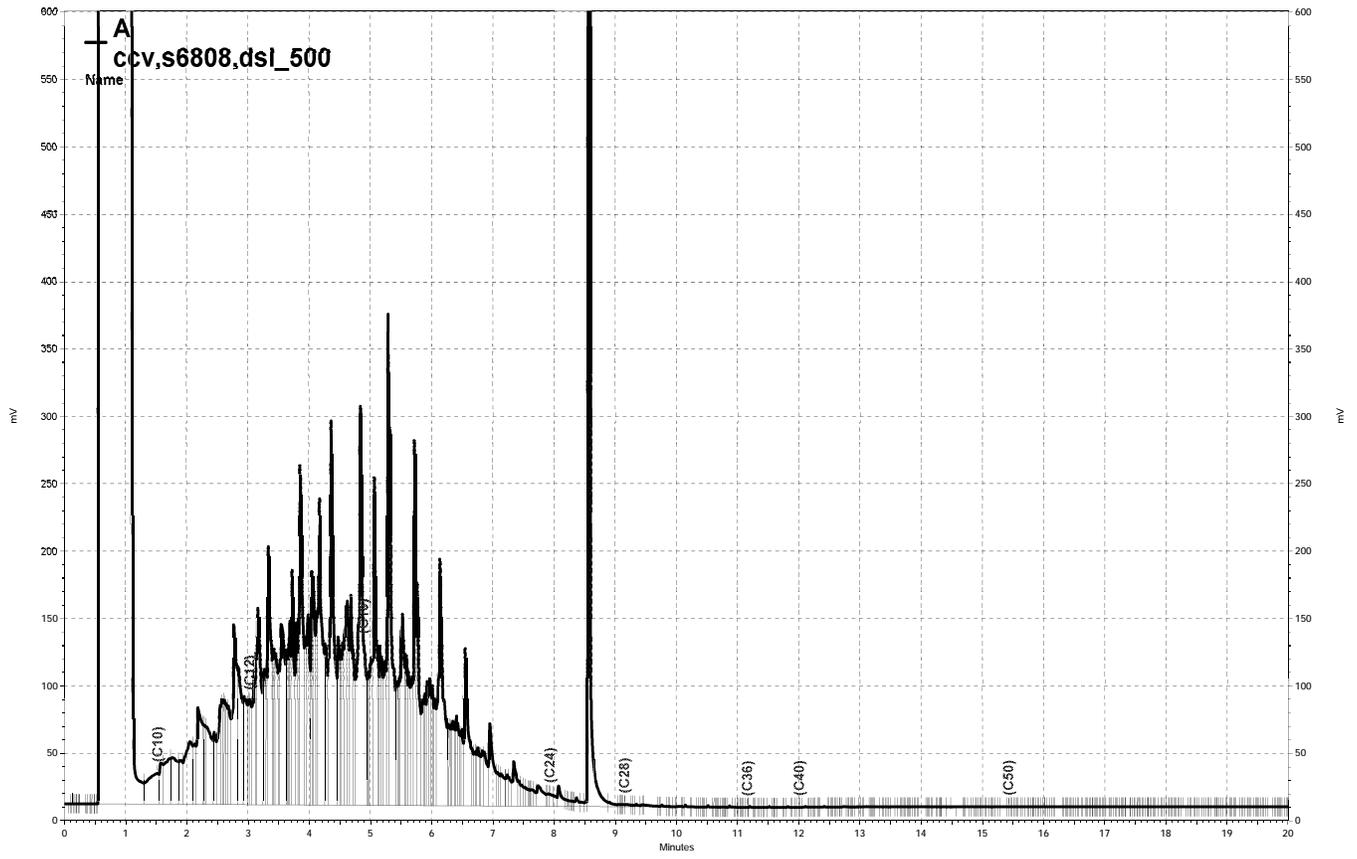
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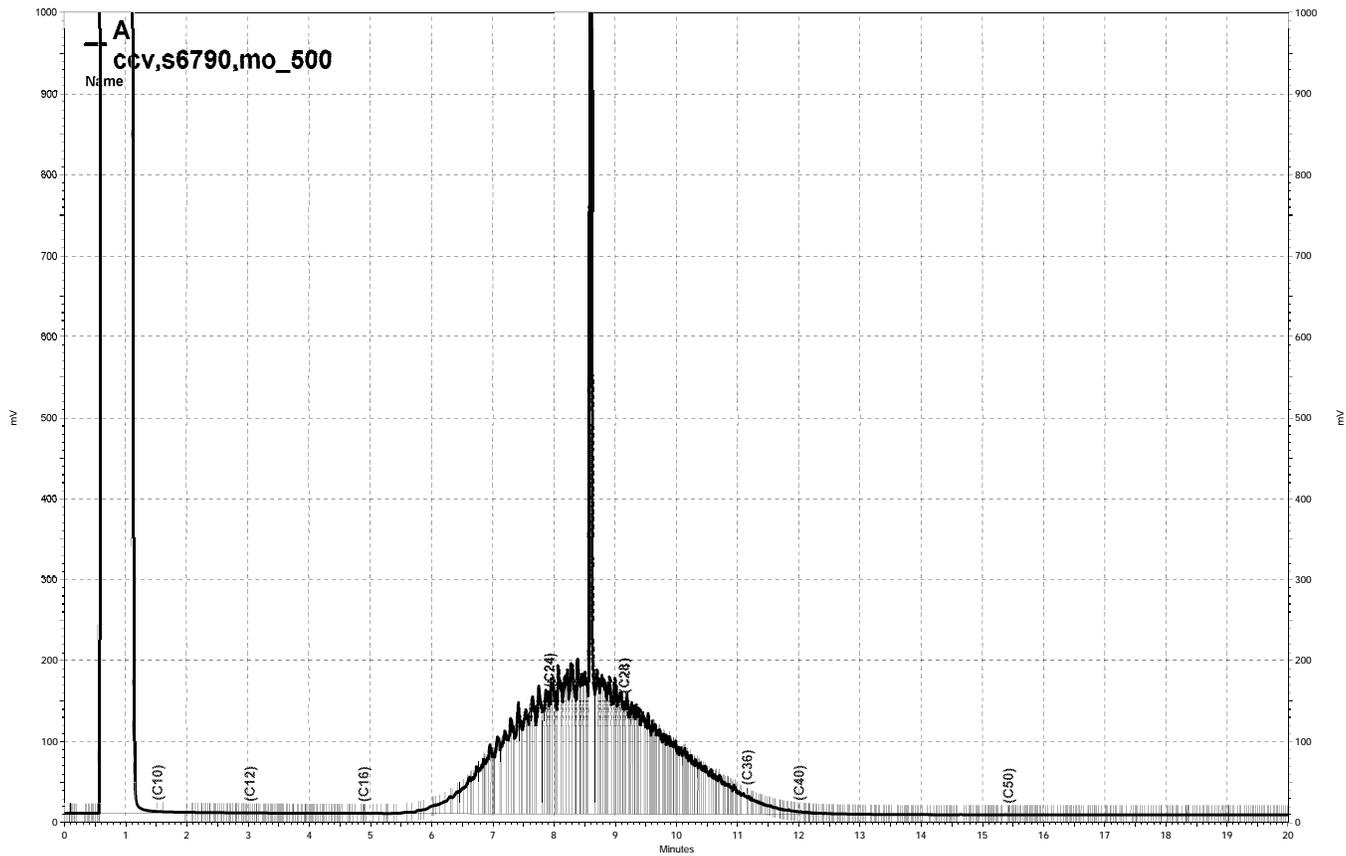
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— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\257a004, A



— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\257a037, A

Purgeable Organics by GC/MS

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Field ID:	DE-1	Diln Fac:	100.0
Lab ID:	197485-001	Batch#:	129489
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07

Analyte	Result	RL
Freon 12	ND b	1,000
Chloromethane	ND b	1,000
Vinyl Chloride	ND b	1,000
Bromomethane	ND b	1,000
Chloroethane	ND b	1,000
Trichlorofluoromethane	ND b	500
Acetone	ND b	2,500
Freon 113	ND b	500
1,1-Dichloroethene	ND b	500
Methylene Chloride	ND b	2,000
Carbon Disulfide	ND b	500
MTBE	ND b	500
trans-1,2-Dichloroethene	ND b	500
Vinyl Acetate	ND b	5,000
1,1-Dichloroethane	ND b	500
2-Butanone	ND b	1,000
cis-1,2-Dichloroethene	ND b	500
2,2-Dichloropropane	ND b	500
Chloroform	ND b	500
Bromochloromethane	ND b	500
1,1,1-Trichloroethane	ND b	500
1,1-Dichloropropene	ND b	500
Carbon Tetrachloride	ND b	500
1,2-Dichloroethane	ND b	500
Benzene	ND b	500
Trichloroethene	ND b	500
1,2-Dichloropropane	ND b	500
Bromodichloromethane	ND b	500
Dibromomethane	ND b	500
4-Methyl-2-Pentanone	ND b	1,000
cis-1,3-Dichloropropene	ND b	500
Toluene	ND b	500
trans-1,3-Dichloropropene	ND b	500
1,1,2-Trichloroethane	ND b	500
2-Hexanone	ND b	1,000
1,3-Dichloropropane	ND b	500
Tetrachloroethene	ND b	500
Dibromochloromethane	ND b	500
1,2-Dibromoethane	ND b	500
Chlorobenzene	ND b	500
1,1,1,2-Tetrachloroethane	ND b	500
Ethylbenzene	ND b	500
m,p-Xylenes	ND b	500
o-Xylene	ND b	500
Styrene	ND b	500
Bromoform	ND b	500
Isopropylbenzene	ND b	500
1,1,2,2-Tetrachloroethane	ND b	500
1,2,3-Trichloropropane	ND b	500
Propylbenzene	ND b	500
Bromobenzene	ND b	500
1,3,5-Trimethylbenzene	ND b	500
2-Chlorotoluene	ND b	500

