

**Post-Remedial Action Letter Report**  
for  
**Site 2, Phase I**

**Naval Weapons Industrial  
Reserve Plant (NWIRP)**

Bethpage, New York



**Northern Division**  
**Naval Facilities Engineering Command**  
**Contract Number N62472-90-D-1298**  
**Contract Task Order 0212**

June 1996

**C F BRAUN ENGINEERING CORPORATION**

# **Post-Remedial Action Letter Report**

for

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# Brown & Root Environmental

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C-49-06-6-054

June 7, 1996  
Project Number 5236

bcc: Dave Brayack

Mr. Steven B. Lehman (Code 4051/SL)  
Northern Division, Mail Stop No. 82  
Naval Facilities Engineering Command  
10 Industrial Highway  
Lester, PA 19113-2090

Reference: CLEAN Contract N62472-90-D-1298  
Contract Task Orders 0212


Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Post-Remedial Action Letter Report

Dear Mr. Lehman:

Enclosed you will find five (5) copies of the Post-Remedial Action Letter Report for Site 2 at the Naval Weapons Industrial Reserve Plant, Bethpage, New York. The report was prepared under CTO 212 of the referenced contract.

Should you have any questions, please call me at 412-921-8916 or Ms. Kelly Smay at 412-921-8750.

Very truly yours,

  
Mark P. Speranza, P.E.  
Project Manager

MPS/dt  
Enclosures (5)

cc: Mr. Roger Boucher, NORTHDIV (w/o enclosures)  
Mr. Jim Colter, NORTHDIV (1 copy)  
Mr. Al Taormina, ROICC, NWIRP (1 copy)  
Mr. John Trepanowski, C.F. Braun (1 copy)  
Mr. Gordon Bullard, C.F. Braun (1 copy)  
Mr. Matthew Soltis, C.F. Braun (w/o enclosures)  
Project File 5236

## TABLE OF CONTENTS

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
<b>1.0 PROJECT DESCRIPTION .....</b>	<b>1-1</b>
1.1 INTRODUCTION .....	1-1
<b>2.0 SUMMARY OF REMEDIAL ACTION.....</b>	<b>2-1</b>
2.1 POST-DESIGN STUDY .....	2-1
2.2 EXCAVATION/DISPOSAL .....	2-1
2.3 BACKFILLING AND COMPACTION.....	2-4
2.3.1 Stockpile Material.....	2-5
2.3.2 Backfilling Operation .....	2-7
<b>3.0 CONFIRMATORY SAMPLING .....</b>	<b>3-1</b>
3.1 FIELD TEST KITS.....	3-1
3.2 FIXED-BASED LABORATORY TESTING.....	3-4
<b>4.0 SUMMARY AND CONCLUSIONS.....</b>	<b>4-1</b>
<b>REFERENCES .....</b>	<b>R-1</b>
<b><u>APPENDICES</u></b>	
<b>A</b>	<b>WEEKLY ACTIVITY REPORTS</b>
<b>B</b>	<b>FIELD LOGBOOK</b>
<b>C</b>	<b>HAZARDOUS WASTE MANIFESTS</b>
<b>D</b>	<b>VOLUME CALCULATIONS</b>
<b>E</b>	<b>CERTIFICATES OF "CLEAN SOIL"</b>
<b>F</b>	<b>COMPACTION AND GEOPHYSICAL TEST RESULTS</b>
<b>G</b>	<b>CHAIN OF CUSTODIES</b>
<b>H</b>	<b>VALIDATED CONFIRMATION SAMPLE ANALYTICAL RESULTS</b>
<b>I</b>	<b>STOCKPILE SAMPLE ANALYTICAL RESULTS</b>
<b>J</b>	<b>BACKFILL MATERIAL DELIVERY TICKETS</b>



**TABLES**

<b><u>NUMBER</u></b>		<b><u>PAGE</u></b>
3-1	Site 2 - Field Test Results .....	3-2
3-2	Site 2 - Fixed-Based Laboratory Confirmatory Results .....	3-5

**FIGURES**

<b><u>NUMBER</u></b>		
1-1	Site Layout Map.....	1-2
2-1	Soil Removal Area .....	2-2
2-2	PCB Concentration Areas of Excavation.....	2-3
2-3	Stock Pile Sampling Location Map .....	2-6
3-1	Site 2, Remedial Action Verification Sampling Location Map.....	3-3

## 1.0 PROJECT DESCRIPTION

### 1.1 INTRODUCTION

C F Braun Engineering Corporation (C F Braun) conducted over site activities as part of the Remedial Design, Phase I, for Sites 1 and 2 at the Naval Weapons Industrial Reserve Plant (NWIRP), located in Bethpage, New York. These activities were performed under the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract No. N62472-90-D-1298, Contract Task Order (CTO) 0212. This Post-Remedial Action Letter Report summarizes the work performed by the Remedial Action Contractor (RAC), as identified in the Remedial Design (C F Braun, 1995b) and subsequent project plans (Foster Wheeler, 1995a).

The Bethpage NWIRP which was established in 1933 is located on Long Island, Nassau County, New York. The NWIRP is a Government-Owned Contractor Operated (GOCO) facility operated by Northrup-Grumman Corporation.

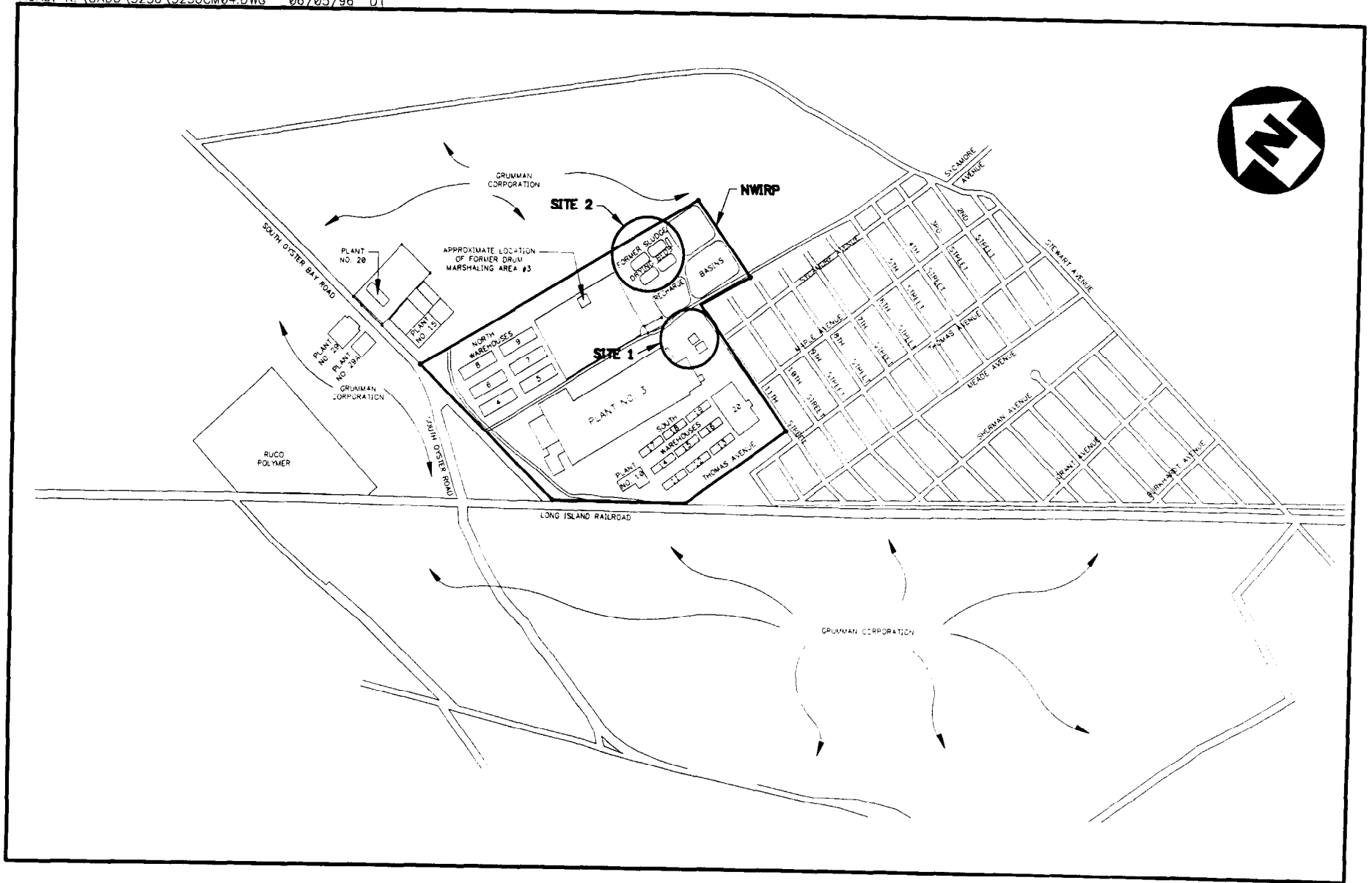
The remedial design prepared by C F Braun was for both Sites 1 and 2. As specified in the design, the RAC was to perform additional investigation activities (Post-Design Study) at both Site 1 and Site 2 to confirm the remediation areas. Upon the completion of this investigation it was determined that adequate information existed to conduct the remediation of Site 2. However, the results for Site 1 indicated that the contamination was more wide spread in the horizontal and vertical directions. Therefore, additional investigation activities were required to completely delineate the areas of contamination. As a result of this additional investigation, the Site 1 remediation has been delayed. This Letter Report will only address activities conducted at Site 2, as shown on Figure 1-1.

The Site 2 - recharge basin area is located in the northeast corner of the Navy's property and north of Site 1. It contains three recharge basins which currently receive non-contact cooling water. Historically, these basins also received rinse waters from Grumman operations. Also located on this site are the former sludge drying beds which no longer exist and have been filled in. Sludge from the Plant 02 industrial waste treatment facility was dewatered in these beds before being disposed of off site.

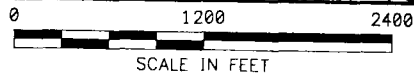
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1-2

CTO 0212



**SITE LAYOUT MAP  
NWIRP, BETHPAGE, NEW YORK**



**FIGURE 1-1**

**C F BRAUN**

## **2.0 SUMMARY OF REMEDIAL ACTION**

Remedial activities were conducted from March 3, 1996 through May 10, 1996 in accordance with the Project Plans submitted by Foster Wheeler. During this period C F Braun recorded the activities performed by the RAC and presented the information in Weekly Reports (week 1 through week 8). Field activities lasted for eight weeks (Weekly Reports are provided in Appendix A). These reports also included the weekly meeting minutes and any pertinent attachments relating to field activities. To assure accurate information pertaining to the project was recorded in a timely fashion, a field log book was kept by the C F Braun over site engineer and was used to prepare the Weekly Reports. A copy of the field logbook is provided in Appendix B.

### **2.1 POST-DESIGN STUDY**

As indicated in the remedial design, an action level of 10 ppm for concentrations of total PCBs in soil was used by Foster Wheeler to identify Site 2 soils requiring excavation and disposal. All soils in excess of 500 ppm of total PCBs, required incineration. The analytical results from 25 soil borings, installed by Foster Wheeler for the Post-Design Study, were used to identify soil containing PCBs that exceed the action level and to define the horizontal and vertical limits of the proposed excavation (Foster Wheeler, 1995a). Figure 2-1 illustrates the excavation plan prepared for Site 2 based on these analytical results. According to the Pre-excavation Sampling Results, Figure 2-2 depicts the soil areas requiring remediation, total PCBs were detected at concentrations greater than 10 ppm at soil depths between 6 feet and 8 feet in the cross-hatched portion of the excavation and at soil depths between the surface layer and 12 feet in the non cross-hatched area. Based on the soil contained within these horizontal and vertical limits, Foster Wheeler estimated that 2016 cubic yards or 3276 tons of soil containing concentrations of total PCBs greater than 10 ppm would be excavated from Site 2 (Foster Wheeler, 1995b).

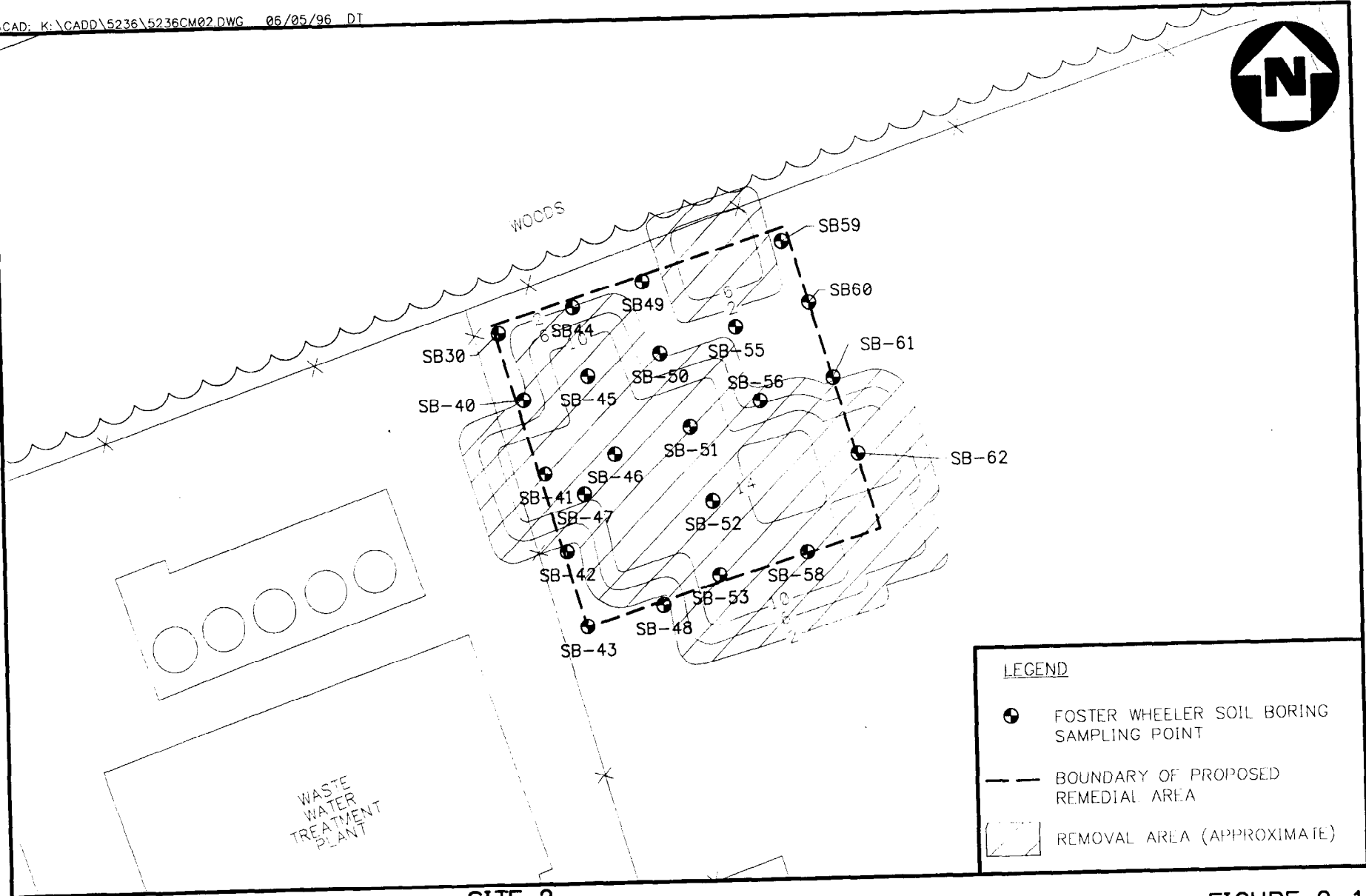
### **2.2 EXCAVATION/DISPOSAL**

Excavation of the PCB-contaminated soil was performed at Site 2 between March 3, 1996 and April 24, 1996. According to field directions given by Foster Wheeler, the top 4-foot layer of soil was excavated from the portion of Site 2 indicated by the cross-hatched section of Figure 2-2. This soil was temporarily stockpiled at Site 2 as Soil Pile A and Soil Pile C, to be used as clean backfill following excavation. The remaining soils excavated from Site 2 were loaded into dump trailers and transported to the railroad transfer station located in Farmingdale, New York, for transfer to rail car and final disposal at the Grayback Mountain hazardous waste landfill located in Clive, Utah. The material was identified as a Solid

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2-2

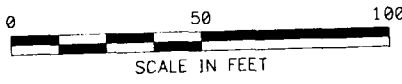
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**SITE 2  
SOIL REMOVAL AREA  
NWIRP, BETHPAGE, NEW YORK**

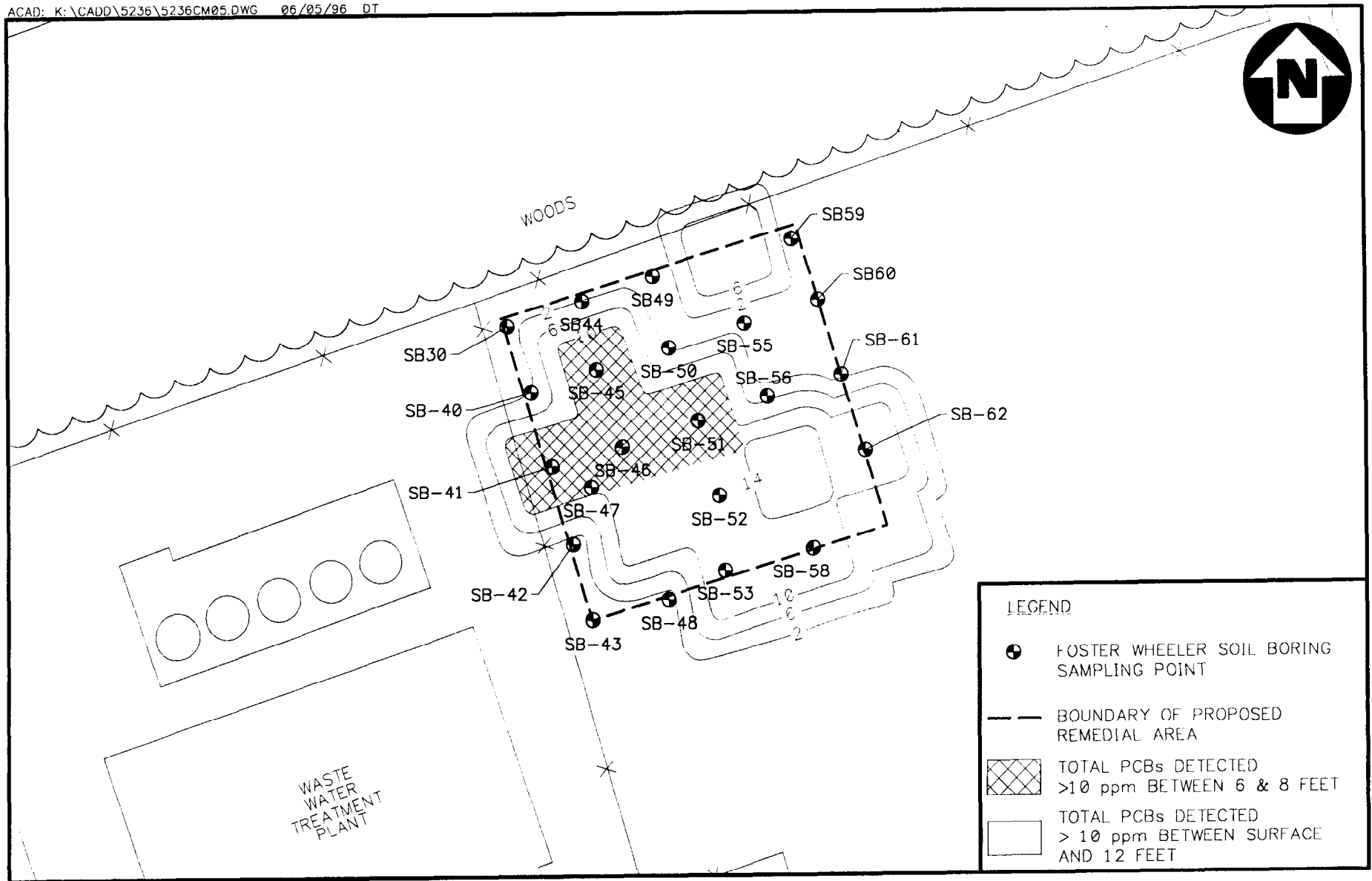
**FIGURE 2-1**

**C F BRAUN**

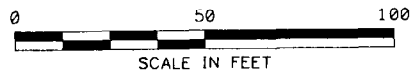


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2-3



**SITE 2**  
**PCB CONCENTRATION AREAS OF EXCAVATION**  
**NWIRP, BETHPAGE, NEW YORK**



**FIGURE 2-2**

**C F BRAUN**

CTO 0212

Environmentally Hazardous Substance (N.O.S. 9, UN 3077, PG III, PCB, Marine Pollutant) and required manifests for transport and disposal. These manifests were prepared by Foster Wheeler and copies are available for review in the REICC office as identified in Appendix C.

Transport of the PCB-contaminated soil from Site 2 to the Utah disposal facility, construction and operation of the Farmingdale railroad transfer station, and railcar scheduling were directed by Laidlaw Environmental Corporation through a subcontract agreement with Foster Wheeler.

During excavation, a portion of the clean 4-foot layer of surface soil from the cross-hatched section of Site 2, was accidentally mixed with PCB-contaminated soil scraped from the underlying contaminated layer. This PCB-contaminated soil was temporarily stockpiled separately at Site 2 for delivery to the railyard and the Utah disposal facility.

A total of 7,239 tons of soil was transported to the Laidlaw facility for disposal. This included 178 drums of soil cuttings from Site 1. Cross sectional drawings of the excavated area for volume calculations were developed by Foster Wheeler and C F Braun also ran volume calculations as provided in Appendix D. The volume of excavated area was calculated to be 7,121 tons.

A decontamination pad which measured 14' X 25' X 2' deep was constructed to collect the water used to wash down the vehicles exiting the exclusion zone of Site 2. The base of the decontamination pad was equipped with a four inch layer of sand covered by a 40 mil liner. The liner was then covered by 4 inches of sand and then a layer of stone. A sump pump was located in the downgradient corner of the pad which discharge into 55-gallon drums for decontamination water collection. The decon water was mixed with PCB contaminated soil at Site 2 and transported to the Laidlaw facility for transport and disposal.

### **2.3 BACKFILLING AND COMPACTION**

Backfilling activities for Site 2 began on April 30, 1996 and was completed on May 10, 1996. Clean soil Pile A and Pile C temporarily stockpiled at Site 2 were returned to the excavated area and compacted. Also, clean backfill was delivered to Site 2 from an offsite supplier. Soil from Stockpile B was not used for fill because the source of the soil was not well documented. The quantities and classifications of the delivered backfill are included in the weekly reports contained in Appendix A. Certificates of "clean soil" from the backfill supplier are included in Appendix E.

The backfill was spread across the excavated area in approximately 1-foot to 2-foot lifts, and compacted by a vibratory roller. A Troxler nuclear density meter was used during backfilling operations to assure that

a minimum compaction of 95% was achieved. Compaction and geophysical test results are included in Appendix F.

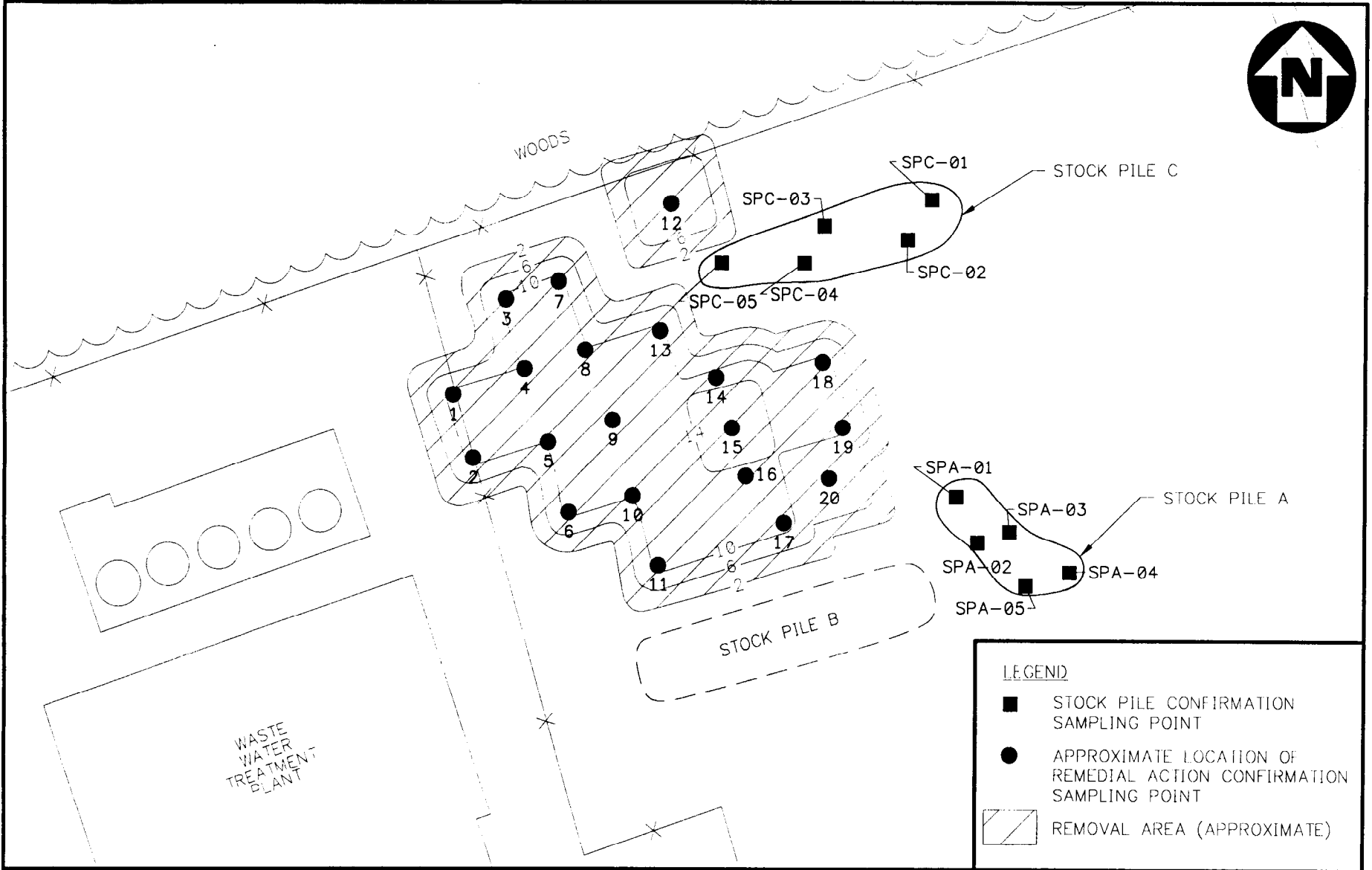
### 2.3.1 Stockpile Material

The material placed in stockpiles identified as A and C were tested by C F Braun to verify they did not contain PCBs at concentrations that exceeded 10 ppm. A five part composite sample was collected from each pile and submitted for analysis. The location where the samples were collected is shown on Figure 2-3. The results of the analysis on the composite sample for Stockpile A was 4.7 ppm total PCBs and Stockpile C was 6.0 ppm. These results were in the range where dilution due to compositing could result in a false negative value for one of the individual sample, therefore, each sample was analyzed separately and the results of the analyses are as follows:

<u>Stockpile</u>	<u>Sample Identification</u>	<u>Total PCB Concentration</u>
A	SPA-01	6.50 ppm
A	SPA-02	3.50 ppm
A	SPA-03	4.20 ppm
A	SPA-04	2.70 ppm
A	SPA-05	2.80 ppm
C	SPC-01	4.40 ppm
C	SPC-02	4.70 ppm
C	SPC-02FD	5.00 ppm
C	SPC-03	4.80 ppm
C	SPC-04	3.50 ppm
C	SPC-05	5.50 ppm

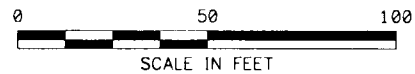
The results indicated that both stockpiles were applicable for use as backfill. A copy of the laboratory submittal is provided in Appendix I.





**SITE 2**  
**STOCK PILE SAMPLING LOCATION MAP**  
**NWIRP, BETHPAGE, NEW YORK**

**FIGURE 2-3**



**C F BRAUN**

### **2.3.2 Backfilling Operation**

Backfill material included stockpiles A and C and material from an off site source. The offsite material was from American Materials Inc. located in Kings Park, New York. The approximate amount of offsite material provided was the following:

Screened Sand:	2,440 tons
Bankrun:	787 tons
Process Fill:	2,500 tons

A copy of the offsite backfill material delivery tickets are provided in Appendix J. The material was placed in 1 to 2 foot lifts and compacted with a vibrating roller. Soil compaction testing was performed by Materials Testing Lab Inc. under a subcontract to Foster Wheeler. The results of the testing is provided in Appendix F.

### **3.0 CONFIRMATORY SAMPLING**

Analytical results generated by field test kits and a fixed-based laboratory were used at Site 2 to confirm that soil containing total PCBs at concentrations greater than 10 ppm had been excavated from within the horizontal and vertical limits established by Foster Wheeler. Samples were collected along the base of the excavated area according to the Remedial Action Verification Field Sampling and Analysis Plan prepared by Foster Wheeler and C F Braun (C F Braun, 1995a).

#### **3.1 FIELD TEST KITS**

Preliminary field screening of the excavated portions of Site 2 was performed by a Foster Wheeler field team using an OHMICRON RAPID Assay kit for total PCBs. Following excavation of a portion of Site 2 to the predetermined horizontal and vertical limits, field test samples were collected at the base of the excavation according to the C F Braun Sampling Plan (C F Braun, 1995a). In general, the field test kits correlated well with the analytical results generated from soil samples delivered to the fixed-based laboratory. At soil sample locations where the field test kit analytical results were below the 10 ppm action level for concentrations of total PCBs, excavation was stopped and a soil sample was collected by a C F Braun field representative for analysis by a fixed-based laboratory. At soil sample locations where field test kit analytical results exceeded the 10 ppm action level for concentrations of total PCBs, the area containing the sample location was re-excavated and then resampled using the field test kit. This procedure was repeated until the field test kit analytical result at that particular sample location was below the 10 ppm action level. Table 3-1 summarizes the field test results generated by the field test kit. Figure 3-1 shows the locations of the samples.

Additional removal was conducted based on the RAC field kit analysis at three locations.

- Soil sample locations 1 and 7 were re-excavated on 4/10/96 because the initial field test samples collected at these 2 locations exceeded the 10 ppm action level for total PCBs. The re-excavated soil volume was approximately 10 feet by 10 feet by 2 feet in each area.
- Soil sample location 1 was re-excavated a second time on 4/12/96 because the field test sample collected at that location exceeded the 10 ppm action level for concentrations of total PCBs. The re-excavated soil volume was approximately 10 feet by 10 feet by 2 feet. Locations 1 through 8 were resampled a second time and analyzed by the field test kits to

**TABLE 3-1**

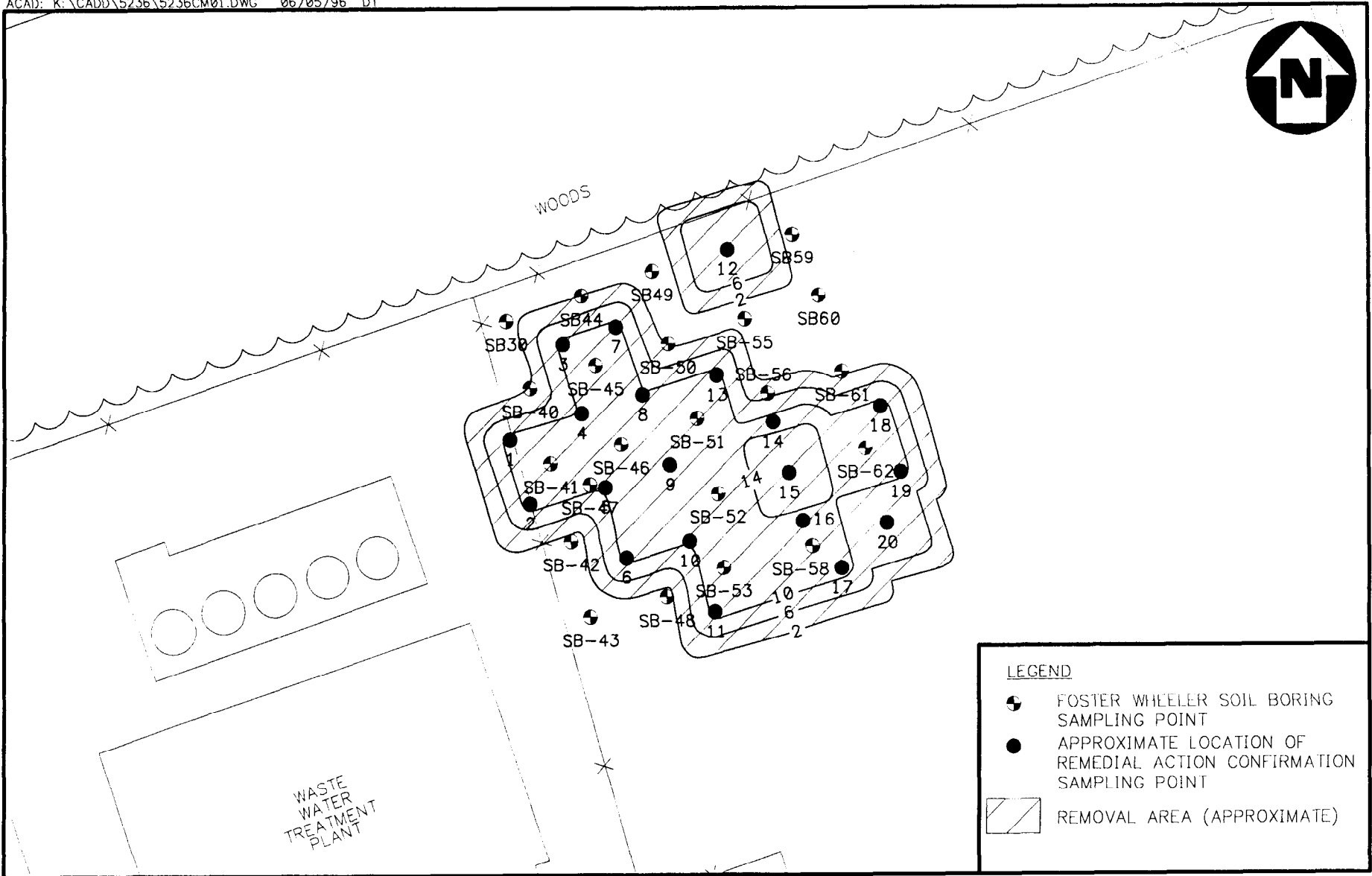
**SITE 2 - FIELD TEST RESULTS  
NWIRP, BETHPAGE, NEW YORK**

<b>Sample Date</b>	<b>Sample Location</b>	<b>Analytical Result</b>	<b>Notes</b>
4/9/96	1	13.8 ppm	Re-excavated, Resampled
4/9/96	2	Non-detect	
4/9/96	3	3.7 ppm	
4/9/96	4	1.9 ppm	
4/9/96	5	2.9 ppm	
4/9/96	6	Non-detect	
4/9/96	7	20.8 ppm	Re-excavated, Resampled
4/9/96	8	3.0 ppm	
4/9/96	12	Non-detect	
4/12/96	1	17.8 ppm	Re-excavated, Resampled
4/12/96	2	Non-detect	
4/12/96	3	5.2 ppm	
4/12/96	4	6.8 ppm	
4/12/96	5	1.8 ppm	
4/12/96	6	1.0 ppm	
4/12/96	7	5.9 ppm	
4/12/96	8	4.9 ppm	
4/12/96	13	4.5 ppm	
4/12/96	1	Non-detect	
4/19/96	9	2.8 ppm	
4/19/96	10	3.1 ppm	
4/19/96	11	1.5 ppm	
4/19/96	14	2.5 ppm	
4/19/96	15	2.1 ppm	
4/19/96	16	3.6 ppm	
4/19/96	17	4.3 ppm	
4/19/96	18	2.0 ppm	
4/19/96	19	13.5 ppm	Re-excavated, Resampled
4/19/96	20	2.7 ppm	
4/22/96	13	7.0 ppm	
4/22/96	19	3.2 ppm	

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3-3

CTO 0212



**SITE 2**  
**REMEDIAL ACTION VERIFICATION SAMPLING LOCATION MAP**  
**NWIRP, BETHPAGE, NY**

**FIGURE 3-1**

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verify that construction equipment used to re-excavated location 1 did not recontaminate excavated areas at these other sample locations.

