CHEMICAL QUALITY ASSURANCE REPORT

NORTH EAST CAPE - ST. LAWRENCE ISLAND

1. **SUMMARY:**

a. The project laboratories' data are accepted based on a majority of acceptable internal quality control (QC), blind duplicate and quality assurance (QA) data agreements. The data of analytes detected in the laboratory method, trip and rinsate blanks should be viewed with caution. The accuracy and precision of the water dioxin/furan data could not be determined due to a lack of submitted internal QC data. The volatile organics (VOC), aromatic volatiles (AVO), gasoline range organics (GRO) and diesel range organics (DRO) data of 21, eight, seven and two soil samples, respectively, should be considered high estimates based on high surrogate recoveries. The AVO and GRO data of water sample 94NE-13107GW should be considered high estimates based on a high surrogate recovery. The AVO, GRO and DRO data of 67 and 45 and five soil samples, respectively, should be considered low estimates based on low surrogate recoveries. The DRO data of two water samples should be considered low estimates based on low surrogate recoveries. Low levels of GRO might not have been detected in sample 94NE-00700SS based on the low surrogate recovery. The semi-volatiles (BNA) data of 20 out of 28 soil samples of NET report 94.02891 exceeded the extraction holding time and should be considered low estimates. Low levels of soil BNA and/or PCB analytes might not have been detected if present in selected samples of seven NET reports due to fuel hydrocarbon matrix interference. The "PR" qualified dioxin/furan data of samples 94NE-07122SS (NET report 94.02848), -09139SS, -09141SS and -09241SS (NET report 94.02854) and -BW158SB (NET report 94.03148) should be considered high estimates. The water PCB data of extraction Batch 218 should be considered low estimates based on low matrix spike and laboratory control (LC) recoveries. The soil DRO data of extraction Batch 225 should be considered high estimates due to a high LC recovery. The water DRO data of extraction Batch 146 should be considered estimates based on an out-of-control relative percent difference (RPD) result. The dissolved lead data of NET report 94.03020 should be considered low estimates based on low matrix spike recoveries. The water total selenium data of NET report 94.02769 and 94.02900 should be considered low estimates based on low matrix spike recoveries. The soil data of antimony of NET reports of eight reports should be considered low estimates based on low matrix spike and/or LC recoveries.

b. The project and QA data comparisons are presented in Tables II through XXIII. 150 out of 178 data parameter tables (of all methods) agree with each other. Of the 28 table discrepancies, there are seven TRPH, six dioxin/furan and metals, three AVO and DRO, two GRO, and one BNA and PCB. See CQAR report section 6-d, section 8 and the associated tables for details.

2. **BACKGROUND:** The samples were collected on June 25 through June 30, July 1 through 6, 10 through 13, and 15 through 21, 1994 and received by the analytical laboratories on June 28 through 30, July 1 and 2, 5 through 9, 11 through 15, 18, 19, and 21 through 23, 1994.

3. **OBJECTIVES:**

a. Sixty-eight water samples, one hundred eighty-six soil samples, twenty-one blind duplicate, seven rinsate blanks and five trip blanks were collected from various locations to determine the extent of the chemical contamination on the site.

b. Four QA water samples, seventeen soil QA samples, seven rinsate blanks and five trip blanks were submitted to evaluate the project laboratories' data quality.

4. **PROJECT ORGANIZATION:**

a. The samples were collected by Montgomery Watson, Anchorage, Alaska.

b. The project samples were analyzed by NET Pacific, Inc., Santa Rosa, California. The following laboratories were subcontracted by NET Pacific; Triangle Laboratories of RTP, Inc., Durham, North Carolina, Enseco-CAL, West Sacramento, California and BC Laboratories, Bakersfield, California.

c. The QA samples were analyzed by ARDL, Inc., Mt. Vernon, Illinois and its subcontract laboratory IT Analytical Services, Knoxville, Tennessee, and U.S. Army Corps of Engineers North Pacific Division Laboratory (CENPD-PE-GE-L), Troutdale, Oregon.

5. **ANALYTICAL REFERENCES:**

Number	Title	Date
a. SW-846, Third Edition	Test Methods for Evaluating Solid Waste-Final Update I and Proposed Update II	8/93
b. GRO,DRO	State of Alaska Interim TPH Methods	2/93
c. FIQ (COE 8015 mod.)	Proposed U.S. Army Corps of Engineers Fuel Identification/Quantitation EPA 8015 modified	1989
d. EPA 600/4-79-020	Method for Chemical Analysis of Water and Wastes	3/83

6. **EVALUATION OF THE PROJECT LABORATORIES DATA:**

a. Surrogate and Internal Standard Recoveries:

I. Volatile Organic Compounds (VOC): Three surrogates, similar to the analytes of interest, were used in the analysis of VOC by EPA Method 8260. All surrogate recoveries were within EPA method required quality control (QC) limits and are acceptable with the following exceptions. One out of three soil VOC surrogate recoveries was above the EPA QC limit in the following soil samples: 94NE-C10104SB of NET report 94.02769; -16131SB, -16135SB and -16231SB of NET report 94.02854; -24140SB, -21139SB, -21137SB, -21138SB, -17165SS, of NET report 94.02891; -24142SB of NET report 94.02947; -00700SD, -07149SB, and -07151SB of NET report 94.03048; -06153SB and -09156SB of NET report 94.03076; -BW158SB of NET report 94.03148 and Batch 124 matrix spike (MS) and 124 matrix spike duplicate (MSD) of NET reports 94.02829, 94.02854, 94.02891 and 94.02947. The laboratory stated in the associated case narratives that all of the out-of-control samples were re-analyzed with similar results indicating matrix interference, except for samples -24140SB of NET report 94.02891; -06153SB and -09156SB of NET report 94.03076. The VOC data of detectable analytes associated with the out-of-control surrogates, should be considered high estimates. Two out of three soil VOC surrogate recoveries were above EPA QC limits in the following soil samples: -C10103SB of NET report 94.02769; -03105SS of NET report 94.02829; -24141SB and -21136SB of NET report 94.02891; -00700SS of NET report 94.03048 and Batch 123 MS and MSD of NET reports 94.02769 and 94.02829. The laboratory stated in the associated case narratives that all of the out-of-control samples were re-analyzed with

similar results indicating matrix interference, except for sample -24141SB of NET report 94.03048. The VOC data of detectable analytes associated with the out-of-control surrogates, should be considered high estimates.

II. Semi-Volatile Organic Compounds (BNA) and Polychlorinated Biphenyls (PCB): Six and two surrogates, similar to the analytes of interest, were used in the analysis of BNA by EPA Method 8270 and PCB by EPA Method 8080, respectively. All surrogate recoveries were within EPA method required or laboratory established (LE) QC limits and are acceptable with the following exceptions. One out of six water BNA surrogate recoveries was above the EPA QC limit in water sample 94NE-16109GW of NET report 94.03020 and Batch 332 of NET reports 94.03048 and 94.03076. One out of six water BNA surrogate recoveries was below the EPA QC limit in water samples -07101SW, -07201SW and Batch 324 MS and MSD of NET report 94.02798 and -10210SW of NET report 94.02833. The water BNA data of these samples are accepted based on the remaining five acceptable surrogate recoveries. One out of six soil BNA surrogate recoveries were above EPA QC limits in soil samples -C10203SB and -C10104SB of NET report 94.02769; -10126SS, -10132SS, and -16131SB of NET report 94.02854; -06112SS, -06113SS, -06114SS, and -07124SS of NET report 94.02848; -24141SB of NET report 94.02891; Batch 326 MSD of NET reports 94.03048 and 94.03076. One out of six soil BNA surrogate recoveries were diluted out in soil sample -10103SB of NET report 94.02769. Two (one acidic, one base/neutral) out of six soil BNA surrogate recoveries were above EPA QC limits in soil sample -16231SB of NET report 94.02854. The soil BNA data of the aforementioned reports are accepted based on the remaining acceptable surrogate recoveries. One out of two water PCB surrogate recoveries was below the LE QC limit in water samples -06115SW and -07101SW of NET report 94.02854. EPA 8080 method states that if two or more surrogates are used in the analysis, only one surrogate recovery needs to meet established QC limits for the data to be acceptable. Per method criteria the PCB data are accepted based on the remaining one acceptable surrogate recovery. One out of two soil PCB surrogate recoveries were below the LE QC limit in soil samples -10129SS of NET report 94.02854; -05200SS of NET report 94.02829; -10110SW, 10210SW, and -24113SW of NET report 94.02833. One out of two soil PCB surrogate recoveries were above the LE QC limit in soil samples -10116SB of NET report 94.02854; -16161SS of NET report 94.02891. Per method criteria the PCB data are accepted based on the remaining one acceptable surrogate recovery. Two out of two soil PCB surrogate recoveries were diluted out in soil sample -13145SS in NET report 94.02900 due to the high concentration of PCB 1260 in the sample. The soil PCB data are accepted.

III. Polychlorinated Dioxins and Furans (Dioxin/Furan):

Nine internal standards, five surrogates and two alternate surrogate standards, similar to the analytes of interest, were used in the analysis of dioxin/furan by EPA Method 8290. All internal standard and surrogate recoveries were within the EPA method required QC limits of 40-135 percent and are acceptable with the following exceptions and/or notations. The laboratory flagged selected internal standards and surrogates with the "V" qualifier to indicate that even though the percent recovery of the labeled internal standard and surrogate was outside QC limits, all quantitated data derived from that particular standard are valid. Therefore, all "V" qualified dioxin/furan water data of NET reports 94.02900 and 94.03148 and soil data of NET reports 94.02798 and 94.02848 are accepted. The laboratory flagged selected internal standards, surrogate standards and dioxin/furan data with a "Q" qualifier to indicate QC ion deviations outside of acceptance limits because of quantitative interferences encountered during analysis. The affected analytes may be over or underestimated as a result of this interference. Selected surrogate standards which were "Q" qualified in NET report 94.03076, found within EPA QC limits and its associated data was not "Q" qualifier are accepted. The only dioxin/furan data "Q" qualified was the 2,3,4,6,7,8-HxCDF data of MSD sample 94NE-09156SB (NET report 94.03076). The laboratory flagged selected dioxin/furan data with a "PR" qualifier to indicate that the GC peak was poorly resolved and that the reported data are most likely overestimated. The "PR" qualified dioxin/furan data of samples -07122SS (NET report 94.02848), -09139SS, -09141SS and 09241SS (NET report 94.02854) and -BW158SB (NET report 94.03148) should be considered high estimates. The laboratory did not flag selected internal standards that were below the EPA QC limit in NET reports 94.03020 and 94.03148. The associated data was either nondetect, "PR" qualified or was detected in the method blank, except for the 1,2,3,4,6,7,8-HpCDF data of water sample -09122GW. For the purposes of data validation, it is assumed that laboratory re-quantitated the data of the particular standards and that the data are valid. The laboratory did not flag selected internal standards that were above the EPA QC limit in NET report 94.03148. The associated data was either nondetect or "EMPC" qualified, which indicates that the data are considered an over estimate due to matrix effects. One out of five dioxin/furan surrogates (13C-1,2,3,4,7,8,9-HpCDF) of soil sample -07144SB in NET report 94.03048 was above the EPA QC limit but not qualified as such. The dioxin/furan data are accepted based on the remaining acceptable surrogate recoveries.

IV. Aromatic Volatile Organics (AVO): One surrogate was used in the analysis of AVO by EPA Method 8020. All surrogate recoveries were within LE QC limits and are acceptable with the following exceptions. The water AVO surrogate recovery was above the LE QC limit in water sample 94NE-13107GW of NET report 94.02947 due to fuel hydrocarbon matrix interference. The water AVO data of this sample should be considered high estimates. The water AVO surrogate recovery of the MS and MSD water samples of NET report 94.02900 and in Batch 1897 of NET report 94.02854 was above the LE QC limit. Based on acceptable matrix spike recoveries and acceptable sample surrogate recoveries, the water AVO data of the aforementioned reports are accepted. The soil AVO surrogate recovery was below the LE QC limit in the following soil samples due, in part, to fuel hydrocarbon matrix interference. 94NE-06100SD, -07101SD, -07201SD, -07102SD, -09104SD and -09105SD of NET report 94.02798; -09139SS, -09141SS, -09241SS, -06115SD, -10117SD, -10125SS, -10126SS, -10127SS, -10128SS, -10129SS, -10130SS, -10131SS, -10133SS, -10134SS, -10234SS, -11135SS, -11136SS, -11137SS and -09138SS of NET report 94.02854; -10210SD, -21112SD, -10109SD, -05100SS, -05200SS, -03101SS, -04106SS, -04107SS and -04108SS of NET report 94.02829; -21166SS, -21168SS, -21268SS, -22170SS, -23172SS, -24173SS, -24173SS, -24174SS, -25176SS and -25177SS of NET report 94.02891; -06112SS, -06113SS, -06114SS, -06115SS, -06116SS, -06117SS, -06217SS, -07119SS, -07120SS, -07122SS, -07123SS, -07124SS, -07224SS and -15127SB of NET report 94.02848; -13225SB of NET report 94.02833; -13142SS, -13144SS, -15146SS, -15147SS, -15148SS, -15149SS, -15249SS and -19150SS of NET report 94.02900. All samples were reanalyzed with similar recoveries, indicating matrix interference. The soil AVO data of the aforementioned samples should be considered low estimates. Soil AVO QC sample surrogate recoveries were below the LE QC limit in the following batches/reports: Batch 1308 MSD of NET report 94.02798, Batch 1337 MS, MSD and laboratory duplicate of NET reports 94.02829 and 94.02891, Batch 1324 laboratory duplicate of NET report 94.02854, indicating matrix effects. The soil AVO surrogate recoveries were above the LE QC limit due to fuel hydrocarbon matrix interference in soil samples -10132SS of NET report 94.02854; -27117SB, -27218SB, -27119SB, and -11112SB of NET report 94.02829; -27180SS and -27182SS of NET report 94.02891; -13126SB and -27121SB of NET report 94.02833; and -19155SS of NET report 94.02900. The soil AVO data of the aforementioned samples should be considered high estimates. The soil AVO surrogate recovery of soil sample -19154SS of NET report 94.02900 was not reportable because of fuel hydrocarbon matrix interference. The soil AVO data of this sample are accepted.