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Field ID:	DE-1	Diln Fac:	100.0
Lab ID:	197485-001	Batch#:	129489
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07

Analyte	Result	RL
4-Chlorotoluene	ND b	500
tert-Butylbenzene	ND b	500
1,2,4-Trimethylbenzene	600 b	500
sec-Butylbenzene	ND b	500
para-Isopropyl Toluene	ND b	500
1,3-Dichlorobenzene	ND b	500
1,4-Dichlorobenzene	ND b	500
n-Butylbenzene	ND b	500
1,2-Dichlorobenzene	ND b	500
1,2-Dibromo-3-Chloropropane	ND b	500
1,2,4-Trichlorobenzene	ND b	500
Hexachlorobutadiene	ND b	500
Naphthalene	1,600 b	500
1,2,3-Trichlorobenzene	ND b	500

Surrogate	%REC	Limits
Dibromofluoromethane	93 b	80-124
1,2-Dichloroethane-d4	88 b	79-136
Toluene-d8	102 b	80-120
Bromofluorobenzene	89 b	80-122
Trifluorotoluene (MeOH)	82 b	55-146

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Field ID:	DE-2	Diln Fac:	50.00
Lab ID:	197485-002	Batch#:	129489
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07

Analyte	Result	RL
Freon 12	ND b	500
Chloromethane	ND b	500
Vinyl Chloride	ND b	500
Bromomethane	ND b	500
Chloroethane	ND b	500
Trichlorofluoromethane	ND b	250
Acetone	1,400 b	1,300
Freon 113	ND b	250
1,1-Dichloroethene	ND b	250
Methylene Chloride	ND b	1,000
Carbon Disulfide	ND b	250
MTBE	ND b	250
trans-1,2-Dichloroethene	ND b	250
Vinyl Acetate	ND b	2,500
1,1-Dichloroethane	ND b	250
2-Butanone	ND b	500
cis-1,2-Dichloroethene	ND b	250
2,2-Dichloropropane	ND b	250
Chloroform	ND b	250
Bromochloromethane	ND b	250
1,1,1-Trichloroethane	ND b	250
1,1-Dichloropropene	ND b	250
Carbon Tetrachloride	ND b	250
1,2-Dichloroethane	ND b	250
Benzene	ND b	250
Trichloroethene	ND b	250
1,2-Dichloropropane	ND b	250
Bromodichloromethane	ND b	250
Dibromomethane	ND b	250
4-Methyl-2-Pentanone	ND b	500
cis-1,3-Dichloropropene	ND b	250
Toluene	ND b	250
trans-1,3-Dichloropropene	ND b	250
1,1,2-Trichloroethane	ND b	250
2-Hexanone	ND b	500
1,3-Dichloropropane	ND b	250
Tetrachloroethene	ND b	250
Dibromochloromethane	ND b	250
1,2-Dibromoethane	ND b	250
Chlorobenzene	ND b	250
1,1,1,2-Tetrachloroethane	ND b	250
Ethylbenzene	ND b	250
m,p-Xylenes	ND b	250
o-Xylene	ND b	250
Styrene	ND b	250
Bromoform	ND b	250
Isopropylbenzene	ND b	250
1,1,2,2-Tetrachloroethane	ND b	250
1,2,3-Trichloropropane	ND b	250
Propylbenzene	ND b	250
Bromobenzene	ND b	250
1,3,5-Trimethylbenzene	280 b	250
2-Chlorotoluene	ND b	250

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Field ID:	DE-2	Diln Fac:	50.00
Lab ID:	197485-002	Batch#:	129489
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07

Analyte	Result	RL
4-Chlorotoluene	ND b	250
tert-Butylbenzene	ND b	250
1,2,4-Trimethylbenzene	ND b	250
sec-Butylbenzene	ND b	250
para-Isopropyl Toluene	ND b	250
1,3-Dichlorobenzene	ND b	250
1,4-Dichlorobenzene	ND b	250
n-Butylbenzene	ND b	250
1,2-Dichlorobenzene	ND b	250
1,2-Dibromo-3-Chloropropane	ND b	250
1,2,4-Trichlorobenzene	ND b	250
Hexachlorobutadiene	ND b	250
Naphthalene	860 b	250
1,2,3-Trichlorobenzene	ND b	250

Surrogate	%REC	Limits
Dibromofluoromethane	104 b	80-124
1,2-Dichloroethane-d4	104 b	79-136
Toluene-d8	101 b	80-120
Bromofluorobenzene	87 b	80-122
Trifluorotoluene (MeOH)	67 b	55-146