- Soil sample location 19 was re-excavated on 4/22/96 because the initial field test sample collected at that locations exceeded the 10 ppm action level for concentrations of total PCBs. The re-excavated soil volume was approximately 10 feet by 10 feet by 2 feet.

### **3.2 FIXED-BASED LABORATORY TESTING**

Confirmatory soil sampling costs were minimized at Site 2 by limiting fixed-based laboratory analysis to soil samples collected in areas of the excavation that had been "prescreened" using the field test kits for concentrations of total PCBs. Confirmatory soil samples were collected by a C F Braun field representative from the base of the excavation according to the approved Field Sampling Plan (C F Braun 1995a). After collecting the appropriate sample, the field representative filled out a Chain of Custody (COC) form and packaged the samples in a cooler. The confirmatory soil samples were delivered via Federal Express to Quanterra Laboratories, Pittsburgh, Pennsylvania for 7-day turnaround analysis for PCBs. A copy of the COCs are provided in Appendix G. At soil sample locations where the analytical results for the confirmatory samples were below the 10 ppm action level for PCBs, that portion of the excavated area was covered by a plastic liner until backfill was applied and compacted. At sample point S2-A-13 a result of 19.0 ppm AROCLOR-1248 was obtained on 4/22/96 which exceeded the action level of 10 ppm PCBs, therefore, the RAC excavated an area 10 foot by 10 foot by 2 feet deep in the area of the sample point. The area was resampled and identified as S2-A-13R. The results of the analysis indicated the sample was below the action level with a value of 4.9 PCBs. All other sample results were below the 10 ppm action level.

Table 3-2 summarizes the analytical results of the fixed-based laboratory soil samples collected from the base of the excavated area at Site 2. Figure 3-1 shows the locations of the samples.

The results of the analysis performed by Quanterra was validated by C F Braun and a copy of the validation letter containing the formal laboratory submission is provided in Appendix H.

**TABLE 3-2**

**SITE 2 - FIXED-BASED LABORATORY CONFIRMATORY RESULTS  
NWIRP, BETHPAGE, NEW YORK**

<b>Date Sampled</b>	<b>Sample ID</b>	<b>Sample Location</b>	<b>Total PCB Concentration<sup>(1)</sup></b>
4/12/96	S2-A-01	1	1.00 ppm
4/12/96	S2-A-02	2	0.17 ppm
4/12/96	S2-A-03	3	6.70 ppm
4/12/96	S2-A-04	4	3.00 ppm
4/12/96	S2-A-05	5	1.10 ppm
4/12/96	S2-A-06	6	0.19 ppm
4/12/96	S2-A-07	7	8.60 ppm
4/12/96	S2-A-08	8	4.10 ppm
4/12/96	S2-A-12	12	0.11 ppm
4/12/96	S2-A-13	13	19.00 ppm
4/12/96	S2-A-29	Duplicate of S2-A-03	5.60 ppm
4/22/96	S2-A-13R	13 (after additional removal)	4.90 ppm
4/22/96	S2-A-09	9	4.00 ppm
4/22/96	S2-A-10	10	1.40 ppm
4/22/96	S2-A-11	11	< 0.03 ppm
4/22/96	S2-A-14	14	1.80 ppm
4/22/96	S2-A-15	15	0.69 ppm
4/22/96	S2-A-16	16	5.5 ppm
4/22/96	S2-A-17	17	2.3 ppm
4/22/96	S2-A-18	18	0.68 ppm
4/22/96	S2-A-19	19	1.40 ppm
4/22/96	S2-A-20	20	2.40 ppm
4/22/96	S2-A-30	Duplicate of S2-A-16	6.70 ppm

(1) The only PCB detected was AROCLOR-1248, all other PCBs were non-detects.

## 4.0 SUMMARY AND CONCLUSIONS

The RAC performed remedial action activities for Site 2 at NWIRP. The purpose of the remedial action was to remove PCB contaminated soil that had concentrations in excess of 10 ppm. Work commenced on March 3, 1996 and was completed on May 10, 1996.

During the remedial action, a total of 7,239 tons of PCB contaminated soil was excavated and disposed of at the Grayback Mountain hazardous waste landfill located in Clive, Utah. Removal of all PCBs at concentrations in excess of 10 ppm were verified through field test kits and fixed based laboratory analysis

Following excavation, sample locations from the approved Sampling and Analysis Plan were sampled by RAC personnel. These samples were analyzed using an OHMICRON RAPID Assay kit for total PCBs. If the total PCB concentration was below 10 ppm, then C F Braun personnel collected samples for fixed based laboratory analysis. If the test kit or the fixed based laboratory analysis indicated that PCB concentrations exceeded 10 ppm, then additional soil was removed and the location was resampled. This procedure was repeated until all PCB contamination in excess of 10 ppm was removed from Site 2.

Based on the remedial action and the confirmation sampling it can be concluded that all PCB contamination in excess of 10 ppm was removed from Site 2 and disposed of properly.



## REFERENCES

C F Braun Engineering Corporation, 1995a. Remedial Action Verification Field Sampling and Analysis Plan for Sites 1 and 2, Phase I, Naval Weapons Industrial Reserve Plant. December 1995.

C F Braun Engineering Corporation, 1995b. Final Submission for Remedial Design, Sites 1 and 2, Phase I, Naval Weapons Industrial Reserve Plant. June 1995.

Foster Wheeler Environmental Corporation, 1995a. Forwarding of Pre-excavation Sampling Results. December 11, 1995.

Foster Wheeler Environmental Corporation, 1995b. Project Plans; October 12, 1995b.

**APPENDIX A**

**WEEKLY ACTIVITY REPORTS**

# C F Braun

**Weekly Progress Report - Week 1**  
**3/19/96 to 3/22/96**  
**CTO 212 - Site 2 Remediation**  
**NWIRP Bethpage, NY**  
**Prepared by: Craig Farkos**

The following activities occurred during Week 1:

**Tuesday 3/19/96:**

- \* Michael Snyder arrives at Site 2 as a C.F. Braun representative for construction oversight.
- \* The RAC, Foster Wheeler Corporation, clears and grubs Site 2 in preparation for excavation.
- \* The horizontal limits of excavation at Site 2 are established by the construction crew based on analytical results from 25 soil samples collected by Foster Wheeler prior to excavation (Foster Wheeler, 1995)(Figure 1 enclosed).
- \* The construction crew removes the top 1 foot to 2 foot layer of clean soil from the northwest section of Site 2 identified using the analytical results from the pre-excitation soil samples. This clean soil is stockpiled at Site 2 in the area of soil sample SB54 and in the area of soil sample SB63.

**Wednesday 3/20/96:**

- \* Craig Farkos arrives at Site 2 as a C.F. Braun representative for construction oversight.
- \* C. Farkos and M. Snyder meet with Bob Ingram and Al Taormina of the Navy to review site operations.
- \* Items covered during the meeting included:
  - William Dolhancay of Foster Wheeler will issue daily construction reports to the REICC office. Each of these reports will be routed to the C.F. Braun representative for review and written comment prior to final delivery to the Navy REICC.
  - B. Ingram and A. Taormina note that they are looking to C.F. Braun representatives to provide oversight services and manifest handling and to keep the Navy REICC office informed as to site developments and construction plans.
  - C. Farkos informs B. Ingram and A. Taormina that 7-day turnaround on confirmatory soil samples may be improved by taking half the confirmatory samples on half the excavated site while the other half of the site is beginning to be excavated. B. Ingram and A. Taormina suggest that C. Farkos look into potential cost increases related to performing 2-day sample analysis turnaround on confirmatory samples collected from each of the excavated halves of Site 2.
- \* B. Dolhancay informs C.F. Braun representatives that some of the surface excavation extended beyond the clean surface layer. Consequently, the 2 soil stockpiles have been declared to be contaminated with some concentrations of PCB's. These 2 piles were covered by plastic sheeting and were kept separate from any additional clean surface soil excavated from the site.

**Thursday 3/21/96:**

- \* Foster Wheeler project manager for Site 2 remediation, Howard Lazarus, arrives at the site.
- \* C Farkos and M. Snyder provide H. Lazarus with a copy of the C.F.Braun excavation design documents and specifications.
- \* C. Farkos, M. Snyder, B. Ingram, B. Dolhancay, H. Lazarus meet at REICC office to review construction plans.

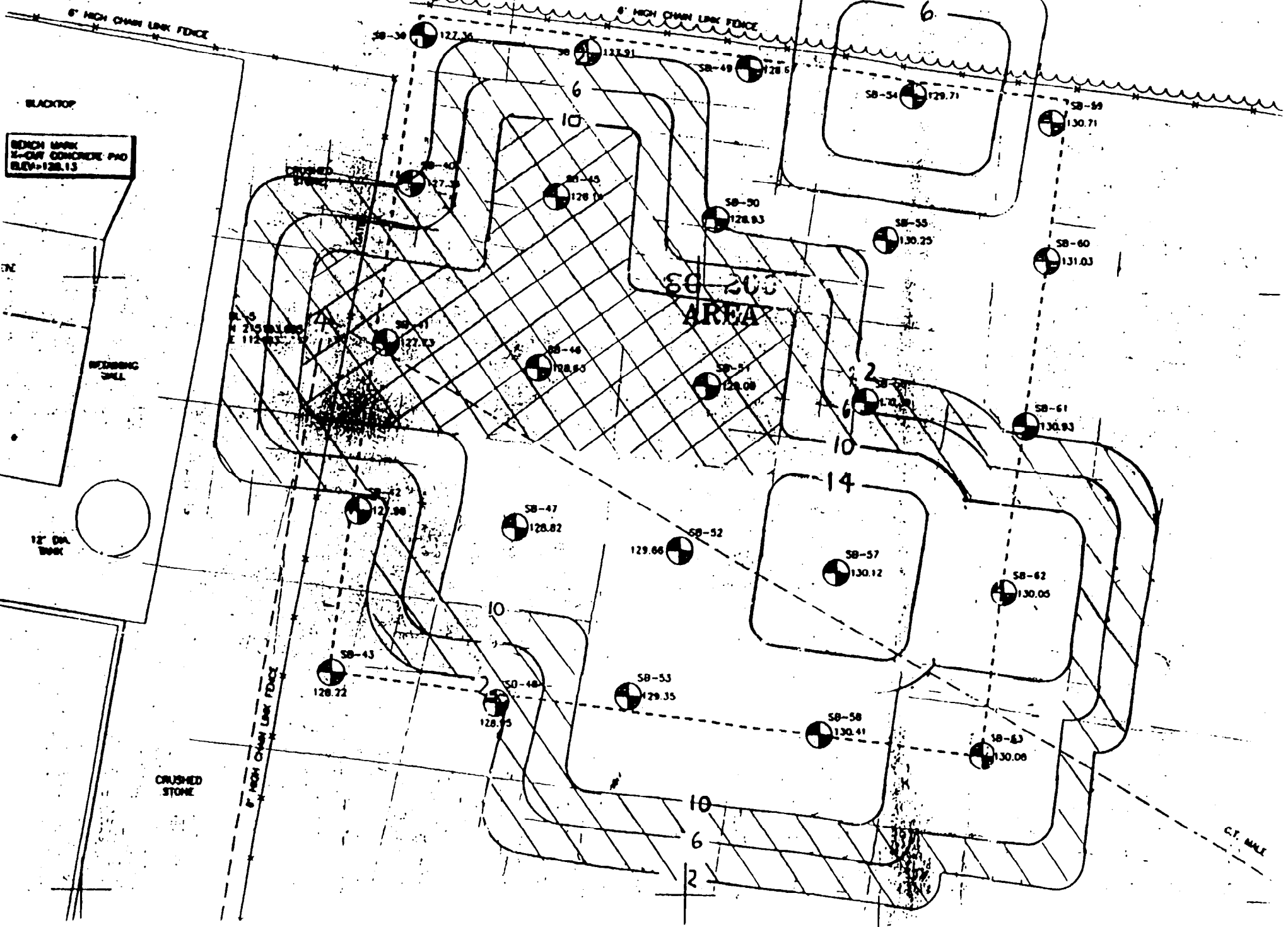
Also, David Ardito, project manager for Laidlaw Corporation, joins the meeting through teleconference call.

- \* The construction crew continues to remove the clean surface soil layers from the Site 2. Also, the construction crew stockpiles all site debris at the northwest corner.

**Friday 3/22/96:**

- \* The materials for construction of the decontamination pad are delivered to Site 2. The decontamination pad is constructed as a 14 foot by 25 foot by 2 foot deep pit. The base of the pit is covered by a 4-inch layer of sand. The sand layer is then covered by a 40 mil liner. The liner is covered by another 4-inch sand layer which is then covered by a layer of stone. A water collection sump and sump pump are located in the lower corner of the pad.
- \* Ten empty 55-gallon drums are delivered to the site and will be used to contain the decontamination water.
- \* C. Farkos and M. Snyder visit the railroad yard to inspect the unloading ramp. The ramp is constructed of steel beams with a railroad-tie decking. A worker informs the two that an empty truck was driven up the ramp yesterday without incident.

WOODS HOLE



# C F Braun

**Weekly Progress Meeting - Week 1  
March 21, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY**

**List of Attendees:**

Craig Farkos	C.F. Braun
Mike Snyder	C.F. Braun
Bob Ingram	Navy
Bill Dolhancay	Foster Wheeler
Howard Lazarus	Foster Wheeler
David Ardito	Laidlaw Corp. (through teleconference)

**Meeting Minutes:**

- \* Items reviewed in the meeting include:
  - D. Ardito faxed a copy of the proposed PCB-contaminated-soil shipping manifest and step-by-step manifest signing and copy distribution instructions to the meeting group (Attachment 1). D. Ardito assures B. Ingram that signed copies of the manifest will be provided to the REICC office after each of the loaded trucks has been weighed at the site. The loaded truck will not leave the site until these signed copies have been given to the REICC office. The REICC office will also be given photocopies of the manifest signed by railroad transporter following transfer of the PCB contaminated soils to the railroad cars. Finally, copies of the manifests signed by the landfill operator will be delivered to the REICC after the soil has been received at the Utah landfill. D. Ardito notes that the truck dump site at the railyard will be manned by a Laidlaw representative, Phillip Embrescia, and that protective plastic sheeting will be used at the railyard to collect any spilled soil.
  - B. Ingram, M. Snyder and C. Farkos question H. Lazarus regarding construction of an equipment decontamination pad at Site 2. H. Lazarus informs the group that he is initially inclined to not construct a pad at the site. H. Lazarus notes that no decontamination pad was requested by the Navy personnel who attended the initial site visit in the fall of 1995. M. Snyder notes that a pad will be required to clean the excavation equipment at the end of the job. C. Farkos notes that decontamination operations were mentioned several times in the Foster-Wheeler Work Plan for Site 2. B. Ingram notes the potential for community complaints if soil is tracked onto public roadways. For these reasons, H. Lazarus agrees to construct a decontamination pad at Site 2 for excavation equipment cleaning and dump truck cleaning.
  - B. Ingram notes that a progress meeting will be held at 10:30, on Thursday of each week that the Site 2 project continues. C. Farkos agrees to prepare a report of the meeting minutes for distribution to all represented groups.
  - B. Dolhancay notes that excavation is tentatively scheduled to begin on Monday, March 25th. Approximately 2000 cubic yards of soil will be excavated and removed from Site 2 during this remediation. Four dump trucks, each with a 23 cubic yard capacity will be used on a daily delivery rotation between Site 2 and the railroad yard. B. Dolhancay estimates that each of the 4 trucks will make 5 round trips each day. The clean trucks will arrive at the site on the first day. The wheels will be decontaminated prior to leaving the site on each delivery. The empty truck bed will be sealed at the railroad yard after each load dump. The truck beds will not be completely decontaminated at the site. Laidlaw is responsible for completely decontaminating the truck beds following the final delivery of PCB-contaminated soil from the Site 2. Five railroad cars shall be filled per day.

To: Bill Dolhancey @ Foster Wheeler  
cc: Al Taormina @ US Navy  
From: David A. Ard/LES  
Date: 03/20/96 05:34:28 PM  
Subject: Transportation Steps

*The following are the steps Laidlaw Environmental Services, Inc. will follow to properly manifest and transport waste materials from the US Navy Site in Bethpage, NY to Laidlaw's Grassy Mountain Facility in Clive, UT.:*

**Trucks will be dispatched by Laidlaw to the loading site.**  
*Foster Wheeler will load contaminated soils in each truck not exceeding 24 tons.*  
**The trucks will go to the Grumman scale house to be weighed.**  
*If the weight is acceptable, pounds are converted to kilograms.*  
**That figure is placed on the manifest in Section G.**  
*A Navy representative will sign the manifest as well as the Laidlaw driver.*  
**Three parts of the manifest are left with the Navy Representative.**  
*The driver delivers the soil to the transloading site in Farmingdale, NY.*  
**The LIRR signs the manifest after dumping and retains a copy.**  
*Copies of the original manifest are made by Laidlaw's Project Manager.*  
**These copies are for Navy, Foster Wheeler and loaded railcar.**  
*The railcar is tarped and ready for pickup by LIRR.*

*A discussion to further describe this process will occur on 3/21/96 at 1:30 PM EST as well as the first day of loading, 3/25/96.*

**Due Date:**  
**Attention Priority:** Normal



STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF HAZARDOUS SUBSTANCES REGULATION  
**HAZARDOUS WASTE MANIFEST**

P.O. Box 12820, Albany, New York 12212

Form Approved OMB No. 2050-0038. Expiration Date 12/31/90

Please print or type. Do not Staple.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>NYD 002047967</b>	Manifest Document No.	2. Page 1 of <b>3</b>	Information in the state is not required by F
3. Generator Name and Mailing Address <b>MAILSTOP A-41-03, RWIRP NAVY PLANT 3 GRUMMAN AEROSPACE CORP., BETHPAGE, NY 11714-3593</b>		U.S. NAVY-REICC-BETHPAGE		State Manifest Document No. <b>NY B729128</b>	
4. Generator's Phone ( <b>516</b> ) <b>575-2121</b>		6. US EPA ID Number <b>QHD 068913409</b>		C. State Transporter's ID <b>QHD-01</b>	
5. Transporter 1 (Company Name) <b>Wills Trucking</b>		8. US EPA ID Number <b>NYD 980641625</b>		D. Transporter's Phone <b>800-321-3</b>	
7. Transporter 2 (Company Name) <b>Long Island Railroad</b>		10. US EPA ID Number <b>UTD 991130174</b>		E. State Transporter's ID <b>N/A</b>	
8. Designated Facility Name and Site Address <b>US Pollution Control, Grayback Mountain Facility 3 Mi. East 7 Mi North of Knolls Exit 41 off I80 Clive, UT 84029</b>		10. US EPA ID Number <b>UTD 991130174</b>		F. Facility's Phone <b>801-322-8500</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity	
a. <b>RD, Environmentally Hazardous Substances, Solid, N.O.S. 9, UN 3077, PG III (PCB) (Marine Pollutant)</b>		No. Type		Unit	
b. <b>23.75 tons lbs 20,800 kg</b> <i>95 ton/PCB car</i> <i>23 - 23 tons/drum x .454 = kg</i>		0 0 1 D T		K	
c. <b>Refine 3,48</b>					
d.					
J. Additional Descriptions for Materials listed Above <b>8895-0010</b>		K. Handling Codes for Wastes List			
a.		a.			
b.		b.			
15. Special Handling Instructions and Additional Information <b>Emergency Contact Number - Al Taormina 516-575-2121</b> <b>Out of Service Date _____</b> <b>Railcar # _____</b>					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignor ( ) are fully and accurately described above by proper shipping name ( ) are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national or ment regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined ( ) e nomically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to h health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method the available to me and that I can afford.					
Printed/Typed Name		Signature		Mo. Day	
17. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name		Signature		Mo. Day	
18. Transporter 2 (Acknowledgement or Receipt of Materials)					
Printed/Typed Name		Signature		Mo. Day	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name		Signature		Mo. Day	

In case of emergency or spill immediately call the National Response Center (800) 424-9802 and the N.Y. Dept. of Environmental Conservation (516) 457-7382.



# C F Braun Engineering Corporation

Foster Plaza VII  
661 Andersen Drive  
Pittsburgh, PA 15220-2745

(412) 921-7090  
FAX: (412) 921-4040

C-49-04-6-040

April 6, 1996

Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

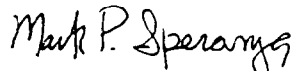
Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 2

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 2. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,



Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy REICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. David Ardito, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
Mr. Craig Farkos, C.F. Braun  
File 5236

# C F Braun

Weekly Progress Report - Week 2  
3/25/96 to 3/29/96  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY  
Prepared by: Craig Farkos

The following activities occurred during Week 2:

Monday 3/25/96:

- \* Excavation and shipping of PCB-contaminated soil to the Laidlaw facility at 1600 Highland Ave (railroad yard) begins today. Four 18-wheel trucks (app. 23 ton capacity) supplied by Wills Trucking Inc are making the soil shipments. Each truck is weighed empty, filled, then reweighed full. Each truck then leaves the site.
- \* David Ardito of Laidlaw arrives in Bethpage to direct soil transfer activities at the railyard. He reviews manifest handling procedures with A. Taoramina and B. Ingram. The ROICC office retains copies 3,4 and 8 after filling in the shipping weight, manifest document number, and signing. Another photocopy with the railyard director's signature will be furnished to the ROICC office after the soil has been transferred into the railroad car.

The following truck identifications are being used:

<u>Truck Cab No</u>	<u>Trailer Body No.</u>	<u>Weight Ticket Code No.</u>
138	439	88
132	489	94
82	446	91
78	346	92

- \* Excavation being performed at northwest corner. Also stockpiled PCB-contaminated soil being removed from this northwest corner. Each truck has its wheels sprayedcleaned on the decon pad prior to leaving the site.
- \* C. Farkos and B. Ingram visit the Laidlaw dumpsite at the railroad yard. Upon arriving at the site we see P. Embruccia shoveling PCB-contaminated soil from under the ramp into a front end loader bucket. Approximately 2 cubic yards of soil had been spilled from the dump truck onto the ground. No PPE is being worn by P. Embruccia or the other two laborers working with the soil. When asked by B. Ingram, the 2 laborers note they are not aware that the soil was contaminated with PCBs. D. Ardito acknowledges that the men should be wearing PPE but that the shipment had not yet arrived. D. Ardito is also advised that the bucket of the front end loader would have to be decontaminated. Also, all spilled soil would have to be placed into the rail car before the end of the day. Rail cars are covered by tarp at the end of the day.
- \* M. Snyder finishes project oversight duties today and returns to Wayne, PA office.
- \* No daily reports have been submitted by Foster Wheeler to date.

## Tuesday 3/26/96

- \* Soil excavation continues in the northwestern section of Site 2 in the area of sample SB41. PCB-contaminated soil stockpiled under the plastic sheeting in the northwest portion of Site 2 is being removed from the site. An additional stockpile of PCB-contaminated soil is covered by plastic sheeting in the southeastern portion of Site 2. Dust at Site 2 is being controlled using water sprayed from a garden hose and nozzle.
- \* All workers at the railroad yard are now wearing appropriate PPE. According to B. Dolhancey, the two laborers and P. Embroccia do not have 40-hour health & safety certificates on file with the Foster-Wheeler H& S office. B. Dolhancey notes that a spill report was not required for the soil deposited under the truck ramp on 3/25/96 because this soil was captured on plastic sheeting and transferred to the railroad car.
- \* Foster Wheeler assigns a worker to full-time duty operating the scale house.
- \* C. Farkos questions the Foster Wheeler H & S manager regarding the work plan for air monitoring. According to the FW Work Plan, three air monitoring stations are to be located at Site 2. The H & S manager notes that she had issued a letter informing the Navy that the monitoring stations would be replaced by 1 hand-held monitor operated at Site 2 by the H & S manager. A copy of the letter is enclosed.

## Wednesday 3/27/96

- \* PCB contaminated soil stockpiled in the southeast corner of the site since 3/20/96 is being loaded into the trucks and transferred to the railyard. Based on weight tickets, a total of 134 tons of soil has been moved from this pile.
- \* David Evans and John Barnes of the New York State Department of Environmental Conservation arrive at the Site 2 with A. Taoramina. They observe site activities including excavation, truck loading, and truck decontamination. The wind and sun had evaporated much of the moisture contained in the soil during the morning. A cloud of dust was created by one of the trucks entering Site 2, and this cloud moved in the direction of the houses adjacent to Site 1. The water truck that had been delivered to the site earlier in the morning was filled with Grumman well water from a hydrant located near the water treatment plant, and this water was sprayed over the Site 2 work area. A. Taoramina was to determine if this water was potable or not.
- \* C. Farkos visits the railyard and notes that the two laborers previously working on the dump ramp are now working with the uncontaminated rail cars. According to D. Ardito, the Laidlaw laborer working on the dump ramp has received 40-hour health & safety training. Some soil has fallen below the ramp onto the protective plastic. The following procedure is used to unload each truck:
  1. Front loader goes to top of the ramp and uses a chain to raise the catch shute off the railcar.
  2. Wooden stakes are wedged into the shute guide tracks to hold the shute in a raised position.
  3. Front loader travels down the ramp and is chained to the railcars so that an empty area in the railcar is positioned under the shute.
  4. Front loader goes to top of the ramp and raises shute while wedges are removed from the guide tracks. Shute is lowered onto railcar sidewall.
  5. Truck drives up the ramp and dumps the soil. Worker shovels soil off of shute rim into railcar.
  6. Process begins over again.

The total elapsed time for the procedure to be completed is 35 to 40 minutes.

It is estimated that the trucks spend approximately 30 minutes between entering the base and leaving with a full load. It then takes 60 to 90 minutes before the truck returns for another base operation.

#### Thursday 3/28/96

- \* Weekly meeting held at the ROICC office. (See Meeting Minutes - Week 2)
- \* C. Farkos reviews extent of excavation to this time at Site 2:

<u>Date</u>	<u>Total soil removed</u>	<u>Total number of runs</u>	<u>Begin time of runs</u>	<u>End time of runs</u>
3/25/96	139 tons	7	10:00	2:33PM
3/26/96	360 tons	18	8:17	4:11PM
3/27/96	301 tons	12	8:11	3:31PM

This data was collected from the weight tickets attached to the shipping manifests. According to the 3/27/96 data, 134 tons of the 301 total shipped was from the stockpile of PCB-contaminated soil located in the southeast corner of Site 2. It is estimated by C. Farkos that the stockpile of PCB-contaminated soil removed on 3/25/96 and 3/26/96 from the northwest corner of Site 2 contained a similar soil volume.

- \* B. Dolhancey gives daily Site 2 activity reports for the period between 3/18/96 and 3/27/96 to C. Farkos for review. C. Farkos to return copies to the Navy on 4/1/96.
- \* A. Taoramina varified water being used for dust supression is potable.

#### Friday 3/29/96

- \* C. Farkos goes to railroad yard at 7:15 AM to review dumping procedure. Three trucks departed Site 2 at 7:00 AM. Trucks arrive at railyard at 7:38 AM. P. Embrescia has site prepared for first unload at 8:00 AM. All three trucks unloaded by 8:15 AM. Truck 4 arrives at 8:40 AM. Truck 4 was delayed at Site 2 due to load readjustment. C. Farkos meets Larry Walker at railyard. He will be assisting with truck unloading documentation. Workers present at railyard include L. Walker, P. Embrescia and the two laborers seen by C. Farkos and B. Ingram on 3/25/96. All workers are wearing proper PPE. G. Jones and S. Myerson are not at the railyard.
- \* Heavy morning snows are making driving difficult. Snow ends at 1:00 PM.
- \* One Wills truck breaks its hydraulic line at the railyard. Soil load cannot be dumped. Truck must be repaired today. B. Dolhancey notes that two additional trucks will be included in the transport system next week. Excavation and shipping data will be updated on 4/1/96.

# C F Braun

Weekly Progress Meeting - Week 2  
March 28, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY

List of Attendees:

Al Taoramina	Navy ROICC
Bob Ingram	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Grey Coppi	Foster Wheeler
Cheryl Polios	Foster Wheeler
Lynn Niles	Foster Wheeler
David Ardito	Laidlaw Corp. (through teleconference)

Meeting Minutes:

- \* The weekly meeting was held at the ROICC office. Items reviewed in the meeting include:
  - B. Dolhancey recounted to G. Coppi the events associated with Day 1 operations at the railyard including the unsatisfactory PCB-contaminated soil handling procedures. D. Ardito assures meeting attendants that the two untrained laborers who were handling the soil on Day 1 are still working at the railyard, but only with liners for the clean cars and other noncontaminated equipment. D. Ardito notes that 40-hour H&S certificates are not on file for these two workers.
  - D. Ardito notes that Garland Jones and Stewart Myerson have now been assigned by Laidlaw to the railyard. G. Coppi notes that G. Jones has only submitted Refresher H & S certification and not 40-hour certification. B. Dolhancey notes that no 40-hour H & S certificate is on file for P. Embrescia. D. Ardito notes that Larry Walker will be temporarily replacing him at the railyard as site supervisor. No 40-hour certification is on file for Walker. D. Ardito notes that he will furnish certificates for Jones, Embrescia and Walker.
  - B. Dolhancey notes to D. Ardito that the bucket for the front end loader must be decontaminated at the close of the job. D. Ardito agrees to ship the bucket to Site 2 for decon. D. Ardito also agrees to decon all other equipment used at the railyard to handle contaminated soil. D. Ardito agrees to provide proper PPE to all railyard workers and to properly dispose of all PPE.
  - D. Ardito notes that Wills Trucking Corp. is working as a subcontractor to Laidlaw. Under this contract, Laidlaw is responsible for proper handling of all PCB-contaminated soil when it is placed into the Wills truck at Site 2. According to D. Ardito, Laidlaw is legally responsible for activities related to soil shipment and handling to the railyard as long as the trucks comply with established weight limits for road transportation. D. Ardito notes that the trailer beds will not be decontaminated at the close of the job since these trailers are dedicated to hazardous waste transportation. B. Dolhancey notes that the Navy and Wills request that no trucks be staged overnight or on weekends at the railyard because of safety considerations. During non-work hours all trucks will be covered and staged on Navy property.
  - C. Farkos requests D. Ardito to supply written confirmation that George Burns is certified to sign the manifests for the Long Island Railroad. D. Ardito to furnish.

- B. Dolhancey reviews site operating hours with D. Ardito and meeting group:

7:00 AM trucks should be light-weighted and ready at Site 2 for loading. Trucks can exit the gate by Building #15 as early as 6:30 AM.

Site workers will rotate lunch breaks so that no downtime occurs during this period.

The last loaded truck will leave the base at 3:30 PM. Work at Site 2 will stop after this time.

- C. Farkos reviews the confirmatory field sampling plan with meeting attendants. A copy of the field sampling diagram is presented to L. Niles. C. Farkos requests copies of all Foster Wheeler confirmatory field test results.



# Brown & Root Environmental

A Division of Halliburton NUS Corporation

Foster Plaza VII  
661 Andersen Drive  
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(412) 921-7090  
FAX: (412) 921-4040

C-49-04-6-077

April 9, 1996

Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 3

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 3. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

*Mark P. Speranza*  
Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy REICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. David Ardito, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
~~Mr. Craig Farkos, C.F. Braun~~  
File 5236

# C F Braun

Weekly Progress Report - Week 3  
4/01/96 to 4/05/96  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY  
Prepared by: Craig Farkos

The following activities occurred during Week 3:

Monday 4/01/96:

- \* The following additional excavation data has been collected since the previous weekly report:

<u>Date</u>	<u>Total soil removed</u>	<u>Total number of runs</u>	<u>Begin time of runs</u>	<u>End time of runs</u>
3/28/96	326 tons	14	8:23 AM	3:09 PM
3/29/96	185 tons	10	8:25 AM	2:23 PM

- \* Excavation continues in the northwest portion of the Site 2. Excavation has proceeded to the required 10-foot depth along the northwest fenceline. Excavation now continues in a southern direction along this fenceline. B. Dolhancay checks excavation depths using survey equipment. Estimate that Site 2 excavation is approximately 33 % complete. A total of 1311 tons of soil has been excavated and removed from Site 2 between 3/25/96 and 3/29/96.
- \* Two of the four truck drivers that worked the past week have been replaced by two new drivers. The following drivers and trucks are now working at Site 2:

<u>Truck No</u>	<u>Trailer No</u>	<u>Driver</u>	<u>Weight Ticket Code No</u>
132	489	Ed Stumbaugh	94
138	439	Sonny Belgrach	88
NA	346	Greg McLeod	95
NA	446	Dean Murphy	90

- \* C. Farkos visits the railyard. Notes that the front end loader is being repaired because the fuel filters became clogged when the loader ran out of gas on Friday. During this time all four full dump trucks are staged at the yard. The dump gate to truck number 138 is also being repaired at the yard because the gate release will not disengage. One truck has unloaded to this point. The railcar cannot be repositioned to accept additional soil until the front end loader is repaired. The repair is completed at 10:00 AM.
- \* L. Walker informs C. Farkos that the Long Island Rail Road EPA ID number typed on the shipping manifests is incorrect.