V. Gasoline Range Organics (GRO): One surrogate was used in the analysis of GRO by Alaska Method 8015 modified. All surrogate recoveries were within Alaska Department of Environmental Conservation (ADEC) QC limits and are acceptable with the following exceptions. The water GRO surrogate recovery was above the ADEC QC limit in water sample -13107GW of NET report 94.02947 due to fuel hydrocarbon matrix interference. The water GRO data should be considered high estimates. The soil GRO surrogate recovery was below the ADEC QC limit in the following soil samples due, in part, to fuel hydrocarbon matrix interference. 94NE-07201SD and -07102SD of NET report 94.02798; -09139SS, -09141SS, -09241SS, -10125SS, -10126SS, -10127SS, -10131SS, -10133SS, -11135SS, -11136SS and -11137SS of NET report 94.02854; -10109SD, -03101SS, -04108SS and -05200SS of NET report 94.02829; -21168SS, -21268SS, -23172SS, -24141SB, -21136SB, -24174SS and -25177SS of NET report 94.02891; -06112SS, -06113SS, -06114SS, -06115SS, -06116SS, -06117SS, -06217SS, -07119SS, -07120SS, -07123SS, -07124SS and -15127SB of NET report 94.02848; -15146SS, -15147SS, -15148SS, -15149SS and -15249SS of NET report 94.02900; -24142SB of NET report 94.02947; -00700SS and -07149SB of NET report 94.03048; and -BW158SB of NET report 94.03148. All samples were reanalyzed with similar recoveries, indicating matrix interference. The soil GRO data of the aforementioned samples should be considered low estimates. Soil GRO QC sample surrogate recoveries were below the LE QC limit in the following batches/reports: Batch 1337 MS, MSD and laboratory duplicate of NET reports 94.02829 and 94.02891 and Batch 1348 MS and MSD of NET report 94.03048, indicating matrix effects. The soil GRO surrogate recovery was above the ADEC QC limits due to fuel hydrocarbon matrix interference in soil samples -C10203SB of NET report 94.02769; -27117SB and -27218SB of NET report 94.02829; -27180SS of NET report 94.02891; -27121SB and -13126SB of NET report 94.02833; -19155SS of NET report 94.02900. The soil GRO data of the aforementioned samples should be considered high estimates. The soil GRO surrogate recovery of soil sample -19154SS of NET report 94.02900 was because of fuel hydrocarbon matrix interference. The soil GRO data of this sample are accepted.

VI. Diesel Range Organics (DRO): One surrogate was used in the analysis of DRO by Alaska Method 8100 modified and FIQ by COE 8015 modified. All surrogate recoveries were within ADEC or LE QC limits and are acceptable with the following exceptions. The water DRO surrogate recovery was below the ADEC QC limit in water samples -06120GW and -09122GW of NET report 94.03180. The water DRO data of these samples should be considered low estimates. The soil DRO surrogate recoveries of the following 80 soil samples were either

diluted out due to high concentration of DRO in the sample or not reportable because of fuel hydrocarbon matrix interference. 94NE-C10103SB, -C10203SB, -C10104SB of NET report 94.02769; -09138SS, -09139SS, -06115SD, -10117SD, -10125SS, -10126SS, -10127SS, -10128SS, -10129SS, -10130SS, -10131SS, -10132SS, -10133SS, -10134SS, -10234SS, -11135SS and -11137SS of NET report 94.02854; -13125SB, -13124SB, -13126SB, -27121SB and -19116SB of NET report 94.02833; -02109SS, -06112SS, -06113SS, -06114SS, -06115SS, -06116SS, -06117SS, -06217SS, -07119SS, -07120SS, -07122SS, -07123SS, -07124SS, -07224SS, -02110SS and -15127SB of NET report 94.02848; -10107SD, -10108SD, -10109SD, -10110SD, -27117SB, -27118SB, -27218SB, -27119SB, -11108SB, -11112SB, -05100SS, -03101SS, -10210SD, -03102SS, -04107SS and -04108SS of NET report 94.02829; -21139SB, -21136SB, -27179SS, -27180SS, -27181SS, -27182SS, -22170SS and -24140SB, of NET report 94.02891; -13142SS, -13143SS, -15146SS, -15147SS, -15148SS, -15149SS, -15249SS, -19150SS, -19152SS, -19154SS and -19155SS of NET report 94.02900; -24142SB of NET report 94.02947; -07029SB of NET report 94.03048; -06153SB and -09156SB of NET report 94.03076. The soil DRO data of the aforementioned samples are accepted. A majority of the soil DRO MS and MSD recoveries and laboratory duplicate analyses were not reportable due to the aforementioned reason. The soil DRO surrogate recovery was below the ADEC QC limit in soil samples -04107SS of NET report 94.02829; -21166SS and -21167SS of NET report 94.02891; -07101SD, -07103SD, -07101SD MS and -07101SD MSD of NET report 94.02798. The soil DRO data of the aforementioned samples should be considered low estimates. The soil DRO surrogate recovery was above the ADEC QC limit in soil samples -05100SS and Batch 222 laboratory duplicate of NET report 94.02829 and -21137SB of NET report 94.02891. The soil DRO data of the aforementioned samples should be considered high estimates.

b. Matrix Spike (MS) and Matrix Spike Duplicate (MSD), and Laboratory Control (LC) Recoveries: All MS, MSD and LC recoveries were within EPA method required QC limits, ADEC and/or LE QC limits and are acceptable with the following exceptions or notations.

I. VOC, BNA, PCB and Dioxin/Furan: Triangle Laboratories did not submit MS, MSD or LC recoveries with the water matrix dioxin/furan data of NET reports 94.02900, 94.03020, 94.03076 and 94.03148. The accuracy of the water dioxin/furan data could not be determined. Four (2,4-dinitrotoluene and 4-nitrophenol) out of 22 water BNA MS/MSD recoveries were reported at zero percent in Batch 324 of NET report 94.02798. The laboratory's report narrative stated that the out-of-control recoveries were due to matrix interferences encountered during analysis. The water BNA data are

accepted based on the 18 remaining acceptable matrix spike recoveries. One out of 22 water BNA MS/MSD recoveries was above the EPA QC limit in Batch 332 of NET reports 94.03020 and 94.03048. The water BNA data of this batch are accepted based on the 21 remaining acceptable matrix spike and acceptable LC recoveries. Two out of 22 water BNA LC/LCD recoveries were below EPA QC limits in Batch 329 of NET report 94.02900. One out of 22 water BNA LC/LCD recoveries was below the EPA QC limit in Batch 333 of NET reports 94.03076 and 94.03148. The water BNA of these batches are accepted based on the remaining acceptable LC recoveries. The soil BNA MS and MSD recovery data of Batch 320 of NET reports 94.02829, 94.02848 and 94.02947 was incorrectly reported by the laboratory. At the request of the North Pacific Division Laboratory, the corrected BNA MS/MSD recoveries were submitted by the laboratory as a facsimile addendum dated 29 Aug 94. Two out of 22 BNA MS/MSD recoveries were below EPA QC limits in this particular sample batch. Two out of 22 soil BNA MS/MSD recoveries were outside of EPA QC limits in Batch 321 of NET reports 94.02848 and 94.02854. Two out of 22 soil BNA MS/MSD recoveries were above of EPA QC limits in Batch 326 of NET reports 94.03048 and 94.03076. The soil BNA of the aforementioned batches are accepted based on the 20 remaining acceptable matrix spike and acceptable LC recoveries. One out of two water PCB MS/MSD recoveries was below the LE QC limit in Batch 218 of NET reports 94.03020 and 94.03048. In addition, one of two LC recoveries was below the LE QC limit. Based on the low spike recoveries, the water PCB data of this batch should be considered low estimates. The water PCB LC recovery of NET reports 94.02854 and 94.02900 was below the LE QC limit. The water PCB data are accepted based on acceptable matrix spike recoveries. The soil PCB LC recovery was below the LE QC limit in NET report 94.02848. The soil PCB data are accepted based on acceptable matrix spike recoveries.

II. AVO, GRO, FIQ, DRO: The four water AVO MS and MSD recoveries of Batch 1889 in NET report 94.02833 were below the LE QC limit. Since no targeted AVO analytes were detected in any associated sample, the AVO data are not adversely affected by the high recoveries. The soil GRO MSD recovery was below the LE QC limit in Batch 1308 of NET reports 94.02769 and 94.02798. The soil GRO data of this batch are accepted based on an acceptable MS recovery. The soil GRO MS and MSD recoveries were below the LE QC limit in Batch 1337 of NET reports 94.02829 and 94.02891 and batch 1348 of NET report 94.03048. The GRO surrogate recoveries of the original samples, MS and MSD samples were below the ADEC QC limit indicating matrix interference. The GRO data of batch 1337 (five samples) are accepted based on an acceptable sample surrogate

recovery. Low levels of GRO might not have been detected in sample 94NE-00700SS (Batch 1348 of NET report 94.03048) based on the low out-of-control surrogate recovery. One (MSD of gasoline) out of four soil FIQ MS/MSD recoveries was below the LE QC limit in NET report 94.02769. The soil FIQ data are accepted based on the three remaining acceptable matrix spike and acceptable LC recoveries. The soil DRO MS and MSD recoveries were not reportable in the following batches/reports, as the original sample concentrations were greater than four times the spike amounts. Batch 220 of NET report 94.02769, Batch 223 of 94.02829 and 94.02833, Batch 225 of NET report 94.02848, Batch 227/257 and 227/258 of NET reports 94.02891 and 94.02900, Batch 229/256 and Batch 229/257 of NET report 94.03048. The soil DRO data of the aforementioned batches are accepted based on an acceptable LC recovery except for the soil DRO data in Batch 225 of NET report 94.02848, which due to a high LC recovery should be considered high estimates. One (MS) out of two water DRO MS/MSD recoveries was below the LE QC limit in Batch 146 of NET report 94.02947. The water DRO data of this batch are accepted based on acceptable MSD and LC recoveries. The soil DRO MS and MSD recoveries were above the LE QC limit in Batch 221 of NET report 94.02798 due to matrix interference because of the presence of late eluting fuel hydrocarbons in the sample and a required dilution of the sample extract. The DRO MS and MSD analyses were in effect diluted out and the recovery data should not be considered significant for the purposes of data evaluation. The soil DRO data of this batch are accepted based on an acceptable LC recovery.

III. Total Recoverable Petroleum Hydrocarbons (TRPH): One out of two water TRPH LC recoveries of Batch 233 in NET report 94.02833 and the water TRPH LC recoveries of Batch 234 in NET reports 94.02854 and 94.02947 and Batch 235 of NET report 94.02947 were marginally below the LE QC limit. The water TRPH data of the aforementioned batches are accepted based on acceptable MS and MSD recoveries. The soil TRPH MS and MSD recoveries were not reportable in the following batches/reports, as the original sample concentrations were greater than four times the spike amounts. Batch 428 of NET reports 94.02769 and 94.02798, Batches 432 and 434 of NET report 94.02829, Batch 439 of NET report 94.02848, Batches 441 and 442 of NET report 94.02854, Batch 443 of NET reports 94.02854, 94.02891 and 94.02947, Batches 446 and 447 of NET report 94.02891, Batch 448 of NET reports 94.02891 and 94.02900, Batch 458 of NET report 94.03076. The soil TRPH data of the aforementioned batches are accepted based on an acceptable LC recovery. One out of two soil TRPH MS/MSD recoveries was not reportable in Batch 429 of NET report 94.02798, as the original sample concentration was greater than four times the spike amount. The soil TRPH data of this batch are accepted based on the acceptable matrix spike and LC recoveries.

IV. Total and/or Dissolved Metals:

a. Antimony: One out of two water total antimony MS/MSD recoveries, referenced in NET reports 94.02833 and 94.02854 was slightly below the EPA QC limit. The total antimony data are accepted based on the remaining acceptable matrix spike and LC recoveries. One out of two soil antimony MS/MSD recoveries referenced in NET reports 94.03048 and 94.03076 was below the EPA QC limit. The soil antimony data of these reports are accepted based on the remaining acceptable matrix spike and LC recoveries. The soil antimony MS, MSD and LC recoveries were below EPA QC limits in NET reports 94.02769, 94.02848, in one set of MS/MSD in NET report 94.02891 and in Batch 365 of NET reports 94.02854 and 94.02947. The soil data of antimony of these batches/reports should be considered low estimates. The soil antimony MS and MSD recoveries were below the EPA QC limit in NET reports 94.02833, 94.02900 and 94.03148. The soil antimony data of these reports should be considered low estimates. The soil antimony LC recovery was below the EPA QC limit in NET report 94.02829. The soil antimony data are accepted based on acceptable MS and MSD recoveries.

b. Arsenic: One out of two water total arsenic MS/MSD recoveries was below the EPA QC limit in NET report 94.02798. The total arsenic data are accepted based on the remaining acceptable matrix spike and LC recoveries. The soil arsenic MS and MSD recoveries were not reportable in NET reports 94.02854 as the original sample concentration was greater than four times the spike amount. The soil arsenic data are accepted based on an acceptable LC recovery. One out of two soil arsenic MS/MSD recoveries were above and below the EPA QC limit in NET reports 94.02798 and 94.02829. The soil arsenic data of these reports are accepted based on acceptable MS and LC recoveries.

c. Lead: One out of two water total lead MS/MSD recoveries referenced in NET reports 94.02854, 94.02900 and 94.02947 was below the EPA QC limit but not considered significant for the purposes of data evaluation as the sample concentrations were greater than four times the spike amounts. The water total lead data of these reports are accepted based on the remaining acceptable matrix spike and LC recoveries. The dissolved lead MS and MSD recoveries were below the EPA QC limit in NET report 94.03020. The dissolved lead data should be considered low estimates. The soil lead MS and MSD recoveries were not reportable in NET reports 94.02833, 94.02848 and Batch 545 of NET reports 94.03048 and 94.03076 as the original sample concentrations were greater than four times the spike

amounts. One out of four soil lead MS/MSD recoveries was not reportable in NET report 94.02891 due to the aforementioned reason. The soil lead data of these reports are accepted based on the remaining acceptable matrix spike and//or acceptable LC recoveries. The soil lead MS and MSD recoveries were below the EPA QC limit in NET reports 94.02769 and 94.03148 but are not considered significant for the purposes of data evaluation as the original sample concentrations were greater than four times the spike amounts. The soil lead data of these reports are accepted based on an acceptable LC recovery. One out of two soil lead MS/MSD recoveries referenced in NET reports 94.02854, 94.02947 and 94.02900 was below the EPA QC limit. One of two soil lead MS/MSD recoveries were above the EPA QC limit in NET report 94.02798. The soil lead data of these reports are accepted based on the remaining acceptable matrix spike and LC recoveries. Three out of four soil GFAA lead MS/MSD recoveries and the soil ICP lead MS/MSD recoveries of NET report 94.03153 were not reportable as the original sample concentrations were greater than four times the spike amounts. The GFAA lead LC recovery was above the EPA QC limit while the ICP lead LC recovery was acceptable. Since the laboratory only reported the soil ICP lead data (the GFAA data was out-of-control), the soil ICP lead data are accepted based on a the acceptable LC recovery.

d. Selenium: The water total selenium MS and MSD recoveries were below the EPA QC limit in NET reports 94.02798 and 94.02900. The water total selenium of these reports should be considered low estimates. One out of two sets of soil selenium MS and MSD recoveries were below the EPA QC limit in NET report 94.02833. The recoveries of this particular batch are not considered significant for the purposes of data evaluation, as the spike recoveries were below the selenium detection limit of 2.5 ppm. The soil data of antimony are accepted based on the remaining acceptable of MS/MSD and LC recoveries.

e. Chromium, and Zinc: One out of two sets of chromium soil MS and MSD recoveries was below the EPA QC limit in NET report 94.02891. In addition, one set of zinc MS and MSD recoveries was not reportable and one set was below EPA QC limits but it was not considered significant for the purposes of data evaluation as the sample concentration was greater than four times the spike amount. The chromium and zinc data are accepted based on the remaining acceptable matrix spike and/or LC recoveries. One of two soil zinc MS/MSD recoveries was below the EPA QC limit in NET report 94.03148. The soil zinc data are accepted based on acceptable MS and LC recoveries.

c. Laboratory Duplicate Results: All relative percent differences (RPDs) were within EPA method required QC limits and/or LE QC limits and are acceptable with the following exceptions.