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC406204	Diln Fac:	1.000
Matrix:	Soil	Batch#:	129489
Units:	ug/Kg	Analyzed:	09/14/07

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	25
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC406204	Diln Fac:	1.000
Matrix:	Soil	Batch#:	129489
Units:	ug/Kg	Analyzed:	09/14/07

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-124
1,2-Dichloroethane-d4	103	79-136
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33107-007637.00	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC406205	Diln Fac:	1.000
Matrix:	Soil	Batch#:	129489
Units:	ug/Kg	Analyzed:	09/14/07

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.52	92	74-131
Benzene	12.50	11.70	94	77-121
Trichloroethene	12.50	11.99	96	77-121
Toluene	12.50	11.89	95	79-122
Chlorobenzene	12.50	12.46	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-124
1,2-Dichloroethane-d4	99	79-136
Toluene-d8	99	80-120
Bromofluorobenzene	92	80-122

Semivolatile Organics by GC/MS SIM

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8270C-SIM
Field ID:	DE-1	Batch#:	129308
Lab ID:	197485-001	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	ug/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/13/07
Diln Fac:	50.00		

Analyte	Result	RL
Naphthalene	ND b	5,100
Acenaphthylene	ND b	5,100
Acenaphthene	14,000 b	5,100
Fluorene	24,000 b	5,100
Phenanthrene	110,000 b	5,100
Anthracene	26,000 b	5,100
Fluoranthene	11,000 b	5,100
Pyrene	59,000 b	5,100
Benzo(a)anthracene	20,000 b	5,100
Chrysene	41,000 b	5,100
Benzo(b)fluoranthene	ND b	5,100
Benzo(k)fluoranthene	ND b	5,100
Benzo(a)pyrene	7,700 b	5,100
Indeno(1,2,3-cd)pyrene	ND b	5,100
Dibenz(a,h)anthracene	ND b	5,100
Benzo(g,h,i)perylene	ND b	5,100

Surrogate	%REC	Limits
Nitrobenzene-d5	DO b	39-136
2-Fluorobiphenyl	DO b	42-120
Terphenyl-d14	DO b	34-130

b= See narrative
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8270C-SIM
Field ID:	DE-2	Batch#:	129308
Lab ID:	197485-002	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	ug/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/11/07
Diln Fac:	50.00		

Analyte	Result	RL
Naphthalene	5,900 b	5,100
Acenaphthylene	ND b	5,100
Acenaphthene	12,000 b	5,100
Fluorene	24,000 b	5,100
Phenanthrene	96,000 b	5,100
Anthracene	22,000 b	5,100
Fluoranthene	11,000 b	5,100
Pyrene	41,000 b	5,100
Benzo(a)anthracene	24,000 b	5,100
Chrysene	39,000 b	5,100
Benzo(b)fluoranthene	5,100 b	5,100
Benzo(k)fluoranthene	ND b	5,100
Benzo(a)pyrene	11,000 b	5,100
Indeno(1,2,3-cd)pyrene	ND b	5,100
Dibenz(a,h)anthracene	ND b	5,100
Benzo(g,h,i)perylene	ND b	5,100

Surrogate	%REC	Limits
Nitrobenzene-d5	DO b	39-136
2-Fluorobiphenyl	DO b	42-120
Terphenyl-d14	DO b	34-130

b= See narrative
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC405420	Batch#:	129308
Matrix:	Soil	Prepared:	09/10/07
Units:	ug/Kg	Analyzed:	09/11/07
Basis:	as received		

Analyte	Result	RL
Naphthalene	ND	4.9
Acenaphthylene	ND	4.9
Acenaphthene	ND	4.9
Fluorene	ND	4.9
Phenanthrene	ND	4.9
Anthracene	ND	4.9
Fluoranthene	ND	4.9
Pyrene	ND	4.9
Benzo(a)anthracene	ND	4.9
Chrysene	ND	4.9
Benzo(b)fluoranthene	ND	4.9
Benzo(k)fluoranthene	ND	4.9
Benzo(a)pyrene	ND	4.9
Indeno(1,2,3-cd)pyrene	ND	4.9
Dibenz(a,h)anthracene	ND	4.9
Benzo(g,h,i)perylene	ND	4.9

Surrogate	%REC	Limits
Nitrobenzene-d5	93	39-136
2-Fluorobiphenyl	80	42-120
Terphenyl-d14	70	34-130

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC405421	Batch#:	129308
Matrix:	Soil	Prepared:	09/10/07
Units:	ug/Kg	Analyzed:	09/11/07
Basis:	as received		