Incorrect EPA ID No: NYD 980641625  
Correct EPA ID No: NYR000021345

C. Farkos telephones D. Ardito to inform him and to advise him that all completed manifests must be corrected. D. Ardito agrees to correct the completed manifests. A total of 61 manifests have been completed between 3/25/96 and 3/29/96.



- \* C. Farkos returns completed daily construction reports to B. Dolhancay for distribution.

#### Tuesday 4/02/96

- \* Excavation is being performed in the southwest portion of Site 2, in the area of soil boring SB-47. Excavation in the area of borings SB-41, SB-45 and SB-54 is completed to the required 10-foot depth. This portion of the excavated area is covered by plastic. Some of the soil excavated from the area near SB-46 and SB-47 is being temporarily stockpiled at Site 2 in the area near SB-52.
- \* A Foster Wheeler field technician arrives at Site 2 to collect confirmatory field samples at the locations of SB-41, SB-45, SB-46, and SB-54. Samples are to be analyzed at the field trailer (results to be provided next week).
- \* C. Farkos notes to B. Dolhancay the erosion along the excavated wall adjacent to the waste water treatment plant. B. Dolhancay notes that he has prepared to have a rainwater catch basin constructed in the southwest portion of Site 2 near boring location SB-43. C. Farkos also notes that runoff from the water treatment plant asphalt area should also be controlled. B. Dolhancay agrees to evaluate.
- \* C. Farkos meets with H. Lazarus and B. Dolhancay at Site 2. H. Lazarus estimates that an additional 1000 cubic yards will have to be excavated from Site 2 from this point to the finish. H. Lazarus notes that it will be Laidlaw's responsibility to supply the necessary railcars to transport this soil. H. Lazarus notes that drums containing Site 2 decontamination water will be disposed by Laidlaw. He notes that disposal of these drums is included in Laidlaw's scope of work established by Foster Wheeler. B. Dolhancay notes that work hours at Site 2 beginning tomorrow and continuing until the job close will be:

6:30 AM - truckers and workers arrive at Site 2.

3:30 PM - Site 2 excavation and truck loading ends.

- \* C. Farkos reviews operations at the railyard. Two new site workers have been added to the workforce in addition to P. Embrescia and the 2 workers who have been at the site since 3/25/96. All workers are wearing proper PPE. It now takes between 5 minutes and 10 minutes to unload each truck at the ramp. C. Farkos notes to D. Ardito that Laidlaw must change the Long Island Railroad EPA ID number for copies #3, #4 and #8 of all completed manifests currently held by the ROICC office. D. Ardito agrees.
- \* H. Lazarus and B. Dolhancay arrive at the railyard to review operations with D. Ardito and C. Farkos. H. Lazarus indicates that approximately 1600 tons of soil have been excavated and shipped from Site 2 to this point. H. Lazarus estimates that the excavation is approximately 33% completed and that Laidlaw should be prepared to handle an additional 3200 tons of soil to complete the excavation. D. Ardito notes that 45 railroad cars were originally scheduled for the entire job. D. Ardito agrees to evaluate railcar needs. D. Ardito agrees to dispose of the decontamination water stored in drums at Site 2.

#### Wednesday 4/03/96

- \* B. Dolhancay advises Site 2 workers to shore up Site 2 fencing and to move the worker decontamination area adjacent to the truck decontamination area. A new, wider truck entrance lane will be created at Site 2. B. Dolhancay also notes that a runoff collection sump and trench has been created in the area of boring SB-43 to handle soil erosion.
- \* B. Dolhancay agrees with C. Farkos to collect field screening samples in the same sample locations proposed by C. Farkos for the confirmatory samples. A sample location diagram was given by C. Farkos to L. Niles on 3/28/96. C. Farkos agrees to review the plan further with L. Niles.

- \* C. Farkos notes to A. Taoramina and B. Ingram that C.F. Braun recommends that all new manifests being generated at Site 2 be retyped and free of cross-out lines.
- \* C. Farkos visits the railyard. L. Walker informs C. Farkos that manifest 1 through 60 were mailed out 4/1/96. Manifests 61 through 93 are supposed to be mailed out on 4/3/96. C. Farkos notes that photocopies of manifests 1 through 20 and 82, 83 85 and 86 currently located in the ROICC office do not have the proper EPA ID number for the Long Island Railroad. L. Walker examines the original copies of manifests 82, 83, 85 and 86 in his office and notes that he must make the correction to these originals. Manifests 80, 81, 87 and 88 have already been corrected.
- \* C. Farkos speaks with P. Embrescia at the railyard. P. Embrescia notes that no railcars will be delivered to the rail-yard today. Three cars are currently at the yard -- one car is filled and tarped, one car is being filled, and one car is empty. These 3 cars will be filled today. P. Embrescia notes that 10 additional cars should arrive at the yard on Monday. C. Farkos notes that 25 cars are required for a full week of excavated soil. C. Farkos also notes that P. Embrescia is holding copies of manifests 93 and 94 in the shipping envelope used to attach the manifest to the railcar. P. Embrescia notes that he plans to give these manifest to a railroac operator to attach to the railcars that have already been removed from the railyard. P. Embrescia notes that "this is a mistake."
- \* P. Embrescia and the truck drivers note to C. Farkos that 2 of the trucks are temporarily out of service. Truck 138 is out of service for approximately 2 hours because of an electrical problem with the taillights. Truck 132 is out of service for approximately 3 hours because of a cracked seal in the rear hub.
- \* B. Dolhancay confirms that excavation will terminate at Site 2 at approximately 1:00 PM today. The site workers and truck drivers will not return until 4/8/96.

**Thursday 4/04/96**

- \* No excavation being performed at Site 2. The trailers to all 4 trucks are tarped and staged at Site 2. Farkos reviews the extent of excavation to date. See enclosed figure. The following additional excavation data has been collected since 3/29/96:

<u>Date</u>	<u>Total soil removed</u>	<u>Total number of runs</u>	<u>Begin time of runs</u>	<u>End time of runs</u>
4/1/96	321 tons	15	8:09 AM	3:45 PM
4/2/96	447 tons	21	7:43 AM	4:30 PM
4/3/96	252 tons	12	8:23 AM	1:37 PM

A total of 2331 tons of soil have been removed from Site 2 to date. This soil has been delivered to the railyard in 109 truckloads. According to D. Ardito, 45 railcars were originally ordered to complete this job. Four truckloads are required to fill one railcar. A total of 27 railcars have been filled. Ten additional railcars are scheduled to arrive on Monday, 4/8/96. H. Lazarus and B. Dolhancay estimate that the excavation is approximately 30% to 40% complete.

**Friday 4/05/96**

No work was conducted at Site 2.

# C F Braun

## Weekly Progress Meeting - Week 3 April 4, 1996 CTO 212 - Site 2 Remediation NWIRP Bethpage, NY

### List of Attendees:

Al Taoramina	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Cheryl Polios	Foster Wheeler
Lynn Niles	Foster Wheeler

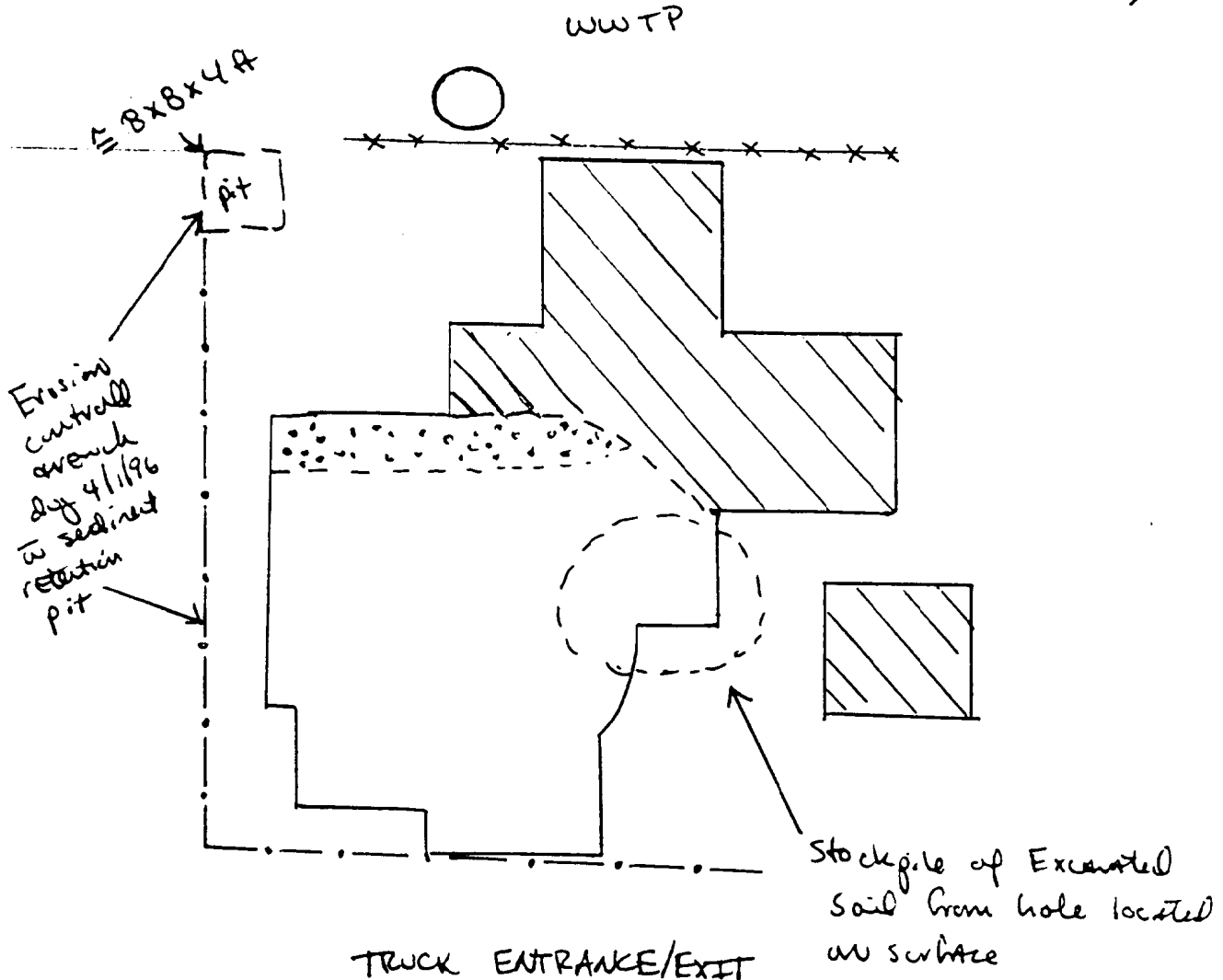
### Meeting Minutes:

- B. Dolhancay notes that according to H. Lazarus, Laidlaw is responsible for all soil handling operations conducted at the railyard and in transit from Site 2. Foster Wheeler cannot direct Laidlaw with regards to any of the soil handling procedures being used at the railyard or in transit from Site 2. Foster Wheeler will continue to be responsible for all soil excavation and handling procedures conducted at Site 2. A. Taoramina notes that the close proximity of the railyard to Site 2 obligates the Navy to review the railyard operations and discuss with Foster Wheeler and Laidlaw any items of concern. B. Dolhancay notes that Foster Wheeler agrees to decontaminate the front loader bucket used at the railyard when the job has been completed.
- B. Dolhancay and C. Polios note that air monitoring will be conducted on a periodic basis at Site 2. The site will continue to be sprayed by the water truck thereby eliminating the need for continuous monitoring.
- B. Dolhancay reviews the delay in railcar delivery that occurred this week. Site 2 operations were terminated at 1:30 PM on 4/3/96. Ten cars are scheduled to arrive on 4/8/96. Twenty five cars are needed to transport the quantity of soil generated during a full week of excavation. Excavation may only proceed for 2 days next week.
- B. Dolhancay reviews the problems associated with completing the manifests and attaching them to the railcars. According to B. Dolhancay and Thomas Tealing of Foster Wheeler, the following steps must be taken by Laidlaw to change the Long Island Railroad EPA ID number on the manifests:
  1. Laidlaw must notify the New York Department of Environmental Conservation and the Utah disposal facility, in writing, of the manifest change.
  2. Laidlaw must get written authorization from the waste generator to make the manifest change.
  3. Laidlaw must make the change to all copies of all completed manifests.
  4. Laidlaw must prove to the waste generator that the change has been made to all copies of the manifests.

Currently, several photocopies of the completed manifests issued by Laidlaw to the ROICC office do not indicate any change. Also, several manifest copies of sheet #3, #4 and #8 retained by the ROICC office for mailing to the New York DEC and the Utah disposal facility do not

indicate any change. As indicated in the activity report for 4/3/96, Laidlaw has mailed manifests 1 through 60 to the required destinations. B. Dolhancay notes that he will contact D. Ardito to have the necessary changes made for next week's shipments.



- B. Dolhancay notes that photocopies of manifests 93 and 94 were not affixed to the railcar, as required by law, when the car containing these loads was removed from the railyard (See daily activity report for 4/3/96). According to T. Tealing, these manifest copies may be replaced by bills of lading delivered to the railroad and the Utah dumpsite. B. Dolhancay agrees to contact D. Ardito regarding these manifest handling requirements.
  
- C. Farkos notes that the approved Foster Wheeler PCB Waste Disposal Plan (December, 1995) projected 3276 tons of PCB-contaminated soil to be excavated from Site 2. Weight tickets indicate that 2331 tons of soil have been removed from Site 2 through 4/3/96. H. Lazarus and B. Dolhancay estimate that the project is 30% to 40% completed. B. Dolhancay notes that he plans to keep the clean soil excavated from the sideslopes separate from the PCB-contaminated soil excavated from the other portions of the area to minimize soil shipments. C. Farkos notes that the 2 stockpiles of PCB contaminated soil estimated to be 134 tons per pile were included in the shipping total.
  
- A. Taoramina agrees to determine if the large stockpile of soil located in the southern section of the site can be used as backfill. B Dolhancay agrees to use field test samples to determine the concentration of PCB's contained in this soil prior to backfilling.



Erosion control trench dug 4/1/96 to sediment retention pit

Stockpile of Excavated Soil from hole located on surface

TRUCK ENTRANCE/EXIT

-  Finished excavation to 4/4/96
-  Excavation in process



# Brown & Root Environmental

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C-49-04-6-146

April 15, 1996

Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 4

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 4. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

*Mark P. Speranza*  
Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. David Ardito, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
~~Mr. Craig Farkos~~, C.F. Braun  
File 5236

# C F Braun

**Weekly Progress Report - Week 4**  
**4/08/96 to 4/12/96**  
**CTO 212 - Site 2 Remediation**  
**NWIRP Bethpage, NY**  
**Prepared by: Craig Farkos**

The following activities occurred during Week 4:

**Monday 4/08/96:**

- \* Excavation continues in the central portion of Site 2 in the area of SB-52 and SB-53. The decontamination pad is in good condition. The runoff collection trench is collected surface water from the excavation area.
- \* The following analytical results have been obtained for the field samples collected from the excavated area:

<u>Sample Date</u>	<u>Sample Location</u>	<u>Analytical Result</u>
4/2/96	SB-41	Non Detect
4/2/96	SB-45	2.7 ppm
4/2/96	SB-46	2.8 ppm
4/2/96	SB-54	Non Detect

The action level for concentrations of PCB's in Site 2 soils is 10 ppm.

- \* B. Dolhancay advises C. Farkos that field screening and confirmatory samples can be collected from the excavated portion of Site 2. Field screening samples will be collected by Foster Wheeler at the locations identified on the sample plan prepared by C. Farkos. Confirmatory samples will be collected by C. F. Braun in those same locations after field screen samples have confirmed that all PCB-contaminated soil exceeding the 10 ppm action level has been excavated and removed from that portion of the site.
- \* Also, field screen composite samples are collected from each of the 3 soil piles designated as "clean soil piles" at Site 2.
- \* C. Farkos visits railyard. P. Embruscia notes that water was found in the bed of railcar #13 at the Utah dumpsite. According to P. Embruscia, the water was tested for leachate contamination, and results were satisfactory. The soil from car #13 was disposed of at the landfill.
- \* C. Farkos asked B. Dolhancay if Laidlaw is complying with the manifest correction guidelines presented in last Thursday's meeting (see meeting minutes 4/4/96). B. Dolhancay notes that Foster Wheeler has now determined that these guidelines do not have to be followed by Laidlaw and that Laidlaw can continue to correct the manifests by crossing out the wrong EPA ID number and writing over the correct EPA ID number for the Long Island Railroad.

**Tuesday, 04/09/96**

- \* C. Farkos visits the railyard. Notes that all four dump trailers are full and waiting to dump. Three full railcars are currently located on the dumpsite rail spur. The last of the four trailers had departed from Site 2 for the railyard at 8:23 AM. P. Embruscia notes that the railroad workers would not arrive until after 9:30 AM to

replace the full railcars with empty railcars. Prior to dumping, the empty railcars would have to be lined. The first dump trailer in the queue did not return to Site 2 for its second load until 10:50 AM.

- \* C. Farkos notes to P. Embruscia that manifest copies #4 and #8 retained at the ROICC office did not have the proper EPA ID number for the Long Island Railroad on manifests 1 through 93. Also, photocopies of the completed manifests prepared by Laidlaw and retained at the ROICC office did not have the proper EPA ID number on copies 1 through 60.
- \* The following analytical results are reported for the field screen samples collected from the "clean soil piles:"

<u>Sample Date</u>	<u>Soil Pile</u>	<u>Sample PCB Concentration</u>
4/8/96	A	4.0 ppm
4/8/96	B	6.3 ppm
4/8/96	C	5.1 ppm

See the enclosed diagram for the clean soil pile locations.

A. Taoramina advises Foster Wheeler that he would like soil samples collected from clean pile B to be analyzed also for volatile, semivolatle and metals concentrations prior to backfilling this soil.

- \* C. Farkos indicates the confirmatory sample locations in the excavated area of Site 2, and the Foster Wheeler field team collects field screen samples at each of the 8 sample locations. See the enclosed diagram for the sample locations.
- \* The following soil excavation and transportation data was collected:

<u>Date</u>	<u>Total Soil Shipped</u>	<u>Total Number Loads</u>	<u>1st Truck Depart</u>	<u>Last truck depart</u>
4/4/96		No soil shipped as no railcars available		
4/5/96		No soil shipped as no railcars available		
4/8/96	384 tons	18	8:40 AM	4:30 PM

**Wednesday, 04/10/96**

- \* The following analytical results were reported by Foster Wheeler for field screen samples collected from the excavated portions of Site 2:

<u>Sample Date</u>	<u>Sample Number</u>	<u>PCB Concentration</u>
4/9/96	1	13.8 ppm
4/9/96	2	Non Detect
4/9/96	3	3.7 ppm
4/9/96	4	1.9 ppm
4/9/96	5	2.9 ppm
4/9/96	6	Non Detect
4/9/96	7	20.8 ppm
4/9/96	8	3.0 ppm
4/9/96	12	Non Detect

The action level for concentrations of total PCB's in the Site 2 soil is 10 ppm. The areas surrounding sample 1 and sample 7 will be reexcavated since the detected PCB concentrations in these 2 samples exceeds the action level.

- \* The diesel fuel line of one of the dump trailers was ruptured as the truck passed over the exit berm of the decontamination pad. Approximately 8 to 10 gallons of diesel fuel was released outside the limits of Site 2 before the truck was backed over the decontamination pad and the leaking fuel was captured in a plastic tub. The leaked fuel mixed with the melting snow and surface water outside the decontamination pad and flowed into the two stormwater collection drains located near Site 2. Some containment of the fuel was achieved



locating hay bales and absorbent pads around the storm drains. A. Taoramina was notified of the spill and he notified Grumman Emergency Services. A Grumman spill control team arrives at the site and advises B. Dolhancay to use sand to construct stormwater control berms along the flow path and to continue using absorbent pads. Grumman supplies B. Dolhancay with a large absorbent boom to be located around the outfall for one of the recharge basins. B. Dolhancay notes that the construction crew will remove the top 6-inch soil layer from all affected areas outside the Site 2 boundary. (See enclosed figure). Excavation and transport of PCB contaminated soil from Site 2 to the railyard terminates at 10:00 AM.

The following excavation information was determined:

<u>Date</u>	<u>Total Soil Shipped</u>	<u>Number of Loads</u>	<u>First Truck Depart</u>	<u>Last Truck Depart</u>
4/9/96	304 tons	14	8:04 AM	3:39 PM

#### Thursday, 04/11/96

- \* Excavation and transport of diesel fuel contaminated soil from the Site 2 staging area continues until 10:00 AM. C. Farkos uses the weight tickets to calculate the following weight of diesel contaminated soil removed from Site 2:

<u>Date</u>	<u>Driver</u>	<u>Tons of Soil Shipped</u>	<u>Time Out of Site</u>
4/11/96	Ed Stumbaugh	21	7:48 AM
4/11/96	Greg McLeod	21	8:10 AM
4/11/96	Dean Murphy	22	8:33 AM
4/11/96	Ed Stumbaugh	22	9:16 AM
4/11/96	Greg McLeod	22	9:42 AM

- \* The fourth truck driven by Sonny Belgrach was not used in the morning because a broken tarp was being repaired. This truck was back in service at Site 2 at 11:15 AM.
- \* C. Farkos reviews and confirms the field sampling plan for soil pile B and the excavated area with M. Speranza of C. F. Braun. Field sampling is scheduled for 4/12/96.
- \* C. Farkos shows B. Dolhancay a map of the limits of excavation at Site 2 and notes that the trucks and excavation equipment continue to drive over areas of Site 2 identified to be clean on the map. Also, the front loader is stockpiling PCB contaminated soil, without a plastic ground liner, near or on a section of Site 2 identified to be clean on the map. B. Dolhancay acknowledges my concern and notes that the surface layer of soil in the traffic and stockpile areas will be excavated and hauled to the railyard following completion of backfilling and compaction of the excavated area in Site 2.

#### Friday, 04/12/96

- \* Trucks are being loaded from the large stockpile of PCB contaminated soil located at the edge of the current excavation located between SB-52 and SB-57. Soil is being excavated from down in the hole near this edge. Also, some soil from this stockpile is being relocated in the area between SB-55 and SB-61. No plastic was placed below this soil (see notes for 4/11/96).
- \* The areas around soil sample #1 and #7 are reexcavated because the analytical results for these samples exceeded the 10 ppm action level for PCB concentrations (see notes for 4/10/96). A 10 foot x 10 foot by 2 foot volume of soil was excavated from each of these two sample locations. Because of the soil disturbance caused by the excavation equipment, sample locations 1 through 8 were resampled by the field screen method. Also, an additional field screen sample was collected from location #13 which had been excavated to grade.

- \* The following analytical results were obtained from the second round of field screen samples collected by Foster Wheeler:

<u>Sample Date</u>	<u>Sample Location</u>	<u>PCB Concentration</u>
4/12/96	1	17.8 ppm
4/12/96	2	Non Detect
4/12/96	3	5.2 ppm
4/12/96	4	6.8 ppm
4/12/96	5	1.8 ppm
4/12/96	6	1.0 ppm
4/12/96	7	5.9 ppm
4/12/96	8	4.9 ppm
4/12/96	13	4.5 ppm

Sample location 12 was not resampled as the initial sample result of 4/11/96 was below 10 ppm.

Sample location #1 must be reexcavated because the concentration of PCB's detected in the sample exceeds the 10 ppm action level.

- \* A 10 foot x 10 foot x 2 foot volume of soil is excavated from sample location #1. Sample location #1 is once again resampled by Foster Wheeler using the field test kit.

The following analytical result is obtained for the second resample of location #1:

<u>Sample Date</u>	<u>Sample Location</u>	<u>PCB Concentration</u>
4/12/96	1	Non Detect

- \* C. Farkos collects confirmatory soil samples from all sample locations since all field screen sample results are now below the 10 ppm action level for concentrations of total PCB's. Ten samples were collected plus one sample duplicate and one MS/MSD sample. The samples were shipped to Quantara Laboratories, Pittsburgh, PA, for 7-day turnaround analysis for concentrations of total PCB's in soil. All sampled portions of the excavated area were covered with plastic until backfilling.
- \* Foster Wheeler collects field screen samples in 5 separate locations on the "clean soil pile B." These locations are indicated on the enclosed figure. The samples were collected at approximately the following depths within pile B.

<u>Sample Date</u>	<u>Sample ID</u>	<u>Sample Depth</u>
4/12/96	SPB -01	3 feet
4/12/96	SPB -02	3 feet
4/12/96	SPB-03	3 feet
4/12/96	SPB-04	3 feet
4/12/96	SPB-05	5 feet

The samples were shipped today to NYTEST Environmental, Long Island NY, for 72-hour turnaround analysis for RCRA, TCL, TCLP and TAL parameters.

- \* B. Dolhancay notes that 25 tons of sand was deposited in the nearby salt barn to replace the sand used by Foster Wheeler during the diesel spill cleanup operations.

The following excavated soil shipping information was collected today:

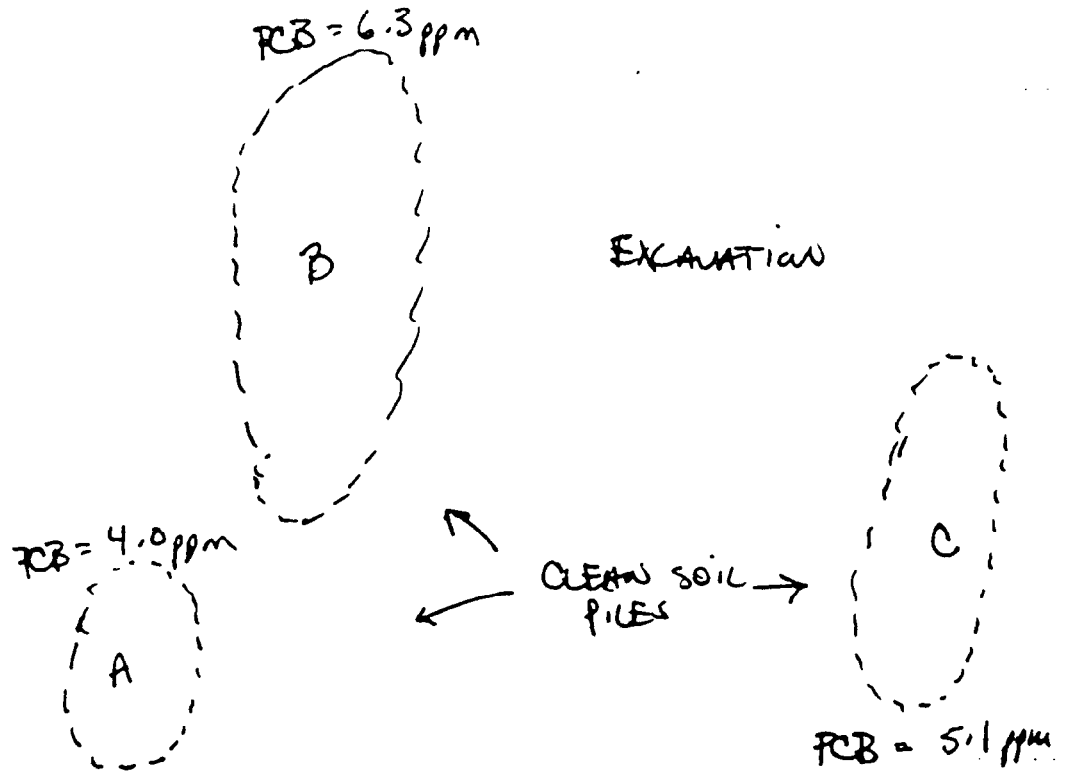
<u>Ship Date</u>	<u>No. of trucks</u>	<u>Total Tons</u>	<u>1st Truck out</u>	<u>Last Truck Out</u>
4/11/96	17	373 tons	7:48 AM	4:09 PM
4/12/96	12	264 tons	7:31 AM	12:47 PM

No additional shipments were made after 12:47 PM on 4/12/96 as all available railcars were filled.

The trailers of all 4 trucks were tarped and staged for the weekend at Site 2.

The total quantity of soil removed for the week is 1,431 tons in 66 loads. The total quantity of soil removed from Site 2, to date, is 3,762 tons in 175 loads.

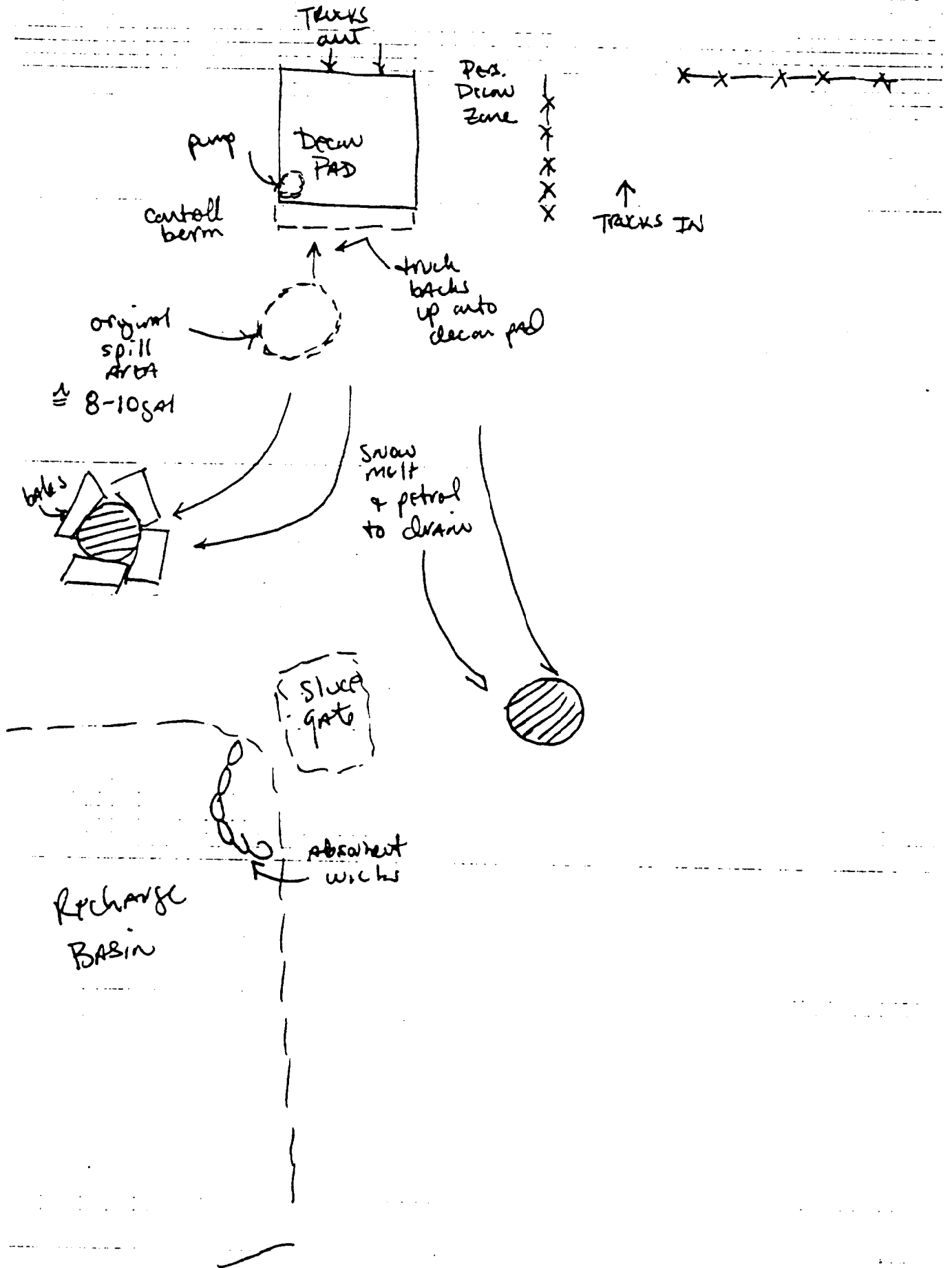
FIELD SCREEN SAMPLES  
COLLECTED  $\frac{1}{CF}$  4/8/96  
WWTP

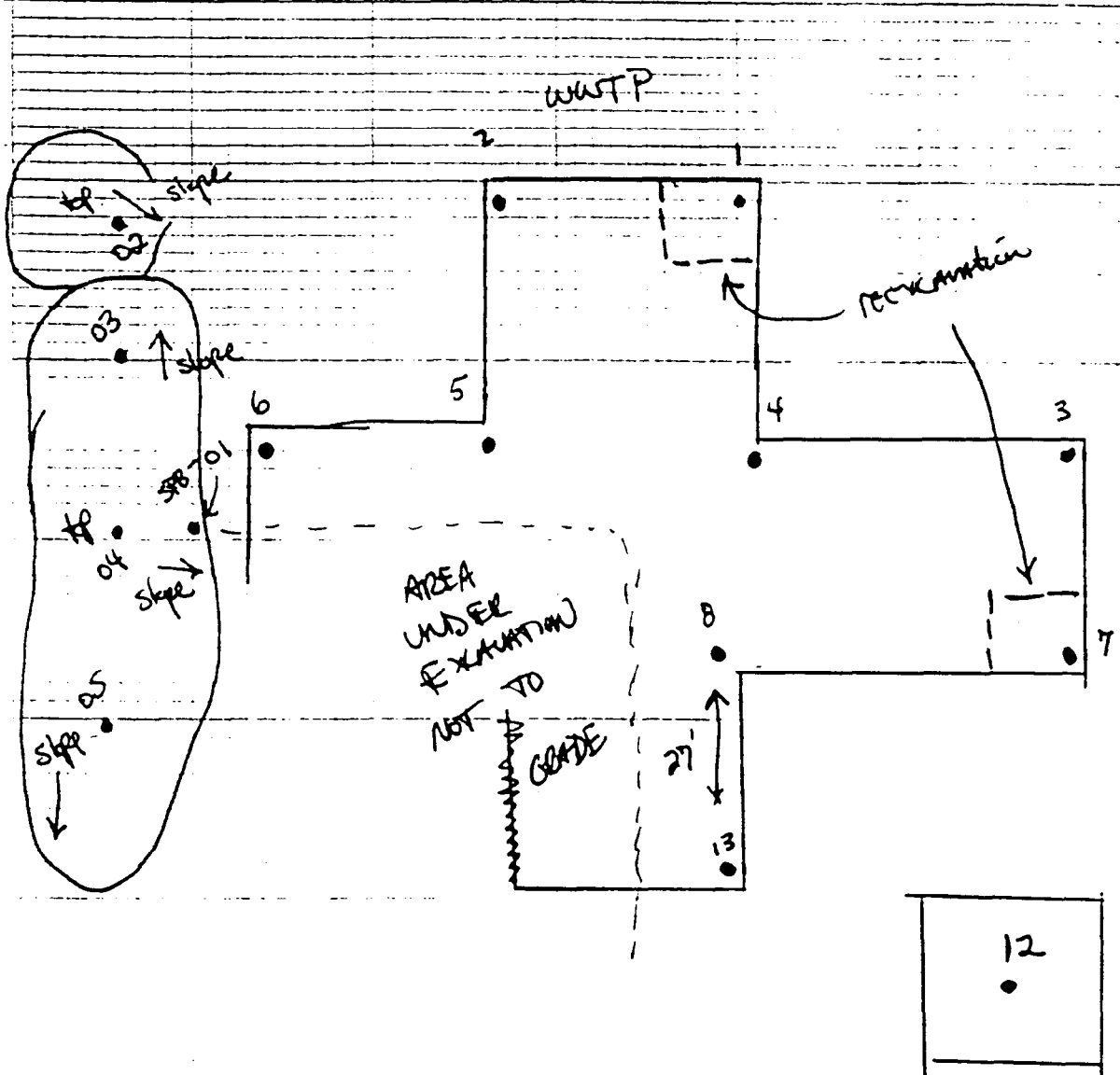


ALDOX

↑ ENTRANCE ↑

ACTION LEVEL = 10 ppm





# C F Braun

**Weekly Progress Meeting - Week 4  
April 10, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY**

**List of Attendees:**

Al Taoramina	Navy ROICC
Steven Lehman	NORTHDIV
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Cheryl Polios	Foster Wheeler
Lynn Niles	Foster Wheeler

**Meeting Minutes:**

The weekly construction meeting was held in the ROICC office:

- B. Dolhancay recounts the activities related to cleanup of the diesel fuel spill at Site 2 (see note above). B. Dolhancay notes that the New York State DEC has been notified. Representatives from the DEC are scheduled to arrive at Site 2 on 4/12 or 4/15 for a site review. The spill number assigned by the DEC to event is 9600467. Also, B. Dolhancay has notified Laidlaw and Wills Trucking. The decontamination pad is in good condition. All diesel fuel contaminated soil will be excavated and stored on a separate plastic liner at Site 2 until it is removed to the railyard. B. Dolhancay notes that the Navy will not incur any expenses associated with excavation and removal of the diesel-contaminated soil. The Navy will only be responsible for expenses associated with the first 3 hours of today's activities at Site 2.
- The members of the group review the field sampling plan for the large "clean soil pile B" at Site 2. The soil pile will be sampled at 5 separate locations. Each of the 5 samples will be collected at a sample depth of 2 to 4 feet below the soil surface. Each of the 5 samples will be analyzed for TCL volatiles, semivolatiles, TAL metals and TCLP metals. Sample results will be reported by fax from the lab within 72 hours of sample shipment.
- The meeting members agree that the other 2 "clean soil piles" located at Site 2 will not be sampled further. The PCB concentrations detected by the field screening process (See notes for 4/9/96) and the analytical results collected by Foster Wheeler during previous sampling events at Site 2 support the conclusion that soil piles A and C can be considered clean and can be used for backfill.
- C. Farkos asks B. Dolhancay to confirm that an 85 ton minimum soil charge per railcar is not being assessed to the Navy by Laidlaw at the Utah dumpsite. B. Dolhancay will confirm.
- B. Dolhancay notes that he has requested Laidlaw to replace the larger dump trailers with standard, triaxle trucks for transport of the PCB soil to the railyard.
- C. Farkos shows a map of the Site 2 area of excavation to the members of the meeting. B. Dolhancay shows the members of the meeting the extent of excavation to date, and estimates that the excavation is 60 percent complete. B. Dolhancay anticipates that excavation at Site 2 will be completed by 4/19/96. According to B. Dolhancay, backfilling of the portions of the excavated area confirmed to be clean will take place concurrently with excavation of the remaining PCB contaminated soil from Site 2.