I. VOC, BNA, PCB and Dioxin/Furan: Triangle Laboratories did not submit laboratory duplicate results with the water matrix dioxin/furan data of NET reports 94.02900, 94.0320, 94.0376 and 94.03148. The precision of the water dioxin/furan data could not be determined. One out of five soil VOC MS/MSD RPDs was above the EPA QC limit in Batch 123 of NET reports 94.02769 and 94.02829. The soil VOC data of this batch are accepted based on the four remaining acceptable RPD results. Two out of 11 water BNA MS/MSD RPDs were above EPA QC limits in Batch 332 of NET reports 94.03020 and 94.03048. The water BNA of this batch are accepted based on the nine remaining acceptable RPD results. Two out of 11 water BNA LC/LCD RPDs were above EPA QC limits in Batch 333 of NET reports 94.03076 and 94.03148. The water BNA of this batch are accepted based on the nine remaining acceptable RPD results. One out of 11 water BNA LC/LCD RPDs was above the EPA QC limit in NET report 94.02854. The water BNA are accepted based on the ten remaining acceptable RPD results. Two out of 11 soil BNA MS/MSD RPDs were above EPA QC limits due to out-of-control matrix spike recoveries in Batch 321 of NET reports 94.02848 and 94.02854. The soil BNA of this batch are accepted based on the nine remaining acceptable RPD results. One out of 17 water dioxin/furan RPDs was above the EPA QC limit in the Enseco-CAL Laboratory report of NET report 94.02798. The water dioxin/furan data are accepted based on the remaining 16 acceptable RPDs.

II. AVO, GRO, FIQ, DRO and TRPH: One out of two water AVO MS/MSD RPDs was marginally above the LE QC limit in Batch 1932 of NET report 94.03020; data are accepted. The soil AVO laboratory duplicate RPD of total xylenes was above the LE QC limit in Batch 1315 of NET report 94.02829. The precision of the AVO data of this batch are accepted based on the two acceptable MS/MSD RPD results. One (MSD of gasoline) out of two soil FIQ MS/MSD RPDs was above the LE QC limit in NET report 94.02769 due to a low MSD recovery. The soil FIQ data are accepted based on the remaining acceptable RPD result. The water DRO MS/MSD RPD result was above the LE QC limit in Batch 146 of NET report 94.02947 due to a low MS recovery. The laboratory could not perform a duplicate analysis due to an insufficient volume of sample received. The water DRO data of this batch should be considered estimates. One out of two soil DRO RPD results was above the LE QC limit in NET reports 94.02798, 94.02829 and 94.02947. The soil DRO data of these reports are accepted based on the remaining acceptable RPD result. One out of two soil

DRO RPD results was above the LE QC limit in Batch 225 of NET report 94.02848 and Batch 226 of NET reports 94.02848, 94.02854 and 94.02891. The soil DRO data of these reports are accepted based on the remaining acceptable RPD result.

III. Total and/or Dissolved Metals: One out of two water total arsenic RPD results of NET report 94.02798 and one out of two total lead RPD results referenced in NET reports 94.02854 and 94.02947 was above the EPA QC limit due to a low matrix spike recovery. The water arsenic and lead data are accepted based on an acceptable laboratory duplicate RPD results. One out of two soil lead RPD results was above the EPA QC limit in NET reports 94.02769 and 94.02798. The soil lead data are accepted based on an acceptable laboratory duplicate RPD result. One out of two soil lead RPD results referenced in NET reports 94.02854, 94.02947 and 94.02900 was above the EPA QC limit due to a low matrix spike recovery. It was noted by NPDL that the laboratory miscalculated the soil lead RPD of NET report 94.02947 by using the spike results and not the percent recoveries. In all cases, the soil lead data are accepted based on an acceptable laboratory duplicate RPD result. One out of two soil arsenic and zinc RPD results was above the EPA QC limit in NET reports 94.02829 and 94.03148, respectively, due to a low matrix spike recovery. The soil arsenic and zinc data of their respective reports are accepted based on acceptable laboratory duplicate RPD results. One out of two soil chromium RPD results was above the EPA QC limit in NET report 94.02829. The soil chromium data are accepted based on an acceptable MS/MSD RPD result. One out of three soil antimony, chromium and zinc RPD results were above the EPA QC limit in NET report 94.02891. The soil data are accepted based on the two remaining acceptable RPD results.

d. Project Blind Duplicate Results: The project blind duplicate data are presented in Tables III through XXIII. All data agree with the following exceptions. The water DRO data of Table III-5. The project sample 94NE-07201SW was re-sampled at a later date, and could be a non-identical sample aliquot. The project data of -07101SW are accepted based on agreement with the QA laboratory's data. The water GRO data of Table IV-4. A review of the fuel chromatograms indicate a possible calculation error in sample -10110SW. The project data are of -10210SW are accepted based agreement with the QA laboratory's data. The dissolved lead data of Tables IV-8 and V-8. The project data of -10210SW and -24215GW, respectively, are accepted based agreement with the QA laboratory's data. The soil TRPH data of Table IX-6. The of project sample -07101SD are accepted based on agreement with the QA laboratory's

data. The soil PCB data of Table XII-2. The project data of sample -10210SD are accepted based on agreement with the QA laboratory's data. The soil AVO data of toluene and total xylenes in Table XV-1. The project laboratory reported a low surrogate recovery (53 percent) for sample -13225SB indicating a possible false negative results. The positive AVO data of -13125SB was confirmed by the laboratory as a non-gasoline fuel pattern was evident. The project data of -13125SB are accepted. Due to the QA laboratory's high AVO detection limits, the QA data was not able to be utilized in the evaluation of the discrepancy.

e. Laboratory Method Blanks: All laboratory method blanks were free of targeted analytes with the following exceptions.

I. VOC: Up to 2.4, 3.1, 4.1, and 1.2 ppb of methylene chloride, acetone, naphthalene, and 1,2,3-trichlorobenzene, respectively, were detected in the water VOC method blanks of NET reports 94.02854, 94.02900, 94.03020, 94.03048, 94.03076, 94.03180, and 94.03148. The methylene chloride data of NET reports 94.02854, 94.03048, and 94.03148 should be considered due to laboratory contamination. The acetone data of NET reports 94.03048, 94.03020, 94.03076 and 94.03148 should be considered due to laboratory contamination. The naphthalene data of NET report 94.03020 should be considered due to laboratory contamination. Since methylene chloride was not detected in the samples of NET reports 94.02900 and 94.03180; naphthalene was not detected in the samples of NET reports 94.03048, 94.03076, and 94.03148; and 1,2,3-trichlorobenzene was not detected in the samples of in NET reports 94.03020, 94.03048, 94.03076; and 94.03148 data was not adversely affected by the laboratory contamination. Up to 7.6 ppb of methylene chloride was detected in the VOC soil method blanks of NET reports 94.02829, 94.02854, 94.02891, 94.02947, 94.03048, 94.03076, and 94.03148. The methylene chloride data of soil samples -10105SB, -03105SS, -16131SB, -16231SB, -16132SB, -21138SB, -07147SB, -00700SD, -00700SS, -07145SB, -07143SB, -07149SB, -06152SB, -06153SB, -06154SB, -09156SB, and -BW158SB should be considered due to laboratory contamination.

II. Dioxin/Furan: Up to 3.0, 32.0, 2.6, 1.9, 14.0, 8.2, 2.4, and 30.9 ppq of 1,2,3,4,6,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 2,3,4,7,8-PeCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8,-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF respectively, and 14.6, 17.8, 3.0, 2.6, 4.2, 13.8, and 10.2 ppq of Total TCDD, Total HxCDD, Total HpCDD, Total TCDF, Total PeCDF, Total HxCDF and Total HpCDF, respectively, were detected in the water dioxin/furan method blanks of NET reports 94.02900, 94.03020, 94.03048, 94.03076, and 94.03148. Seven congeners were

detected in the associated water samples. The OCDD data of NET reports 94.02900, 94.03076 and 94.03148; the 1,2,3,4,6,7,8-HpCDD and OCDF of NET report 94.03148 should be considered due to laboratory contamination. The 2,3,4,6,7,8,-HxCDF water data of NET report 94.03076, sample 94NE-09244GW of NET report 94.02900 and -09122GW, -09124GW, -09244GW of NET report 94.03148 should be considered due to laboratory contamination. The 2,3,7,8,-TCDF, 2,3,4,7,8,-PeCDF and 1,2,3,4,7,8,9-HpCDF water data of -09124GW and the 2,3,7,8,-TCDF water data -09123GW and -09124GW of NET report 94.03148 should be considered due to laboratory contamination. Up to 0.63, 2.2, 0.55, 2.4, 0.63, 0.46 and 1.1 ppt of 1,2,3,4,6,7,8-HpCDD, OCDD, 2,3,4,6,7,8-HxCDF, Total HxCDD, Total HpCDD, Total PeCDF and Total HxCDF, respectively, were detected in the soil dioxin/furan method blanks of NET reports 94.02848, 94.02854, 94.03076 and 94.03148. Three selected congeners were detected in the associated soil samples. The OCDD data of -07124SS and -07224SS of NET report 94.02848 and -09156SB of NET report 94.03076 should be considered due to laboratory contamination. The remaining OCDD data of these reports and of NET report 94.02854 are accepted as the associated sample concentrations were greater than ten times the level of method blank contamination. The 1,2,3,4,6,7,8-HpCDD data of soil samples -07121SS, -07124SS and -07224SS of NET report 94.02848 and -09140SS of NET report 94.02854 and the 2,3,4,6,7,8-HxCDF data of -07120SS of NET report 94.02848 and -09156SS and -09255SS of NET report 94.03076 should be considered due to laboratory contamination.

III. TRPH and Total Metals: Up to 15 ppm of TRPH was detected in the soil TRPH method blank of NET reports 94.02848, and 94.02829. The soil TRPH data of soil samples -02109SS, -06112SS, -06113SS, -06114SS, -06115SS, -06116SS, -06117SS, -06217SS, -07119SS, -10107SD, -10108SD, -10109SD, and -10110SD are accepted as the sample concentrations were greater than ten times the level of blank contamination. 26 ppm of total lead was detected in the GFAA soil method blank of NET report 94.03153. The laboratory re-digested/re-analyzed the samples using ICP. The ICP method blank was a non detect for total lead. The ICP total lead data of NET report 94.03153 are accepted.

f. Trip Blanks: The project trip blank results are presented in Tables I-a through I-g and are free of targeted analytes with the following exceptions. The project trip blank 94NE-11191GW was not analyzed by the laboratory (Table I-a) as all VOA sample containers had headspace which compromised the sample integrity. Up to 1.8 and 3.4 ppb of methylene chloride and acetone were detected, respectively, in the trip blanks (Tables I-b, I-c, and I-e) and should be considered due to laboratory contamination.

CENPD-PE-GE-L (94-376)

PROJECT AND QA TRIP BLANK RESULTS

Table I-a

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-4) 11191GW	Detection Limits	QA Lab (7-4) 11391GW	Detection Limits
Benzene	**		ND	0.7
Toluene	**		ND	0.9
Ethylbenzene	**		ND	1.3
Total Xylenes	**		ND	0.7

ND = Not detected
** = Not analyzed by laboratory as 6 of 6 VOA's containers had headspace

SUMMARY: The absence of targeted analytes in the QA trip blank indicate that no cross contamination occurred during sample shipment, storage or analysis.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11191GW	Detection Limits	QA Lab 11391GW	Detection Limits
GRO	**		ND	0.10

SUMMARY: The absence of targeted analytes QA trip blank indicate that no cross contamination occurred during sample shipment, storage or analysis.

CENPD-PE-GE-L (94-376)

PROJECT AND QA TRIP BLANK RESULTS

Table I-b

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-10) 10192GW	Detection Limits	QA Lab (7-10) 10392GW	Detection Limits
Toluene	ND	1.0	0.1 J	0.4
Methylene Chloride	1.4 B	1.0	ND	3.1

B = Analyte detected in method blank
J = Estimated value
ND = Not detected

SUMMARY: The presence of methylene chloride in the project trip blank should be considered due to laboratory contamination. The presence of toluene quantitated below the detection limit in the QA trip blank is not considered significant at this level of detection. The absence of other targeted analytes indicates that no cross contamination occurred during sample shipment and storage.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10192GW	Detection Limits	QA Lab 10392GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The absence of targeted analytes in the project and QA trip blanks indicates that no cross contamination occurred during sample shipment, storage or analysis.