Analyte	Spiked	Result	%REC	Limits
Naphthalene	32.91	24.09	73	46-120
Acenaphthylene	32.91	23.06	70	37-120
Acenaphthene	32.91	23.97	73	42-120
Fluorene	32.91	26.94	82	40-122
Phenanthrene	32.91	23.99	73	37-120
Anthracene	32.91	25.45	77	30-120
Fluoranthene	32.91	25.69	78	40-120
Pyrene	32.91	20.09	61	33-120
Benzo(a)anthracene	32.91	20.71	63	34-120
Chrysene	32.91	20.75	63	36-120
Benzo(b)fluoranthene	32.91	20.96	64	36-120
Benzo(k)fluoranthene	32.91	22.17	67	30-125
Benzo(a)pyrene	32.91	19.13	58	32-120
Indeno(1,2,3-cd)pyrene	32.91	19.70	60	31-120
Dibenz(a,h)anthracene	32.91	20.72	63	36-120
Benzo(g,h,i)perylene	32.91	19.72	60	29-124

Surrogate	%REC	Limits
Nitrobenzene-d5	91	39-136
2-Fluorobiphenyl	78	42-120
Terphenyl-d14	63	34-130

Polychlorinated Biphenyls (PCBs)

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Prepared:	09/13/07
Batch#:	129473		

Field ID:	DE-1	Diln Fac:	100.0
Type:	SAMPLE	Analyzed:	09/15/07
Lab ID:	197485-001	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	660
Aroclor-1221	ND b	1,300
Aroclor-1232	ND b	660
Aroclor-1242	ND b	660
Aroclor-1248	ND b	660
Aroclor-1254	ND b	660
Aroclor-1260	ND b	660

Surrogate	%REC	Limits
TCMX	DO b	66-140
Decachlorobiphenyl	DO b	51-152

Field ID:	DE-2	Diln Fac:	100.0
Type:	SAMPLE	Analyzed:	09/15/07
Lab ID:	197485-002	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	660
Aroclor-1221	ND b	1,300
Aroclor-1232	ND b	660
Aroclor-1242	ND b	660
Aroclor-1248	ND b	660
Aroclor-1254	ND b	660
Aroclor-1260	ND b	660

Surrogate	%REC	Limits
TCMX	DO b	66-140
Decachlorobiphenyl	DO b	51-152

b= See narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Polychlorinated Biphenyls (PCBs)

Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Prepared:	09/13/07
Batch#:	129473		

Type:	BLANK	Analyzed:	09/14/07
Lab ID:	QC406132	Cleanup Method:	EPA 3665A
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	138	51-152

b= See narrative
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC406133	Batch#:	129473
Matrix:	Soil	Prepared:	09/13/07
Units:	ug/Kg	Analyzed:	09/14/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1260	165.7	183.9	111	69-155

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	127	51-152

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33107-007637.00	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	129473
MSS Lab ID:	197333-003	Sampled:	08/31/07
Matrix:	Soil	Received:	08/31/07
Units:	ug/Kg	Prepared:	09/13/07
Basis:	as received	Analyzed:	09/14/07
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A
 Lab ID: QC406134

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1260	14.06	166.4	180.8	100	54-143

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	107	51-152

Type: MSD Cleanup Method: EPA 3665A
 Lab ID: QC406135

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1260	165.8	176.5	98	54-143	2	34

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	108	51-152

RPD= Relative Percent Difference

RCRA Metals			
Lab #:	197485	Project#:	33107-007637.00
Client:	Bureau Veritas North America	Location:	Thane Road
Field ID:	DE-1	Diln Fac:	1.000
Lab ID:	197485-001	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received		

Analyte	Result	RL	Batch#	Analyzed	Prep	Analysis
Arsenic	1.6	0.29	129312	09/11/07	EPA 3050B	EPA 6010B
Barium	34	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Chromium	13	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Lead	29	0.15	129312	09/11/07	EPA 3050B	EPA 6010B
Mercury	0.051	0.020	129296	09/10/07	METHOD	EPA 7471A
Selenium	ND	0.50	129312	09/11/07	EPA 3050B	EPA 6010B
Silver	ND	0.25	129312	09/12/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

RCRA Metals			
Lab #:	197485	Project#:	33107-007637.00
Client:	Bureau Veritas North America	Location:	Thane Road
Field ID:	DE-2	Diln Fac:	1.000
Lab ID:	197485-002	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received		

Analyte	Result	RL	Batch#	Analyzed	Prep	Analysis
Arsenic	1.0	0.27	129312	09/11/07	EPA 3050B	EPA 6010B
Barium	15	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Chromium	6.3	0.25	129312	09/11/07	EPA 3050B	EPA 6010B
Lead	19	0.15	129312	09/12/07	EPA 3050B	EPA 6010B
Mercury	0.023	0.020	129296	09/10/07	METHOD	EPA 7471A
Selenium	ND	0.50	129312	09/11/07	EPA 3050B	EPA 6010B
Silver	ND	0.25	129312	09/12/07	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33107-007637.00	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC405356	Batch#:	129296
Matrix:	Soil	Prepared:	09/10/07
Units:	mg/Kg	Analyzed:	09/10/07