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C-49-04-6-216

April 23, 1996

Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 5

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 5. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

*Mark P. Speranza*  
F.P. / Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. David Ardito, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
Mr. Craig Farkos, C.F. Braun  
File 5236



# C F Braun

**Weekly Progress Report - Week 5**  
**4/15/96 to 4/19/96**  
**CTO 212 - Site 2 Remediation**  
**NWIRP Bethpage, NY**  
**Prepared by: Craig Farkos**

The following activities occurred during Week 5:

**Monday 4/15/96:**

- \* Excavation is proceeding in the area of SB-58 and SB-63. The stockpile of excavated PCB-contaminated soil is now located in the area bounded by SB-55, SB-56, SB-60 and SB-61. No plastic tarp is located under this stock pile. The trucks are being loaded by the front end loader using the soil from this stockpile.
- \* P. Embruscia notifies B. Dolhancay and the drivers from Wills trucking that Wills is being replaced tomorrow by trucks and drivers from JBT Trucking of West Babylon, NY. JBT Trucking employs union-sponsored drivers. At the end of the day, each of the four Wills trailer beds is cleaned by spraying the elevated bed over the Site 2 decontamination pad. One trailer is staged overnight at Site 2 as Greg McLeod did not report for work today at Site 2. This trailer will be removed tomorrow morning.
- \* Personnel from the New York Department of Environmental Conservation have not come to inspect the site of the past week's diesel fuel spill.

**Tuesday, 4/16/96**

- \* Heavy rainfall is generating significant surface runoff at Site 2 in the morning.
- \* Four trucks from JBT Trucking; Babylon, NY; arrive at Site 2 at 7:00 AM. The following information is collected regarding the new trucking firm for Site 2 soils:

<u>Driver</u>	<u>Tractor No.</u>	<u>Trailer No.</u>
Jim Byrne	95-846	8085
Bob Denneky	94-319	2
Cliff Sieber	94-319	6
Steve Arthur	89-1	8084

According to P. Embruscia each truck is permitted to operate at a gross weight of 120,000 pounds. Each truck is to transport 60,000 pounds of PCB-contaminated soil per load.

- \* B. Ingram notes that the mesh tarps currently installed on each of the 4 JBT trailers will not prevent rain infiltration during transport. Given today's heavy rains, B. Ingram notifies B. Dolhancay and P. Embruscia to terminate all soil transport activities today. All 4 JBT trailers are instructed to return to Site 2 and dump the first loads back in the stockpile. B. Ingram informs B. Dolhancay and P. Embruscia that the mesh tarps must be replaced on all 4 trucks if soil is to be transported during rainstorms.
- \* Because of the heavy rain and significant runoff at Site 2, B. Ingram instructs B. Dolhancay to terminate all sitework until tomorrow. B. Dolhancay instructs Site 2 worker to excavate additional runoff collection trenches around the excavated area of Site 2. B. Dolhancay informs C. Farkos that the available plastic sheeting at Site 2 is insufficient to cover the entire stockpile of PCB-contaminated soil. No sheeting is applied. Straw bales are placed around the entire perimeter of the stockpile to control silt runoff. C. Farkos

notes to B. Dolhancay that the sideslopes are collapsing into the excavated area identified to be below the PCB action level by last week's field sampling. B. Dolhancay notes that these sideslopes are comprised of clean soil. Given the heavy rains and the Site 2 runoff conditions, C. Farkos notes to B. Dolhancay that additional field screen samples may need to be collected from a few points in the excavated and sampled portion of Site 2 and the area underlying and surrounding the stockpile of PCB-contaminated soil. Dolhancay agrees.

- \* Site 2 construction activities finish at 11:00 AM.
- \* Photocopies of the corrected manifests #1 through #106 arrive at the ROICC office from the Utah dumpsite.

**Wednesday, 4/17/96**

- \* JBT Trucking arrives with 2 trucks using automatically operated canvass tarps and 2 trucks using mesh tarps that must be manually applied and removed from the soil in the truck bed.
- \* Tractors 94-301 and 95-363 arrive at Site 2 without valid New York IRP vehicle registration. B. Dolhancay receives faxed copies of IRP registration extensions for both tractors. All drivers produce certification to operate at 120,000 pounds gross weight.
- \* Truck operating information is summarized below:

<u>Driver</u>	<u>Tractor No.</u>	<u>Trailer No.</u>
Joe Caterish	95-363	6
Bob Denneky	94-301	2
Jim Arthur	91-752	5
Dave Croner	89589	8084

**Thursday, 4/18/96**

- \* Excavation continues in the area of SB-62 and SB-63.
- \* A JBT driver arrives at Site 2 to remove the trailer staged since 4/16/96. The raised trailer is cleaned by pressure sprayer over the decontamination pad.

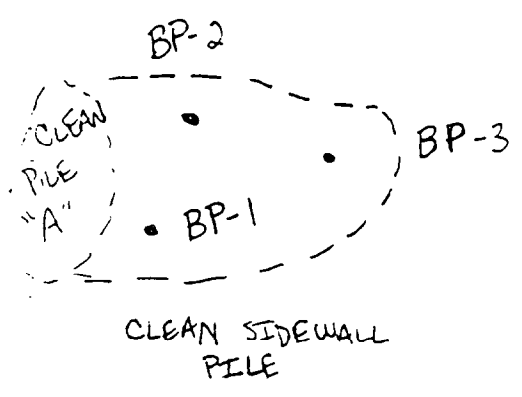
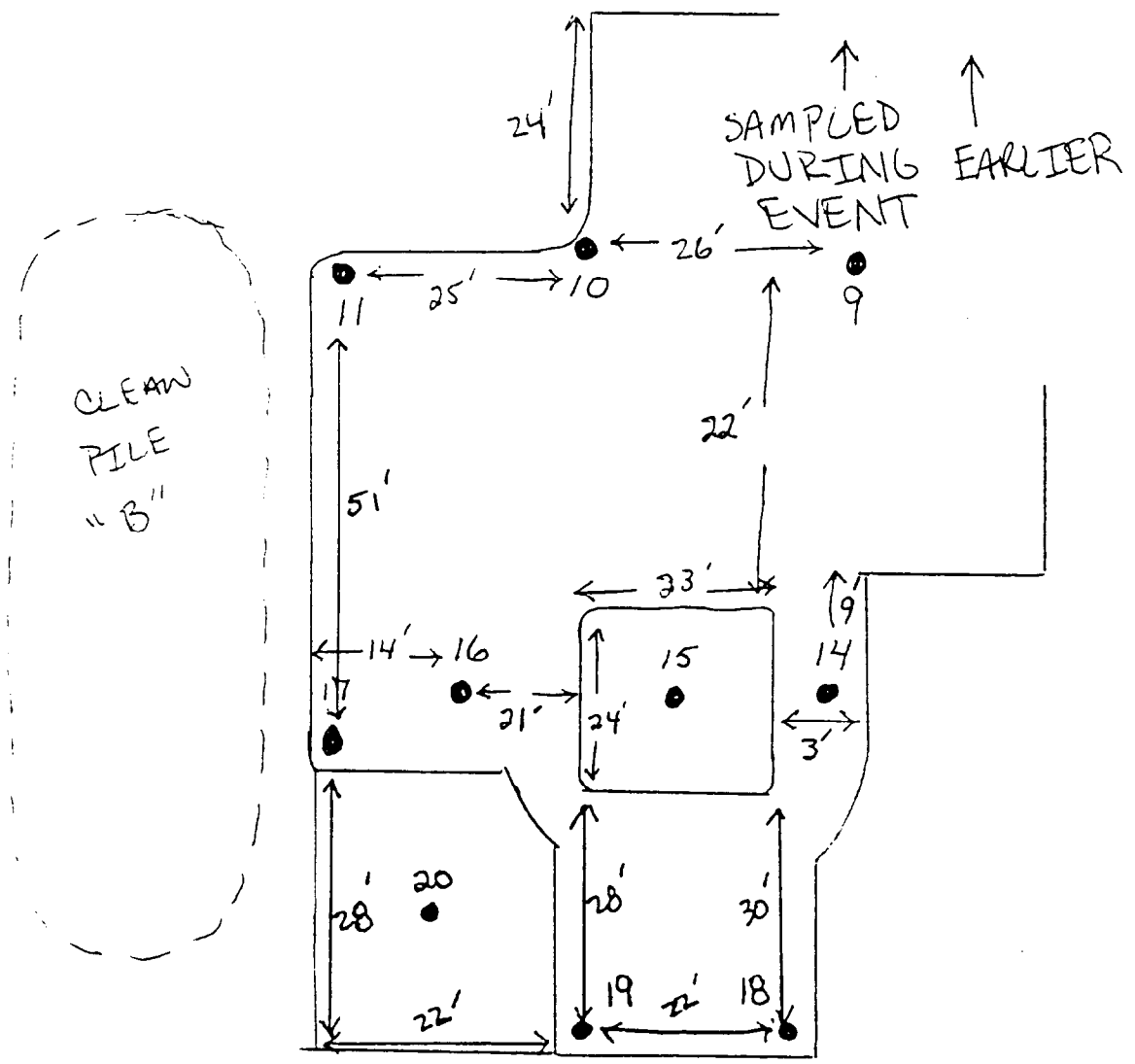
**Friday, 4/19/96**

- \* Excavation of the PCB-contaminated soils at Site 2 is completed today. The following excavation data is available for the week:

<u>Date</u>	<u>No. of Deliveries</u>	<u>Total Tons of Soil</u>	<u>First Truck Out</u>	<u>Last Truck Out</u>
4/15/96	12	260 tons	7:33 AM	2:07 PM
4/16/96		No deliveries due to heavy rains		
4/17/96	19	601 tons	7:44 AM	3:46 PM
4/18/96	14	429 tons	8:27 AM	3:20 PM
4/19/96	15	454 tons	7:38 AM	2:40 PM

The cumulative total PCB-contaminated soil excavated from Site 2, including the week of 4/15/96, was 5,506 tons. This soil was transported in 235 truckloads to the railroad dumpsite. The total quantity of soil removed for the week was 1,744 tons transported in 60 truckloads.

- \* C. Farkos locates the final 10 soil sample locations in the base of the excavation. These locations are sampled today by Foster Wheeler using the field test kits. Samples were collected by Foster Wheeler at locations 9, 10, 11, 14, 15, 16, 17, 18, 19 and 20. Also, field screen samples BP-1, BP-2 and BP-3 were collected from the pile of soil excavated from the sidewalls and dumped adjacent to clean soil pile "A" (See diagram and meeting minutes 4/19/96).



NEW SAMPLE POINTS  
4/19/96

# C F Braun

**Weekly Progress Meeting - Week 5  
April 19, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY**

**List of Attendees:**

Al Taoramina	Navy ROICC
Bob Ingram	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Cheryl Polios	Foster Wheeler
Howard Lazarus	Foster Wheeler

**Meeting Minutes:**

The weekly construction meeting was held in the ROICC office:

- B. Dolhancay and H. Lazarus notes that Foster Wheeler will coordinate disposal of the drill cuttings staged at Site 1. Analytical results for the cuttings indicate that PCB concentrations are less than 500 ppm in all but the surface layer of 1 drum. The drummed cuttings will be transferred from Site 1 to Site 2 by the Site 2 front-end loader. All soil will be removed from the drums at Site 2, added to the existing stockpile of PCB-contaminated soil, and shipped to the railyard with the other Site 2 soil. The empty drums will be crushed and shipped to the railyard with the soil for delivery to Utah. Also, the drums staged adjacent to Site 2 by C.F. Braun during an earlier Site 2 investigation will be handled in the same way.
- B. Dolhancay and H. Lazarus notes that Foster Wheeler will remove the drummed decontamination fluids generated at Site 2 and mix it with the stockpile of PCB-contaminated soil at Site 2.
- B. Dolhancay informs the attendants that the current manifest used for Site 2 soils are satisfactory for the transport of the drill cuttings from Site 1 and the soil moistened by the decontamination fluids. Also, B. Dolhancay reiterates that these manifests are satisfactory for the soil excavated because of the diesel fuel spill of 4/11/96 which were temporarily stockpiled at Site 2.
- B. Dolhancay and H. Lazarus note that Laidlaw is responsible for all costs associated with decontamination of the front-end loader bucket and soil hopper used at the railyard as well as the four JBT trailers. At the request of A. Taoramina and B. Ingram, B. Dolhancay and H. Lazarus agree to oversee the decontamination of these items and agree to supply the Navy with a release from liability for each of these pieces of equipment.
- H. Lazarus indicates that Foster Wheeler may not reimburse Laidlaw for expenses associated with demobilization of equipment at the railyard since Laidlaw personnel have indicated that the railyard facility may be used in the future for additional hazardous waste disposal operations. B. Dolhancay and H. Lazarus note that all equipment used at Site 2 will be demobilized at the close of the job. The fence adjacent to the waste water treatment plant and the gravel in that area disturbed by Foster Wheeler will be replaced by Foster Wheeler. The fence removed from Site 1 by Foster Wheeler will not be replaced. The trailers will not be demobilized in anticipation of additional construction activity at Site 1.

- B. Dolhancay notes that purchased backfill for the Site 2 excavation area will be minimized by scraping up to a 3 foot layer from the area immediately outside the fenced entrance to Site 2. Following scraping, this area will be regraded by Foster Wheeler to promote proper drainage.
- B. Dolhancay and H. Lazarus agree to collect field screen samples at locations selected by C. Farkos in the entrance corridor to Site 2, in the surface soil currently covered by the PCB-contaminated soil stockpile, and in the stockpile of soil adjacent to clean pile "A" which was generated by excavating the sidewalls to Site 2. These field screen samples will be used to confirm that all these soils contain PCB's at concentrations below the 10 ppm action level.
- H. Lazarus requests a letter from C.F. Braun approving the use of clean soil pile "B" as backfill for Site 2. The letter should note exceptions to the approved design with regard to all backfill being delivered from offsite and the specified geophysical parameters for the backfill. H. Lazarus agrees to supply analytical results for the geophysical parameters of clean soil pile "B."
- B. Dolhancay notes that the base of excavation at Site 2 will be professionally surveyed on 4/22/96 or 4/23/96.
- B. Ingram notes that the truck trailers of the selected soil removal company must be fitted with water-proof tarps prior to the start of any construction activity at Site 1. H. Lazarus outlines the nature and extent of contamination at Site 1. Additional details will be forthcoming pending completion of the laboratory analyses of Site 1 soil samples.
- C. Farkos notes that manifest numbers 1 through 175 retained at the ROICC offices have been forwarded to the following departments:

Copy #3: Utah State Division of Solid & Hazardous Waste  
P.O. Box 14480  
Salt Lake City, Utah 84114-4880

Copy #4: State of New York Department of Environmental Conservation  
Division of Hazardous Substance Regulation  
P.O. Box 12820  
Albany, New York 12212

Copy #8: Retained at the ROICC office.



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FAX: (412) 921-4040

C-49-05-6-012

May 1, 1996

Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 6

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 6. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. Randy Miller, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
Mr. Craig Farkos, C.F. Braun  
File 5236

# C F Braun

## Weekly Progress Report - Week 6 4/22/96 to 4/26/96

CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY

Prepared by: Craig Farkos

The following activities occurred during Week 6:

### Monday 4/22/96:

- \* Excavation within the boundaries of the Site 2 contamination area is completed today. The four JBT trucks continue to be loaded from the stockpile of excavated PCB-contaminated soil located in the area of SB-55, SB-60 and SB-61.
- \* Analytical results for the field screen samples collected by Foster Wheeler on 4/19/96 are as follows:

<u>Date</u>	<u>Sample Location</u>	<u>Total PCB Concentration</u>
4/19/96	9	2.8 ppm
4/19/96	10	3.1 ppm
4/19/96	11	1.5 ppm
4/19/96	14	2.5 ppm
4/19/96	15	2.1 ppm
4/19/96	16	3.6 ppm
4/19/96	17	4.3 ppm
4/19/96	18	2.0 ppm
4/19/96	19	13.5 ppm
4/19/96	20	2.7 ppm
4/19/96	BP-1	2.5 ppm
4/19/96	BP-2	2.3 ppm
4/19/96	BP-3	7.1 ppm

- \* Analytical results for the laboratory samples collected by C. F. Braun on 4/12/96 are as follows:

<u>Date</u>	<u>Sample ID</u>	<u>Sample Location</u>	<u>Total PCB Concentration</u>
4/12/96	S2-A-01	1	1.0 ppm
4/12/96	S2-A-02	2	0.2 ppm
4/12/96	S2-A-03	3	6.7 ppm
4/12/96	S2-A-04	4	3.0 ppm
4/12/96	S2-A-05	5	1.1 ppm
4/12/96	S2-A-06	6	0.2 ppm
4/12/96	S2-A-07	7	8.6 ppm
4/12/96	S2-A-08	8	4.1 ppm
4/12/96	S2-A-12	12	0.1 ppm
4/12/96	S2-A-13	13	19.0 ppm
4/12/96	S2-A-29	3 Duplicate of S2-A-03	5.6 ppm

The detected PCB in each of the 11 analytical results reported above was Aroclor 1248. For all 11 samples, the concentrations of all other Aroclors were reported as Non-Detect.

- \* Because the PCB concentrations detected in Foster Wheeler sample #9 and C. F. Braun sample #S2-A-13 exceed the 10 ppm action level, a 10 ft x 10 ft x 2 ft volume of soil was reexcavated from both locations.

Foster Wheeler collected field screen samples from each of the reexcavated areas and reported the following analytical results:

<u>Date</u>	<u>Sample Location</u>	<u>Total PCB Concentration</u>
4/22/96	13	7.0 ppm
4/22/96	19	3.2 ppm

- \* Since all analytical results reported by Foster Wheeler for the field screen samples were less than the 10 ppm action level, C.F. Braun collected the following samples for laboratory analysis:

<u>Date</u>	<u>Sample ID</u>	<u>Sample Location</u>
4/22/96	S2-A-09	9
4/22/96	S2-A-10	10
4/22/96	S2-A-11	11
4/22/96	S2-A-14	14
4/22/96	S2-A-15	15
4/22/96	S2-A-16	16
4/22/96	S2-A-17	17
4/22/96	S2-A-18	18
4/22/96	S2-A-19	19
4/22/96	S2-A-20	20
4/22/96	S2-A-30	16 Field Duplicate

- \* Site 2 laborers begin moving drums containing drill cuttings from Site 1 to Site 2 for disposal. The following drum inventory was made by C. Farkos:

#### Site 1 Drum Inventory

	<u>Number of Drums</u>
Drums filled with drill cuttings	178
Drums filled with decontamination water	49
Drums filled with sample jars	1
Empty Drums	2

The drums filled with Site 1 decontamination water were not removed from Site 1. These drums and the contents will be disposed by Laidlaw.

#### Tuesday 4/23/96

- \* The transfer of drums from Site 1 to Site 2 and the disposal of these drums continues today. The stockpile of PCB-contaminated soil continues to be loaded into JBT trucks and shipped to the railyard. JBT trailer #8084 is out of service until 12:00 PM because of a broken tractor axle.
- \* C. Farkos speaks with J. Trepanowski, D. Brayack and R. Simcik regarding the following issues:
  1. Foster Wheeler proposes to use soil piles A, B and C currently stockpiled at Site 2 as backfill for the excavation area. Foster Wheeler is currently subjecting 5 discrete samples collected from soil pile B to a full suite of laboratory analyses because pile B is comprised of soil derived from various base operations (See field notes 4/12/96). Foster Wheeler proposes to use analytical results reported from field test kits to determine if soil piles A and C contain PCBs at concentrations below the 10 ppm action level and may be used as Site 2 backfill. Soil pile A is comprised of soil scraped from the top 4 foot surface layer of Site 2 (non-cross hatched area on the enclosed drawing), and soil excavated from the sideslopes of the hole. Soil pile C is comprised of soil scraped from the same 4 foot surface layer of Site 2. According to H. Lazarus, analytical results for the top 4 foot portion of Foster Wheeler soil borings collected in November 1995 from this area (See enclosed drawing) reported total concentrations of PCBs at concentrations less than the 10 ppm action level.



A review of literature for the RAPID Assays field test kits used at Site 2 indicate that a reactivity factor of 0.85 for Aroclor 1248 and 0.41 for Aroclor 1242 must be applied to the "blind" PCB concentration reported by the kit. Given that both Aroclor 1242 and Aroclor 1248 have been detected in Site 2 surface soils at concentrations greater than 10 ppm (See Foster Wheeler analytical results, 12/11/95), some "clean" surface soils were mistakenly mixed with PCB-contaminated surface soils during the initial excavation (See field notes 3/27/96 and 3/28/96), and the correlation between the reported field test kit result and the laboratory analytical result has been weak (See Foster Wheeler field test result, sample location #13, 4/12/96, vs. C. F. Braun laboratory analytical result, sample location #13, 4/12/96), it is recommended by C.F. Braun that composite soil samples collected from soil piles A and C be subjected to laboratory analysis prior to being used as backfill.

- 2. C.F. Braun design specifications (June 1995, Section 02220, pp 1 through 6), outline specific geophysical parameters for Site 2 backfill. Foster Wheeler proposes to use soil pile B as Site 2 backfill. Since this soil was not excavated from Site 2 and was derived from various base locations, it is recommended by C.F. Braun that the geophysical parameters for this soil be determined prior to backfilling and that a written waiver of the approved Section 02220 specifications be obtained prior to using this soil as backfill.

R. Simcik agrees to contact S. Lehman regarding these two issues and to notify C. Farkos of the appropriate site action.

- \* R. Simcik notifies C. Farkos that S. Lehman requests that 5 discrete samples be collected from both soil pile A and soil pile C. Each of the sets of 5 discrete samples are to be composited by Quanterra Labs to form a single, representative sample for each pile. The 2 samples are to be analyzed by Quanterra Labs for concentrations of total PCBs using a 72-hour turnaround.

**Wednesday 4/24/96**

- \* C. Farkos collects the following samples from soil piles A and C (See enclosed diagram)

<u>Date</u>	<u>Soil Pile A - Sample ID</u>	<u>Soil Pile C - Sample ID</u>
4/24/96	SPA-01	SPC-01
4/24/96	SPA-02	SPC-02
4/24/96	SPA-03	SPC-03
4/24/96	SPA-04	SPC-04
4/24/96	SPA-05	SPC-05

All samples are collected at a depth of 2 feet below the ground surface.

- \* A D-5 bulldozer and small surface roller are delivered to Site 2 today.
- \* A 6 inch to 10 inch surface layer of soil is being scraped from portions of the traffic areas of Site 2 (See enclosed diagram). The scraped soil is being stockpiled with the PCB soils and crushed drums and transported to the railyard. Drum transfer from Site 1 is completed today. Of the total soil transported from Site 2 for 4/24/96, C. Farkos notes the following information regarding this scraped soil:

<u>Date</u>	<u>Trailer No.</u>	<u>Tons of Soil</u>	<u>Trailer Departure</u>
4/24/96	6	30	10:55 AM
4/24/96	2	31	11:06 AM

- \* Trucking of all PCB-contaminated soil and crushed drums stockpiled at Site 2 is completed today. At the close of the day, all 4 JBT tractors and trailers are cleaned over the decontamination pad and permitted to depart Site 2.
- \* The following shipping information is collected for the week:

<u>Date</u>	<u>Number of Truckloads</u>	<u>Tons of Soil</u>	<u>First Delivery</u>	<u>Last Delivery</u>
4/22/96	17	534	7:39 AM	4:49 PM
4/23/96	16	506	7:31 AM	4:08 PM
4/24/96	14	436	7:36 AM	4:02 PM

The total soil and crushed drums shipped for the week from Site 2 to the railyard was 1476 tons transported in 47 loads. The cumulative total quantity of soil shipped to the railyard from Site 2 between 3/25/96 and 4/24/96 is 6982 tons. This soil was transported to the railyard in 282 truckloads.

#### Thursday 4/25/96

- \* The remaining surface layer of the traffic areas in Site 2 are scraped at a depth of 6 inches to 10 inches. This soil is stockpiled at Site 2 for transport to the railyard next week with the decontamination pad (See enclosed diagram). R. Simcik instructs C. Farkos not to collect any confirmatory samples from the scraped traffic areas. The excavated portion of Site 2 is being lined with straw bales and prepared for next week's backfilling activity. Access ramps are constructed into the excavation area. One ramp is excavated in the area of SB-42. Another ramp is excavated in the area of SB-45. Portions of the site not confirmed to be clean are not disturbed.
- \* The base and boundaries of the excavated portion of Site 2 is surveyed by a professional surveyor.
- \* The front-end loader and track excavator are cleaned over the decontamination pad.
- \* C. Farkos mails copies #3 and #4 of manifest 176 through 283 to the state regulatory authorities.

#### Friday 4/26/96

- \* The Site 2 construction equipment and manpower are directed to Site 1 to excavate a test pit. The excavation reveals a 4-inch clay pipe with no visible drainage holes. Four soil samples are collected by Foster Wheeler personnel and the area is backfilled with the excavated material.

# C F Braun

## Weekly Progress Meeting - Week 6

April 25, 1996

CTO 212 - Site 2 Remediation

NWIRP Bethpage, NY

### List of Attendees:

Al Taoramina	Navy ROICC
Bob Ingram	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Randy Miller	Laidlaw Environmental (teleconference)

### Meeting Minutes:

The weekly construction meeting was held in the ROICC office:

- C. Farkos and B. Dolhancay identify to R. Miller the weight discrepancy between the manifested weight written by the Navy ROICC on the manifest and the manifested weight printed by the Utah disposal facility on the Rail Reconciliation Form. According to R. Miller, this difference is caused by conversion from kilograms to pounds.
- C. Farkos and B. Dolhancay identify to R. Miller the weight discrepancy between the weight printed on weight ticket generated at the Navy yard, the manifested weight printed by the Utah disposal facility on the Rail Reconciliation Form, and the Site weight printed by the Utah disposal facility on the Rail Reconciliation Form. According to R. Miller, the Site weights recorded on the Rail Reconciliation Forms are generated by weighing transporter trucks containing PCB soil excavated from the railcar at the Utah dumpsite. R. Miller notes that these trucks are not lightweighed prior to every transfer of PCB soil into the trailer. B. Dolhancay notes that some soil may stick into the trailer following dumping in the Utah landfill. This sticking may cause the numerous discrepancies between the total pounds of soil recorded by the ROICC office for each railcar and the greater, total pounds of soil frequently reported to be unloaded from each railcar at the Utah disposal facility. R. Miller agrees to identify and calculate these numerous discrepancies and to print a "discrepancy plot" of the calculations. A calculation and plot will be generated per every 50 manifests received at the Utah facility. If the plot indicates that these discrepancies exceedingly favor the Utah disposal facility, then R. Miller agreed to use the net pounds values printed on the weight tickets generated at the Navy yard as the basis for billing for disposal of the PCB soils.
- C. Farkos notes the numerous differences between the kilogram values written by the ROICC on the manifests and the corresponding kilogram values printed on the Certificates of Disposal generated at the Utah disposal facility. R. Miller notes that these discrepancies are not a regulatory violation unless the differences are greater than 10%.
- R. Miller agrees to generate a letter for the ROICC outlining and resolving the issues noted above.
- B. Dolhancay notes that 2 railcars are staged at the railyard to transport the final soil shipments from Site 2.
- B. Dolhancay notes that the boom will be collected from the recharge basin and that a new replacement boom will be delivered to Grumman.



# Brown & Root Environmental

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C-49-05-6-144

May 16, 1996

Project Number 5236

bc: **Dave Brayack**  
**Rob Simcik**

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 7

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 7. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. Randy Miller, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
Mr. Craig Farkos, C.F. Braun  
File 5236

# C F Braun

## Weekly Progress Report - Week 7 4/29/96 to 5/03/96

CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY

Prepared by: Craig Farkos

The following activities occurred during Week 7:

### Monday 5/29/96:

\* The following analytical results are received by C. Farkos at Site 2:

#### C. F. Braun Confirmatory Samples for Base of the Excavation

<u>Sample Date</u>	<u>Sample ID</u>	<u>Sample Location</u>	<u>Total Concentration PCB's</u>
4/22/96	S2-A-09	9	4.0 ppm
4/22/96	S2-A-10	10	1.4 ppm
4/22/96	S2-A-11	11	Non-Detect
4/22/96	S2-A-13R	13	4.9 ppm
4/22/96	S2-A-14	14	1.8 ppm
4/22/96	S2-A-15	15	0.7 ppm
4/22/96	S2-A-16	16	5.0 ppm
4/22/96	S2-A-17	17	2.1 ppm
4/22/96	S2-A-18	18	0.7 ppm
4/22/96	S2-A-19	19	1.3 ppm
4/22/96	S2-A-20	20	2.3 ppm
4/22/96	S2-A-30	16 Field Duplicate	6.5 ppm

All reported concentrations are for the PCB, Aroclor 1248. All other Aroclors were reported at Non-Detect concentrations.

All confirmatory field samples are less than the 10 ppm action level for concentration of total PCB's at Site 2.

#### C.F. Braun Composite Samples for Soil Pile A and Soil Pile C

<u>Sample Date</u>	<u>Sample ID</u>	<u>Total Concentration PCBs</u>
4/24/96	Composite: SPA-01 SPA-02 SPA-03 SPA-04 SPA-05	4.7 ppm
4/24/96	Composite: SPC-01 SPC-02 SPC-03 SPC-04 SPC-05	6.0 ppm

All reported concentrations are for the PCB, Aroclor 1248. All other Aroclors were reported at Non-Detect concentrations.

The composite sample result for both piles is below the 10 ppm action level for total PCBs at Site 2

M. Speranza informs C. Farkos that the EPA guidance document on site sampling for PCB contamination recommends a maximum total PCB concentration of 2.8 ppm in order to statistically declare each of the 5 aliquots making up composite samples SPA and SPC to be less than the 10 ppm action level established for Site 2. Since the analytical results reported for both composite samples is greater than 2.8 ppm, M. Speranza recommend that each of the 5 aliquots making up composite sample SPA and each of the 5 aliquots making up composite sample SPC be analyzed separately by Quanterra Labs. M. Speranza notes to C. Farkos that S. Lehman has authorized 72-hour turnaround analysis for all 10 samples. C. Farkos notifies Quanterra Labs of the work order.

#### Foster Wheeler Confirmatory Samples for Soil Pile B

<u>Sample Date</u>	<u>Sample ID</u>	<u>Chromium Conc.</u>	<u>Zinc Concentration</u>
4/12/96	SPB-01	18.3 ppm	42.1 ppm
4/12/96	SPB-02	6.9 ppm	24.5 ppm
4/12/96	SPB-03	36.6 ppm	59.5 ppm
4/12/96	SPB-04	17.6 ppm	75.6 ppm
4/12/96	SPB-05	20.6 ppm	75.5 ppm

The New York State action level for chromium and zinc in soils is reported by Foster Wheeler to be 10 ppm and 20 ppm, respectively. Most of the analytical results reported above exceed these limits.

The detected concentrations of total PCBs in all 5 samples were below the 10 ppm action level for Site 2.

- \* The following PCB soil shipping data is recorded:

<u>Date</u>	<u>Total Tons</u>	<u>Number of Loads</u>	<u>First Load Out</u>	<u>Last Load Out</u>
4/29/96	97	3	8:20 AM	11:39 AM

All 3 soil shipments are generated from scraping the PCB-contaminated surface layer of Site 2 in the high traffic areas.