CENPD-PE-GE-L (94-376)

PROJECT AND QA TRIP BLANK RESULTS

Table I-c

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-13) 00790GW	Detection Limits	QA Lab (7-13) 00990GW	Detection Limits
Toluene	ND	1.0	0.1 J	0.4
Methylene Chloride	1.5 B	1.0	ND	3.1

B = Analyte detected in method blank
J = Estimated value
ND = Not detected

SUMMARY: The presence of methylene chloride in the project trip blank should be considered due to laboratory contamination. The presence of toluene quantitated below the detection limit in the QA trip blank is not considered significant at this level of detection. The absence of other targeted analytes indicates that no cross contamination occurred during sample shipment or storage.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00790GW	Detection Limits	QA Lab 00990GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The absence of targeted analytes in the project and QA trip blanks indicates that no cross contamination occurred during sample shipment, storage or analysis.

PROJECT AND QA TRIP BLANK RESULTS

Table I-d

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-16) 07195GW	Detection Limits	QA Lab (7-16) 07395GW	Detection Limits
	ND	1.0-2.0	ND	0.04-10

ND = Not detected

SUMMARY: The absence of targeted analytes in the project and QA trip blanks indicates that no cross contamination occurred during sample shipment, storage or analysis.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07195GW	Detection Limits	QA Lab 07395GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The absence of targeted analytes in the project and QA trip blanks indicates that no cross contamination occurred during sample shipment, storage or analysis.

PROJECT AND QA TRIP BLANK RESULTS

Table I-e

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-17) 00196GW	Detection Limits	QA Lab (7-17) 00396GW	Detection Limits
Acetone	3.4 B	2.0	ND	10
Methylene Chloride	1.8 B	1.0	ND	3.1

B = Analyte detected in method blank
ND = Not detected

SUMMARY: The presence of acetone and methylene chloride in the project trip blank should be considered due to laboratory contamination. The absence of targeted analytes in the QA trip blank indicate that no cross contamination occurred during sample shipment or storage.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-a

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-4) 11180GW	Detection Limits	QA Lab (7-4) 11380GW	Detection Limits
1,2-Dichloropropane	ND	1.0	0.6 J	0.7
Toluene	ND	1.0	0.6	0.4

J = Estimated value
ND = Not detected

SUMMARY: The project and QA rinsate data agree within a factor of two to each other or their detection limits and are comparable. The presence of 1,2-dichloropropane quantitated below the detection limit and toluene quantitated slightly above the detection limit in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
	NS		ND	10-50

NS = Data not submitted, but requested on COC records (Case narrative of NET report 94.02900 stated that the sample was used up on the method 8080 analysis for MS/MSD and was unable to extract sample this method)

SUMMARY: The absence of targeted analytes in the QA laboratory rinsate blank indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
DRO	0.120	0.10	0.30 J	0.108

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of DRO in the project and QA rinsate blanks quantitated slightly above and below the detection limit, respectively, is not considered significant at this level of detection.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
TRPH	ND	1.0	ND	0.25

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: pg/L (ppq)
Project Laboratory: Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
OCDD	28.7 B	--	5.0 B J	--
2,3,4,6,7,8-HxCDF	ND	3.1	1.9 B J	--
Total-HxCDF	ND	3.1	1.9 B J	--

B = Analyte detected in method blank
J = Estimated value
-- = Not reported

SUMMARY: The project and QA rinsate data agree within a factor of three each other or their detection limits and are comparable except for the data of OCDD. The presence of OCDD in the project rinsate blank and OCDD and HxCDF and in the QA rinsate blank should be considered due to laboratory contamination. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

8. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11180GW	Detection Limits	QA Lab 11380GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	50
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	ND	2	1.2	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	0.52	--
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	ND	5

SUMMARY: The project and QA rinsate data agree with each other or their detection limits and are comparable. The presence of low levels of lead and selenium in the QA laboratory's rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-b

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-5) 11182GW	Detection Limits	QA Lab (7-5) 11382GW	Detection Limits
1,2-Dichloropropane	ND	1.0	1.3	0.7
Toluene	ND	1.0	1.2	0.4

ND = Not detected

SUMMARY: The project and QA rinsate data agree within a factor of two to each other or their detection limits and are comparable. The presence of 1,2-dichloropropane and toluene quantitated within factor of three to their respective detection limit in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
	ND	10-50	ND	10-50

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
DRO	ND	0.01	ND	0.086

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
TRPH	ND	1.0	ND	0.21

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: pg/L (ppq)
Project Laboratory: Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
1,2,3,7,8,9-HxCDD	4.9 EMPC	--	ND	4.9
Total HxCDD	4.9 EMPC	--	ND	5.0
1,2,3,4,6,7,8-HpCDD	ND	5.4	7.5 J	--
Total HpCDD	ND	5.4	7.5 J	--
OCDD	20.9 B	--	55.7 B	--
1,2,3,4,6,7,8-HpCDF	4.3	--	3.5 J	--
Total-HpCDF	5.3	--	6.0 J	--
OCDF	10.4 EMPC	--	8.1 B J	--

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect
-- = Not reported
J = Estimated value

SUMMARY: The project and QA rinsate data agree within a factor of three to each other or their detection limits and are comparable. The presence of OCDD in the project laboratory's rinsate blank and OCDD and OCDF in the QA laboratory's rinsate blank should be considered due to laboratory contamination. The data of hexachlorinated dioxins and OCDF in the project rinsate blank should be considered high estimates and are not considered significant at this level of detection. The presence of low levels of heptachlorinated dioxins and furans in the project and QA laboratories' rinsates are not considered significant at this level of detection.

8. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11182GW	Detection Limits	QA Lab 11382GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	0.5
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	5.4	--
Lead	ND	2	1.4	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	ND	0.5
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	ND	5

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of low levels of copper and lead in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-c

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-4) 11184GW	Detection Limits	QA Lab (7-4) 11384GW	Detection Limits
1,2-Dichloropropane	ND	1.0	1.3	0.7
Toluene	ND	1.0	1.2	0.4

ND = Not detected

SUMMARY: The project and QA rinsate data agree within a factor of two to each other or their detection limits and are comparable. The presence of 1,2-dichloropropane and toluene quantitated within factor of three to their respective detection limits in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
	ND	10-50	ND	10-50

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
DRO	ND	0.10	ND	0.105

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
TRPH	ND	1.0	ND	0.22

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: pg/L (ppq)
Project Laboratory: Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
1,2,3,4,6,7,8-HpCDD	4.0 EMPC	--	10.4	--
Total HpCDD	4.0 EMPC	--	16.5	--
OCDD	20.8 B	--	42.3 B	--
1,2,3,4,7,8-HxCDF	1.9 EMPC	--	ND	2.2
2,3,4,6,7,8-HxCDF	4.3 EMPC B	--	2.8 B J	--
Total HxCDF	6.0 EMPC	--	2.8 B J	--
OCDF	4.0 EMPC	--	2.0 B J	--

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect.
-- = Not reported
J = Estimated value

SUMMARY: The project and QA rinsate data agree within a factor of three to each other and are comparable except for the data of total HpCDD. The presence of OCDD and 2,3,4,6,7,8-HxCDF in the project laboratory's rinsate blank and OCDD, 2,3,4,6,7,8-HxCDF, total HxCDF, and OCDF in the QA laboratory's rinsate blank should be considered due to laboratory contamination. The data of heptachlorinated dioxins, hexachlorinated dibenzofurans, and OCDF in the project rinsate blank should be considered high estimates and are not considered significant at this level of detection. Since the project laboratory (Triangle) did not submit complete internal QC data with the water dioxin/furan results, the project data could not be completely evaluated and the data discrepancy of Total HpCDD could not be resolved.

8. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 11184GW	Detection Limits	QA Lab 11384GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	5
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	ND	2	1.2	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	ND	0.5
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	ND	5

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of low levels of lead in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-d

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-10) 10186GW	Detection Limits	QA Lab (7-10) 10386GW	Detection Limits
1,2-Dichloropropane	1.8	1.0	1.5	0.7
1,1-Dichloropropene	ND	1.0	1.7	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.3 J	0.8
Toluene	1.2	1.0	1.3	0.4

ND = Not detected
J = Estimated value

SUMMARY: The project and QA rinsate data agree within a factor of two to each other or their detection limits and are comparable. The presence of 1,2-dichloropropane and toluene in the project laboratory's rinsate blank and 1,2-dichloropropane, 1,1-dichloropropene, 1,2,4-trimethylbenzene and toluene in the QA laboratory's rinsate blank quantitated within factor of four to their respective detection limits should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
Di-n-butylphthalate	ND	10	3 B J	10

B = Analyte detected in method blank

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of di-n-butylphthalate below the detection limit in the QA laboratory's rinsate should be considered due to laboratory contamination. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
DRO	ND	0.10	ND	0.89

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
TRPH	ND	1.0	ND	0.21

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 10186GW	Detection Limits	QA Lab 10386GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	1
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	2	2	2.7	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	ND	1
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	ND	20

SUMMARY: The project and QA rinsate data agree within a factor of two to each other and are comparable. The presence of low levels of lead in the project and QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-e

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-10) 07188GW	Detection Limits	QA Lab (7-10) 07388GW	Detection Limits
1,2-Dichloropropane	1.2	1.0	1.1	0.7
Toluene	ND	1.0	1.0	0.4
Naphthalene	1.7 B	1.0	ND	0.9

B = Analyte detected in method blank
ND = Not detected

SUMMARY: The project and QA rinsate data agree within a factor of three to each other or their detection limits and are comparable. The presence of naphthalene in the project rinsate blank should be considered due to laboratory contamination. The presence of 1,2-dichloropropane in the project laboratory's rinsate blank and 1,2-dichloropropane and toluene quantitated within factor of three to their respective detection limit QA laboratory rinsate blanks should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
Di-n-butylphthalate	ND	10	2 B J	10

J = Estimated value

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of di-n-butylphthalate below the detection limit in the QA laboratory's rinsate should be considered due to laboratory contamination. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
DRO	0.120	0.10	ND	0.087

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of DRO quantitated within a factor of two to the detection limit in the project laboratory's rinsate blank should not be considered significant at this level of detection. The absence of targeted analytes in the QA laboratory rinsate blank indicates that complete decontamination procedures were utilized during sampling.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
TRPH	ND	1.0	ND	0.20

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: pg/L (ppq)
Project Laboratory:Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
Total TCDD	39.9	--	ND	10.1
OCDD	16.5 EMPC	--	5.6 B J	--
2,3,4,6,7,8-HxCDF	ND	5.5	2.0 B J	--
Total HxCDF	ND	5.4	2.0 B J	--
OCDF	ND	18.7	1.7 B J	--

EMPC = Data considered an over estimate due to matrix effect.
-- = Not reported

SUMMARY: The project and QA rinsate data agree within a factor of three to each other or their detection limits and are comparable except for the data of Total TCDD. The data of OCDD in the project rinsate blank should be considered a high estimate and is not considered significant at this level of detection. Since the project laboratory (Triangle) did not submit complete internal QC data with the water dioxin/furan results, the project data could not be completely evaluated and the discrepancy of total TCDD could not be resolved. The presence of dioxin/furan analytes in the QA laboratory's rinsate blank should be considered due to laboratory contamination.

8. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07188GW	Detection Limits	QA Lab 07388GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	1
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	ND	2	1.1	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	ND	1
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	5.2	--

SUMMARY: The project and QA rinsate data agree with each other or their detection limits and are comparable. The presence of low levels of lead and zinc in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-f

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-11) 21189SW	Detection Limits	QA Lab (7-11) 21389SW	Detection Limits
Benzene	ND	0.5	ND	0.7
Toluene	ND	0.5	ND	0.9
Ethylbenzene	ND	0.5	ND	1.3
Total Xylenes	ND	0.5	ND	0.7

ND = Not detected

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
	ND	10-50	ND	10-50

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
DRO	ND	0.10	ND	0.091

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
TRPH	45	1.0	ND	0.21

SUMMARY: The project and QA rinsate data do not agree within a factor of three to each other. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. As TRPH was not detected in any associated water sample oor laboratory method blank, the presence of TRPH in the project rinsate should not be considered due to laboratory contamination. The absence of targeted analytes in the QA laboratory's rinsate blank indicates that complete decontamination procedures were utilized during sampling.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 21189SW	Detection Limits	QA Lab 21389SW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	1
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	4	2	4.4	--
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	ND	1
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	13	--

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of low levels of lead in the project laboratory and lead and zinc in the QA laboratory rinsate blank should not be considered significant at this level of detection. The presence of lead in both rinsate could indicate the possibility that incomplete decontamination procedures were utilized during this sampling event.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RINSATE BLANK RESULTS

Table II-g

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

DATE: Analytes Detected	Project Lab (7-13) 00780GW	Detection Limits	QA Lab (7-13) 00980GW	Detection Limits
Acetone	3.8 B	2.0	ND	10
Methylene Chloride	1.1 B	1.0	ND	3.1

B = Analyte detected in method blank
ND = Not detected

SUMMARY: The project and QA rinsate data agree with each other or their detection limits and are comparable. The presence of acetone and methylene chloride in the project rinsate blank should be considered due to laboratory contamination. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
Di-n-butylphthalate	ND	10	2 B J	10.0

J = Estimated value

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of di-n-butylphthalate below the detection limit in the QA rinsate should be considered due to laboratory contamination. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
Aroclor 1016	ND	0.5	ND	1.0
Aroclor 1221	ND	0.5	ND	2.0
Aroclor 1232	ND	0.5	ND	1.0
Aroclor 1242	ND	0.6	ND	1.0
Aroclor 1248	ND	0.5	ND	1.0
Aroclor 1254	ND	0.5	ND	1.0
Aroclor 1260	ND	0.5	ND	1.0

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
GRO	ND	0.05	ND	0.10

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The absence of targeted analytes indicates that complete decontamination procedures were utilized during sampling.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
DRO	ND	0.10	0.053 B J	0.126

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of DRO quantitated below the detection limit in the QA laboratory's rinsate blank is not considered significant at this level of detection. The absence of targeted analytes in the project laboratory rinsate blank indicates that complete decontamination procedures were utilized during sampling.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
TRPH	ND	1.0	0.28	0.20