Result	RL
ND	0.020

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33107-007637.00	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	129296
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/10/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC405357	0.5000	0.5270	105	80-120		
BSD	QC405358	0.5000	0.5380	108	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33107-007637.00	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	129296
MSS Lab ID:	197440-003	Sampled:	09/06/07
Matrix:	Soil	Received:	09/06/07
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/10/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC405360	0.05917	0.4902	0.5873	108	70-143		
MSD	QC405361		0.4630	0.5519	106	70-143	1	22

RPD= Relative Percent Difference

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33107-007637.00	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC405437	Batch#:	129312
Matrix:	Soil	Prepared:	09/10/07
Units:	mg/Kg	Analyzed:	09/11/07
Basis:	as received		

Analyte	Result	RL
Arsenic	ND	0.29
Barium	ND	0.25
Cadmium	ND	0.25
Chromium	ND	0.25
Lead	ND	0.15
Selenium	ND	0.50
Silver	ND	0.25

ND= Not Detected

RL= Reporting Limit

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33107-007637.00	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	129312
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/11/07
Diln Fac:	1.000		

Type: BS Lab ID: QC405438

Analyte	Spiked	Result	%REC	Limits
Arsenic	50.00	49.85	100	80-120
Barium	100.0	102.5	103	80-120
Cadmium	10.00	10.33	103	80-120
Chromium	100.0	99.23	99	80-120
Lead	100.0	98.73	99	80-120
Selenium	50.00	51.40	103	80-120
Silver	10.00	9.995	100	80-120

Type: BSD Lab ID: QC405439

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	50.00	48.23	96	80-120	3	20
Barium	100.0	94.42	94	80-120	8	20
Cadmium	10.00	9.819	98	80-120	5	20
Chromium	100.0	91.30	91	80-120	8	20
Lead	100.0	93.09	93	80-120	6	20
Selenium	50.00	50.39	101	80-120	2	20
Silver	10.00	9.137	91	80-120	9	20

RPD= Relative Percent Difference

Batch QC Report

RCRA Metals			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33107-007637.00	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	129312
MSS Lab ID:	197488-001	Sampled:	09/07/07
Matrix:	Soil	Received:	09/08/07
Units:	mg/Kg	Prepared:	09/10/07
Basis:	as received	Analyzed:	09/11/07
Diln Fac:	1.000		

Type: MS Lab ID: QC405440

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	1.915	44.64	37.57	80	72-120
Barium	54.68	89.29	186.5	148 *	49-139
Cadmium	<0.02139	8.929	7.668	86	74-120
Chromium	26.52	89.29	105.7	89	65-120
Lead	2.138	89.29	75.44	82	53-123
Selenium	<0.04208	44.64	35.10	79	71-120
Silver	<0.05104	8.929	7.593	85	66-120

Type: MSD Lab ID: QC405441

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	49.02	42.08	82	72-120	2	20
Barium	98.04	147.2	94	49-139	29 *	23
Cadmium	9.804	8.563	87	74-120	2	20
Chromium	98.04	106.6	82	65-120	6	20
Lead	98.04	84.15	84	53-123	2	28
Selenium	49.02	40.27	82	71-120	4	20
Silver	9.804	8.442	86	66-120	1	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

pH			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33107-007637.00	Analysis:	EPA 9045C
Analyte:	pH	Batch#:	129342
Matrix:	Soil	Received:	09/07/07
Units:	SU	Analyzed:	09/11/07 11:20
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
DE-1	197485-001	6.3 b	1.0	08/23/07 12:40
DE-2	197485-002	6.7 b	1.0	08/23/07 13:15

b= See narrative

RL= Reporting Limit

Batch QC Report

pH			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33107-007637.00	Analysis:	EPA 9045C
Analyte:	pH	Units:	SU
Field ID:	DE-2	Diln Fac:	1.000
Type:	SDUP	Batch#:	129342
MSS Lab ID:	197485-002	Sampled:	08/23/07 13:15
Lab ID:	QC405572	Received:	09/07/07
Matrix:	Soil	Analyzed:	09/11/07 11:20

MSS Result	Result	RL	RPD	Lim
6.660	6.700	1.000	1	20

RL= Reporting Limit

RPD= Relative Percent Difference

Reactive Cyanide			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Analysis:	SW-846 CH.7
Project#:	33107-007637.00		
Analyte:	Reactive Cyanide	Batch#:	129507
Matrix:	Soil	Sampled:	08/23/07
Units:	mg/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL
DE-1	SAMPLE	197485-001	ND b	10
DE-2	SAMPLE	197485-002	ND b	10
	BLANK	QC406292	ND	10

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Reactive Cyanide			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Analysis:	SW-846 CH.7
Project#:	33107-007637.00		
Analyte:	Reactive Cyanide	Diln Fac:	1.000
Field ID:	DE-2	Batch#:	129507
MSS Lab ID:	197485-002	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	mg/Kg	Analyzed:	09/14/07
Basis:	as received		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC406293		100.0	23.08		23	20-120		
SDUP	QC406294	<10.00		<10.00	10.00			NC	30