#### Tuesday 4/30/96

- \* Construction workers prepare Site 2 for delivery of backfill material by excavating access ramps into Site 2. A roller operator has reported to Site 2 for the duration of the backfilling.
- \* M. Speranza informs C. Farkos that all analytical results for the base of the excavation have been confirmed by a staff chemist. The excavation may now be backfilled.
- \* American Materials Inc, Kings Park, NY, delivers 2 loads of backfill (materials are referred to a bankrun and processed fill) to Site 2 for B. Dolhancay's inspection. The job manager for American Materials is given a copy of the C.F. Braun specifications for offsite backfill material.
- \* Two additional loads are delivered and compacted today (see Table, 05/03/96).
- \* No geotesting of the compacted fill is being performed.
- \* B. Dolhancay informs C. Farkos that a sample of the processed fill has been delivered to the geotesting lab to confirm compliance with approved backfill specifications. A sample of the bankrun material was not collected.

**Wednesday 5/1/96**

- \* Delivery of offsite backfill by American Materials continues today. The backfill is being distributed across the site by the bulldozer and compacted by the vibratory roller (see Table, 5/03/96).
- \* No geotesting of the compacted fill is being performed.

**Thursday 5/2/96**

- \* The following analytical results for the individual aliquats for Piles A and C are faxed to C. Farkos from Quanterra Labs:

<u>Sample Date</u>	<u>Sample ID</u>	<u>Total PCB Concentration</u>
4/24/96	SPA-01	6.5 ppm
4/24/96	SPA-02	3.5 ppm
4/24/96	SPA-03	4.2 ppm
4/24/96	SPA-04	2.7 ppm
4/24/96	SPA-05	2.8 ppm
4/24/96	SPC-01	4.4 ppm
4/24/96	SPC-02	4.7 ppm
4/24/96	SPC-03	4.8 ppm
4/24/96	SPC-04	3.5 ppm
4/24/96	SPC-05	5.5 ppm
4/24/96	SPC-02FD	5.0 ppm

All detected concentrations are for Aroclor 1248. All other Aroclors are reported at Non-Detect concentrations.

Because all analytical results are below the 10 ppm action level for total PCB concentration. M. Speranza advises C. Farkos that Pile A and Pile C may be used as backfill for Site 2. C. Farkos informs B. Dolhancay.

- \* A field representative from Materials Testing Lab Inc, New Hyde Park, NY, arrives onsite today to monitor the geophysical parameters of the lifts of backfill being compacted at Site 2. Field monitoring is performed by a Troxler testing device. The following geophysical parameters are identified for Site 2 materials:

<u>Material Tested</u>	<u>Wet Density</u>	<u>Dry Density</u>	<u>Maximum Density</u>	<u>Moisture Content</u>
Pile C Material	129 lb/cu ft	123 lb/cu ft	126 lb/cu ft	5.3 %
Material from Site 2 Evaluation	119 lb/cu ft	112 lb/cu ft	115 lb/cu ft	6.3 %
Processed Fill	135 lb/cu ft	123 lb/cu ft	123 lb/cu ft	10.5 %

Site 2 backfill material is comprised of bankrun soils supplied by American Materials and onsite soils derived from Pile A and Pile C. Field testing is performed at various locations within the compacted area following compacting of each soil lift (See enclosed field test results for 5/2/96, 5/3/96).

- \* A. Taoramina and B. Ingram inform C. Farkos and B. Dolhancay that no weekly progress meeting will be held today. The meeting will be rescheduled for next week.

**Friday 5/3/96**

- \* Material delivery & compacting operations continue.

- \* The following backfill delivery data for Site 2 is recorded:

<u>Date</u>	<u>Number of truckloads</u>	<u>Total Tons</u>	<u>Material Classification</u>
4/30/96	1	40	Processed Fill
4/30/96	3	124	Bankrun
5/1/96	10	414	Bankrun
5/2/96	2	84	Bankrun
5/2/96	6	245	Screened Sand
5/3/96	2	83	Bankrun
5/3/96	12	567	Screened Sand

The density used by American Materials for the processed fill and bankrun fill is 1.25 ton/cy. The density used for the screened sand is 1.20 ton/cy.

- \* John McGrath of the Navy Contract Administration visits Site 2 to review operations with B. Dolhancay and C. Farkos.
- \* Manifests 1 through 120 have been returned to the ROICC office from the Utah disposal facility. C. Farkos advises B. Dolhancay that no bell curves have been received from R. Miller at the Utah disposal facility (See meeting minutes 4/25/96).
- \* Two trucks are used to deliver backfill to Site 2 from 4/30/96 to 5/1/96. Four trucks are used to deliver backfill to Site 2 for 5/2/96 and 5/3/96. C. Farkos timed 1 round trip for soil delivery to require 2 hours 30 min. Labor downtime is incurred between deliveries.
- \* B. Dolhancay informs C. Farkos that the geotechnical test results for the processed fill have not yet arrived. No samples of the screened sand have been collected for laboratory analysis.



# C F Braun

**Weekly Progress Meeting - Week 7  
May 2, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY**

**List of Attendees:**

Al Taoramina	Navy ROICC
Bob Ingram	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler

**Meeting Minutes:**

- May 2, 1996 - A. Taoramina and B. Ingram inform C. Farkos and B. Dolhancay that no progress meeting will be held this week. The meeting will be rescheduled for next week.



# Brown & Root Environmental

A Division of Halliburton NUS Corporation

Foster Plaza VII  
661 Andersen Drive  
Pittsburgh, PA 15220-2745

(412) 921-7090  
FAX: (412) 921-4040

C-49-05-6-145

May 16, 1996

Project Number 5236

bc: Dave Brayack  
Rob Simcik

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Transmittal of Weekly Report and Meeting Minutes from Progress Meeting No. 8

Dear Mr. Lehman:

You will find enclosed one (1) copy each of the Weekly Report and meeting minutes from the Progress Meeting No. 8. If you have any questions or require additional information, please call me at 412-921-8916.

Very truly yours,

Mark P. Speranza, P.E.  
Project Manager

MPS/dt

Enclosure

c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. Randy Miller, Laidlaw Corporation (minutes only)  
Mr. John Trepanowski, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
Mr. Craig Farkos, C.F. Braun  
File 5236

# C F Braun

## Weekly Progress Report - Week 8 5/06/96 to 5/10/96

CTO 212 - Site 2 Remediation

NWIRP Bethpage, NY

Prepared by: Craig Farkos

The following activities occurred during Week 8:

### Monday 5/06/96:

- \* B. Dolhancay not at Site 2 because of illness.
- \* Soil delivery to Site 2 by American Materials continues. Field representative from Materials Testing present to monitor compacting. The following additional geophysical parameters are identified by the field representative for the screened sand being used as backfill:

<u>Material Tested</u>	<u>Wet Density</u>	<u>Dry Density</u>	<u>Maximum Density</u>	<u>Moisture Content</u>
Screened Sand	111 lb/cu ft	105 lb/cu ft	109 lb/cu ft	5.1 %

- \* Geotechnical test results for the processed fill is not complete. Bankrun and screened sand backfill have not been sampled by B. Dolhancay for geotechnical analysis. Certificate of "clean soil" has not been produced by the backfill supplier.
- \* The following Site 2 activity was observed by C. Farkos:

<u>Time</u>	<u>Activity</u>
0700	Five truckloads of soil delivered by American Materials.
0900	Two operators finish spreading delivered soil. Compacting continues.
1000	Five truckloads of soil delivered by American Materials.
1115	Two operators finish spreading delivered soil. Compacting continues.
1245	Five truckloads of soil delivered by American Materials.
1350	Two operators finish spreading delivered soil. Compacting continues.
1440	Compacting finished.
1520	Five truckloads of soil delivered by American Materials.
1530	Workers offsite for day.

### Tuesday 5/7/96

- \* B. Dolhancay not at Site 2 because of illness.
- \* Soil delivery to Site 2 by American Materials continues. Field representative from Materials Testing present to monitor compacting.
- \* Geotechnical test results for the processed fill is not complete.
- \* The following activities occur at Site 2:

<u>Time</u>	<u>Activity</u>
0700	Five truckloads of soil delivered by American Materials.
0800	Two operators finish spreading delivered soil. Compacting continues.
0830	Compacting complete.

0940	Four truckloads of soil delivered by American Materials.
1050	Two operators finish spreading delivered soil. Compacting continues.
1220	Four truckloads of soil delivered by American Materials.
1350	Two operators finish spreading delivered soil. Compacting continues.
1500	Three truckloads of soil delivered by American Materials.
1530	Grading and compaction finished for day.

- \* C. Farkos notes to A. Taoramina that screened sand is being placed and compacted into the excavated area. No certificate of "clean soil" produced by the backfill supplier. No geotechnical analysis have been performed on the screened sand and the bankrun to confirm compliance with the approved design specifications. A. Taoramina notes that since an exception to the specifications was granted to permit backfilling of Pile A and Pile C, an exception can also be granted for the use of screened sand for backfill. C. Farkos will assure continued compliance with the specified compaction limits. C. Farkos notes the Site 2 activity breakdown for 5/6/96 and 5/7/96 listed above.

### Wednesday 5/8/96

- \* B. Dolhancay returns to Site 2 following illness.
- \* American Materials trucks are dumping processed fill into the excavated area for backfill. C. Polios notes that a verbal communication with Materials Testing confirms that the processed fill complies with the approved geotechnical design specifications. No certificate of "clean soil" is provided by the backfill supplier.
- \* The following Site 2 activities are recorded by C. Farkos:

<u>Time</u>	<u>Activity</u>
0700	Two American Materials trucks unload processed fill at Site 2.
0740	Three American Materials trucks unload processed fill at Site 2.
0810	Two operators finish spreading backfill.
0830	Compacting finished.
0940	Three American Materials trucks unload processed fill at Site 2.
0950	One American Materials truck unloads processed fill at Site 2.
1007	One American Materials trucks unloads processed fill at Site 2.
1030	Two operators finish spreading backfill. Begin regrading side areas of Site 2. Compaction continues.
1125	Two operators and compaction operator finish.
1220	One American Materials truck delivers load.
1240	Two American Materials trucks deliver fill.
1250	One American Materials truck delivers load.
1330	C. Farkos off Site 2 for meeting with ROICC.
1430	C. Farkos returns to Site 2. One American Materials truck dumping load.
1440	One American Materials truck dumps load.
1450	One American Materials truck dumps load.
1500	One American Materials truck dumps load. Operator continue spreading and compacting.
1530	Workers off Site 2 for day.
1600	Three trucks dump loads.

All three laborers are working continuously on Site 2 cleanup and traffic control between 0940 and 1530.

### Thursday 5/9/96

- \* C. Farkos visits the Calverton site in the morning. Returns to Site 2 at 1300.
- \* One JBT Trucking vehicle is being used to haul the excavated decontamination pad and the pile of scraped soil to the railyard for transport to Utah. Following dumping, the truck bed is decontaminated and the decontamination water is added to the PCB-contaminated soil contained in the railcar.

**Friday 5/10/96**

- \* Compaction of delivered backfill continues. An additional hauler is using two trucks to deliver backfill to Site 2. Six trucks are delivering backfill to Site 2.
- \* Laborers are working on Site 2 cleanup and reinstalling the fence around Site 2.
- \* Two truckloads of gravel are delivered to Site 2. The gravel is spread in the area adjacent to the waste water treatment plant. B. Dolhancay notes that the laborers will return to Site 2 on 5/13/96 to complete reinstallation of the fence. Backfilling and compaction operations will be completed today.
- \* The following backfill delivery activities occurred this week:

<u>Date</u>	<u>Total Tons Delivered</u>	<u>Number of Loads</u>	<u>Type of Material</u>
5/6/96	82	2	Bankrun
5/6/96	745	18	Screened Sand
5/7/96	640	16	Screened Sand
5/8/96	924	22	Processed Fill
5/9/96	767	18	Processed Fill
5/10/96	To Be Supplied By Foster Wheeler**		

- \* The following PCB-contaminated materials were removed from Site 2:

<u>Date</u>	<u>Total Tons</u>	<u>Number of Loads</u>	<u>First Truck Out</u>	<u>Last Truck Out</u>
5/9/96	160	5	7:55 AM	5:33 PM

These are the final loads of PCB-contaminated material to be removed from Site 2. The cumulative total quantity of soil shipped to the railyard from Site 2 between 3/25/96 and 5/9/96 is 7239 tons. This soil was transported to the railyard in 290 truckloads.

- \* C. Farkos requests the following documents from B. Dolhancay:
  - Certificates of "clean soil" from the backfill suppliers.
  - Lab results for the geophysical testing of the processed backfill.
  - Laidlaw-generated "release of liability" of the Navy for decontamination of all equipment used at the railyard.
  - Backfill tickets for deliveries of 05/10/96.
  - Compaction testing results for 05/10/96.
  - Analytical results for decontamination verification of Site 2 construction equipment.
  - H. Lazarus responses to C.F. Braun-generated Site 2 construction activity exceptions report (delivered to H. Lazarus 04/09/96).
- \* B. Dolhancay agrees to forward the requested materials.\*\*
- \* C. Farkos closes Site 2 oversight activities today.

\*\*Footnote: On the day of printing this Week 8 report (5/21/96), these documents had not been delivered to C.F. Braun from Foster Wheeler. These requested items will be included in the final Site 2 letter report to be prepared by C.F. Braun.



April 25, 1996

Mr. Bill Dohancy  
Foster-Wheeler  
c/o U. S. Navy-REICC-Bethpage  
Mail Stop A-41-03  
NWIRP Navy Plant 3  
Grumman Aerospace Corporation  
Bethpage, New York 11714-3593

**RE: Evaluation and Resolution of Weight Differences**

Dear Mr. Dohancy:

This letter confirms our telephone discussion of today referring to the differences to date in weights of waste volume received by U. S. Pollution Control, Inc.'s Grassy Mountain Facility from the Bethpage, New York project. As discussed, the shipments of rail loads of PCB Waste which has been transferred from truck to rail to truck have evidenced some variation in weight which is less than the 10% weight discrepancy. The nature of the discussions concerning weight differences is focused on assuring fair accounting of material for invoicing purposes under unit cost conditions.

The difference in weights could be due to random differences due to different scales, different application of conversion factors or other reasons. The customer indicates that it uses a certified scale and confirms these weights with a second certified scale, and these confirmations demonstrate a weight reproducibility of 0.1%. The Grassy Mountain Facility agrees to construct an analysis of fifty (50) loads comparing the generator's weight (in pounds from the scale ticket) to the Grassy Mountain Facility weight (in pounds from the scale ticket). If the comparison should random variations which in the aggregate essential cancel out Grassy Mountain will continue to invoice based on Grassy Mountain weights. If the comparison shows consistently heavier weights at the Grassy Mountain Facility, the facility agrees to change its weight determination for invoice purposes to reflect the generator's weight for each load. The previously invoiced loads could be rectified and credited as necessary.

The Grassy Mountain Facility will construct the first comparison on the first fifty loads and transmit the comparison to you when it is completed.

I appreciate your interest and absolutely concur that it is in the interest of all parties that the weights for invoice purposes be of understood and agreed-upon accuracy. Please feel free to call me at (801) 323-8960 if you have any questions regarding this letter. I will forward the comparison on the first fifty loads as soon as it is complete.

Sincerely,

**W. Randall Miller**

W. Randall Miller

General Manager

Grassy Mountain Facility

cc: Phil Embrescia  
Howard Lazarus

Via Fax: (516) 293-7486



May 7, 1996

Mr. Bill Dohancy  
Foster-Wheeler  
c/o U. S. Navy-REICC-Bethpage  
Mail Stop A-41-05  
NWTRP Navy Plant 3  
Grumman Aerospace Corporation  
Bethpage, New York 11714-3593

Via Fax: (201) 842-7025

RE: Follow Up of April 25, 1996 Letter: "Evaluation and Resolution of Weight Differences"

Dear Mr. Dohancy:

As discussed in the above referenced letter, I am enclosing the waste volume weight comparison report to you. Please review and I will call you Wednesday, May 8, 1996 to discuss the results of our random report.

Sincerely,

W. Randall Muller  
General Manager  
Grassy Mountain Facility

cc: Phil Embrescia  
Howard Lazarus

1996 load number	manifest number	arrival date	NAVY weight	GMF weight	difference
3386	00006	04/08/96	48000	47120	-880
3387	00007	04/08/96	43200	47260	4060
3374	00008	04/08/96	40820	55420	14600
3375	00009	04/08/96	43580	51280	7700
3388	00010	04/08/96	39240	37200	-2040
3389	00011	04/08/96	40940	44220	3280
3377	00012	04/08/96	43260	29260	-14000
3376	00013	04/08/96	44980	40760	-4220
3382	00014	04/08/96	41140	54020	12880
3383	00015	04/08/96	46220	54300	8080
3384	00016	04/08/96	46440	42680	-3760
3385	00017	04/08/96	47320	32180	-15140
3378	00018	04/08/96	43120	31280	-11840
3379	00019	04/08/96	45540	41720	-3820
3380	00020	04/08/96	43140	47360	4220
3381	00021	04/08/96	51100	62920	11820
3470	00026	04/11/96	46200	41380	-4820
3471	00027	04/11/96	45300	45780	480
3472	00028	04/11/96	45520	41740	-3780
3473	00029	04/11/96	45740	45480	-260
3486	00030	04/11/96	43940	44820	880
3467	00031	04/11/96	41760	39680	-2080
3468	00032	04/11/96	44040	42520	-1520
3474	00033	04/11/96	40320	53440	13120
3469	00034	04/11/96	42440	52680	10240
3475	00035	04/11/96	43680	50500	6820
3476	00036	04/11/96	44620	28660	-15960
3477	00037	04/11/96	43780	41680	-2100
3516	00038	04/12/96	46400	46080	-320
3517	00039	04/12/96	42380	48380	6000
3518	00040	04/12/96	46600	42040	-4560
3519	00041	04/12/96	41660	43040	1380
3512	00042	04/12/96	45340	60240	14900
3513	00043	04/12/96	44860	44140	-720
3514	00044	04/12/96	44480	34320	-10160
3515	00045	04/12/96	47400	45480	-1920
3486	00046	04/11/96	42100	52620	10520
3487	00047	04/11/96	45580	41400	-4180
3488	00048	04/11/96	43140	33740	-9400
3489	00049	04/11/96	32720	39720	7000
3598	00050	04/15/96	42840	45520	2680
3624	00051	04/15/96	42540	52840	10300
3625	00052	04/15/96	34320	33660	-660
3626	00053	04/15/96	43660	35520	-8140
3627	00054	04/15/96	43260	41600	-1660
3628	00055	04/15/96	41500	42560	1060
3629	00056	04/15/96	40900	42360	1460
3631	00057	04/15/96	42100	40440	-1660
3630	00058	04/15/96	39220	48440	9220
3632	00059	04/15/96	40320	50880	10560

totals 2168700 2212360 43660





**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GULMAN AIR FORCE FACILITY  
 CLIENT FOSTER WHEELER  
 TIME ARRIVE 9:00 AM  
 PERMIT # \_\_\_\_\_

DATE MAY 22 1996  
 TECHNICIAN Lloyd A Bucknor  
 TIME DEPART \_\_\_\_\_  
 JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D. LBS./CU FT		MC	W.D.	PROCTOR D.D. MAX D.D.		COM
SANDY	SITE # 2 BETHPAGE 96 200 AREA	Elevation				111.6	106.2	110.5	
"	SB-A5	123.0	113.6	109.6	5.6	"	"	"	97
"	SB-A6	122.63	115.0	110.0	4.5	"	"	"	99
"	SB-A7	122.57	115.2	109.6	5.1	"	"	"	99
"	SB-53	122.35	114.9	108.8	5.6	"	"	"	98
"	SB-51	122.09	112.9	107.5	5.0	"	"	"	96
"	SB-58	125.58	117.6	110.2	6.9	"	"	"	99
"	SB-52	122.0	117.0	112.4	4.5	"	"	"	100
"	"	121.0	113.3	107.8	5.1	"	"	"	97
"	"	120.0	113.7	107.2	5.19	"	"	"	97

REMARKS:

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PROCTOR -  
 WT OF MOLD EMPTY = 9.4  
 WT OF MOLD & MATERIAL = 13.12  
 (-) WT OF MOLD = 3.72  
 (X) 30 = PROCTOR WT 111.6  
 DRY DENSITY DERIVED FROM PROCTOR 106.2  
 MAXIMUM DRY DENSITY 110.5  
 DERIVED FROM FAMILY CHART # 2



MATERIALS TESTING LAB INC. *pg #2*

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 414-474  
FAX: (718) 348-548

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER & WHEELER

PROJECT: ARMY AIR FORCE FACILITY

LOCATION: Site #2 AREA SQ 200

PURE SAND:

W.D. 111.3

D.D. 105.2

MAX 110.5

W.D. 120.9 MIXTURE OF PURE SAND

D.D. 111.6

max 113.5

TEST	DEPTH	EXACT LOCATION	PI % Fml
#1	Elevation 123.62	SB-27	9
#2	123-06	SB-52	97
#3	123-52	SB-57	1
#4	124.78	SB-58	97
#5	121.75	SB-53	96.6
#6	122.02	SB-27	46

TECHNICIAN: Lloyd A. Buckholz *1104*

TIME ON SITE: FROM 17:30 TO 3:30



MATERIALS TESTING LAB INC.

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-1474  
FAX: (718) 359-8646

Pg #2

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER WHEELER

PROJECT: GLUMANN AIR FORCE FACILITY

LOCATION: SITE # 2 BETHPAGE AREA SQ 20

TEST	DEPTH	EXACT LOCATION	PAS FAI
#1	Elevation 122.46	SB-52	99
#2	122.92	SB-57	96
#3	124.38	SB-58	100+
#4	121.15	SB-53	98
#5	121.49	SB-51	98
#6	122.03	SB-46	100+

TECHNICIAN: Lloyd A. Ruckmoe

TIME ON SITE: FROM 9:30 TO 3:30



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GRUMAN AIR FORCE FACILITY DATE MAY 8, 1996  
 CLIENT FOSTER WHEELER TECHNICIAN Lloyd A. Bucknor  
 TIME ARRIVE 7:30 AM TIME DEPART \_\_\_\_\_  
 PERMIT # \_\_\_\_\_ JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH ELEVATION	W.D./D.D. LBS./CU FT		M%	W.D.	PROCTOR D.D.	MAX D.D.	Comp
SANDY Soil				116.6	13.6%			121.0	
"	SB-47	120.42	132.4	116.6	13.6%			"	96.4
"	SB-45	120.0	129.9	115.0	13.0%			"	95.0
"	SB-58	122.78	131.8	115.6	14.0%			"	95.6
"	SB-52	120.86	131.0	116.2	12.6%			"	96.2
"	SB-46	120.43	132.0	117.1	12.7%			"	96.8
"	SB-57	121.7	130.6	115.5	13.1%			"	96.1
"	SB-51	119.99	130.5	115.6	12.4%			"	95.6
"	SB-53	119.55	131.3	116.7	12.5%			"	96

REMARKS:  
MDE DERIVED FROM 5 POINT  
PROCTOR

PROCTOR =  
 WT OF MOLD EMPTY = \_\_\_\_\_  
 WT OF MOLD & MATERIAL = \_\_\_\_\_  
 (-) WT OF MOLD = \_\_\_\_\_  
 (X) 30 = PROCTOR WT \_\_\_\_\_  
 DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_  
 MAXIMUM DRY DENSITY \_\_\_\_\_  
 DERIVED FROM FAMILY CHART # \_\_\_\_\_



MATERIALS TESTING LAB INC.

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-147  
FAX: (718) 359-864

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTAL WHEELER

PROJECT: GRUMAN AIR FORCE FACILITY

LOCATION: SITE #2 BOTH PAGES AREA SB 2E

TEST	DEPTH	EXACT LOCATION	PA: FA
#1	ELEVATION 121.42	SB 49	97
#2	121.86	SB 42	99
#3	122.33	SB 57	98
#4	123.78	SB 58	95
#5	120.55	SB 53	99
#6		SB 51	99

SB-A7

TECHNICIAN: Lloyd A. Bucknor

*[Signature]*

TIME ON SITE: FROM 7:30

TO 3:30



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GRANDHAM AIR FORCE FACILITY  
 CLIENT FORTAL WHEELER  
 TIME ARRIVE 7:00 AM  
 PERMIT # \_\_\_\_\_

DATE MAY 31 1996  
 TECHNICIAN Lloyd A. Bucknor  
 TIME DEPART 3:00 PM  
 JOB # \_\_\_\_\_

MATERIAL	SITE #	2' BATH PAGE	LOCATION	DEPTH	ELEVATION	W.D./D.D. LBS./CU FT	M%	W.D.	PROCTOR D.D.	MAX D.D.	CON	
SAND	93-42		200 AREA	"	119.73	114.5	108.6	5.4	111.0	105.2	109.5	99.7%
	86-45		"	"	122.14	114.8	109.3	5.0	"	"	"	99.1%
	58-53		"	"	123.0	112.9	107.6	4.9	"	"	"	98.7%
	55-51		"	"	123.09	113.7	108.6	4.7	"	"	"	99.2%
	56-62		"	"	124.0	113.1	107.1	5.6	"	"	"	97.1%
	56-62		"	"	122.05	118.2	111.1	6.4	"	"	"	100.4%
SAND	86-54		"	"	124.71	129.0	120.8	6.8	131.7	122.9	126.3	0%
	"		"	"	124.71	134.6	125.6	7.2	"	"	126.3	99.4%
	"		"	"	123.71	125.7	120.3	4.5	"	"	"	95.0%
	"		"	"	123.71	133.3	125.1	6.5	"	"	"	99.0%

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PROCTOR =

WT OF MOLD EMPTY = 9.4 / 9.4

WT OF MOLD & MATERIAL = 13.79 / 13.1

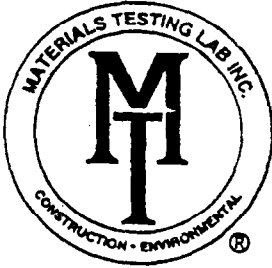
(-) WT OF MOLD = 4.39 / 3.7

(X) 30 = PROCTOR WT 131.7 / 111.0

DRY DENSITY DERIVED FROM PROCTOR 122.9 / 105.2

MAXIMUM DRY DENSITY 126.5 / 109.5

DERIVED FROM FAMILY CHART # \_\_\_\_\_



**MATERIALS TESTING LAB INC.**

9500 -1- mi

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT \_\_\_\_\_

DATE MAY 9, 1996

CLIENT FOSTER WHEELER

TECHNICIAN WYD A BUCKNER

TIME ARRIVE \_\_\_\_\_

TIME DEPART \_\_\_\_\_

PERMIT # \_\_\_\_\_

JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D.		M%	W.D.	PROCTOR		COMP
			LBS./CU FT				D.D.	MAX D.D.	
SANDY SOIL								121.0	
	SB. 62	120.73	131.0	116.3	12.6				95.9
	"	119.73	129.8	116.1	11.8				96.0
	"	118.73	130.3	116.7	11.6				96.4
	SB. 54	122.71	131.0	116.1	12.8				96.0
	SB. 53	118.55	131.0	118.5	10.5				96.9
	SB. 48	121.14	131.7	116.6	13.0				97.4
	SB. 45	122.0	131.7	116.0	13.5				96.4
	SB. 57	121.33	131.4	116.8	12.5				96.5
	"	120.33	129.2	115.9	12.1				95.8

REMARKS:  
HDR 121.0

PROCTOR = \_\_\_\_\_  
 WT OF MOLD EMPTY = \_\_\_\_\_  
 WT OF MOLD & MATERIAL = \_\_\_\_\_  
 (-) WT OF MOLD = \_\_\_\_\_  
 (X) 30 = PROCTOR WT \_\_\_\_\_  
 DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_  
 MAXIMUM DRY DENSITY \_\_\_\_\_  
 DERIVED FROM FAMILY CHART # \_\_\_\_\_

# C F Braun

**Weekly Progress Meeting - Week 8  
May 8, 1996  
CTO 212 - Site 2 Remediation  
NWIRP Bethpage, NY**

**List of Attendees:**

Al Taoramina	Navy ROICC
Bob Ingram	Navy ROICC
Craig Farkos	C.F. Braun
William Dolhancay	Foster Wheeler
Chris Polios	Foster Wheeler

**Meeting Minutes:**

The following items were covered in the weekly meeting at the ROICC office:

- C. Farkos reviews items on the punch list itemizing Site 2 closure activities (See enclosed).
- B. Dolhancay notes that the Site 2 decontamination pad will be excavated and transported to the railyard along with the remaining pile of soil generated by scraping the Site 2 traffic areas.
- B. Dolhancay notes that the front-end loader will be decontaminated at Site 2 and the decontamination water will be containerized and stored with the Site 1 drums of decontamination water.
- B. Dolhancay notes that he is negotiating to add an additional backfill hauler to the Site 2 operations.



## **PUNCH LIST FOR PROJECT CLOSURE AT SITE 2 - CTO 212**

Generated 5/8/96 by C. Farkos

1. Finish backfilling and compacting the excavated area within Site 2.
2. Place and compact all soils from Pile A and Pile C in the excavated area for Site 2.
3. Regrade the area immediately outside the Site 2 entrance and assure proper drainage.
4. Excavate Site 2 decontamination pad and remaining stockpile of PCB soil at Site 2 and transport material to the railyard for disposal in Utah.
5. Obtain certification for decontamination of all equipment used in the Site 2 operations.
6. Retain copies of all weight tickets for backfill delivered to Site 2.
7. Replace the fence and fence poles along the western property boundary, adjacent to the wastewater treatment plant. Replace all disturbed gravel in this area.
8. Monitor and review Hazardous Waste Shipping Manifest and Certificate of Disposal return dates and verify that all manifests are returned to the ROICC office within the 45 day limit. Notify Foster Wheeler and Laidlaw for any manifests exceeding a 35-day return limit. Notify the State of New York for any manifest exceeding a 45-day return limit.
9. Forward copy #3 of all manifests generated during decon pad disposal to the State of Utah. Forward copy #4 of all manifests generated to the State of New York.
10. Review and retain copies of all bell curves generated by the Utah disposal facility.
11. Receive a copy of release of liability from Foster Wheeler and Laidlaw for all equipment used at the railyard.
12. Receive a copy of certificates of clean soil for all types of backfill delivered to Site 2.
13. Receive a copy of geotechnical test results for the processed backfill used at Site 2.



# Brown & Root Environmental

Foster Plaza VII  
661 Andersen Drive  
Pittsburgh, PA 15220-2745

A Division of Halliburton NUS Corporation

(412) 921-7111  
FAX: (412) 921-4111

C-49-04-6-217  
April 22, 1996  
Project Number 5236

Mr. Steven Lehman (Code 4051/SL)  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, PA 19113-2090

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order 0212

Subject: Northern Division, Naval Facilities Engineering Command  
Naval Weapons Industrial Reserve Plant, Bethpage, New York  
Verification Sampling Results

Dear Mr. Lehman:

The results of the first round of confirmatory sampling collected on April 12, 1996 indicates one samples (SA-A-13) is above the established total PCB action level of 10 ppm. The other ten samples are below the action level and it is recommended these areas be backfilled. Additional soil removal is recommended in the area of samples SA-A-13 and another confirmatory sample taken. The results of the analysis is as provided below:

<u>Sample Identification</u>	<u>Analytical Result (ppm)</u>
S2-A-01	1.00
S2-A-02	0.16
S2-A-03	6.50
S2-A-04	3.00
S2-A-05	1.10
S2-A-06	0.19
S2-A-07	8.50
S2-A-08	4.10
S2-A-29	5.50
S2-A-12	0.12
S2-A-13	20.00

The location of these samples and the additional confirmatory samples which are tentatively scheduled to be collected later today are provided on the attached figure. If you have any questions or require additional information at this time, please call me at 412-921-8916 or Robert Simcik at 412-921-8163.

Very truly yours,

*FOR: Mark P. Speranza*  
Mark P. Speranza, P.E.  
Project Manager

MPS/dt  
Enclosure



c: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Paul Briegel, NORTHDIV  
Mr. Jim Colter, NORTHDIV  
Mr. Al Taormina, Navy ROICC  
Mr. Bob Ingram, Navy  
Mr. Howard Lazarus, Foster Wheeler  
Mr. Bill Dolhancay, Foster Wheeler  
Mr. John Trepanowski, C.F. Braun  
Mr. Robert Simcik, C.F. Braun  
Mr. Daryl Hutson, C.F. Braun  
**Mr. Craig Farkos**; C.F. Braun  
File 5236

W. 440 713.5

6' HIGH CHAIN LINK FENCE

6' HIGH CHAIN LINK FENCE

BLACKTOP

BENCH MARK  
X-CUT CONCRETE PAD  
ELEV=128.13

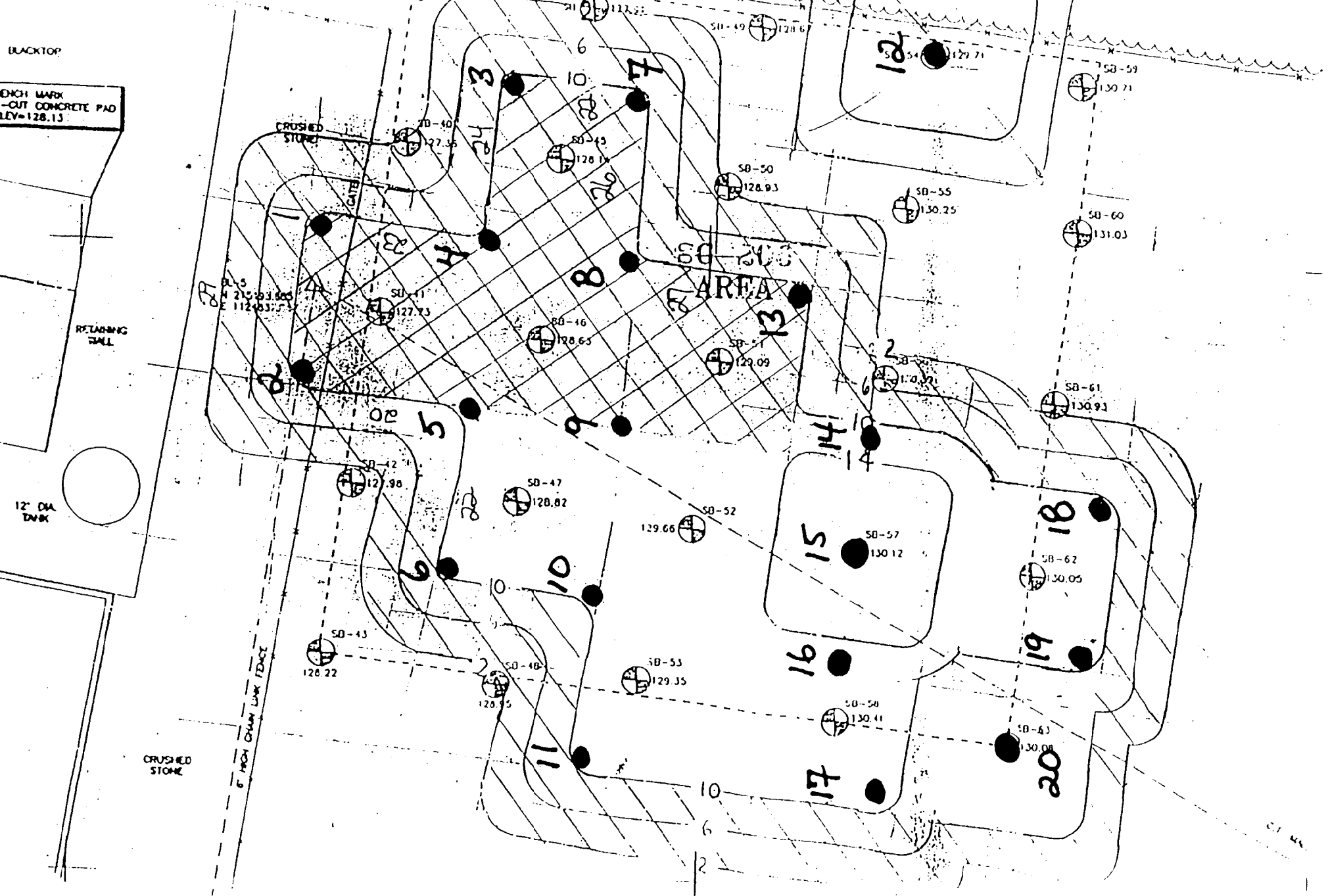
ETC

RETAINING WALL

12" DIA  
DRAIN

CRUSHED STONE

6' HIGH CHAIN LINK FENCE



**APPENDIX B**  
**FIELD LOGBOOK**

CTO 212 BETH PAGE

LOG BOOK I

JOB START:

5236 - 0330 - oversight  
- overhead

5236 - 0142 sampling

\$38 meals  
142 lodging

sited

Fed. Ex  
Charge

0152-0168-1

147-200

10948015

5304N

Office: 1-800-245-2730  
SPRANZA: 921-8916

Dave Brenman - Quantara Labs: (412) 826-3185  
5477

5236-0330

Fed. Ex Cost: 168848862

Pre-remediation sampling - Day 1, 11-7-95

Tom Mullaney + Rob Simcik (TM + RS) arrive on base at 0700

TM + RS meet Foster Wheeler Field crew on base.  
(FW)

Foster Wheeler field crew:

<u>Name</u>	<u>Position</u>
Lynn Niles (LN)	Field Operation Leader (FOL)
Cheryl Polios (CP)	Site Health + Safety Officer (SHSO)
Tom Fowler (TF)	Field Geologist
John Schaffer (JS)	Field Geologist

Around 0730, FW subcontractor surveyor arrives. He began setting up GPS references. Bob Isby

Around 0800, Grumman personnel arrived to perform a sonic survey of Site 1 to search for utilities.