SUMMARY: The project and QA rinsate data agree with each other or their detection limits and are comparable. The presence of TRPH quantitated within a factor of two to the detection limit in the QA laboratory's rinsate blank is not considered significant at this level of detection. The absence of targeted analytes in the project laboratory rinsate blank indicates that complete decontamination procedures were utilized during sampling.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 00780GW	Detection Limits	QA Lab 00980GW	Detection Limits
Antimony	ND	100	ND	30
Arsenic	ND	5	ND	0.5
Beryllium	ND	20	ND	1
Cadmium	ND	20	ND	5
Chromium	ND	20	ND	5
Copper	ND	20	ND	5
Lead	ND	2	ND	2
Mercury	ND	0.5	ND	0.2
Nickel	ND	50	ND	20
Selenium	ND	5	0.85	--
Silver	ND	20	ND	5
Thallium	ND	200	ND	1
Zinc	ND	50	48	--

-- = Not reported

SUMMARY: The project and QA rinsate data agree with each other and are comparable. The presence of low levels of selenium and zinc in the QA laboratory rinsate blank should not be considered significant at this level of detection. The absence of other targeted analytes indicates that complete decontamination procedures were utilized during sampling.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table III

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/L (ppb)

Analytes Detected	Project Lab 07101SW	Project Lab 07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
Benzene	ND	ND	0.5	ND	2.3
Toluene	4.2 C	3.4 C	0.5	2.8 J	3.0
Ethylbenzene	ND	ND	0.5	ND	4.3
Total Xylenes	ND	ND	0.5	ND	2.3

ND = Not detected
J = Estimated value
C = Positive result confirmed by secondary column or GC/MS analysis

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SW	Project Lab 07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
	ND	ND	10-50	ND	10-50

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 07101SW	07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
Aroclor 1016	ND	ND	0.5	ND	1.0
Aroclor 1221	ND	ND	0.5	ND	2.0
Aroclor 1232	ND	ND	0.5	ND	1.0
Aroclor 1242	ND	ND	0.6	ND	1.0
Aroclor 1248	ND	ND	0.5	ND	1.0
Aroclor 1254	ND	ND	0.5	ND	1.0
Aroclor 1260	ND	ND	0.5	ND	1.0

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 07101SW	07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
GRO	ND	ND	0.05	ND	0.10

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 07101SW	07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
DRO	7.2	16*	2	3.5	0.094

* Sample was taken at a later date due to the original sample container received broken

SUMMARY: The project blind duplicate and QA data agree within a factor of three with each other except for the comparison of project sample -07201SW with the QA sample. It was noted that project sample -07201SW was collected at a different date/time from the other two samples because the original DRO sample was received broken. The project data of -07101SW are accepted based on agreement with the QA laboratory's data.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SW	Project Lab 07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
TRPH	ND	ND	1.0	4.4	--

-- = Not reported

SUMMARY: The project blind duplicate data agree with each other. The QA data does not agree within a factor of three to the project blind duplicate data. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data are accepted based on blind duplicate agreement.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: pg/L (ppq)
Project Laboratory:Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 07101SW	Project Lab 07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
Total HpCDD	140	130	--	ND	30.4
1,2,3,4,6,7,8 -HpCDD	77 J	64 J	--	ND	30.4
OCDD	580	460	--	138 B J	--

B = Analyte detected in method blank

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits except for the QA data of total HpCDD and OCDD. Since the project laboratory (Triangle) did not submit complete internal QC data with the water dioxin/furan results, the project data could not be completely evaluated. The project data are accepted based on blind duplicate agreement.

8. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SW	07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
Antimony	ND	ND	100	ND	30
Arsenic	18	15	5	6.5	--
Beryllium	ND	ND	20	2.3	--
Cadmium	ND	ND	20	11	--
Chromium	ND	30	20	15	--
Copper	50	100	20	110	--
Lead	38	92	2	130	--
Mercury	ND	0.5	0.5	0.40	--
Nickel	ND	80	50	96	--
Selenium	ND	ND	5	ND	2.5
Silver	ND	ND	20	ND	5
Thallium	ND	ND	200	2.4	--
Zinc	520	1100	50	1200	--

SUMMARY: The project blind duplicate data agree within a factor of three to each other and are comparable.

9. Method: Dissolved Metals (EPA 6010, 7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 07101SW	07201SW	Detection Limits	QA Lab 07301SW	Detection Limits
Antimony	ND	ND	100	ND	30
Arsenic	ND	ND	5	ND	0.5
Beryllium	ND	ND	20	ND	1
Cadmium	ND	ND	20	ND	5
Chromium	ND	ND	20	13	--
Copper	ND	ND	20	ND	5
Lead	ND	ND	2	ND	1
Mercury	ND	0.5	0.5	ND	2
Nickel	ND	ND	50	ND	20
Selenium	ND	ND	5	ND	0.5
Silver	ND	ND	20	ND	5
Thallium	ND	ND	200	1.2	--
Zinc	ND	ND	50	23	--

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table IV

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/L (ppb)

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
Benzene	ND	ND	0.5	ND	0.7
Toluene	ND	ND	0.5	ND	0.9
Ethylbenzene	1.7	1.4	0.5	ND	1.3
Total Xylenes	10	10	0.5	8.9	0.7

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits for all targeted analytes and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
	ND	ND	10-50	ND	10-50

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
Aroclor 1016	ND	ND	0.5	ND	1.0
Aroclor 1221	ND	ND	0.5	ND	2.0
Aroclor 1232	ND	ND	0.5	ND	1.0
Aroclor 1242	ND	ND	0.6	ND	1.0
Aroclor 1248	ND	ND	0.5	ND	1.0
Aroclor 1254	ND	ND	0.5	ND	1.0
Aroclor 1260	1.6	1.4	0.5	ND	1.0

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
GRO	0.92	0.21	0.05	0.23	0.10

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other except for the data of project sample -10110SW. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. A review of the project fuel chromatograms indicate a possible calculation error in -10110SW. The project data are of -10210SW are accepted based agreement with the QA laboratory's data.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
DRO	14	12	0.5	13.0	0.114

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
TRPH	18	19	1.0	2.1	1.0

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other except for the QA data. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The QA data of TRPH are questionable as up to 14 ppm of DRO was found in the project and QA replicates of Table IV-5. The project data are accepted based on blind duplicate agreement.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
Antimony	ND	ND	100	ND	30
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	ND	20	20	11	--
Copper	30	50	20	27	--
Lead	62	110	2	51	--
Nickel	ND	ND	50	ND	20
Silver	ND	ND	20	ND	5.0
Thallium	ND	ND	200	ND	1.0
Zinc	510	720	50	500	--

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits and are comparable.

Table IV cont.

8. Method: Dissolved Metals (EPA 6010, 7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 10110SW	10210SW	Detection Limits	QA Lab 10310SW	Detection Limits
Antimony	ND	ND	100	ND	30
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	ND	ND	20	ND	5.0
Copper	ND	ND	20	ND	5.0
Lead	3	18	2	11	--
Nickel	ND	ND	50	ND	20
Silver	ND	ND	20	ND	5.0
Thallium	ND	ND	200	ND	1.0
Zinc	220	230	50	280	--

SUMMARY: The project blind duplicate and QA data agree with a factor of three to each other except for the lead data of project sample -10110SW. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data of 94NE-10210SW are accepted based agreement with the QA laboratory's data.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table V

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

Analytes Detected	Project Lab 24115GW	24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
Benzene	1.7	1.6	1.0	2.1	0.6
cis-1,2-Dichloroethene	1.9	1.8	1.0	2.1	0.9
Ethylbenzene	1.8	1.6	1.0	2.9	0.6
Isopropylbenzene	ND	ND	1.0	0.4 J	0.6
4-Isopropyl-toluene	ND	ND	1.0	0.3 J	0.7
n-Propylbenzene	ND	ND	1.0	0.8	0.6
Trichloroethene	ND	ND	1.0	0.6	0.6
1,2,4-Trimethyl-benzene	1.7	ND	1.0	2.4	0.8
1,3,5-Trimethyl-benzene	ND	ND	1.0	1.0	0.5
Toluene	ND	ND	1.0	1.0	0.4
o-Xylene	ND	ND	1.0	1.3	0.5
m&p-Xylene	5.1	4.5	1.0	4.3	0.4

J = Estimated value
ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits for all targeted analytes and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 24115GW	Project Lab 24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
Di-n-butyl-phthalate	ND	ND	10	2 B J	10

B = Analyte detected in method blank

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits for all targeted analytes and are comparable. The presence of di-n-butylphthalate below the detection limit in the QA sample should be considered due to laboratory contamination.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/L (ppb)

Analytes Detected	Project Lab 24115GW	Project Lab 24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
Aroclor 1016	ND	ND	0.5	ND	1.0
Aroclor 1221	ND	ND	0.5	ND	2.0
Aroclor 1232	ND	ND	0.5	ND	1.0
Aroclor 1242	ND	ND	0.6	ND	1.0
Aroclor 1248	ND	ND	0.5	ND	1.0
Aroclor 1254	ND	ND	0.5	ND	1.0
Aroclor 1260	ND	ND	0.5	ND	1.0

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 24115GW	Project Lab 24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
GRO	ND	ND	0.05	ND	0.10

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 24115GW	24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
DRO	1.3	1.5	0.1/0.2	1.5	0.087

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 24115GW	24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
TRPH	ND	ND	1.0	0.31	0.20

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 24115GW	24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
Antimony	ND	ND	100	ND	30
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	30	80	20	24	--
Copper	30	60	20	20	--
Lead	21	44	2	13	--
Nickel	ND	70	50	24	--
Silver	ND	ND	20	ND	50
Thallium	ND	ND	200	ND	10
Zinc	110	240	50	90	--

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits except for the chromium and lead data of project sample -24215GW. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. The project data of -24115GW are accepted based agreement with the QA laboratory's data.

8. Method: Dissolved Metals (EPA 6010, 7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 24115GW	24215GW	Detection Limits	QA Lab 24315GW	Detection Limits
Antimony	ND	ND	100	ND	30
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	ND	ND	20	ND	5.0
Copper	ND	ND	20	ND	5.0
Lead	8	ND	2	ND	1.0
Nickel	ND	ND	50	ND	20
Silver	ND	ND	20	ND	50
Thallium	ND	ND	200	ND	10
Zinc	ND	ND	50	7.1	--

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits except for the lead data of project sample -24115GW. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data of -24215GW are accepted based agreement with the QA laboratory's data.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table VI

Project: NE Cape - St. Lawrence Island Matrix: Water Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/L (ppb)

Analytes Detected	Project Lab 00124GW	Project Lab 00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
Toluene	ND	ND	1.0	0.2 J	0.4

J = Estimated value
ND = Not detected

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits for all targeted analytes and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: ug/L (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00124GW	Project Lab 00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
Di-n-butyl-phthalate	ND	ND	10	4 J	10

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits for all targeted analytes and are comparable.

3. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/L (ppm)

Analytes Detected	Project Lab 00124GW	Project Lab 00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
GRO	ND	ND	0.05	ND	0.10

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/L (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 00124GW	Project Lab 00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
DRO	ND	ND	0.10	0.140	0.093

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.

5. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/L (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00124GW	Project Lab 00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
TRPH	ND	ND	1.0	0.62	0.20

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

6. Method: Polychlorinated Dioxins/Furans(EPA 8290) Units: pg/L (ppq)
Project Laboratory: Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 00124GW		00224GW		Detection Limits	QA Lab 00324GW	Detection Limits
Total TCDD	3.4		1.3		--	ND	7.5
1,2,3,7,8-PeCDD	2.2	EMPC	ND		--/1.4	ND	4.1
Total PeCDD	2.2	EMPC	1.4		--	ND	4.1
1,2,3,4,7,8-HxCDD	2.0		ND		--/1.3	ND	2.7
1,2,3,6,7,8-HxCDD	2.2		ND		--/1.1	ND	2.5
1,2,3,7,8,9-HxCDD	2.3		ND		--/1.2	ND	2.5
Total HxCDD	6.5		2.5	EMPC	--	ND	3.9
1,2,3,4,6,7,8-HpCDD	3.4	B	2.0	EMPC B	--	1.5 J	--
Total HpCDD	6.5		4.1	EMPC	--	1.5 J	--
OCDD	31.3	B	21.7	B	--	14.2 B J	--
2,3,7,8-TCDF	2.5	B	2.1	B	--	ND	1.7
Total TCDF	2.5		2.1		--	2.4 J	--
1,2,3,7,8-PeCDF	2.5		ND		--/0.8	ND	2.0
2,3,4,7,8-PeCDF	2.0	EMPC B	ND		--/0.8	ND	2.1
Total PeCDF	2.5		4.9	EMPC	--	ND	2.2
1,2,3,4,7,8-HxCDF	3.1		1.3		--	ND	1.6
1,2,3,6,7,8-HxCDF	1.9	EMPC	ND		--/0.6	ND	1.4
2,3,4,6,7,8-HxCDF	5.1	B	3.7	B	--	1.6 B J	--
1,2,3,7,8,9-HxCDF	2.1		ND		--/0.8	ND	2.0
Total HxCDF	9.9		4.9		--	1.6 B J	--
1,2,3,4,6,7,8-HpCDF	2.9		1.3		--	ND	7.2
1,2,3,4,7,8,9-HpCDF	1.6	EMPC B	ND		--/1.1	ND	7.1
Total HpCDF	3.6		1.6		--	ND	8.2
OCDF	6.1	B	2.5	B	--	0.81 B J	--

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect.
-- = Not reported

SUMMARY: The project blind duplicate data agree close to or within factor of three to each other or their detection limits except for the project (-00124GW) and QA data Total HpCDD; 2,3,4,6,7,8-HxCDF, Total HxCDF and OCDF. The data of 2,3,4,6,7,8-HxCDF, Total HxCDF and OCDF in the project and QA laboratory samples should be considered due to laboratory contamination. Since the project laboratory (Triangle) did not submit complete internal QC data with the water dioxin/furan results, the project data could not be completely evaluated and the Total HpCDD data discrepancy could not be resolved.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/L (ppb)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 00124GW	00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
Antimony	ND	ND	100	ND	30
Arsenic	ND	ND	5	1.8	--
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	ND	ND	20	ND	5.0
Copper	40	ND	20	16	--
Lead	42	50	2	43	--
Mercury	ND	ND	0.5	ND	0.20
Nickel	ND	ND	50	ND	20
Selenium	ND	ND	5	0.68	--
Silver	ND	ND	20	ND	5.0
Thallium	ND	ND	200	ND	1.0
Zinc	200	80	50	63	--

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits except for the zinc data of project sample -00124GW. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data of -001224GW are accepted based agreement with the QA laboratory's data.