NC= Not Calculated

RL= Reporting Limit

RPD= Relative Percent Difference

Reactive Sulfide			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Analysis:	SW-846 CH.7
Project#:	33107-007637.00		
Analyte:	Reactive Sulfide	Batch#:	129509
Matrix:	Soil	Sampled:	08/23/07
Units:	mg/Kg	Received:	09/07/07
Basis:	as received	Analyzed:	09/14/07
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL
DE-1	SAMPLE	197485-001	ND b	10
DE-2	SAMPLE	197485-002	ND b	10
	BLANK	QC406299	ND	10

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Reactive Sulfide			
Lab #:	197485	Location:	Thane Road
Client:	Bureau Veritas North America	Analysis:	SW-846 CH.7
Project#:	33107-007637.00		
Analyte:	Reactive Sulfide	Diln Fac:	1.000
Field ID:	DE-2	Batch#:	129509
MSS Lab ID:	197485-002	Sampled:	08/23/07
Matrix:	Soil	Received:	09/07/07
Units:	mg/Kg	Analyzed:	09/14/07
Basis:	as received		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC406300		96.00	80.00		83	48-120		
SDUP	QC406301	<10.00		<10.00	10.00			NC	30

NC= Not Calculated

RL= Reporting Limit

RPD= Relative Percent Difference

LABORATORY NUMBER: 197485
CLIENT: Bureau Veritas North America
LOCATION: Thane Road
PROJECT #: 33107-007637.00

DATE SAMPLED: 08/23/07
DATE RECEIVED: 09/07/07
DATE ANALYZED: 09/14/07
BATCH#: 129510

ANALYSIS: Ignitability
ANALYSIS METHOD: SW-846, Ch. 7

<u>LAB ID</u>	<u>SAMPLE ID</u>	<u>RESULT</u>
197485-001	DE-1	Not Ignitable
197485-002	DE-2	Not Ignitable
SDUP- 197485-001		Not Ignitable

Polychlorinated Biphenyls (PCBs)

Lab #:	197482	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3580
Project#:	33107-007637.00	Analysis:	EPA 8082
Field ID:	OIL COMP. 1	Sampled:	08/23/07
Units:	ug/Kg	Received:	09/07/07
Basis:	as received	Prepared:	09/13/07
Diln Fac:	1.000	Analyzed:	09/13/07
Batch#:	129418		

Type: SAMPLE Matrix: Oil
 Lab ID: 197482-001 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	500
Aroclor-1221	ND	1,000
Aroclor-1232	ND	500
Aroclor-1242	ND	500
Aroclor-1248	ND	500
Aroclor-1254	ND	500
Aroclor-1260	ND	500

Surrogate	%REC	Limits
TCMX	84	66-140
Decachlorobiphenyl	57	51-152

Type: BLANK Matrix: Miscell.
 Lab ID: QC405908 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	500
Aroclor-1221	ND	1,000
Aroclor-1232	ND	500
Aroclor-1242	ND	500
Aroclor-1248	ND	500
Aroclor-1254	ND	500
Aroclor-1260	ND	500

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	115	51-152

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	197482	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3580
Project#:	33107-007637.00	Analysis:	EPA 8082
Matrix:	Miscell.	Batch#:	129418
Units:	ug/Kg	Prepared:	09/13/07
Basis:	as received	Analyzed:	09/13/07
Diln Fac:	1.000		

Type: BS Cleanup Method: EPA 3665A
 Lab ID: QC405909

Analyte	Spiked	Result	%REC	Limits
Aroclor-1260	10,000	10,880	109	69-155

Surrogate	%REC	Limits
TCMX	112	66-140
Decachlorobiphenyl	121	51-152

Type: BSD Cleanup Method: EPA 3665A
 Lab ID: QC405910

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1260	10,000	11,350	114	69-155	4	20

Surrogate	%REC	Limits
TCMX	118	66-140
Decachlorobiphenyl	131	51-152

RPD= Relative Percent Difference

Lead			
Lab #:	197482	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33107-007637.00	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	129421
Field ID:	OIL COMP. 1	Sampled:	08/23/07
Units:	mg/Kg	Received:	09/07/07
Basis:	as received	Prepared:	09/13/07
Diln Fac:	1.000	Analyzed:	09/13/07

Type	Lab ID	Matrix	Result	RL
SAMPLE	197482-001	Oil	23	0.15
BLANK	QC405919	Soil	ND	0.15

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Lead			
Lab #:	197482	Location:	Thane Road
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33107-007637.00	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	129421
MSS Lab ID:	197330-010	Sampled:	08/30/07
Matrix:	Soil	Received:	08/31/07
Units:	mg/Kg	Prepared:	09/13/07
Basis:	as received	Analyzed:	09/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC405920		100.0	91.26	91	80-120		
BSD	QC405921		100.0	91.72	92	80-120	1	20
MS	QC405922	24.96	86.96	88.19	73	53-123		
MSD	QC405923		90.09	94.76	77	53-123	4	28