0950 - R+L Well Drilling arrived with <sup>TM 11-7-95</sup> 4<sup>1/2</sup> men + 2 support trucks + 2 rigs plus 1 delivery truck with 30-55 gal steel drums. Bob Nard, Philip Zuckman, Norbert Hartman, Brian ~~Walsh~~ <sup>Walischer</sup> <sub>TM 11-7-95</sub>

Weather - overcast, low clouds. cold: 42°F at 0700 predicted high temp <sup>TM 11-7-95</sup> 53°F.

1100 - surveyors arrive Daniel Sheldon <sup>(DS)</sup>, Ron Darrak (RD)

1115 - very light rain begins

1145 - rain is only random raindrops

1200 - Decision is made by LN to send drillers back until tomorrow. ~~They are~~ <sup>TM 11-7-95</sup> FW is missing some sampling supplies.

1200 - Break for lunch.



During the initial briefing of the surveyors, LN explained to DS + DD the FW sampling plan as laid out in the FW workplan.

LN proposed taking ~~borings~~<sup>TM 11-7-95</sup> 3 or 4 borings in the rhomboid-shaped zone of Site 1 and she requested the concurrence of TM. TM explained that it was not his place to make this determination; it was the decision of LN. LN then proposed 4 borings, 1 boring at each corner + TM agreed that this made sense. LN also proposed 5 borings (1 at each corner + 1 located centrally) for the southern-most zone of Site 1. TM acceded to this proposal.

Between 1230 + 1300 it began to rain. A steady downpour was continuous.

The surveyors worked through the rain.

The surveyors were instructed by LN to remain within the fence at both sites. Instead of ~~the~~<sup>TM 8-95</sup> finding + plotting the area as marked on the CF Braun figures, they are adjusting the area to the fence or building. They are allowing approximately 2' clearance on all sides for the drilling equipment.

By 1600 surveyors had staked out the corners of the southern-most area and the rhomboid-shaped area.

T. E. Mallory

11-8-95

Day 2 - 11-8-95

PROJECT

CT0212

5

1248

TM arrives on base at 0700.

0715 - FW crew arrives at Site 1 with surveyors & drillers.

People on-site: LN, CP, TF, JS, BN, PZ, NH, BW, DS, + DD.

0730 - Drillers begin decon-area setup. Decon area is ~6' inside inner fence. ~20' <sup>TM 11-8-95</sup> North of northeast corner of building just west of <sup>TM 11-8-95</sup> of rhomboid-shaped area in Site 1. Decon area is approx. 20' x 12' with the longest dimension running N-S. This is the decon support area - decon activities may take place nearby.

0830 - LN makes decision to change sampling plan to sampling with a 3" split spoon instead of 2" split spoon. This is due to a refusal by the drillers to chemically decon their equipment. (Found out later this was because drillers didn't have 2" split spoons. - TM 11-8-95)

0920 - LN makes decision to omit the boring on the southwest corner of the large area in Site 1. This is because it lies outside the fence line.

The surveyors say that the rhomboid-shaped area actually lies about 7' off the fence line (inside). They did not have to adjust it. The southern-most area was shifted inside the fence line, but the dimensions remain as marked on the CF Brain figures.

Work continues to Page

*T. L. E. McLaughlin*

DATE

11-8-95

DATE

0945 - Drilling begins. First boring to be done is the southwest corner of the rhomboid-shaped area of Site 1. 3 to 4 inches under the surface, drillers encounter a manhole cover. Al Taormina thinks this may be a leach pit.

1200 - Current problems with drilling:

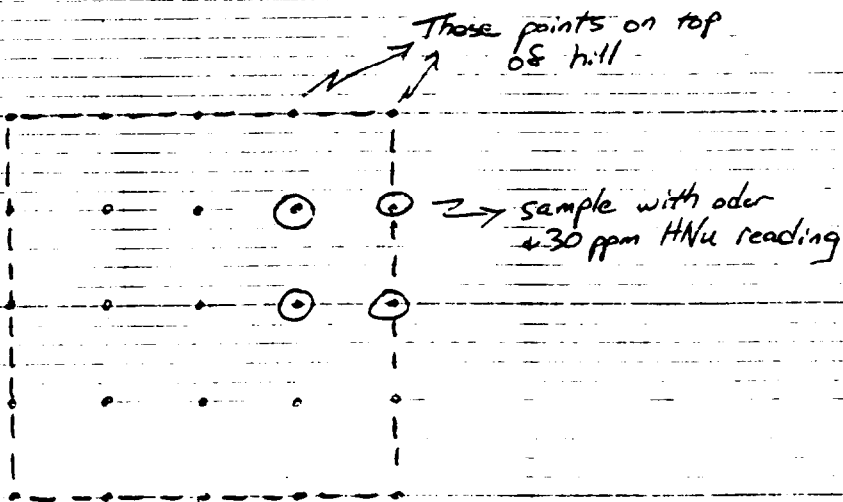
- Small square area appears to be located between two leach pits. It is unsure whether or not this will interfere with drilling.
- Southern-most area is littered with debris. Debris consists of engine + truck parts, steel I-beams, assorted metal pieces. FW previously requested the debris be removed prior to this field effort, but it wasn't done. The debris is large enough and prevalent enough to severely limit drilling in this area.
- Large square area extends to intersect a hill that is approximately 7' higher than the rest of the site. 2 proposed borings are on top of the hill and 2 proposed borings are on the side of the hill. These borings are those in the northeast corner of the area.

1400 - CP informs LN that the first boring in the large square area of Site 1 has a distinct odor and she got a reading of 30ppm on the HNU. This was not noted on previous borings due to the inactivity of the HNU (a fuse had blown). However, previous borings did not have a discernable odor.

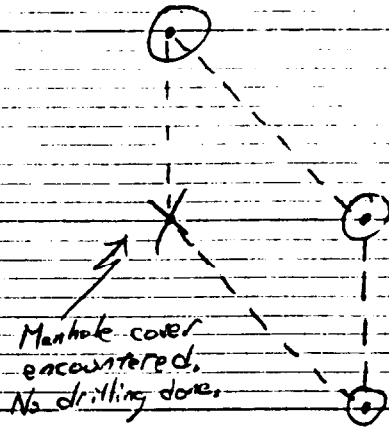
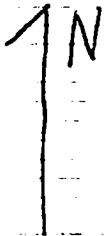
*J. E. McLaughlin*

11-8-95

Samples drilled on 11-8-95:



Large square area  
Site 1



Rhomboid-shaped area  
Site 1

Key:

- Area of concern
- Proposed boring
- ⊙ Sampling done
- X Sampling attempted

1500 - Bob Ingram + Al Taormina arrive on-site to answer some questions of LN concerning sampling logistics (see 1500, pg 7). During the walk-through of the site, Al opened a leach pit cover and CP took an H<sub>2</sub> reading of 5 ppm. This reading was done in a pit with a large headspace and with the contents undisturbed. Bob + Al will try to determine the dimensions of the leach pits.

At this time Al also expressed an interest in additional sampling around the autoclave located west of the Sence at the southern-most area of Site 1. Al stated that during a walk-through in May 1995 he had expressed this same interest and thought that B+RE had agreed to this. Present during the current conversation were Bob, Al, LN, + TM.

During a phone consultation with RS, TM explained this conversation. RS stated that he was present in May 1995 and was aware of Al's concern about the autoclave. He recommended determining Al's intentions with regards to sampling, but stated that this was outside our responsibility and was the responsibility of the RAC. TM relayed this information to LN, adding that how FW addresses Al's concern is between her and Howard Lacarus.

1600 - End drilling for the day. Totals for the day:  
7 borings (numbers 2-8), 21 samples (no surface samples taken) not including QA/QC samples.

Today's weather: Partly cloudy, windy, no precipitation, temperature in the 40's

Continued to Page

*[Handwritten Signature]*

DATE

11-8-95

DATE

Day 3 - 11-9-95

CT6212

11

1248

0700 - TH arrives on site with FW crew

People on site: LN, CF, TF, JS, BN, PE, NH, BW, PS, + DD.

0800 - Begin drilling

0900 - Bob Ingram arrives on site with answers to some of the concerns of 11-8-95. In talking with some people from Grumman, Bob believes there are nearly 50 leach pits in Site 1. He is trying to get the site drawing showing these pits, but feels he may not have it until 11-14 or 11-15.

Bob gave LN permission to drill on top of the hill. They may have trouble getting the rigs up there.

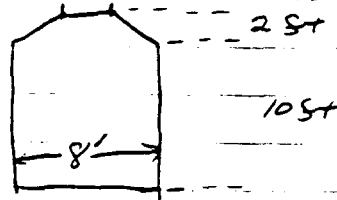
The debris in the south area should be removed today.

LN asked about removing equipment outside the fence that is blocking access to the southwest corner of the large square area. This is a change from their original plan to remain inside the Seracelina. This is closer to what we had intended.

*D. E. Mullaney*

11-9-95

1000 - CP spoke with Bob Ingram & look at site drawings depicting the leach pits. She estimated 150 leach pits. The leach pits are constructed of concrete and have a diameter of 8 ft.



The leach pits are on a grid of 30'. I will try to obtain copies of these drawings. The 30' grid means 30' between centers of leach pits.

1130 - CP informs LN that another boring was found to have an odor. HNu readings were similar to those for previous borings with odors. This is part of the large square area of Site 1.

1200 - Upon further consultation with CP, my impression of the borings with odors was wrong. The borings from yesterday were on the interior of the grid. There was definitely one, possibly two (they are unsure). There have been two borings today with some sort of hit. Both are located along the southern border of the large square area and are consecutive points.

Not continued to Page

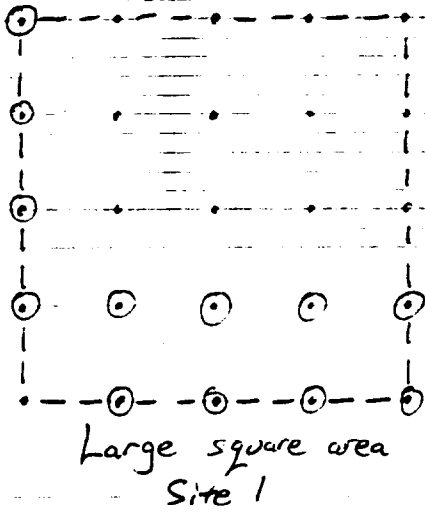
*D. E. Mullahey*

DATE

11-9-95

DATE

Samples drilled on 11-9-95:



Key:

- Area of concern
- Proposed boring
- ⊙ Sampling done



1330- LN informs me that she and CF spoke with Howard Lacarus. Howard instructed them to take 3 surface soil samples around the autoclave. He also instructed them to remove arsenic as one of the analytes for all future samples except those collected from the arsenic area of Site 1. The samples from the arsenic area and those samples collected before today & (those shipped yesterday) will be analyzed for arsenic and PCBs. According to LN, these instructions came to Howard from the Navy. The analysis of the surface samples around the autoclave is currently unknown. (LN isn't sure if these will be analyzed for arsenic.)

1600 Drilling ends for the day. Totals for the day: 12 borings (numbers 9-20), 36 samples (no surface samples) not including QA/QC samples.

Today's weather: Cold. Last night's temperature was in the 20's. The morning was cold + very windy. By 1300, it was mostly sunny with less wind. Temperature in the 40's.

J. C. Mulvaney

11-9-95

Day 4 - 11-10-95

CTO 212

1248

17

0700 - TM arrives on site + meets FW crew.

People on site: LN, CP, TP, JS, BN, PZ, NH, + BW

0800 - Drilling begins.

1000-1130 - Sampled points on top of hill. 4 samples were taken at levels corresponding to those collected in the rest of the site. In other words, they drilled a certain depth before collecting their first sample for those borings. This sample would be approximately at the surface if it weren't for the difference in elevation. This depth appears to be an estimate arrived at arbitrarily - I don't believe the surveyors gave them a number to work from.

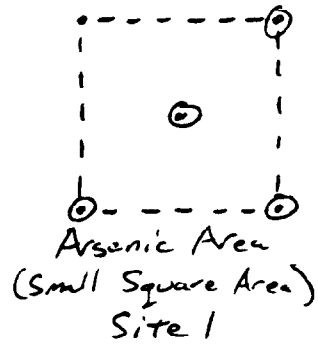
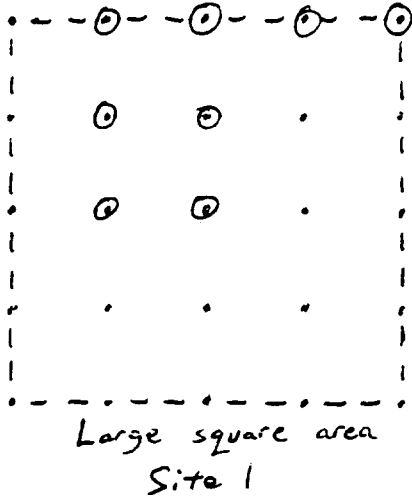
The soil here appears to be no different from the soil collected elsewhere in Site 1. The soil is sandy with varying amounts of gravel. It is a moist brown in appearance.

1230 - Auger refusal occurred at the two sample points in the northwest corner of the large square area. The first of the two occurred between 8 + 10 feet. Two samples were collected from this boring. The other occurred at 4'. One sample was collected from this boring. The first boring is the center point of the north border. The second boring is the point along the border that is due west.

D. E. Mullaney

11-10-95

Samples drilled on 11-10-95:



Key:

- Proposed boring
- ⊙ Sampling done
- Area of concern

1400 - Begin drilling 9<sup>th</sup> boring of the day. This is the boring that was attempted on 11-8-95. This boring, as well as several others thus far, needed to be moved by several feet in order to avoid leach pits. The surveyors are supposed to return next week to plot "as built" figures, so these modifications to the workplan may be noted.

Samples collected thus far: 26 (including 3 for today's 9<sup>th</sup> boring, but not including surface samples except for the two pseudo-surface samples previously noted - See 1000-1130, 11-10-95.)

Today's weather: Milder than yesterday. Morning temperature around low 40's, slight wind. Afternoon temperature around 50°F, gusty wind. Clear & sunny, some clouds.

1430 - TM departs Sor airport.

Totals Sor the day: 12 borings (numbers 21-32),  
35 samples (not including surface samples, except as noted above) not including QA/QC samples.  
- TM 11-13-95

*J. C. Mullaug*

11-10-95

Day 5 - 11-13-95

CT0212

21

1248

0730 - TM arrives on site + meets FW crew.

People on site: LN, CP, TF, JS, BN, PZ, NH, + BW

Surveyors DS + DD expected on site after lunch.

0800 - Begin drilling.

Conversations between TM + LN have determined the following:

- They expect to get unofficial results from the lab within 72 hours of sample receipt. This will allow them to expand the sampling effort as needed. It is currently unclear what will be done about the last two days' samples, since results will not be available until after de-mobilization.
- Full TCL + TAL analysis are being performed on 1 in 5 samples (20%) as opposed to the recommended 10%. This is what FW said would be done in their Response to Comments.
- Surface samples have not been collected thus far due to a lack of available personnel. Originally, the drillers were ready to begin drilling on 11-8-95, and because of the drillers' refusal to perform chemical decon of their equipment, one of the two FW field geologists (JS) was relegated to decon. Because of this



11-13-95

drilling began without surface sampling. When surface sampling occurs, it will be several (2-4) feet away from the boring to avoid the remaining drill cuttings.

- At the end of each day, the drillers fill each bore hole with caulking. This is a gray, cement-like fill that hardens overnight. This is just grout - no bentonite is being used.

1030 - JS has cleaned a sufficient number of split spoons to allow him time to begin surface sampling. Sampling will be done <sup>TM 11-13-95</sup> with the same QA/QC requirements (TCL/TCL 1 in 5, MS/MSD 1 in 20). Field duplicates are being sent as well.

1130 - Drilling at Site 1 complete with the exception of the southwest corner of the large square area. FW is waiting for Grumman to clear the area of carts + debris that is blocking access to the boring site.

1215 - Surveyors from CT Male arrive at Site 1. The surveyors are DS + DD.

1330 - TM arrives at Site 2. Drilling begins.

Site 2 has several piles of soil + gravel in it. The piles range in height from 4' to 8' and range in area from approximately 200  $\text{ft}^2$  to 500  $\text{ft}^2$ .

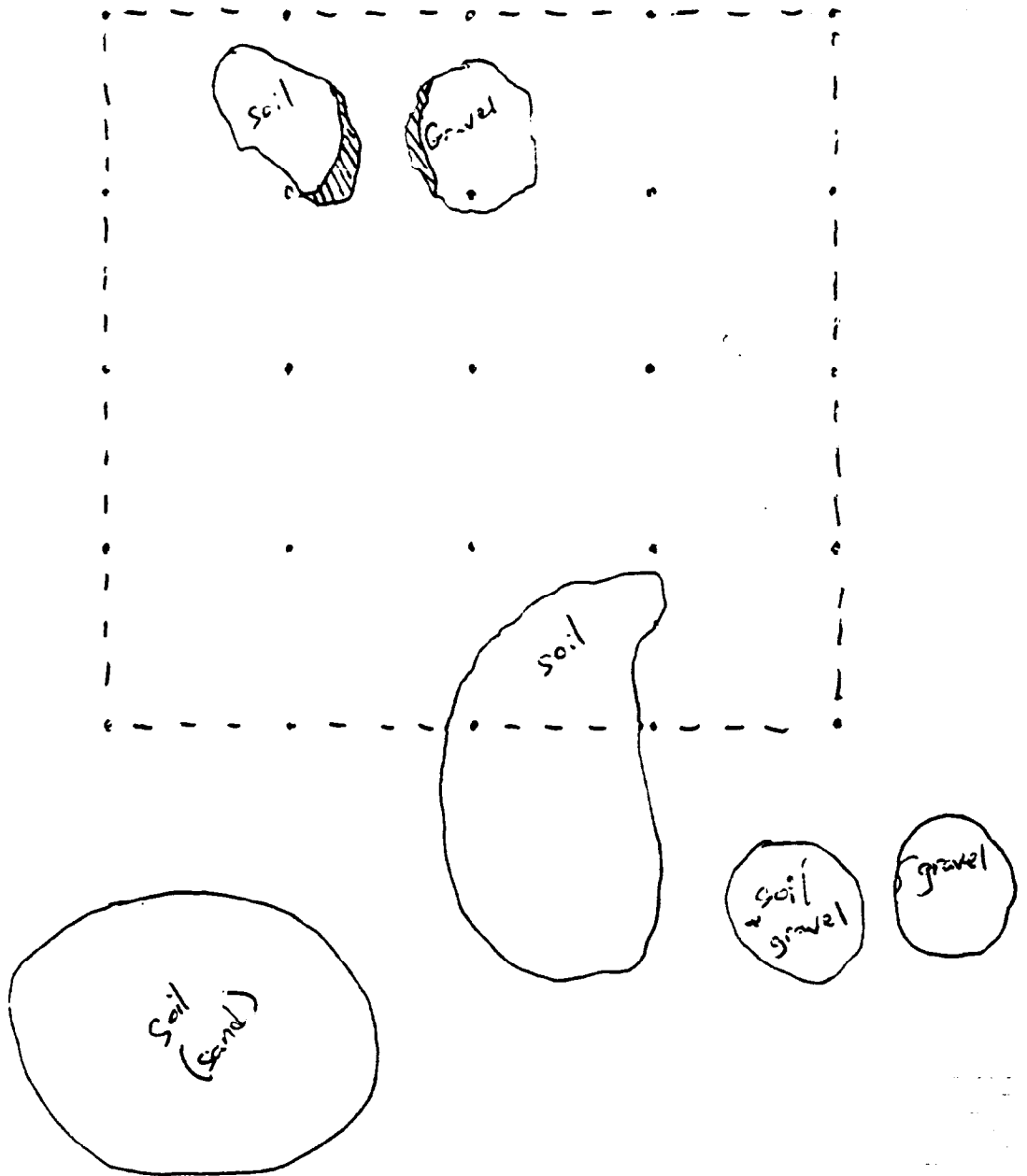
*D. E. Mulvaney*

11-13-95

Site 2

Key:

- Proposed boring
- Area of concern
- Obstacles
- ▨ Area that was moved



There are three mounds - 2 soil, 1 gravel.  
 The gravel is a fine ( $\frac{1}{4}$ " x  $\frac{1}{4}$ " ) gray colored (like river) stone. It is the smallest height-wise. It is located ~10' south of the center of the northern border of the site. (or area)

On of the soil mounds is a mix of sand & large round gravel. It is ~25' west of the gravel mound. The south side of the mound has been removed by a bucket-loader of some kind. The mound has been here long enough to become overgrown with weeds. The south side has been removed recently.

The second mound is a combination of three mounds that have run together and in turn run together with a large (720' tall) mound south of the area. This mound is sand, mud, + large round gravel. It appears very fresh in one section. It is located to the east on the southern border of the area (See Figure, pg 24).

1445 - Grumman employee arrives with bucket loader and moves east side of soil mound (north mound) to allow the drilling rig access. This resulted in some of the gravel mound being mixed in (See Figure, pg 24).

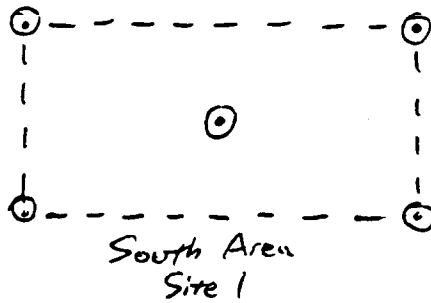
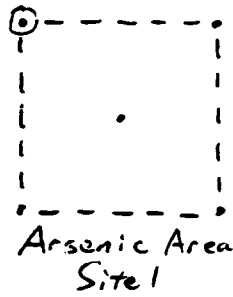
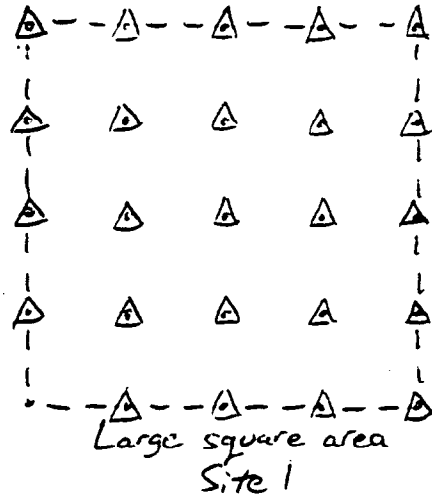
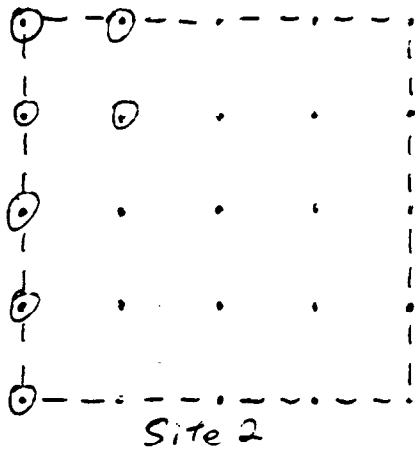
1700 - Drilling ends for the day.

T. E. Mullen

11-13-95



Samples drilled on 11-13-95:



Key:

- Proposed boring
- ⊙ Sampling done
- △ Surface sampling done
- Area of concern

Totals for the day: 13 borings, 39 samples (no surface samples) not including QA/QC samples. 24 surface samples, not including QA/QC samples.

Today's weather: Cold, Low 30's in the morning, high 30's in the afternoon. Hazy + overcast, dismal clouds all day. Very light slurrries occasionally.

T. E. McLaughlin

11-13-95

Day 6 - 11-14-95

CT0212  
1248

2

0700 - TM arrives on site + meets FW crew.

People on site: LN, CP, TF, JS, BN, PE, NH, ~~BW~~, DS, + DD. <sup>11-14-95</sup>

0730 - Because it has been raining since 0600 and is beginning to rain harder, LN decides to forego drilling for the day. The drillers will leave to get a back-hoe from another site and bring it here to move drums. The surveyors can still work. TF can take surface samples, while JS decors all remaining split spoons.

~~0800~~ = 11-14-95

0745 - Drillers leave site. (BN, PE, NH, + BW)

0800 - Rain stops.

0900 - Spoke with Al Tarmim. He is unsure as to whether or not the leach pits have open bottoms. He guesses that they might.

1000 - Spoke with the surveyors. Last week sometime, they used a measuring tape and a metal detector to locate some manhole covers for the leach pits. They uncovered ~10 in ~~addition~~ addition to the ~5 that were already visible. They have been asked by LN + CP to survey the locations of the leach pits.

T. E. Mulvaney

11-14-95

1230 - Rain begins. Steady downpour.

1330 - Surface sampling finished for today. ~6 samples left to be collected. These are the 1 in 5 that get TCL/TAL, because they ran out of VOA vials.

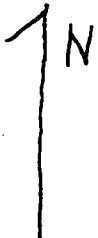
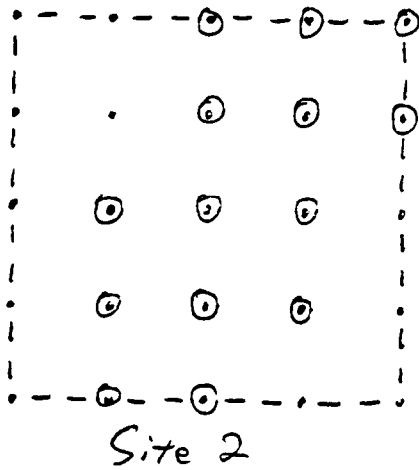
Totals for the day: 36 surface soils (this is probably including QA/QC samples, as the number was obtained by counting samples on the CC.)

Today's weather: Rainy + windy. The region was being hit by the season's first nor'easter. Temperatures started in the low 40's but dropped into the 30's around midmorning. Winds were up to 50 mph according to local weather reports.

D. E. Maloney

11-14-95

Samples drilled on 11-15-95:



- Key:
- Proposed boring
  - ⊙ Sampling done
  - Area of concern

Day 7 - 11-15-95

CT0212

33

1248

0700 - TM arrives on site + meets FW crew.

People on site: LN, CP, TF, JS, BN, PZ, NH, BW, DS, + DD.

0800 - Drilling begins - Site 2. At site: TM, CP, TF, BN, PZ, NH, + BW.  
LN, JS, DS, + DD remain at Site 1.

The lab apparently can no longer meet the 72 hour turnaround and has extended their time to 7 day turn. This means that LN will not have the opportunity to expand the search for contaminants if there are hits on the edges or borders of the areas of concern. However, it appears the drillers do not have the extra time that would be necessary for this.

Also, FW's project management will discuss with the Navy a scope change to include sampling the leach pits. The surveyors have located 9 pits in the large square area of Site 1. There are pits intersecting or near to the other areas as well. FW will arrange things with the drillers, but they may not be able to return until after Thanksgiving.

1630 - Drilling ends for the day. Totals for the day:  
14 borings done, 42 samples (no surface samples)  
not including QA/QC samples.

Today's weather: Blustery. Some scattered rain. Windy with overcast skies breaking up to allow some sun. Morning temperature around 40°F, colder as the day progressed.

J. E. Mullaney

11-15-95

Day 8 - 11-16-95

CTO 212  
1248

35

0700 - TM arrives on site + meets FW crew.

People on site: LN, CP, TF, JS, BN, PZ, NH, BW, DS, + DD.

0800 - Drilling begins, continuing at Site 2. LN + JS remain at Site 1.

1040 - Drilling at Site 2 complete. Return to site 1 for final boring.

1200 - Drilling at Site 1 complete.

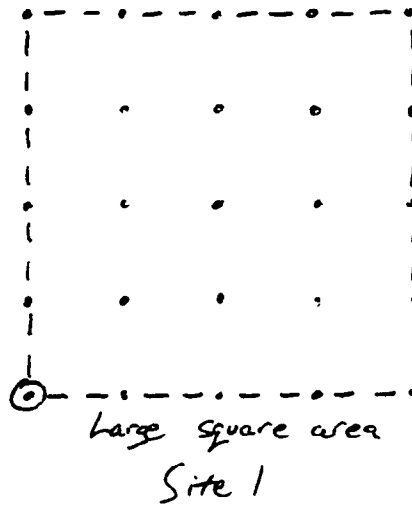
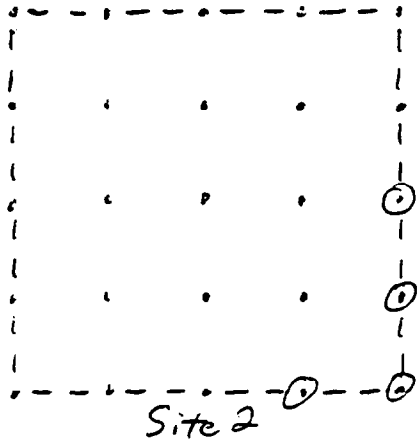
1300 - Drillers begin marshalling drums containing drill cuttings. Drums are being placed on pallets on the cinder drum marshalling area.

1315 - TF + JS begin taking remaining surface samples. These are the last 6 samples getting TCL/TAL analysis and three samples from around the old autoclave. These samples (around the autoclave) are actually just scrapings of the soil that accumulated on the concrete pad on which the autoclave rests. Each of the three was collected under the autoclave. The first two samples were at the west end and center of the autoclave, respectively, and were collected from the south side as far under as JS could reach comfortably. The third sample was collected at the east end of the autoclave, and was collected by taping the sampling spoon to a branch and reaching under the autoclave. This way the sample was taken from soil directly under a drip from the autoclave. These will be analyzed for PCBs.

*A. E. Mullaney*

11-16-95

Samples drilled on <sup>TR 11-16-95</sup> 11-16-95:



Key:

- Proposed boring
- ⊙ Sampling done
- Area of concern



37

Totals for the day: 5 borings, 15 samples (no surface samples) not including QA/QC samples. 9 surface samples not including QA/QC samples.

Today's weather: Clear + cold. Partly cloudy in the afternoon. Gusty winds. Temperature around 32°F in the morning, mid 40's in the afternoon.

D. E. McLaughlin

11-16-95

Day 9 - 11-17-95

CTO 212

1248

39

0800 - TM arrives + meets FW crew.

People on site: LN + CP

0915 - Drillers arrive on site to finish de-mobilization.

People on site: LN, CP, BN, PZ, NH, + BW

Today's activities are general de-mobe and sample shipment.

Today's weather: Clear + cold. Morning temperature ~ 32°F.

D. E. Mulvaney

11-17-95

Day 1 - 12-4-95

CT0212

1248

41

0700 - Tom Mullaney (TM) arrives on base.

0720 - Foster Wheeler (FW) field crew arrives at Site 1.

Foster Wheeler field crew:

<u>Name</u>	<u>Position</u>
Lynn Niles (LN)	Field Operations Leader
Cheryl Polios (CP)	Site Health & Safety Officer
Tom Fowler (TF)	Field Geologist
George Dangerfield (GD)	Field Geologist

According to LN, this trip has three goals:

- 1) To classify/characterize the leach pits. This will be accomplished by sampling two pits from each of the three areas of concern that intersect or contain leach pits. Two samples will be collected from each pit, 1 at 4'-6' and 1 at 10'-12' depth. This is a total of 6 pits and 12 samples, not including QA/QC samples.
- 2) To determine depth of contamination. Originally, samples were collected to a depth of 12'. 6 borings had contamination exceeding 10 ppm. Thus, 6 additional borings will be drilled, one for each deep contamination. These will be placed right next to each original boring and a sample will be collected at 14'-16' depth. One of these is in the arsenic area.

*T. E. Mullaney*

12-4-95

- 3) To determine extent of contamination at the rhomboid-shaped area of concern at Site 1. 4 ~~so~~ borings were drilled here originally. Some of these samples had positive hits. Thus, 4 new borings will be drilled, one at each corner, removed several feet. In other words, one boring at each corner of the area is the area were sized upward. 5 samples will be collected at each boring: surface, 2'-4', 6'-8', 10'-12', and 14'-16' depths.

This results in a total of 16 borings and 38 samples, not including QA/QC samples. As part of the sampling at the rhomboid-shaped area, the wooden inner fence will be torn down to allow the drilling rig access to the proposed boring locations.