8. Method: Dissolved Metals (EPA 6010, 7000 Series) Units: ug/L (ppb)

Analytes Detected	Project Lab 00124GW	00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
Antimony	ND	ND	100	ND	30
Arsenic	ND	ND	5	0.68	--
Beryllium	ND	ND	20	ND	1.0
Cadmium	ND	ND	20	ND	5.0
Chromium	ND	ND	20	ND	5.0
Copper	ND	ND	20	ND	5.0
Lead	ND	ND	2	ND	1.0
Mercury	ND	ND	0.5	ND	0.20
Nickel	ND	ND	50	ND	20
Selenium	ND	ND	5	0.68	--
Silver	ND	ND	20	ND	5.0
Thallium	ND	ND	200	ND	1.0
Zinc	ND	ND	50	13	--

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

9. Method: Inorganic Parameters (EPA 300 Series, SM2340B) Units: mg/L (ppm)

Analytes Detected	Project Lab 00124GW	00224GW	Detection Limits	QA Lab 00324GW	Detection Limits
Total Alkalinity (as $CaCO_3$)	29	28	10	49.3	5.0
Total Hardness (as $CaCO_3$)	50	28	5.0	28.8	0.75

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table VII

Project: NE Cape - St. Lawrence Island Matrix: Wipe Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/wipe

Analytes Detected	Project Lab 13104WI	Project Lab 13204WI	Detection Limits	QA Lab 13304WI	Detection Limits
Aroclor 1016	ND	ND	12/16	ND	10
Aroclor 1221	ND	ND	12/16	ND	20
Aroclor 1232	ND	ND	12/16	ND	10
Aroclor 1242	ND	ND	6.4/8.6	ND	10
Aroclor 1248	ND	ND	12/16	ND	10
Aroclor 1254	ND	ND	7.5/10	ND	10
Aroclor 1260	62*	26*	7.5/10	54	--

ND = Not detected
-- = Not reported
* = Project laboratory PCB data amended, per CENPD-PE-GE-L/NET Pacific telephone conversation dated 28 Aug 94. Amended report to follow when available

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table VIII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/Kg (ppb)

Analytes Detected	Project Lab C10103SB	Project Lab C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
Acetone	145	ND	140/140	ND	700
Methylene Chloride	ND	83 B	73/69	110 J	600
1,3,5 Trimethyl-benzene	ND	ND	73/69	39 J	110
Toluene	ND	ND	73/69	31 J	70
Percent Solids	68.8	72.3		68	

B = Analyte detected in method blank
J = Estimated value
ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits for all targeted analytes and are comparable. The presence of methylene chloride in project sample -C10103SB should be considered due to laboratory contamination.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab C10103SB	Project Lab C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
	ND	ND	9.42-130	ND	5-24
Percent Solids	70.1	59.8		66	

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab C10103SB	C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
Aroclor 1016	ND	ND	114/134	ND	120
Aroclor 1221	ND	ND	114/134	ND	120
Aroclor 1232	ND	ND	114/134	ND	120
Aroclor 1242	ND	ND	61/72	ND	120
Aroclor 1248	ND	ND	114/134	ND	120
Aroclor 1254	733	2170	71/84	610	--
Aroclor 1260	ND	ND	71/84	ND	240

SUMMARY: The project blind duplicate and QA data agree within a factor of four each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab C10103SB	C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
GRO	67	166	14/140	230	50
Percent Solids	68.8	72.3		66	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab C10103SB	C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
DRO	81,300	104,000	2850/16700	46,000	1950
Percent Solids	70.1	59.8		68	

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab C10103SB	Project Lab C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
TRPH	104,000	104,000	14/17	86,000	--
Percent Solids	70.1	59.8		66	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

7. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab C10103SB	Project Lab C10203SB	Detection Limits	QA Lab C10303SB	Detection Limits
Antimony	ND	ND	14/17	ND	4.5
Beryllium	ND	ND	2.8/3.3	1.1	--
Cadmium	ND	ND	2.8/3.3	ND	0.76
Chromium	21	28	2.8/3.3	21.8	--
Copper	24	30	2.8/3.3	25.3	--
Lead	38	84	0.3/0.3	49.1	--
Nickel	13	14	7.1/8.4	12.2	--
Silver	ND	ND	2.8/3.3	ND	0.76
Thallium	ND	ND	28/33	0.26	--
Zinc	67	74	7.1/8.4	74.3	--

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table IX

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
Benzene	ND	ND	26/27	ND	40
Toluene	46 C	ND	26/27	ND	52
Ethylbenzene	ND	ND	26/27	ND	75
Total Xylenes	ND	ND	26/27	ND	40
Percent Solids	9.6	9.1		8.0	

ND = Not detected
C = Positive result confirmed by secondary column or GC/MS analysis.

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
4-Methylphenol	3.8	ND	3.5/3.24	ND	2.4
Percent Solids	9.4	10.2		14	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
Aroclor 1016	ND	ND	851/784	ND	580
Aroclor 1221	ND	ND	851/784	ND	580
Aroclor 1232	ND	ND	851/784	ND	580
Aroclor 1242	ND	ND	457/421	ND	580
Aroclor 1248	ND	ND	851/784	ND	580
Aroclor 1254	ND	ND	530/490	ND	1200
Aroclor 1260	ND	ND	530/490	ND	1200

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
GRO	ND	ND	10/11	ND	5.0
Percent Solids	9.6	9.1		14	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
DRO	440	2060	420/390	4900	90
Percent Solids	9.4	10.2		12.0	

SUMMARY: The project blind duplicate and QA data agree within a factor of five each other except for the data comparison of project sample -07101SD and the QA sample. The project laboratory reported a low, out-of-control DRO surrogate recovery for sample -07101SD. The DRO data of this sample is a low estimate. The data of project sample -07201SD are accepted based on agreement with the QA laboratory's data.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
TRPH	19,000	293,000	106/98	43,600	--
Percent Solids	10.2	22.4		13.8	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other except for the project data of 94NE-07201SD. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. The data of project sample -07101SD are accepted based on agreement with the QA laboratory's data. Based on the differing percent solids in the blind duplicate samples there is a possiblity of non-identical samples submitted as replicates.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: ng/Kg (ppt)
Project Laboratory: Enseco California QA Laboratory: IT Analytical

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
Total HxCDD	ND	ND	7.0/15	1.2 J	--
1,2,3,4,6,7,8-HpCDD	ND	ND	19/18	3.3 J	--
Total HpCDD	ND	ND	19/18	7.3	--
OCDD	130 J	ND	--/95	18.3 B	--
Total TCDF	ND	ND	4.8/3.5	2.8 l	--
Total PeCDF	ND	ND	5.6/12	2.4 l J	--
Total HxCDF	ND	ND	5.0/6.4	3.3 l J	--
1,2,3,4,6,7,8-HpCDF	ND	ND	6.8/15	1.6 B J	--
Total HpCDF	ND	ND	8.6/17	3.5 B J	--
Percent Solids	8.6	11.6		--	

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect.
J = Estimated value
l = Possible Polychlorinated Diphenyl ether interference

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for the QA data of OCDD. Since the project data OCDD was quantitated below the detection limit, the data comparison is not considered significant at this level of detection.

8. Method: Total Metals (EPA 6010, 7000 Series) Units: mg/Kg (ppm)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07101SD	07201SD	Detection Limits	QA Lab 07301SD	Detection Limits
Antimony	ND	ND	106/98	ND	21.7
Arsenic	14	11	5.3/4.9	10.9	--
Beryllium	ND	ND	21/20	ND	0.72
Cadmium	ND	ND	21/20	9.4	--
Chromium	ND	ND	21/20	12.1	--
Copper	40	29	21/20	59.1	--
Lead	29	26	2.1/2.0	47.1	--
Mercury	ND	ND	1.1/1.0	ND	0.51
Nickel	ND	ND	53/49	28.3	--
Selenium	ND	ND	5.3/4.9	2.2	--
Silver	ND	ND	21/20	ND	3.6
Thallium	ND	ND	212/196	1.2	--
Zinc	760	320	53/49	924	--

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table X

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
Benzene	ND	ND	13/10	ND	37
Toluene	ND	ND	13/10	ND	47
Ethylbenzene	ND	ND	13/10	ND	68
Total Xylenes	ND	ND	13/10	ND	37
Percent Solids	19.5	24.1		25	

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

2. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
Aroclor 1016	ND	ND	340/317	ND	80
Aroclor 1221	ND	ND	340/317	ND	80
Aroclor 1232	ND	ND	340/317	ND	80
Aroclor 1242	ND	ND	183/171	ND	80
Aroclor 1248	ND	ND	340/317	ND	80
Aroclor 1254	ND	ND	210/200	ND	160
Aroclor 1260	ND	ND	210/200	ND	160
Percent Solids	23.5	25.2		24.7	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

3. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
GRO	ND	ND	5.1/4.1	ND	5.0
Percent Solids	19.5	24.1		24.7	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
DRO	260	180	170/160	230	49
Percent Solids	23.5	25.2		26	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

5. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
TRPH	1790	1510	42/40	184	--

-- = Not reported

SUMMARY: The project blind duplicate data agree within a factor of two but does not agree within a factor of five to the QA data. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data are accepted based on blind duplicate agreement.

6. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 05100SS	Project Lab 05200SS	Detection Limits	QA Lab 05300SS	Detection Limits
Antimony	ND	ND	42/40	ND	12.1
Arsenic	4.7	2	2	4.8	--
Beryllium	ND	ND	8.5/7.9	ND	0.40
Cadmium	ND	ND	8.5/7.9	ND	2.0
Chromium	ND	ND	8.5/7.9	5.7	--
Copper	10	7.9	8.5/7.9	10.1	--
Lead	18	4.8	0.8/0.8	16.2	--
Mercury	ND	ND	0.4/0.4	ND	0.32
Nickel	ND	ND	21/20	12.4	--
Selenium	ND	ND	2	0.98	--
Silver	ND	ND	8.5/7.9	ND	2.0
Thallium	ND	ND	85/79	0.43	--
Zinc	553	150	21/20	367	--

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XI

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 27118SB	27218SB	Detection Limits	QA Lab 27318SB	Detection Limits
Benzene	157	ND	60/144	ND	5400
Toluene	1000	371	60/144	1800 J	6800
Ethylbenzene	2050	1320	60/144	ND	9800
Total Xylenes	18,100	11,200	600/144	17,000	5400
Percent Solids	82.9	83.6		85	

ND = Not detected
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree within a factor of five each other or their detection limits and are comparable.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 27118SB	27218SB	Detection Limits	QA Lab 27318SB	Detection Limits
GRO	410	514	240/60	1300	--
Percent Solids	82.9	83.6		79.3	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

3. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 27118SB	27218SB	Detection Limits	QA Lab 273188B	Detection Limits
DRO	8470	12,800	5220/2570	16,000	56
Percent Solids	76.7	77.9		77	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

4. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 27118SB	27218SB	Detection Limits	QA Lab 27318SB	Detection Limits
TRPH	29,300	29,100	13	10,000	--
Percent Solids	82.9	83.6		79.3	

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

5. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 27118SB	27218SB	Detection Limits	QA Lab 27318SB	Detection Limits
Antimony	ND	ND	13	ND	3.8
Arsenic	4.3	2.7	0.6	4.8	--
Beryllium	ND	ND	2.6	0.73	--
Cadmium	ND	ND	2.6	ND	0.63
Chromium	25	26	2.6	21.4	--
Copper	17	17	2.6	12.4	--
Lead	14	13	0.2	13.9	--
Mercury	ND	ND	0.1	ND	0.096
Nickel	14	17	6.4	15	--
Selenium	ND	ND	0.6	0.38	--
Silver	ND	ND	2.6	ND	0.63
Thallium	ND	ND	26	0.36	--
Zinc	36	35	6.4	40.7	--

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
Benzene	ND	ND	3.1/3.2	ND	330
Toluene	6.3	ND	3.1/3.2	ND	620
Ethylbenzene	53	ND	3.1/3.2	ND	420
Total Xylenes	57	39	3.1/3.2	ND	330
Percent Solids	79.4	79.0		73	

ND = Not detected

SUMMARY: The project blind duplicate data agree within a factor of two to each other or their detection limits except for the project blind duplicate data of ethylbenzene which does not agree within a factor of five to each other. The project laboratory reported a low, out-of-control AVO surrogate recovery for sample -10210SD indicating possible false negative results. The positive AVO data of -10110SD was confirmed by the laboratory as a non-gasoline fuel pattern was evident. The project data of -10110SD are accepted. Due to the QA laboratory's high AVO detection limits, the QA data was not useful in evaluating the discrepancy. The project AVO data of 94NE-10110SD are accepted.

2. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
Aroclor 1016	ND	ND	983/113	ND	80
Aroclor 1221	ND	ND	983/113	ND	80
Aroclor 1232	ND	ND	983/113	ND	80
Aroclor 1242	ND	ND	528/60	ND	80
Aroclor 1248	ND	ND	983/113	ND	80
Aroclor 1254	5160	436	614/141	ND	160
Aroclor 1260	1350	731	614/141	580	160
Percent Solids	81.4	71.1		76	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for the aroclor 1254 data of project sample -10110SD. Since both laboratories had accepted internal QC data, the data discrepancy could not be analytically resolved. The project data of sample -10210SD are accepted based on agreement with the QA laboratory's data. Based on the differing percent solids in the blind duplicate samples there is a possiblity of non-identical samples submitted as duplicates.

3. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
GRO	4.3	3.7	1.2/1.3	24	--
Percent Solids	79.4	77.0		76	

SUMMARY: The project blind duplicate data agree within a factor of two to each other but do not agree within a factor of five to the QA data. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data are accepted based on blind duplicate agreement.

4. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
DRO	7250	11,500	983/532	9800	73
Percent Solids	81.4	71.1		73	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

5. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
TRPH	19,400 B	23,600	12/14	13,800	--
Percent Solids	81.4	71.1		75.7	

B = Analyte detected in method blank

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable. Since the project data of TRPH in sample -10110SD is greater than ten times the level of method blank contamination, the TRPH data of this sample are accepted.

6. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 10110SD	10210SD	Detection Limits	QA Lab 10310SD	Detection Limits
Antimony	ND	ND	12/14	ND	4.0
Beryllium	ND	ND	2.4/2.8	0.63	--
Cadmium	ND	ND	2.4/2.8	0.87	--
Chromium	16	18	2.4/2.8	17.8	--
Copper	18	22	2.4/2.8	22.5	--
Lead	48	63	0.2/0.3	43.0	--
Nickel	11	14	6.1/7.0	13.1	--
Silver	ND	ND	2.4/2.8	ND	0.66
Thallium	ND	ND	24/28	0.32	--
Zinc	123	140	6.1/7.0	138	--

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XIII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 06117SS	06217SS	Detection Limits	QA Lab 06317SS	06317SS*	Detection Limits
Benzene	ND	ND	2.6	ND	ND	11/210
Toluene	ND	ND	2.6	96.8	82 J	14/260
Ethylbenzene	ND	ND	2.6	ND	ND	21/390
Total Xylenes	ND	ND	2.6	14.4	ND	11/210
Percent Solids	96.2	95.8		94		

* = Methanolic extraction
ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of five each other or their detection limits except for the QA data of toluene and total xylenes. The project laboratory reported low, out-of-control AVO surrogate recoveries of 14 and 16 percent indicating possible false negative results. The QA laboratory initially reported a low (54 percent) AVO surrogate recovery but upon reanalysis of the sample (methanolic extraction) the AVO surrogate recovery was acceptable. The QA laboratory's methanolic AVO data are accepted based on acceptable internal QC data.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 06117SS	06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
	ND	ND	10.4-50.5	ND	17-83
Percent Solids	95.1	95.2		96	

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 06117SS	06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
Aroclor 1016	ND	ND	1260	ND	84
Aroclor 1221	ND	ND	1260	ND	84
Aroclor 1232	ND	ND	1260	ND	84
Aroclor 1242	ND	ND	678	ND	84
Aroclor 1248	ND	ND	1260	ND	84
Aroclor 1254	ND	ND	788	ND	170
Aroclor 1260	ND	ND	788	ND	170

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 06117SS	06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
GRO	ND	ND	1.0	ND	5.0
Percent Solids	96.2	95.8		95.6	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 06117SS	06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
DRO	17,900	60,900	8410/4200	19,000	282
Percent Solids	95.1	95.2		95	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 06117SS	Project Lab 06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
TRPH	112,000 B	95,600 B	10	68,000	--
Percent Solids	95.1	95.2		95.6	

B = Analyte detected in method blank

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable. Since the project data of TRPH are greater than ten times the level of method blank contamination, the TRPH data of these samples are accepted.

7. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 06117SS	Project Lab 06217SS	Detection Limits	QA Lab 06317SS	Detection Limits
Antimony	ND	ND	10	ND	3.1
Beryllium	ND	ND	2.1	1.1	--
Cadmium	1.6	1.7	2.1	ND	0.52
Chromium	19	17	2.1	10.8	--
Copper	10	12	2.1	10.8	--
Lead	42	29	0.2	19.9	--
Nickel	10	10	5.2	6.6	--
Silver	ND	ND	2.1	ND	0.52
Thallium	ND	ND	21	0.29	--
Zinc	52	55	5.2	62	--

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XIV

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
Benzene	ND	ND	2.9	ND	2.4
Toluene	ND	ND	2.9	ND	3.1
Ethylbenzene	ND	ND	2.9	ND	4.4
Total Xylenes	ND	ND	2.9	ND	2.4
Percent Solids	86.4	86.1		87	

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
	ND	ND	3.72-18.2	ND	0.44-2.1
Percent Solids	88.0	88.6		75	

SUMMARY: The project blind duplicate and QA data agree with each other for all targeted analytes and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
Aroclor 1016	ND	ND	91/90	ND	110
Aroclor 1221	ND	ND	91/90	ND	110
Aroclor 1232	ND	ND	91/90	ND	110
Aroclor 1242	ND	ND	49/49	ND	110
Aroclor 1248	ND	ND	91/90	ND	110
Aroclor 1254	ND	ND	57/56	ND	210
Aroclor 1260	ND	ND	57/56	31 J	--

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
GRO	ND	ND	1.2	ND	5.0
Percent Solids	86.4	86.1		75.0	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
DRO	284	113	45	140	12
Percent Solids	88.0	88.6		87	

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
TRPH	580	192	11	497	--
Percent Solids	88.0	88.6		75.0	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: ng/Kg (ppt)
Project Laboratory:Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
Total TCDD	0.87	0.24	--	0.67 J	--
Total PeCDD	ND	0.16 EMPC	0.2/--	ND	0.58
1,2,3,4,6,7,8-HpCDD	0.84 EMPC B	1.1 B	--	0.74 J	--
Total HpCDD	0.92 EMPC	2.5	--	1.5 J	--
OCDD	7.3 B	8.6 B	--	5.5 B J	--
2,3,7,8-TCDF	0.26	0.29	--	ND	0.32
Total TCDF	4.2	4.5	--	5.4 J	--
1,2,3,7,8-PeCDF	ND	0.09 EMPC	0.1/--	ND	0.36
Total PeCDF	0.95	1.3	--	ND	0.79
1,2,3,4,7,8-HxCDF	ND	0.19	0.1/--	ND	0.41
2,3,4,6,7,8-HxCDF	0.28 EMPC	0.41	--	0.19 J	--
Total HxCDF	0.46 EMPC	0.84	--	0.19 J	--
1,2,3,4,6,7,8-HpCDF	0.27 EMPC	0.35 EMPC	--	ND	0.25
Total HpCDF	0.38	0.57	--	ND	0.29
OCDF	0.92	1.2	--	1.6 J	--
Percent Solids	88.0	88.6		--	

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect.
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other and are comparable.

8. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 07124SS	07224SS	Detection Limits	QA Lab 07324SL	Detection Limits
Antimony	ND	ND	11	ND	4.0
Arsenic	3.5	5.1	0.6	NR	
Beryllium	ND	ND	2.3/2.2	1.1	--
Cadmium	ND	1.7	2.3/2.2	ND	0.67
Chromium	10	11	2.3/2.2	15.1	--
Copper	9.1	8.7	2.3/2.2	10.8	--
Lead	19	21	0.2	26.3	--
Mercury	ND	ND	0.1	NR	
Nickel	6.9	7.6	5.7/5.6	11.6	--
Selenium	ND	ND	0.6	NR	
Silver	ND	ND	2.3/2.2	ND	0.67
Thallium	ND	ND	23/22	0.28	--
Zinc	28	30	5.7/5.6	46.5	--
Percent Solids	88.0	88.6		75.0	

NR = Not requested on chain-of-custody records

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits and are comparable. The QA laboratory was not requested to analyze the sample for arsenic, mercury, and selenium.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XV

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 13125SB	13225SB	Detection Limits	QA Lab 13325SB	Detection Limits
Benzene	ND	ND	26/2.6	ND	210
Toluene	56	ND	26/2.6	ND	260
Ethylbenzene	ND	ND	26/2.6	ND	390
Total Xylenes	34	ND	26/2.6	ND	210
Percent Solids	94.4	95.2		95	

ND = Not detected

SUMMARY: The project blind duplicate data agree within a factor of five each other or their detection limits except for the data of toluene and total xylenes. The project laboratory reported a low surrogate recovery (53 percent) for sample -13225SB indicating possible false negative results. The positive AVO data of -13125SB was confirmed by the laboratory as a non-gasoline fuel pattern was evident. Due to the QA laboratory's high AVO detection limits, the QA data was not useful in evaluating the discrepancy. The project AVO data of -13125SB are accepted.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 13125SB	13225SB	Detection Limits	QA Lab 13325SB	Detection Limits
GRO	7.1 J	ND	10/1.0	ND	5.0
Percent Solids	94.4	95.2		94.3	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for project data -13225SB but since the project data of GRO was quantitated below the detection limit, the data comparison is not considered significant at this level of detection.

3. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 13125SB	Project Lab 13225SB	Detection Limits	QA Lab 13325SB	Detection Limits
DRO	546	434	84/42	1000	12
Percent Solids	95.3	94.5		91	

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

4. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 13125SB	Project Lab 13225SB	Detection Limits	QA Lab 13325SB	Detection Limits
TRPH	1150	624	10	431	--
Percent Solids	95.3	94.5		94.3	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XVI

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 10134SS	Project Lab 10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
Benzene	ND	ND	3.0	ND	2.4
Toluene	ND	ND	3.0	ND	3.1
Ethylbenzene	ND	ND	3.0	ND	4.5
Total Xylenes	ND	ND	3.0	ND	2.4
Percent Solids	82.1	82.8		84	

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10134SS	Project Lab 10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
Di-n-butyl-phthalate	ND	ND	0.4	0.12 J	0.41
Percent Solids	81.8	84.8		80	

J = Estimated value

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 10134SS	10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
Aroclor 1016	ND	ND	98/94	ND	100
Aroclor 1221	ND	ND	98/94	ND	100
Aroclor 1232	ND	ND	98/94	ND	100
Aroclor 1242	ND	ND	53/51	ND	100
Aroclor 1248	ND	ND	98/94	ND	100
Aroclor 1254	ND	ND	61/59	ND	200
Aroclor 1260	ND	ND	61/59	ND	200

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 10134SS	10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
GRO	ND	ND	1.2	ND	5.0
Percent Solids	82.1	82.8		79.6	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 10134SS	10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
DRO	379	377	49/47	380	13
Percent Solids	81.8	84.8		86	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 10134SS	10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
TRPH	416	861	12	970	--
Percent Solids	81.8	84.8		79.6	

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other and are comparable.

7. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 10134SS	10234SS	Detection Limits	QA Lab 10334SS	Detection Limits
Antimony	ND	ND	12	ND	3.8
Beryllium	ND	ND	2.4	1.4	--
Cadmium	2.1	1.8	2.4	ND	0.63
Chromium	17	18	2.4	16.3	--
Copper	17	16	2.4	16.0	--
Lead	28	32	0.2	28.3	--
Nickel	11	12	6.1/5.9	9.0	--
Silver	ND	ND	2.4	ND	0.63
Thallium	ND	ND	24	0.34	--
Zinc	48	46	6.1/5.9	53.5	--

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XVII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 09141SS	Project Lab 09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
Benzene	ND	ND	3.0/3.1	ND	3.0
Toluene	ND	ND	3.0/3.1	3.7 J	3.8
Ethylbenzene	ND	ND	3.0/3.1	ND	5.5
Total Xylenes	ND	ND	3.0/3.1	ND	3.0
Percent Solids	83.1	80.7		82	

ND = Not detected
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 09141SS	Project Lab 09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
Di-n-butyl-phthalate	ND	ND	0.4	0.22 J	0.40
Percent Solids	77.4	81.9		82	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 09141SS	09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
Aroclor 1016	ND	ND	103/98	ND	98
Aroclor 1221	ND	ND	103/98	ND	98
Aroclor 1232	ND	ND	103/98	ND	98
Aroclor 1242	ND	ND	56/53	ND	98
Aroclor 1248	ND	ND	103/98	ND	98
Aroclor 1254	ND	ND	64/61	ND	200
Aroclor 1260	181	85	64/61	31 J	200

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other except for the data of aroclor 1260 in project sample does not agree within a factor of five to the QA laboratory's data. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. The project data of sample -09141SS are accepted based on blind duplicate agreement.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 09141SS	09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
GRO	ND	ND	1.2	ND	5.0
Percent Solids	83.1	80.7		81.7	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 09141SS	09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
DRO	41	56	5.2/4.9	160	15
Percent Solids	77.4	81.9		71	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

Table XVII cont.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 09141SS	09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
TRPH	155	183	13/12	139	--
Percent Solids	77.4	81.9		81.7	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

CENPD-PE-GE-L (94-376)
Table XVII cont.

7. Method: Polychlorinated Dioxins/Furans (EPA 8290) Units: ng/Kg (ppt)
Project Laboratory:Triangle Laboratories QA Laboratory: IT Analytical

Analytes Detected	Project Lab 09141SS	Project Lab 09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
Total TCDD	1.9	1.6	--	1.3	--
1,2,3,7,8-PeCDD	1.0 EMPC	1.3 EMPC	--	0.68 J	--
Total PeCDD	7.0	8.8	--	2.8	--
1,2,3,4,7,8-HxCDD	3.2	2.5	--	1.5 J	--
1,2,3,6,7,8-HxCDD	3.7 EMPC	3.0 EMPC	--	2.6 J	--
1,2,3,7,8,9-HxCDD	8.7	7.8	--	3.7 J	--
Total HxCDD	64.4	53.2	--	29.0	--
1,2,3,4,6,7,8-HpCDD	97.0	84.2	--	65.9	--
Total HpCDD	240	211	--	133	--
OCDD	511	385	--	407 B	--
2,3,7,8-TCDF	6.0	4.7	--	ND	0.77
Total TCDF	35.4	24.5	--	24.8 l	--
1,2,3,7,8-PeCDF	1.3 EMPC	2.1	--	ND	1.0
2,3,4,7,8-PeCDF	2.4	2.6	--	0.61 J	--
Total PeCDF	23.5	25.0	--	28.4 l	--
1,2,3,4,7,8-HxCDF	5.3 EMPC	6.6	--	1.9 J	--
1,2,3,6,7,8-HxCDF	1.6	1.6	--	1.6 J	--
2,3,4,6,7,8-HxCDF	1.9	1.6	--	0.54 J	--
Total HxCDF	22.3	24.5	--	27.5 l	--
1,2,3,4,6,7,8-HpCDF	13.9	10.3	--	9.3	--
1,2,3,4,7,8,9-HpCDF	1.1 EMPC	0.64 EMPC	--	1.1 J	--
Total HpCDF	39.7	31.8	--	29.7	--
OCDF	46.4	38.2	--	22.3	--
Percent Solids	78.6	79.0		--	

B = Analyte detected in method blank
EMPC = Data considered an over estimate due to matrix effect
l = Possible Polychlorinated Diphenyl ether interference

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for the QA laboratory's data of 2,3,7,8-TCDF. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data are accepted based on blind duplicate agreement.

8. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 09141SS	09241SS	Detection Limits	QA Lab 09341SS	Detection Limits
Antimony	22	ND	13/12	ND	3.7
Arsenic	30	10	0.6	14.8	--
Beryllium	ND	ND	2.6/2.4	1.2	--
Cadmium	4.0	2.3	2.6/2.4	0.72	--
Chromium	56	63	2.6/2.4	24.7	--
Copper	92	49	2.6/2.4	37.9	--
Lead	181	134	0.2	131	--
Mercury	ND	ND	0.1	ND	0.098
Nickel	17	16	6.4/6.1	13.9	--
Selenium	ND	ND	0.6	0.39	--
Silver	ND	ND	2.6/2.4	ND	0.61
Thallium	ND	ND	26/24	0.28	--
Zinc	904	427	6.4/6.1	513	--

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for the project (94NE-09141SS) and QA data comparisons of antimony and cadmium. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. The project data are accepted based on blind duplicate agreement.

COMPARISON OF PROJECT AND QA RESULTS

Table XVIII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 16131SB	Project Lab 16231SB	Detection Limits	QA Lab 16331SB	Detection Limits
Methylene Chloride	5.5 B	6.7 B	5.2	2.9 J	9.7
Ethylbenzene	ND	ND	5.2	0.6 J	1.8
Styrene	ND	ND	5.2	1.7 J	1.9
1,2,4-trimethyl-benzene	ND	ND	5.2	0.7 J	2.3
Toluene	ND	ND	5.2	7.8	1.1
m&p-xylene	ND	ND	5.2	0.7 J	1.2
Percent Solids	95.9	96.8		96	

B = Analyte detected in method blank
J = Estimated value
ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits for all targeted analytes and are comparable. The presence of methylene chloride in the project samples should be considered due to laboratory contamination.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 16131SB	Project Lab 16231SB	Detection Limits	QA Lab 16331SB	Detection Limits
	ND	ND	0.3-1.7	ND	0.3-1.7
Percent Solids	96.1	96.5		96	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 16131SB	Project Lab 16231SB	Detection Limits	QA Lab 16331SB	Detection Limits
Aroclor 1016	ND	ND	83	ND	83
Aroclor 1221	ND	ND	83	ND	83
Aroclor 1232	ND	ND	83	ND	83
Aroclor 1242	ND	ND	45	ND	83
Aroclor 1248	ND	ND	83	ND	83
Aroclor 1254	ND	ND	52	ND	170
Aroclor 1260	ND	ND	52	ND	170

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 16131SB	Project Lab 16231SB	Detection Limits	QA Lab 16331SB	Detection Limits
Antimony	ND	ND	10	ND	3.1
Arsenic	3.4	3.1	0.5	5.6	--
Beryllium	1.4	ND	2.1	1.2	--
Cadmium	1.8	ND	2.1	ND	0.52
Chromium	11	14	2.1	38.7	--
Copper	8.4	7.5	2.1	16.9	--
Lead	22	23	0.2	23.3	--
Mercury	ND	ND	0.1	--	0.083
Nickel	6.6	6.5	5.2	15.1	--
Selenium	ND	ND	0.5	0.13	--
Silver	ND	ND	2.1	ND	0.52
Thallium	ND	ND	21	0.19	--
Zinc	47	41	5.2	53.8	--

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XIX

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 15149SS	15249SS	Detection Limits	QA Lab 15349SS	Detection Limits
Benzene	ND	ND	2.5/2.6	ND	11
Toluene	ND	ND	2.5/2.6	3.8 J	14
Ethylbenzene	ND	ND	2.5/2.6	ND	20
Total Xylenes	ND	ND	2.5/2.6	9.3 J	11
Percent Solids	99.1	96.7		97	

ND = Not detected
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

2. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 15149SS	15249SS	Detection Limits	QA Lab 15349SS	Detection Limits
GRO	ND	ND	1.0	ND	5.0
Percent Solids	99.1	96.7		95.3	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

3. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 15149SS	Project Lab 15249SS	Detection Limits	QA Lab 15349SS	Detection Limits
DRO	6580	7610	2030	7600	271
Percent Solids	98.7	98.6		98	

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

4. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 15149SS	Project Lab 15249SS	Detection Limits	QA Lab 15349SS	Detection Limits
TRPH	36,800	35,800	10	22,400	--
Percent Solids	98.7	98.6		95.3	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XX

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

1. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 16164SS	16264SS	Detection Limits	QA Lab 16364SS	Detection Limits
Di-n-butyl-phthalate	1.86	ND	0.77/0.78	ND	0.38
Percent Solids	91.3	89.4		86	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits and are comparable.

2. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 16164SS	16264SS	Detection Limits	QA Lab 16364SS	Detection Limits
Aroclor 1016	ND	ND	88/90	ND	93
Aroclor 1221	ND	ND	88/90	ND	93
Aroclor 1232	ND	ND	88/90	ND	93
Aroclor 1242	ND	ND	47/48	ND	93
Aroclor 1248	ND	ND	88/90	ND	93
Aroclor 1254	ND	ND	55/56	ND	190
Aroclor 1260	ND	ND	55/56	19 J	190

-- = Not reported
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits and are comparable.

3. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 16164SS	16264SS	Detection Limits	QA Lab 16364SS	Detection Limits
Antimony	ND	ND	11	ND	3.5
Arsenic	4.7	4.8	0.5/0.6	4.7	--
Beryllium	ND	ND	2.2	1.1	--
Cadmium	ND	ND	2.2	ND	0.58
Chromium	13	11	2.2	13.8	--
Copper	9.1	8.4	2.2	8.8	--
Lead	34	28	0.2	27.5	--
Mercury	ND	ND	0.1	ND	0.093
Nickel	7.1	7.8	5.5	8.6	--
Selenium	ND	ND	0.5/0.6	ND	0.29
Silver	ND	ND	2.2	ND	0.58
Thallium	ND	ND	22	0.26	--
Zinc	48	49	5.5/5.6	49.8	--

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

CENPD-PE-GE-L (94-376)

COMPARISON OF PROJECT AND QA RESULTS

Table XXI

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Aromatic Volatile Organic (EPA 8020) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
Benzene	ND	ND	15/14	ND	39
Toluene	ND	ND	15/14	ND	50
Ethylbenzene	ND	ND	15/14	ND	72
Total Xylenes	ND	ND	15/14	ND	39
Percent Solids	16.9	18.5		16	

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
Di-n-butyl-phthalate	2.12 J	9.26	2.8/4.3	0.90 J	1.70
Bis(2-ethylhexyl) phthalate	1.60 J	ND	2.8/4.3	0.84 J	1.70
4-chloro-aniline	6.00	4.94	2.8/4.3	ND	1.70
Percent Solids	25	16.2		19	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other or their detection limits except for the QA laboratory's data of di-n-butylphthalate does not agree within a factor of five to project sample -21268SS. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data of sample -21168SS are accepted based on agreement with the QA laboratory's data.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
Aroclor 1016	ND	ND	320/494	ND	420
Aroclor 1221	ND	ND	320/494	ND	420
Aroclor 1232	ND	ND	320/494	ND	420
Aroclor 1242	ND	ND	172/265	ND	420
Aroclor 1248	ND	ND	320/494	ND	420
Aroclor 1254	ND	ND	200/310	ND	840
Aroclor 1260	1920	4200	200/310	930	840

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
GRO	ND	ND	5.9/5.4	ND	5.0
Percent Solids	16.9	18.5		19.2	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
DRO	1160	1670	400/490	3800	334
Percent Solids	25.0	16.2		16	

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other and are comparable.

6. Method: Total Recoverable Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
TRPH	18,400	13,000	40/62	1690	--
Percent Solids	25.0	16.2		19.2	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other except for the QA data of TRPH. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The QA data of TRPH are questionable as up to 3800 ppm of DRO was found in the project and QA replicates of Table XXI-5. The project data are accepted based on blind duplicate agreement.

7. Method: Total Metals (EPA 6010,7000 Series) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 21168SS	21268SS	Detection Limits	QA Lab 21368SS	Detection Limits
Antimony	ND	ND	40/62	ND	15.6
Arsenic	9.6	18	2/3	13.5	--
Beryllium	ND	ND	8.0/12	ND	0.52
Cadmium	ND	ND	8.0/12	3.2	--
Chromium	18	15	8.0/12	14.7	--
Copper	140	120	8.0/12	86.8	--
Lead	96	80	0.8/1	62.7	--
Mercury	5.6	4	0.4/0.6	3.1	--
Nickel	ND	ND	20/31	10.5	--
Selenium	2	ND	2/3	ND	1.3
Silver	9.2	ND	0.8/12	6.7	--
Thallium	ND	ND	80/120	0.53	--
Zinc	960	1300	20/31	776	--

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XXII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: ARDL, Inc.

1. Method: Total Organic Carbon (EPA 415.1) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 07151SB	Project Lab 07251SB	Detection Limits	QA Lab 07351SB	Detection Limits
TOC	17,900	21,800	29	16,100	--
Percent Solids	86.1	85.6		85.5	

-- = Not reported

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other and are comparable.

2. Method: Total Organic Halogens (EPA 9020) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 07151SB	Project Lab 07251SB	Detection Limits	QA Lab 07351SB	Detection Limits
TOX	ND	ND	20/10	24.5	--

ND = Not detected

SUMMARY: The project blind duplicate and QA data agree within a factor of three to each other or their detection limits and are comparable.

3. Method: Ignitability (EPA 1010,1020/ASTM-D240) Units: Btu/lb / F°

Analytes Detected	Project Lab 07151SB	Project Lab 07251SB	Detection Limits	QA Lab 07351SB	Detection Limits
BTU	130	475	--	ND	500
Ignitability	>140	>140	--	>200	--

SUMMARY: The project blind duplicate and QA data agree within a factor of four to each other or their detection limits and are comparable.

COMPARISON OF PROJECT AND QA RESULTS

Table XXIII

Project: NE Cape - St. Lawrence Island Matrix: Soil Prefix: 94NE-
Project Laboratory: NET Pacific, Inc. QA Laboratory: CENPD-PE-GE-L

1. Method: Volatile Organic Compounds (EPA 8260) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 06153SB	Project Lab 06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
Methylene Chloride	6.3 B	ND	5.7/5.9	8.5 J	11.0
Benzene	ND	ND	5.7/5.9	2.4	2.2
Ethylbenzene	ND	ND	5.7/5.9	0.4 J	2.1
1,2,4-trimethyl-benzene	ND	ND	5.7/5.9	0.3 J	2.7
Toluene	ND	ND	5.7/5.9	2.6	1.3
O-xylene	ND	ND	5.7/5.9	0.3 J	1.8
m&p-xylene	ND	ND	5.7/5.9	0.4 J	1.4
Percent Solids	87.6	85.2		82	

B = Analyte detected in method blank
ND = Not detected
J = Estimated value

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits for all targeted analytes and are comparable.

2. Method: Semi-Volatile Organics (EPA 8270) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 06153SB	Project Lab 06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
Di-n-butyl-phthalate	ND	ND	2.53/2.60	0.19 B J	0.38
Percent Solids	78.9	77.0		86	

SUMMARY: The project blind duplicate and QA data agree with each other or their detection limits for all targeted analytes and are comparable. The presence of di-n-butylphthalate in the QA laboratory's sample should be considered due to laboratory contamination.

3. Method: Polychlorinated Biphenyls (EPA 8080) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 06153SB	06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
Aroclor 1016	ND	ND	101/104	ND	93
Aroclor 1221	ND	ND	101/104	ND	93
Aroclor 1232	ND	ND	101/104	ND	93
Aroclor 1242	ND	ND	54/56	ND	93
Aroclor 1248	ND	ND	101/104	ND	93
Aroclor 1254	ND	ND	63/65	ND	190
Aroclor 1260	ND	ND	63/65	ND	190

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

4. Method: Gasoline Range Organics (ADEC 8015 mod.) Units: mg/Kg (ppm)

Analytes Detected	Project Lab 06153SB	06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
GRO	ND	ND	1.1/1.2	ND	5.0
Percent Solids	87.6	85.2		85.8	

SUMMARY: The project blind duplicate and QA data agree with each other and are comparable.

5. Method: Diesel Range Organics (ADEC 8100 mod.) Units: mg/Kg (ppm)
QA Laboratory: CENPD-PE-GE-L

Analytes Detected	Project Lab 06153SB	06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
DRO	190	43	25/5.2	280	14
Percent Solids	78.9	77.0		80	

SUMMARY: The project blind duplicate and QA data agree within a factor of five to each other except for the data of project sample -06253SB which does not agree within a factor of five to the QA data. Since both laboratories had acceptable internal QC data, the data discrepancy could not be resolved analytically. The project data of sample -06153SB are accepted based agreement with QA laboratory's data.

Total Recoverable
6. Method: Petroleum Hydrocarbons (EPA 418.1) Units: mg/Kg (ppm)
QA Laboratory: ARDL, Inc.

Analytes Detected	Project Lab 06153SB	06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
TRPH	798	4940	13	127	--
Percent Solids	78.9	77.0		85.8	

SUMMARY: The project blind duplicate and QA data do not agree within a factor of five to each other. Since both laboratories had acceptable internal QC data, the data discrepancies could not be resolved analytically. The QA data of TRPH are questionable as up to 280 ppm of DRO was found in the project and QA replicates of Table XXIII-5. The project data are accepted based on blind duplicate agreement.

7. Method: Total Metals (EPA 6010,7000 Series) Units: ug/Kg (ppb)

Analytes Detected	Project Lab 06153SB	06253SB	Detection Limits	QA Lab 06353SB	Detection Limits
Antimony	ND	ND	13	ND	3.5
Beryllium	ND	ND	2.5/2.6	0.99	--
Cadmium	ND	ND	2.5/2.6	ND	0.58
Chromium	13	21	2.5/2.6	18	--
Copper	8.5	8.7	2.5/2.6	9.0	--
Lead	15	16	0.2	13.5	--
Nickel	6.2	10	6.3/6.5	9.5	--
Silver	ND	ND	2.5/2.6	ND	0.58
Thallium	ND	ND	25/26	ND	0.12
Zinc	19	28	6.3/6.5	30.1	--

SUMMARY: The project blind duplicate and QA data agree within a factor of two to each other or their detection limits and are comparable.