RPD= Relative Percent Difference



CERTIFICATE OF ANALYSIS

Client: Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley, CA 94710
Attention: Anne Kathain

Phone: (510) 486-0900

Fax: (510) 486-0532

Report Date: 09/24/07 11:55

Received Date: 09/10/07 10:30

Turn Around: Normal

Work Order #: 7091049

Client Project: 197482

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Anne Kathain :

Enclosed are the results of analyses for samples received 09/10/07 10:30 with the Chain of Custody document. The samples were received in good condition. The samples were received at 27.9 °C. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Reviewed by:

Kim G Tu

Project Manager



Page 1 of 6





Weck Laboratories, Inc.
14859 E. Clark Ave.
Industry, CA 91745
Phone 626.336.2139 Fax 626.336.2634

Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley CA, 94710

Report ID: 7091049
Project ID: 197482

Date Received: 09/10/07 10:30
Date Reported: 09/24/07 11:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Laboratory	Matrix	Date Sampled
Oil Comp. 1	Client		7091049-01	Oil	08/23/07 10:30



Weck Laboratories, Inc.
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Project ID: 197482

Date Received: 09/10/07 10:30
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Oil Comp. 1 7091049-01 (Oil)

Date Sampled: 08/23/07 10:30

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Total Organic Halides	ND	mg/kg	250	1	EPA 9020M	W710954	09/21/07	09/21/07	jlp M-02, O-11



Weck Laboratories, Inc.
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2323 Fifth Street
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Date Received: 09/10/07 10:30
Date Reported: 09/24/07 11:55

QUALITY CONTROL SECTION



Weck Laboratories, Inc.
 14859 E. Clark Ave.
 Industry, CA 91745
 Phone 626.336.2139 Fax 626.336.2634

Curtis & Tompkins, Ltd.
 2323 Fifth Street
 Berkeley CA, 94710

Report ID: 7091049
 Project ID: 197482

Date Received: 09/10/07 10:30
 Date Reported: 09/24/07 11:55

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

%REC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
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Batch W710954 - SM5320

Blank (W710954-BLK1)

Analyzed: 09/21/07

Total Organic Halides ND 50 mg/kg

LCS (W710954-BS1)

Analyzed: 09/21/07

Total Organic Halides 491 50 mg/kg 500 98 75-115

LCS Dup (W710954-BSD1)

Analyzed: 09/21/07

Total Organic Halides 494 50 mg/kg 500 99 75-115 0.6 20

Duplicate (W710954-DUP1)

Source: 7091049-01

Analyzed: 09/21/07

Total Organic Halides 142 250 mg/kg 112 24 20



Weck Laboratories, Inc.
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Industry, CA 91745
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Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley CA, 94710

Report ID: 7091049
Project ID: 197482

Date Received: 09/10/07 10:30
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Notes and Definitions

O-11	The sample was originally analyzed within holding time. However, it was reanalyzed with dilution that exceeded the recommended holding time.
M-02	Due to the nature of matrix interferences, sample was diluted prior to extraction. The reporting limits were raised due to the dilution.
ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

ANALYSTS INCORPORATED

P.O. BOX 23200	2910 FORD ST.
OAKLAND, CA 94623	OAKLAND, CA 94601
800-424-0099	510-536-5914
FAX 510-536-5994	WWW.ANALYSTSINC.COM

CURTIS & TOMPKINS, LTD.,
STEVE STANLEY
2323 FIFTH STREET
BERKELEY CA 94710

Lab Number: 9852
Logged Date: 10-SEP-07
Sample Drawn: 23-AUG-07
Report Date: 20-SEP-07
Record Ref.#: 8798129

Unit ID: OIL COMP. 1	Mfg.: -
Sample ID: SAMPLE 08/23/07	Model: -
Worksite:	PO No.: 197482-001
Time On Fluid:	Time On System:

TESTING PERFORMED:

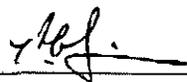
MEASURED

Sulfur Content by EDXRF, mass% - D4294	0.965
Water & Sediment, %vol - D1798	52
HEAT OF COMBUSTION - D240	
Gross Heat Value BTU/gl	N/R
Net Heat Value BTU/gl	N/R
Gross Heat Value BTU/lb	8604
Net Heat Value BTU/lb	N/R
Water, % vol. - ASTM D95	52

RECOMMENDATIONS / COMMENTS:

Condition / Evaluation statements not applicable to this sample.
Report issued to provide test results only. UNABLE to PERFORM all tests due to sample condition. A FAX has been dispatched for this report. Report telephoned. Left a message and awaiting return call.

Respectfully Submitted,



Analysts, Inc.



APPENDIX B
PROJECT SCHEDULE