The three areas of concern where leach pits are a concern are the large square area, the rhomboid-shaped area, and the arsenic area.

0930 - Drillers arrive on site. Drilling company is R+L Well Drilling again. They have 1 drilling rig + 1 support truck (steam cleaning, grouting).

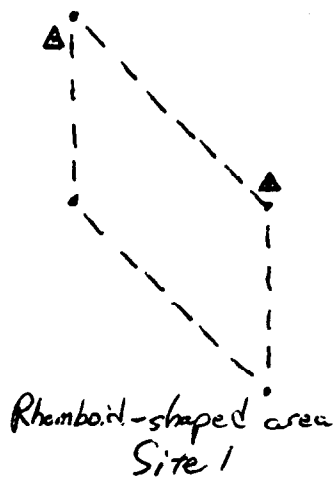
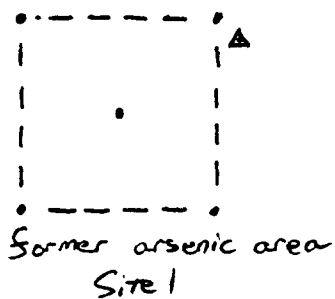
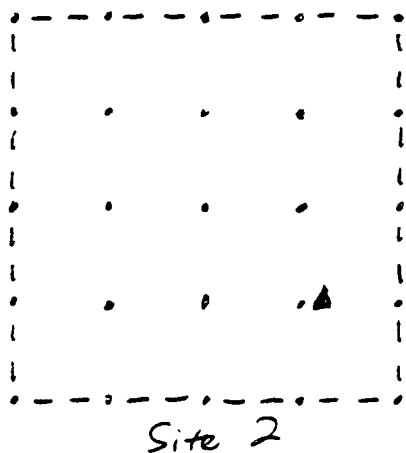
Drillers: Bob Nowd (BN), Norbert Hartman (NH).

1100 - 55 gallon drums are delivered by R+L Well Drilling. 1 truck with 1 man delivered 12 drums.

A. E. Mullany

12-4-95

Samples drilled on 12-4-95:



Key:

- Area of concern
- Previous boring (as proposed, ~~was~~ as built)
- △ Deep boring, single sample

1530 - Drillers finish 4<sup>th</sup> boring for the day. End drilling for day. Totals for the day: 4 borings, 4 samples (not including QA/QC samples).

LN informs me that there were no positive hits of arsenic in the arsenic area of Site 1. However, they got high hits of PCBs in this area.

Today's weather: Partly cloudy + clear. Morning temperature around 48°F. Slightly warmer in the afternoon but also slightly windier.

P. E. Mallory

12-4-95

Day 2 - 12-5-95

CT0212

1248

47

0730 - TM arrives on site & meets FW crew.

People on site: LN, CP, TF, GD, BN, + NH.

0800 - Drilling begins.

0920 - Deep boring, single sample drilling is complete. Leach pit borings begin.

1130 - CP + TF inform me that a 10'-12' depth split spoon sample showed three distinct layers. The top 6"-8" was described as a red sand, fine grain, fill sand. Below that was nearly 12" of black, clayey, sludge-like material. The final layer was a more natural appearing sand. This sand was coarser with some gravel and was closer to the color of beach sand.

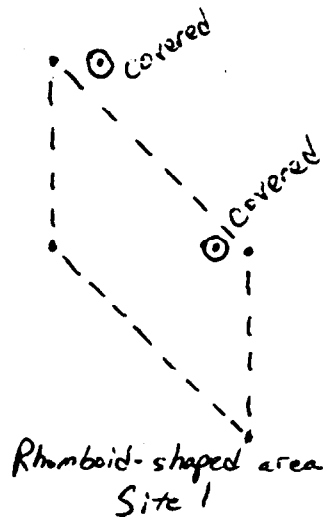
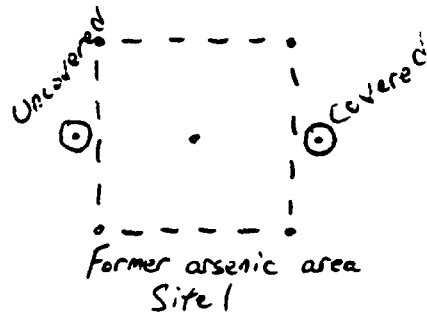
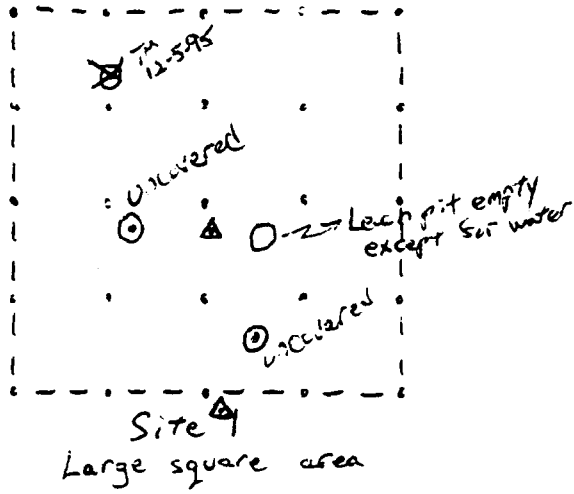
Some of the leach pits appear to have been abandoned. There were no manhole covers on these and they appear to have been filled. Besides the ring that would have supported a manhole cover, there is no visible sign of the leach pit. These occur on the 30' grid laid out in the site diagrams in the ROICC office. This is in conjunction with those leach pits with covers.

Of those leach pits with covers (and of those we actually opened) most seem to still have product contained within. There is approximately 1'-2' headspace directly under the manhole cover. The contents appears to be sandy material that is mounded inside the pit, with the peak occurring directly under the manhole cover. One of the pits we opened was empty to ~10'-12', at which point there was free standing water (I assume it was water).

J. E. Mallory

12-5-95

Samples drilled on 12-5-95:



Key:

--- area of concern

- Previous boring (as proposed, not as built)
- ▲ Deep boring, single sample
- ⊙ Leach pit boring



It should be noted, this leach pit had holes in the manhole covers. It is probable that this is rainwater.

1530 - Drilling ends for the day. Leach pit sampling finished.

Of the six leach pits sampled, only <sup>in</sup> the first one sampled was the black, clayey sludge not encountered. Three of the pits did not have covers and were filled. Only in the second leach pit sampled was the entire layer of sludge sampled. The other four only had two layers: the top layer was sandy, the bottom layer was a black, clayey sludge. The sludge had an odor - sometimes it was a petroleum odor, sometimes it was a sewage odor.

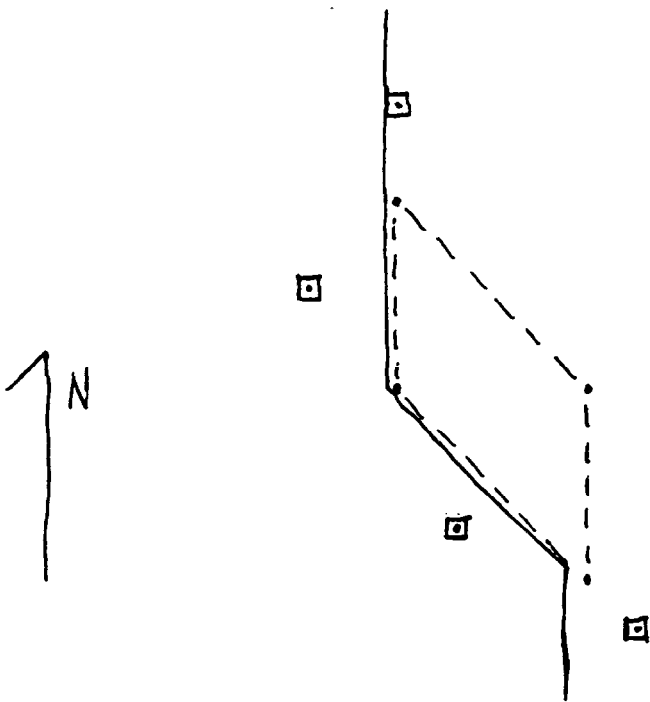
Totals for the day: 8 borings (2 deep borings, single sample; 6 leach pits), 14 samples (not including QA/QC samples).

Today's weather: Partly cloudy + cool. Morning temperature around 33°F. Afternoon temperature in the low 40's. Light wind.

A. E. Mallory

12-5-95

Samples drilled on 12-6-95:



Key:

--- area of concern

• Previous boring (as proposed, not as built)

□ Deep boring, site samples

— Fence

Day 3 - 12-6-95

CT0212

1248

0730 - TM arrives on site & meets FW crew.

People on site: LV, CP, TF, GD, BN, + NH.

0730 - Drilling begins.

1225 - Drilling ends.

Totals for the day: 4 borings, 20 samples (including surface samples, not including QA/QC samples), 1 attempt that yielded no split spoon sample (was sampled again to yield a representative sample).

Today's weather: Clear & mild in morning, overcast by noon.  
Morning temperature ~ 43°F. Noon temperature in the 30's.

Tuesday March 19, 1996

Site 2 RA oversight

Michael Snyder - Brown ? Root Environmental (CR Brown) BIRE

09:00 Arrive @ Site - weather Cloudy ~ 40°F  
Get Pass/Clearance @ Security

10:00 Mt. @ Bill Dolhency (BD) Foster Wheeler Site Supervisor  
Discuss site status  
FW - still mobilizing for excavation activities @ site 2  
also conducting extent of contamination investigation @ site 2

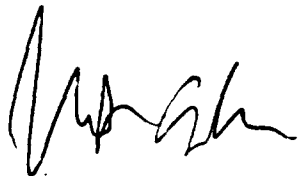
11:00 Mt. @ Bob Ingram RETCC Navy  
Bill ? Bob discuss mob activities  
- Will meet @ Bob Ingram : Al Taormino RETCC tomorrow  
after Craig Farkus BIRE arrives

Accompany Bill D. to Navy warehouse - Receive site supplies  
from Pittsburgh

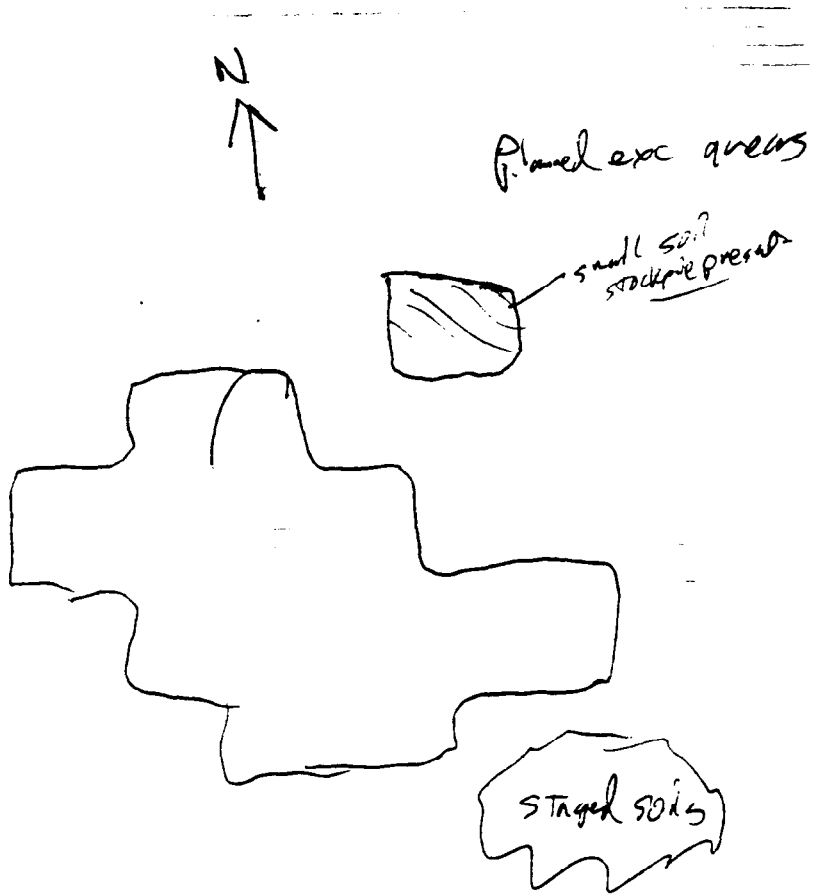
Receive Site Specific H&S training from FW H&S - Cheryl Polios

Cheryl provides copy of letter to NY DEP(?) officials modifying  
requirements for community protection H&S air monitoring.

12:13. Telecon @ Mark Speranza BIRE project manager  
update activities  
Mr. Speranza says our oversight responsibilities are only  
for Site 2 RA, not investigation @ site 1



3-19-96



- Receive plan of excavation dug from B.N.D.  
Review FW pre-excitation sample analyses report  
& compare results @ dug.

13:15 visit site 2

Major equipment on-site

Loader Case 621 B Hertz Rental id# 261-25-4057  
Excavator JD 690 ELC Hertz Rental id# 246-10-4051

FW stripping "clean" soils @ NW corner of site 2

2 operators - 2 laborers present

Laborers covering soil stockpile N of site @ poly, setting up  
orange snow fence around site <sup>around 5854 location</sup> see map

14:30 - steady rain

Exc/operation continues stripping clean soils @ NW corner

loader/op consolidating soils staged on poly @ SE corner of site

15:30 - Laborers quit for day

- Met @ B.N.D. discuss site ops.

1545 - LV site

W. J. M. 3/19/96

Wednesday March 20 1996

07:00 - Mason - Site Cloudy = 45°F

Attend FW Am H:5 mtg.

Plans for today @ site 2 -

- set up exclusion zone
- set grade stakes
- continue "stripping" & staging clean soils

08:00 Exc/Op continues stripping clean soils @ NW corner of site = 2 ft.  
 Loader/Operator 2 laborers installing hay bales for erosion control  
 @ soil stockpile SE corner of site

08:40 Bob Ingram / Al Taormina on site  
 Questioning Bill O about general site ops.

Bob: Al will meet @ myself & Craig @ 10:30 today

- Craig Farkus B:RE on-site FW providing  
 site specific H:5 training.

10:30 mtg. Craig Farkus B:RE  
 M. Snyder  
 Bob Ingram - Nay REICL  
 Al Taormina

Bob/Al will ask Bill O. to modify daily reports to  
 include room for our comments.

Bob/Al remark that they are looking to us to provide  
 all environmental guidance. check manifests - etc. <sup>B:RE</sup>

Briefly discuss our general SOW -

- will meet @ FW PM H. Lazarus tomorrow to discuss site ops.

WJG 3/20/96

Bob & Al ask why FW is not bldg decar pad @ site 2 for trucks & equip.

- I think it is in design & appears to be in FW's wk plan but when questioned Bill D. said that H. Lazarus told him it was not needed.

- Bob: Al will pursue @ Bill D. & H. Lazarus

- Craig F suggests BIRE pursue faster turnaround time for verification sampling  
Bob & Al agree it may be a good idea, eliminate downtime, Craig will pursue

11:30 visit site 2

2 laborers constructing personnel decar pad  
Excavator/operator - idle NO activity  
Loader/operator - idle

11:40 Craig F. Telecon @ M. Spence - Update Activities

13:00 Call M. Turco BIRE - Update activities

13:15. Bob Ingra @ site - Meet @ Bill D.

Bob suggests mtg. tomorrow @ 13:30 to discuss all site activities, plan of action @

Laidlaw Representative

H. Lazarus, Bill D - FW

& Craig & myself.

Bill D. will coordinate @ Laidlaw & H. Lazarus

Craig, myself & Bill discuss PCB trans. shipping  
Bill explains general procedure

- Question Bill about Equip. decar pad -

Bill will question H. Lazarus -

- Bill agrees that it would be helpful to him if we can get a faster turnaround time for verification sampling

Briefly discuss potential equipment decar pad set-ups

MA 3/20/96



14:45 MS/CF over site 2  
 exc/operates continues stripping 'clean' soils @ NW corner  
 ≈ 2 ft depth  
 Laboneas re covering ~~soil~~ soil stockpile N of site @ poly

15:15 Mr. @ B.K. De Briefly discuss site ops.

Bill says that excavator may have overexcavated at northernmost area & excavated some 'dirty' soils, that is why he is keeping those stockpiles separate & cover with poly. will sample & analyze to be sure  
 - Establish new 'clean' stockpiles

15:45 to site

- Review FW's wk plan, spec's etc in preparation for tomorrow's mtg.

Bill De 3/20/96

Thursday March 21 1996

07:00 MS/CF on site P Cloudy  $\approx 42^{\circ}\text{F}$

Attend FW A.M. H&S mtg.

Go thru plans/specs/etc. @ Craig P.

Mr. @ H. Lazarus FW proj. mgr.

Provide H. Laz. @ extra copy of BIRE final design report @ SPECS

08:00 Craig P visits site 2, to obtain pre-RA ~~conditions~~ MS

Discuss site ops @ H Lazarus

08:20 visit site 2

Exc/Op relocating brush pile NW of site  
other operator, 2 laborers standing at site access talking  
no work

Mr. @ B.H.D. - B.H. is aware that they aren't working, Loader is out of gas, Union Rep was on site to mt @ workers

Discuss plan of action for today

- Laborers will work on erosion controls, placing hay bales where needed

- Since Bill of stone drain near access road - we will have the laborers install bales around it, also will place bales around potential "dirty" stockpiles,

Mike G. 3/21/98

09:50 @ Site 2.

Bill D. operator shooting excavation grades @ NW section  
exc/operator leveling area for "clean" stockpile  
labors laying out poly for "clean" stockpile

09:40 - Fuel truck on site

Loader/operator begins moving soils to new "clean" stockpile  
NE section of site

exc/op continues stripping "clean" soils  
Labors installing erosion control hug holes - at  
stone sewer inlet around "dirty" stockpiles

- Provide Craig F. a copy of 40CFR 761 - PCBs reg's &  
49CFR DDT Reg's - Craig reviews
- ~~Exc/op.~~ Loader/op removing additional 2 ft of soil  
at NW portion of site according to grade shot by Bill D.  
This is still "clean" material.
- 11:45 go to FW trailer - FAX copy of planned excavation report  
M. Spence

Transfer Custodial Logbook to C. Farkas  
Mike S 3/21/96

13:30 Arrive @ ROTC office for meeting:

B Ingram - NAVY  
C Farkas - BIR  
M Snyder - BIR

H Lazarus - FW - P.M.  
B Dollmaney - FW - Site manager  
Dave Ardito - Cridlow phase conference

CA Stumm

3/21/96

Meeting discussion:

1. H Lazarus load trucks <sup>on</sup> & remove soil so no clean trucks.  
H Lazarus agrees to construct clean pad at site. Notes that any spillage @ Lairdlaw drain yard is Lairdlaw's responsibility. F.W. will periodically review dumping practices @ drain yard to assure no soil waste spillage @ yard.

2. D Ardito from copy of NY state manifest w/ step by step instructions for handling manifest. Copies received

P Embrescia (516) 293-7484 is @ drain loading area as Lairdlaw supervisor. Truck is cleaned prior to leaving trucking area. This is 1st time that Lairdlaw has shipped via train from Long Island.

3. B. Dalkaway notes excavation rate: total 2000 cy soil 23 yds/truck  
4 trucks / car (RR) @ 5 RR cars / day

4. B Ingram notes weekly meeting 10:30 on Thursdays.

5. 2000 cy soil calculated based on drawing prepared by Foster Wheeler (copy retained)  
Plan is to start on Monday for excavation. Decou pad may delay construction till Tuesday.

Meeting adjourned 1500.

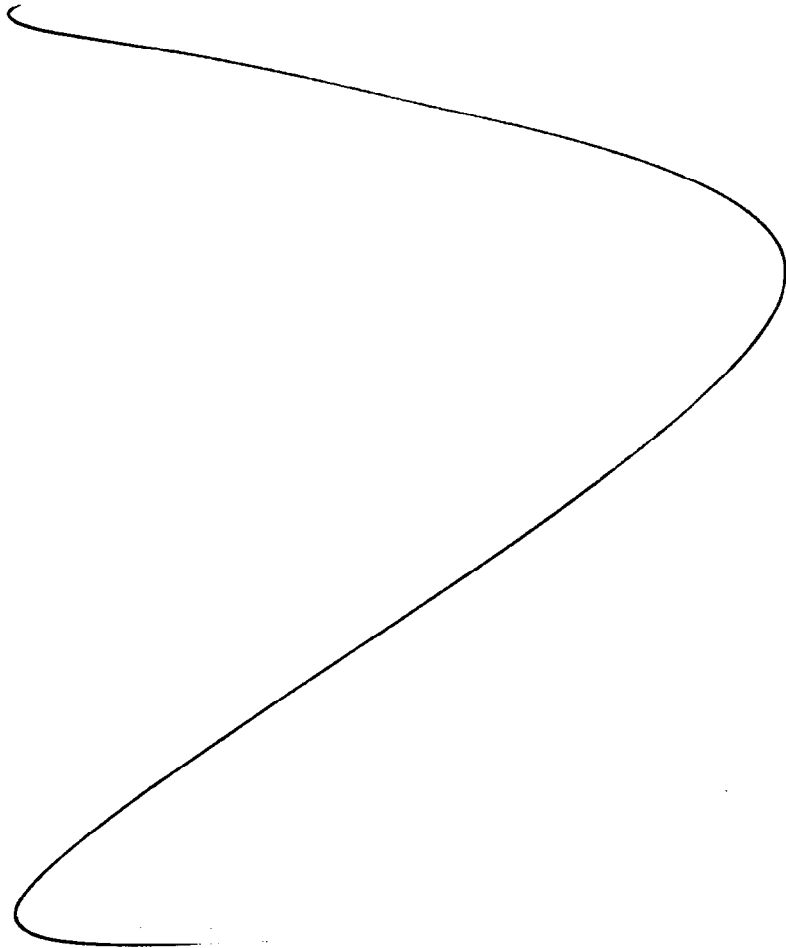
Ch. Gammal

3/21/86

C Farnos agrees w B Ingram to prepare minutes report for Thursday meeting & submit copy to ROICE.

15:40

C Farnos M Snyder offsite for evening



CA Farnos

3/21/96

sunny, 38°F

0700 CF + MS in @ site <sup>cf</sup> for morning meety.

B Dolhany notes that decan pad to be constructed today. Materials will arrive at site for construction.

0800 CF goes to site to review excavation. Currently scraping off surface soil in AREA near waste water treatment plant. Areas being surveyed to assure proper grade. Stakepiled 1 pile in NW corner, 1 pile in SE corner.

0815 B Ingram arrives @ site to inform that he + Al will be unable to visit dump site today with us.  
B Ingram then leaves site

0830 CF + MS leave site to visit drain leachy area in Farmingdale.

Directions from site: cf

1. Out main gate gate
2. R onto Stewart Ave - continue to Hempstead
3. L onto Hempstead - Hempstead turns into Conklin
4. Follow Conklin to very end
5. L onto new highway
6. over RR tracks
7. turn L into 1600 New Highway

Talk to site mgr @ 1600 new highway notes  
Phil Embrescia is scheduled to arrive @ site today to purchase leach + place around site.  
Mgr notes that empty truck tested ramp yesterday. Worked ok.

CA Starnul

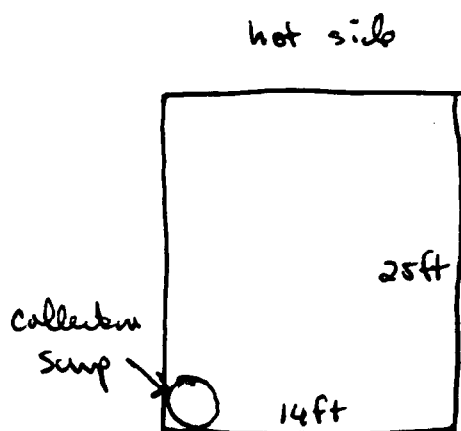
3/22/86

0930 Return to site. Talk to B Doherty. He notes pad to be built today. Materials to arrive @ 11:00. Pad located 1/2 in contaminated zone. 1/2 out contaminated zone. Shall be large enough to fit track hoe on for clean @ end of job.

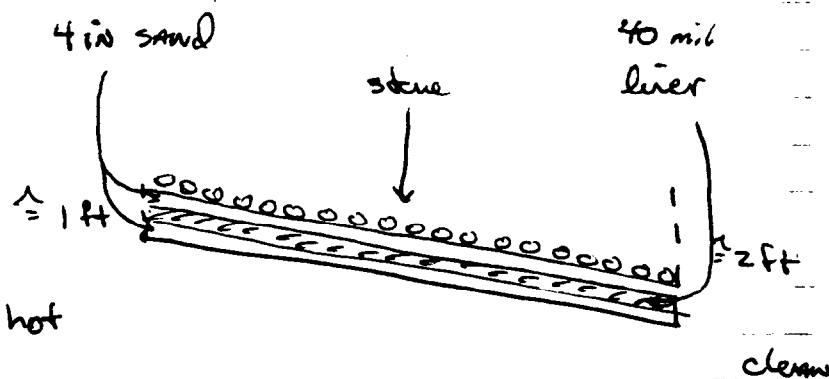
11:00 Two truckloads of sand + 1 truckload of stone delivered to Site 2 for construction of decontamination pad. Also delivered:

- 10 - 55-gallon drums
- 8 rolls - 10 mil polyethylene sheeting 20 ft x 100 ft
- 300 ft - garden hose
- 4 rolls - bright orange safety fencing

Construction of decontamination pad begins. Pad located @ entrance/exit area of Site 2.



Plan view

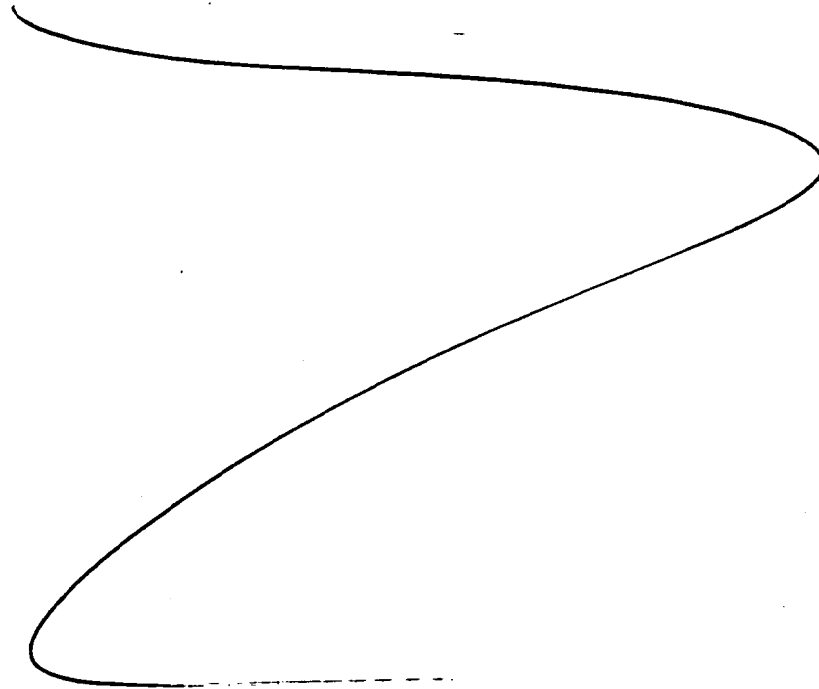


Cross-section

CA Gammal

3/22/90

- 10:00 CF & MS out to lunch. Construction steps
- 12:30 CF & MS returns to site. Stone layer being applied to decou pad. Finish
- 13:30 CF leaves site for Airport.
- 14:30 M Snyder leaves site for home. Notes that decou pad finished construction.



C. J. Gamm

3/25/96



Sunny 45°

0700 C. Falvo + M. Snyder in @ site for morning meeting.

0730 CF meets w B Ingram + A Tavarina @ ROICC office to review days activities. D Ardito - Laillaw + W. Delhancey - FW show up also to review manifesting.

1. 4 - 18-wheel dump trucks arrive @ gate for loading activities. Base permits being served for drivers.
2. Manifests are pre-filled out (copy) except for Manifest Document Number - to be consecutive numbers starting in 00001 + continuing for each truck that leaves site

Total Quantity - to be in kg + to match weight ticket @ scale. Ideal weight/truck is  $23.00 \text{ tons} \times 2000 \text{ lb/ton} \times .454 = \underline{\underline{20,800 \text{ kg}}}$

ideal weight @ RR car is 95 tons/car  $\Rightarrow$   
4 dump trucks / RR car

Out of Service date - date of excavated soil shipped

Generator signatures - signed by ROICC

ROICC office gets copies 3, 4, 8 @ truck departure  
Scale house ticket has manifest Document No  
cross referenced to it + written on it.

D Ardito to furnish photocopies of manifest from  
RR yard signed by RR people for ROICC

CA General

3/25/96

3. Landlaw to handle mailing of copies 3+4 for ROICC.  
 Landlaw to supply someone to handle scale house operations  
 nobody set for today. C Particos of site ( operations  
 to be assigned for today.

0845 Meeting adjourned

0900 CF to site to review decan pad. Power source unable  
 to power spray washer. power source unable to run  
 sump pump. FW people work with it. Dewatering  
 Trucks have not yet arrived at site & from  
 front gate apparatus.

1000 slw MATH SPANZA. He notes that S. Lehman prefers  
 to collect calibration samples on 2-day turnaround  
 & not 2-day rapid. I inform A TAMMAMIA.

Each of 4 trucks being preweighed prior to loading.  
 This will occur for each load out of site  
 Each truck placarded w PCB stickers & #3077 label.

Truck Body #	Name	Weight	Ticket Code #	Louisiana Plate
138	Sanny Belgrasch		88	P5J78B OH
132	Eddy <del>Stambaugh</del> Stambaugh		<del>89</del> 94	P2 F60U OH
82	Tom Raley		91	P4 P86B OH
78	Charles Lane		92	P4N91B OH

Handler is <sup>Wills</sup> ~~Wills~~ of Trucking Inc.

Truck Body #	Trailer Body #
138	439
132	489
82	446
78	346

Changed  
 by D Archito  
 after entered  
 into this  
 book

DA Gammal

3/25/96

- 1015 Each of the 4 trucks arrive @ site 2 + begin loading w/ soil.
- Cheryl Polios monitoring air particulates. Tells me  $\text{CO}_2$  0.00 reading last tested.
- 1030 A TAWAMMO + B Ingram show up @ site 2 to observe operations.
- 10:35 Two union representatives arrive @ site to review duty of running spray washer. Union members feel job should belong to operators. Laborer currently running job.
- 11:00 Union reps leave site after speaking w/ site manager B Dolanney. Laborer continues to run spray washer.
- 11:00 A TAWAMMO + B Ingram leave site.
- 11:45 4 trucks leave site for RR yard. Total 4 truck is below 85 ton minimum required for 1 rail car. This difference is to be made up at the next run.
- 1315 Truck #138 returns for 2nd load out of site. Trucks are not being lined as reported in FWS work plans. I ask B Dolanney + he informs me that H Larrous of FWS waived liners in trucks for liners in drain cans. The trucks will remain charged + dedicated to this job when they will be fully decoupled @ the end of the job.

Cheryl

3/25/96

13:30

C Farhos + B Ingram drive to RR yard dump site to review operations. Upon arrival, note PCB soil laying on plastic sheeting at base of concrete dump ramp. Phil of Laidlaw is standing in soil shoveling it into the bucket of front loader. No PPE is being worn. Bucket is now contaminated. Two additional loaders are working in soil to lower. No PPE is being worn. B Ingram asks D Ardito + Ardito notes that he realizes this is a violation. He notes his PPE shipment did not arrive in time. Notes that spilled soil was due to 1st truck missing the ramp & chute partially. Additionally trucks loaded successfully. C Farhos asks of covering for soil in RR cars. Ardito notes additional plastic cover for cars. CF + BF inspect rail car covers + fasteners. Apparent satisfactory. CF + BF note that all RR cars containing soil must be covered each night. Also spilled soil must be cleaned up by night. Loader must be decontaminated + people must wear PPE at all times. (Photos of spill + ramp collected). At end of day all 4 trucks should be locked up & covered on Bothpage facility since beds are not decontaminated after each day. Two loaders at RR yard were not aware that the soil was PCB contaminated when added.

CF

14:45

CF + BF leave RR dump yard. Return to Base. Find that M Snyder has already left site for home.

15:30

CF @ site 2. Notes that 4 trucks will be leaving trailers @ site overnight. Workers off site.

16:00

CF off site.

C of [Signature]

3/25/96

- 0700 CF into site 2. Workers onsite. Drivers onsite.  
Drivers take trailers to scales for light weighing.
- 0815 Drivers return to site to pick up lot loads. Site workers idle until now.
- 0850 CF leaves site 2 to scale house. B Dolhany is running scales + notes that ~~the scale~~ the scale is jamming the receipts. That is the reason for the downtime.
- CF visits A ~~Tramanna~~. Notes that total of 220 tons soil removed from site + shipped to rail yard so far.
- 0915 CF leaves scales for rail yard. Notes a yard that workers are all wearing dywiders boots, gloves today. No spills evident. Front end loader bucket has not been decaned as no drum of decan water present at site according to yard manager. Trucks are being delayed in dumping because of moving the rail cars into position for each dump. Approximately 5-8 min delay/truck.
- 1020 CF leaves rail yard for warehouse to pick up supplies. No supplies available. Must find out why in Pitt.
- CF phones M Spaventa. M Spaventa notes that laborers at rail yard should have H&H certificates on file in FW. Also advises to check for spill report for yesterday's spill at rail yard. Based on our conversation CF returns to site 2 to estimate volume of 2 piles of scraped soil that was contaminated due to overexcavation. Estimate 25-40 cy/pile. Two piles were on site. 1 pile in SE corner, 1 pile in NW corner.

CA Sturck

3/26/96

1120 CF back @ site 2 to do estimate noted on page 87  
 Workers down as trucks not at site. CF noted this  
 AM to UB Dolhoney that 2 PCB-piles must be removed  
 from site. They cannot be stockpiled according to FW  
 work plan. Noted this also yesterday.

1142 Truck arrives at site 2.

Truck loading procedure:

1. Tarp removed from truck trailer outside hot zone
2. Driver backs to excavation area + filled direct  
to soil.
3. Driver moves forward to decar pad for spray off  
of all wheels.
4. Tarp put back in inside hot zone.
5. Truck on way to scales for heavy weighing
6. Truck off to rail yard.

12:30 Workers return to site. I Ask C. Polios (FW H+S) if  
 FW + H+S certifies on labours at RR yard. She  
 notes that she doesn't. I Ask if she has a spill  
 report from yesterday's spill. She says no. FW is still  
 laying @ contractual responsibility.

Site workers begin to spray down site to minimize  
 dust blowing.

1:45 CF speaks to B Dolhoney. He notes that spill report not  
 required @ rail yard as not really a spill since it was  
 contained in the plastic + then deposited in the car.  
 Noted that 40 hr H+S for 2 labours not needed

C. A. Harwood

3/26/96

since they no longer are working @ rail yard site. Laidlaw has replaced them w/ trained personnel. I will verify on next visit.

CF visits w/ A Travmin. Deliver more manifests to office.  
Meet Matt of FW who is now running scalehouse full time.

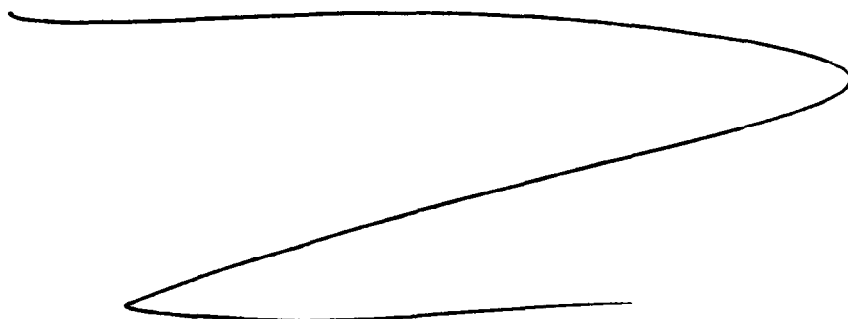
1400 CF back to Site 2. Sprinkler is now controlled dust.

1530 CF Asks C Polios About Air monitoring plan. According to FW work plan Air is to be monitored at 3 site locations. C Polios notes that a letter was issued to Navy indicating change in air monitoring plan. Air monitoring will be done manually only by C Polios. Copy of letter retained.

1600 Tractor take another round of sand to rail yard. Workers @ site stay at site to load trucks.

1630 Site workers off site for evening.  
One truck returns to site + stayed for evening. Two additional trucks stayed at site 2, one truck stayed at rail yard.

1700 C Farnos off site for evening



C A Farnos

3/24/96

- 0700 C Fatos is @ Site 2. All workers at site & trucks @ site.
- 0715 Truck 82 dumps overnight load into excavated area. Told by B Delaney that this to be removed later. Soil stockpiled in SE corner of site for 6 days is (25-30 cy) being loaded into truck 82 for shipment. Stockpile in NW corner near SB505 CF was removed on Monday.
- 0930 CF watching trucks being loaded to remove stockpiled soil in SE corner for better estimate of volume. Truck no. 82 removes 2 loads. Truck number 132 removes 2 loads. Trucks no. 78 + 138 each remove 1 load during the morning hauling session from the stock pile in SE corner. Total weight will be checked at night house. Estimate of other pile to be of similar size.
- 1000 David Egan & John Barnes of NY Dept of Env. Conserv. arrive @ site 2 in A Taramina to inspect operations. I review excavation plans & show them the site plan. I also show them the proposed confirmatory sampling locations & ask if they have any recommendations. Both men look @ sample plan & have no recommendations. I note that I was in area of excavation this morning looking for stained soil & evidence of PCB contamination. Note that it is difficult to locate stains since fill material comprising the site is of various colors. Dump truck arrives to remove load of stockpiled PCB soil. As truck prepares to leave a dust cloud is kicked up. Cloud moves toward nearby houses. I advise FW H&S site person to neutral dust & to wet down area. Also advise to stop operations until wet down is completed.

C. A. Hamed

3/27/96



- 1045 DEC personnel + AT T leave site to visit Site 1. FW personnel + laborers continue to wet down site. Pumper truck arrives @ site 2 & is taken by B Dolhany to off site to fill.
- 1120 Dump truck returns to site 2 for load. Instructed by FW that person to remain outside site until wet down procedure is completed.
- 1130 B Dolhany returns to site to wet down water truck.
- 1150 Unkews prepare to leave site for lunch.
- 1200 A TAORAMIRO + DEC return to site to review truck loading. Since unkews go to lunch. DEC personnel + AT T. leave site for lunch. Will return to review truck loading. Truck driver advises me that D Ardito still at railyard. He notes that trucks are being delayed this am for  $\approx$  1 hr/drop as rail car is moved around & as moist soil dumped in am clogs chute & backs up in truck trailer.
- 1250 2 more trucks arrive @ site 2 for loading.
- 1300 AT T. + DEC return to site to review loading procedure. Laborers return to site also. Dust is controlled by pumper truck. J Barnes questions B. Dolhany regarding where pumper truck water is from. BD notes from hydrant @ curb by waste water plant. J Barnes questions if it contains VOC's from groundwater to AT T. AT notes he must investigate. B Dolhany notes he will collect grab sample of water.

CA Glauert

3/27/94

1340 DEC personnel + A Taramin lease site.

1400 CF offsite for railyard. At railyard CF notes David notes D Arlito still @ site. According to David person using a soil + loading ramp is 40-hrs H&S Laidlaw employee. Everyone in full PPE in hardhat + chaps. I note that worker @ chute is not in protective overboots. David notes ordered wrong size boots. Will have tomorrow. I note trucker caravan crew delays. David notes pallet picked up by loader @ site got stuck in hopper. Notes plastic picked up at site used to cover contaminated piles caused some unloading difficulties. I watch unloading process:

1. Front loader up ramp, attached to chain + picks up loading chute off rail car. Pins placed in chute track to hold suspended.
2. Front end loader down ramp to hook up chain to rail cars. Pulls rail cars into chute position for next soil load.
3. Front end loader back up ramp. Hook up chain to chute. Lift chute, release pins, lower chute into rail car.
4. Loader off ramp, truck up ramp, dump.
5. Truck down ramp, worker shovels soil off rim of chute.
6. Start process over. Total time: 35-40 min

David notes he is off site tonight. I ask who will handle paperwork for manifests. He notes Phil to handle in another person from Texas. David to return Friday. I ask can they handle manifests. David notes he will come off step-by-step instructions.

CA General

3/27/96

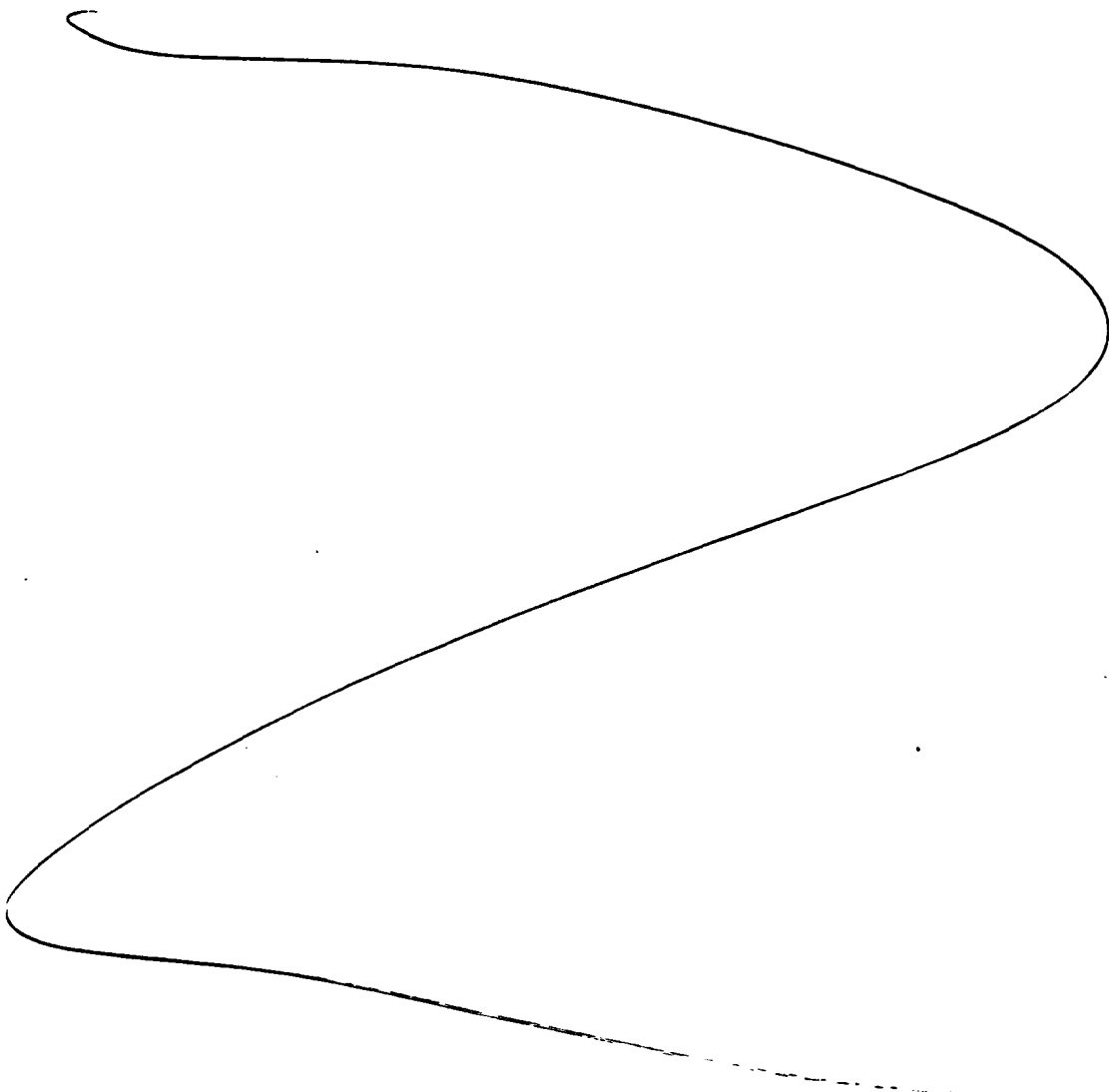
1500 CF offsite of railyard.

1530 CF back to site 2.

1630 Two trucks leave trailers @ site + offsite in cabs

1700 Workers off site. CF offsite

Two trucks leave trailers on other side of levee by Bulldog #3.



C A Gammal

3/27/96

38° Partly sunny

- 0700 CF into site 2. Workers on site. Trucker of #138 on site. Trucker leaves to get light weight.
- 0730 Trucker #138 returns to site for start of loading.
- 0740 Trucker #132 arrives at site for loading. Truck #138 loaded + ready to go off. Truck can't leave as spray wand not operating.
- 0800 Truck #78 on site for loading. Truck #132 loaded + in line to go out. Bobird #138 waiting for decan sprayer to operate
- 0803 Truck #138 onto decan pad for spraying. Truck #82 onto site 2 to pick up cab + go for light weight.
- 0807 Truck #132 onto pad for decan.
- 0808 CF to phone into office
- 0930 CF off site to make phone calls prior to meeting
- 1030 weekly staff meeting begins. Following attendants were there:
 

Cory Cuppi - Fortw wheelbar RAC H+S	Bob Ingram - Navy
Bill DeLancey - FW - P.M.	Al Tamminon - Navy
Cheryl	Craig Fator - CF Brown
Lynns	David Ardito - (phone) Laidlaw
- i. 45 loads in @ meeting. Some trucks overweight implying over 81,000 lbs must be returned to reduce weight.

B.D.

2 ✓ Reviews day 1 incident in Cory cuppi from RR yard. Bill notes soil spill + workers want back H+S certificates. GC reviews H+S certificates for 2 new Laidlaw employees put on site: Garland Jones, Stewart Myerson. Jones has no 40-hr certificate, just rechecked certificate. Request 40-hr from DA. Also D.A. notes that Larry Walker is to arrive tomorrow to supervise operations in place of D.A. No 40-hr on file for him.

C.A. [Signature]

3/28/96

3. BD notes to DA that 2 uncoated wheelers are not to touch soil or work around soil. They can only work in liners in dump cars or more car around. DA agrees.
4. BD notes that proper decou of bucket @ rail yard must be completed once job is finished stay in all equipment that is contaminated soil. DA agrees to clean bucket by sending it to Site 2 for FW to clean. Other equipment will be cleaned @ rail yard. All wheelers will wear full PPE as required by FW.
5. DA notes that Willis trucking is subcontracted to Laidlaw. As such, soil becomes Laidlaw's responsibility as soon as soil hits bed of truck. As long as trucks comply with all loading regs any damage or liabilities that occur after the truck leaves base is the responsibility of Laidlaw. Meeting members understand. DA notes that truck beds will not be decou after job is over since the beds are dedicated to hauling PCBs & other hazardous materials.
6. CF asks DA if George Burns is certified/authorized to sign for Long Island RR. DA notes that "he hopes so." CF requests copy of certification/authorization form confirming this. DA agrees & notes that Joe PALAKIS (718) 784-6612 can provide authorization. DA left in trash.
7. BD reviews w DA time schedule for work:  
 7:00 AM start up @ site 2 - trucks @ lightweight station at this time. So 1st truck can leave base @ 7:30 AM  
 The side gate by Bldg #15 is open @ 6:30 AM  
 The last truck through the gate to RR yard will be @ 3:30 PM  
 No trucks, at request of Army & Wills, are to be left overnight at the RR yard. All trailers must be stored overnight & weekends at base.

CA General

3/23/96

8. CF reviews confirmation sample plans to FW. CF gives FW photo of sample locations. BD notes that 1/2 site will be excavated + CF will sample on 7-day turnaround while other 1/2 is beginning to be excavated.
9. CF reviews to Mary the extent of excavation @ site 2. Shows diagram. Following statistics available: (based on weight tickets)

<u>Date</u>	<u>Kg excavated</u>	<u>total daily loads</u>	<u>1st load out*</u>	<u>last load out*</u>
3/25	125811 = 139 tons	7	11:00 AM	3:33 PM
3/26	327220 = 360 tons	<del>16</del> 18	9:17 AM	5:11 PM
3/27	<u>273356 = 301 tons</u>	<u>12</u>	9:11 AM	CF <del>4:45</del> PM 4:31

⇒ 800 tons

37

\* adjust times 1 hour earlier  
AS scale clock is 1 hour fast. 11am = 10am

Total PCB-contaminated surface soil removed from stockpile in SE corner (based on weight tickets):

267017 lbs = 134 tons

1st 2 trips by truck # 82

1st 2 trips by truck # 132

1st 1 trip by truck # 138 + # 78

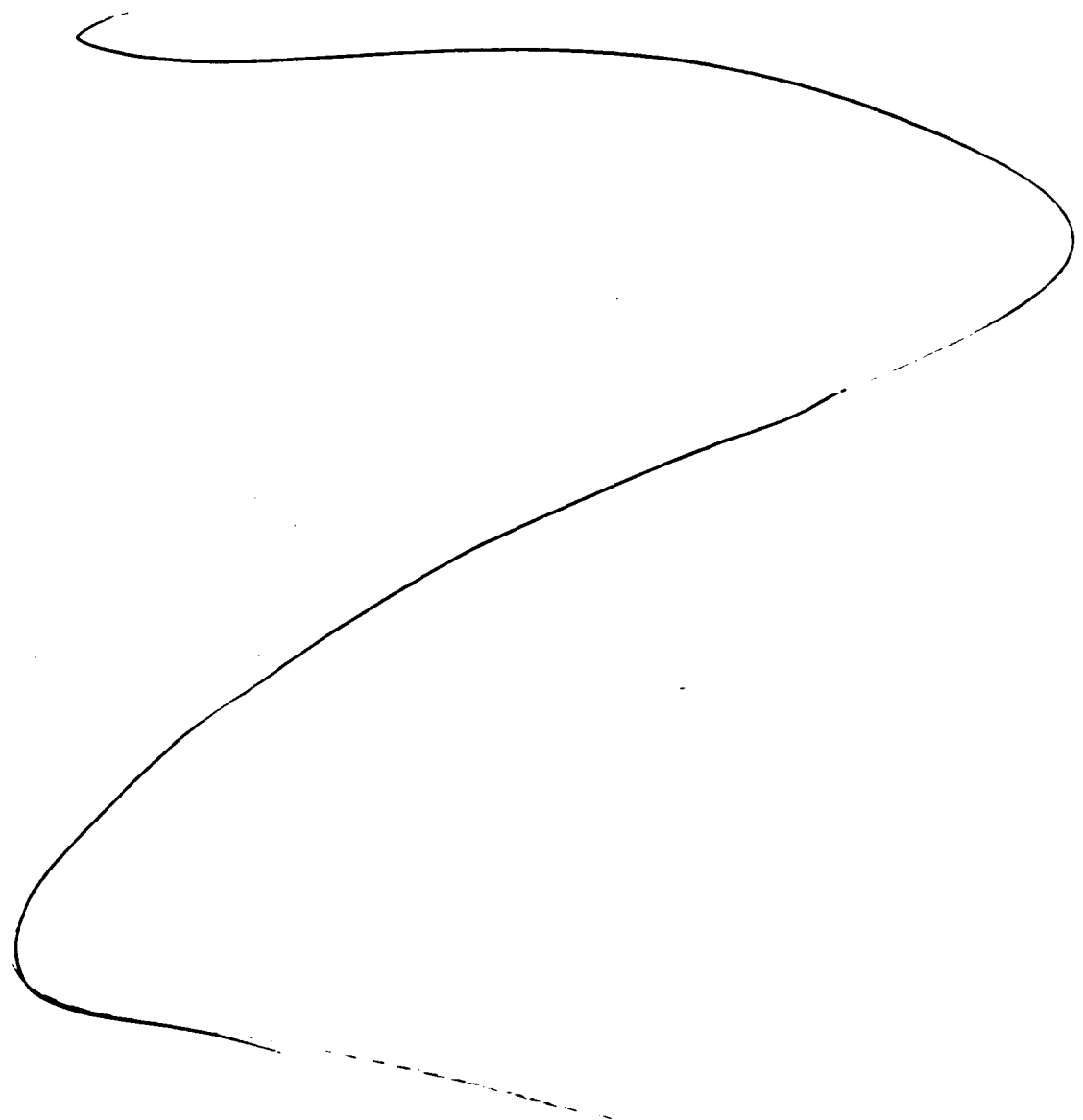
1230 meeting adjourned.

~~#~~ CF 1400 B Dolhoney + G Crippi show up @ site to review operations. Truchero notes that only 3 rail cars available for filling today. All cars filled by 1330. Trucks advised to fill + stage overnight @ site 2 for 7:00 AM delivery to rail yard.

CAF annual

3/28/76

- 1430 B. Dolanney + G. Cypri leave site.  
Trucks begin filling for evening.
- 1530 Truck full, 4 Trailers stayed @ site 2 for evening.  
Workers off site
- 1610 C.F. off site for evening.



C. F. Gamm

3/28/96

83° Snowing

- 700 CF into site. 3 trucks already off site loaded for railyard. Truck 4 at site 2 to be unloaded + reloaded because overweight load in bed.
- 0715 CF off site 2 for railyard.
- 0738 Trucks arrive @ site. Total 3 loaded trucks
- 0800 P Embrosia arrives @ site with 2 laborers (worn 40-hr H&S) to begin unloading trucks. 2 RL cars at yard for filling. P Embrosia notes that 3 additional cars to be delivered today by RL company.
- 0800 Truck 1 unloads. CF notes heavy weather in flie @ railyard.
- 0805 Truck 2 unloads
- 0815 Truck 3 unloads
- 0840 Truck 4 arrives at site for unloading. Total of 3 workers at railyard to handle operations.
- 0915 CF meets w/ A Tammin + delivers manifest copies.

Total loads for 3/28 are as follows:

~~12 loads delivered = 237,281 kg = 261 tons~~

↑ INCORRECT SEE PP113

1000 CF to call supervisor.

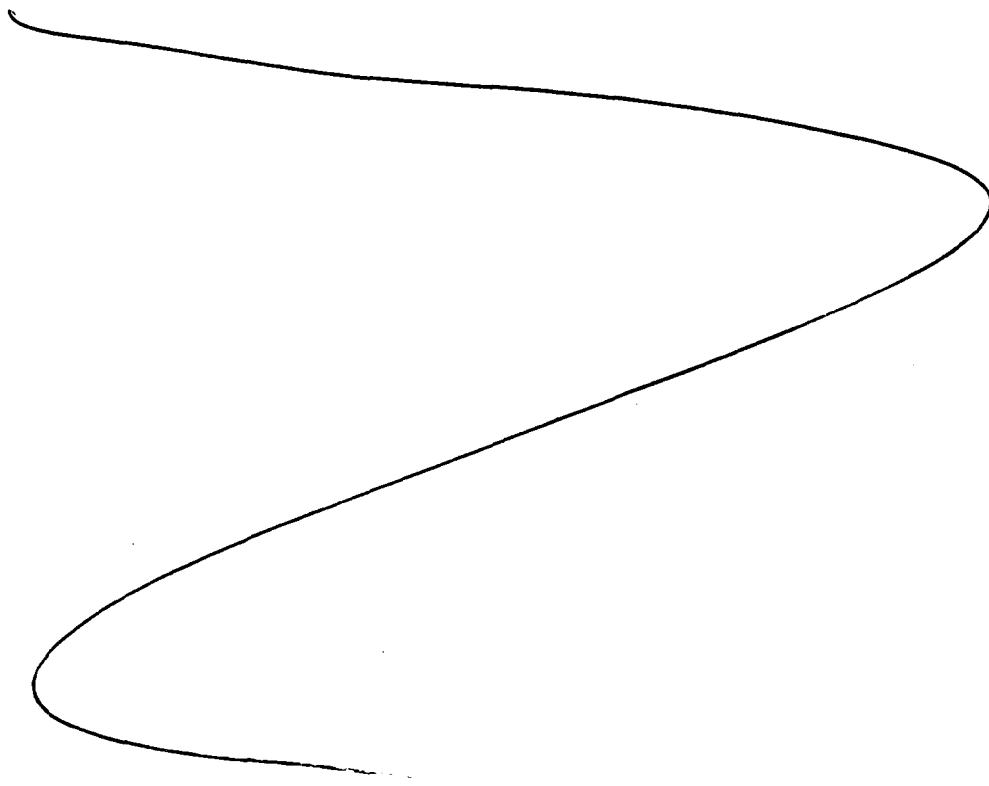
1030 CF back to site 2. Snow continues to fall hard  $\approx$  3.5" on ground. Roads slippery.

O A General

3/29/96



- 12:30 C.F. provides B. Dehoney with copy of minutes for 1st week of operation. B. Dehoney notes that one of the forklifts breaks a hydraulic line @ the yard. Truck must be repaired.
- 13:00 Snow ends sun comes out. Temperature is increasing
- 14:00 C.F. out of site for weekend



Ch. General

3/29/96

Overcast 48°

0700 CF into job 2. Four trucks will be ~~out~~ running in rotation today. Two new trucks to replace 2 of previous drivers. The following truck sets up apply:

<u>Cab #</u>	<u>Trailer #</u>	<u>Trucker</u>	<u>Weight Ticket Co.</u>
#132	489	Ed Stambogh	94
#138	439	Sunny Betgrach	88
No body # (blue)	346	Greg McLeod	95
No body # (green)	446	Dann Murphy	90

New truckers advised of verifying + decon procedures for site.

P Embrescia notes that have to get 2 round trips in by 9:00 AS train transfer time @ yard occurs between 9:00 - 10:00

I ask B. Dolhancey about decon <sup>disposed</sup> water @ site. ~~disposed~~ CF B. Dolhancey notes safety in w.p. but not sure what company will handle it. I will check.

0900 CF to rail yard. Notes that front end loader is broken down. Apparently according to workers, loader ran out of gas on Friday. The fuel line sucked up sludge which clogged the filters. New filters installed + battery recharged. All 4 trucks @ yard full - down time. Truck #138 cannot get l. l. gate to open by hydraulics. Must be fixed.

1000 Front end loader started up. <sup>CF</sup> ~~at~~ this time only 1 truck has put load into railcar. Two workers without certificates @ site. One new worker for Laidlaw also at site. All wearing PPE. Larry Wheeler informs C. Potos that all manifests up to this point 3/25/96 - 3/29/96 have the wrong EPA ID for the LF railroad.

CA turned

CF 4/1/96

EPA ID - NYD 980641625 - old number - WRONG  
 EPA ID - NYR 000021345 - new number - CORRECT

All old manifests were filed out by D. Ardito.

1230 S/w D. Ardito @ office. David notes that it is OK to cross out EPA ID in pen + write in the correct number. Notes that the number he used was from 1 yr ago on an old manifest & since then the LIRR was sold. New number ~~has been~~ <sup>CF</sup> will be changed by Larry Walker on all new outgoing manifests according to D. Ardito.

Total tonnage on PP107 did not include 3 loads transferred later in the day. This tickets were examined today & included in the 3/28 numbers printed below <sup>CF</sup> below:

<u>Date:</u>	<u>Total trucks</u>	<u>Sail hauled</u>	<u>1st load out</u>	<u>Last load out</u>
3/28	14	295864 kg = 326 ton	8:23	3:09 PM
3/29	109 <sup>CF</sup>	167959 kg = 185 ton	8:25	2:23 PM

(1 truck all other trucks finished @ 11:40.

These values are taken from the weight tickets

1300 P Embuscina comes to site. Notes he is fixing manifest EPA ID numbers for the Long Island RR.

1330 P Embuscina off site.

1530 Workers off site. Trucks parked empty for evening @ site

Ch. Kaul

4/1/96

Sunny 40°

0700 CF into site. 4 trucks lined up + ready to load.  
15-20 minute delay as spray under out of gas.  
All 4 trucks out by 8:15.

Excavation is being performed in NW corner of site by new  
excavator plant. Excavation is now being toward southern  
edge of excavation near SB-47. Going down to  
depth @ SB-46, SB-45, SB-41, SB-54 down to depth  
capsule + covered. Approximately 40% of work excavation  
complete. CF notes to B.D about potential cross-border construction of down AC

0930- Joe of FW comes to collect field test samples @ boring locations  
1000 SB-45, SB-46 + SB-54. Surface samples collected using  
plastic spec + glass jar. Will test in lab @ driver.

1030 I note to B. Dolhany that banks appear to be eroding  
along walls adjacent to WW treatment plant. I recommend  
some type of erosion control or shoring. Bill notes he will  
have a small collection pit for rain water dry near  
SB-47. Lined to hay bales. I note that <sup>he</sup> ~~CF~~ must  
also prevent runoff from asphalt by W.W.T.P. he notes  
that bales are present. will evaluate how more effort.

1100 CF visits ROICE office. B Ingram questions work hours  
for job + additional weight tickets. I note that I  
must confirm hours to B. Dolhany. B. Dolhany noted  
earlier in am that he has contracted for another 1000  
weight tickets to be printed by Thurs 4/4.

12:00 CF notes H. Lazarus @ Site 2. H Lazarus notes that  
he estimates another 1000 cu of soil to come out of  
pit from this point on. I question if D. Ardito will  
be able of supplying the additional soil cars. H Lazarus  
notes that <sup>CF</sup> Ardito is contracted to supply cars + he does

CF Kimmel

4/2/96

not need to give a fixed volume for all cars needed.  
Lazarus notes that total job should be  $\approx$  4000 tons.

I ask B. Dolhany for working schedule for tomorrow. He notes 6:30 AM start time - trucks + workers. 3:30 PM shut down @ site 2.

I ask H. Lazarus + B. Dolhany who is responsible for removing debris water drums from site 2. H. Lazarus notes that it is in D. Ardito + Landlans work ~~plan~~ <sup>CF</sup> scope to remove drums.

1300 CF arrives @ sailyard to review operations + pick up manifests. I note to D. Ardito that he is responsible for getting all copies of manifests #3 + #4 @ NAVY offices changed with the new EPA ID for LIRR. He + Phil agree.

1430 CF meets w/ D. Ardito, H. Lazarus, B. Dolhany @ sailyard. H. Lazarus notes at this time that he estimates the job to be 33% completed + that total job will require 4800 tons of excavated soil. ~~this means that~~ <sup>CF</sup> 1600 tons soil have been excavated to this point according to H. Lazarus.

B. Dolhany notes to D. Ardito that normal daily hours will be 6:30 AM - trucks + workers arrive @ site 2 preclude trucks from right before should be done by trucks up to 1st flag in AM 3:30 PM - last loads to be put into trucks @ site 2. D. Ardito notes that up to this point he has reserved a total of 45 quadrants for this job. Notes that he will have to reserve more.

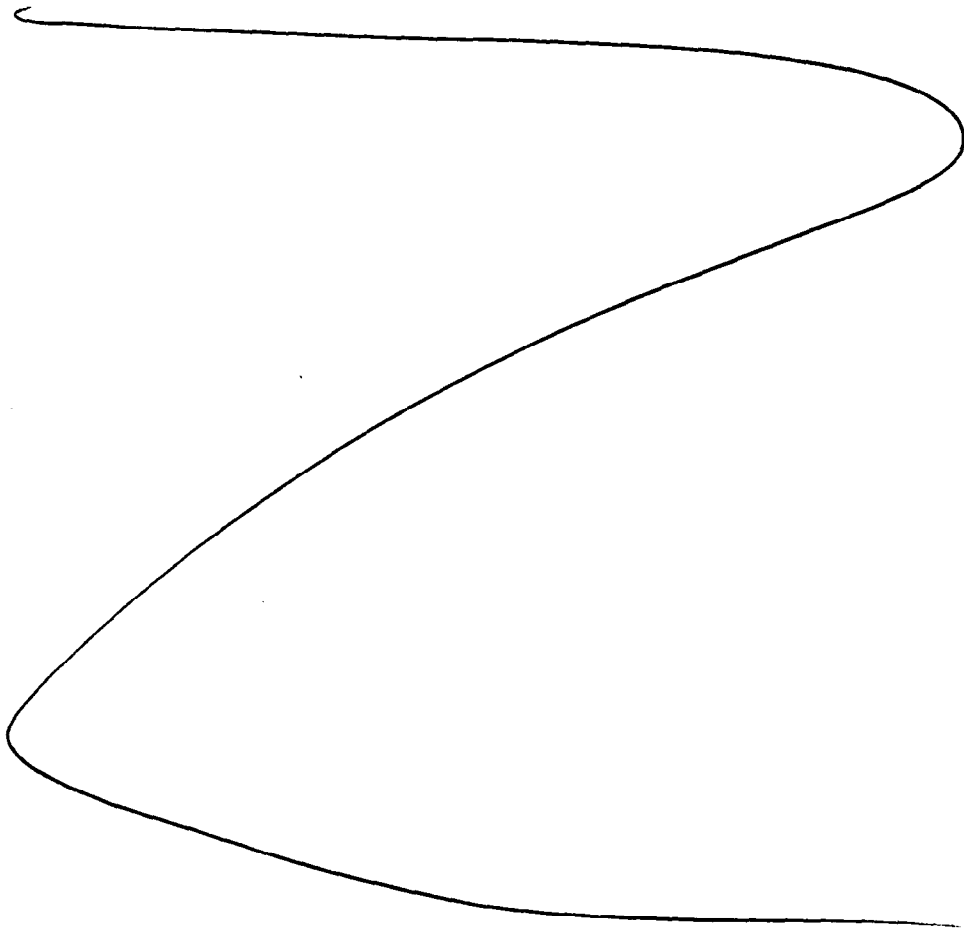
CD Starnes

4/2/96

H. Carrara notes to D. Ardito that he is to remove  
decan water drums from Site 2 according to work plan.  
D. Ardito agrees.

1545 E. Fahn back to Site 2.

1600 C. Fahn off site 2 to Phone M. Speranza + advise of  
excavation projects + site 2 progress.



CA Fahn

4/2/96

0700 C Fehos @ site 2. Notes to B. Dolhany that erosion control along asphalt by water plant should be improved. Hay bales need to be straightened, maybe additional control. B. Dolhany notes that runoff collection ditch has been installed @ site with a small collection basin. B. Dolhany also advises orders to clean up site 2, shore up fencing & more boot decan area near truck decan pad to make more room for truck access.

C. Fehos & B. Dolhany up to date on daily reports. C. Fehos notes that he prefers FW to take field test samples in same location as proposed CF Broom samples. B. Dolhany agrees.

0830 C. Fehos @ ROTC office. Notes to B. Inyan & A. Tsoumian that C.F Broom recommends that new manifests from today on should be free of cross-out lines. Manifests should be retyped. Not against law to cross out but lines may cause concern @ EPA & state filing delays during review

C Fehos reviews photocopied manifests. Notes manifests 85, 86, 87 do not have new RR yard ID as then 84, 83, 88, 89, do have number corrected.

The following shipping data is available:

<u>Date</u>	<u>total trucked</u>	<u># loads</u>	<u>1st truck out</u>	<u>last truck out</u>
4/1/96	291542 kg = 321 tons	15	8:09 AM	3:45 PM
4/2/96	405686 kg = 447 tons	21	7:43 AM	4:30 PM

CA Havel

4/3/96

10:30 CF leaves Site 2 to visit rail yard. Skul L. weather regarding manifests. L.W. notes that manifests 1-60 were mailed out Monday 4/1 to subscribers. Notes that 61-93 to be mailed out Wednesday 4/3. CF looks through manifests for # 82, 83, 85, 86.  
 Also L.W. to

LW notes that EPA FD has not been changed on these 4 but that on manifests 80, 81, 87, 88 the number has been changed. This is the same case with the photocopies in the RPFCL office.

C.F. looks for P. Embrosica. Find P.E. standing along the rail yard tracks with copies of manifest # 93 + # 94 in water proof envelopes + with bag of stickers to be handed to rail operator when he come by. P.E. notes that two cars went out w/out stickers under. "this was a mistake" - P.E.

P.E. notes that he hopes to have 10 additional rail cars @ S rail yard by Monday. CF notes that @ daily production this is only 2 day work. PE notes that need 25 cars for full week's work so this may entail another shut down next week. Its up to FW.

Today there are 3 cars in yard - 1 car is full & tarped, 1 car is being filled currently, 1 car is empty & lined & ready for said. One Laidlaw worker is working to send to coat over top of PPE.

P.E. + drivers note that 2 trucks down today -  
 Swamy's truck down 2 hrs w/out tail lights  
 Eds truck down 3 hr because seal on rear hub is cracked

12:30 CF leaves yard.

CA Stewart

4/3/96



1300 CF notes @ Sub 2 that workers are idle. B. Dolhany notes that job must be shut down till Monday as no rail cars. Workers @ site will be laid-off Thurs & Fri. Trainers also notified

1600 CF + B. Dolhany arrive @ RORC office to meet w A. Tawamni. CF spoke w B.D. prior to going to office to advise B.D. of some CF findings @ rail yard.

At meeting B.D. notes that Friday not holiday for workers but rail yard shut down therefore he can't work on Friday. Also notes that since no rail cars can't work Thursday. BD expects 10 cars for Monday but notes that really need 25 for full week.

B.D. C.F., & AT review that D Audit was ordered so far 45 rail cars for job. We have currently used 27 of the 45 cars.  $\Rightarrow$  18 cars still available from the order  $\approx$  10 supposed to arrive on Monday. AT suggests telling Laidlaw to order 50 trucks to ship soil to Utah on Monday. B.D. notes considerable cost.

B.D. notes that workers laid off Thurs & Friday so some  $\approx$  \$2000 - \$2500/day to site guys. May be possibility of new physicists on Monday if workers on job change on Monday.

1630 Meeting Adjourned

1700 CF flights

CA Gauriel

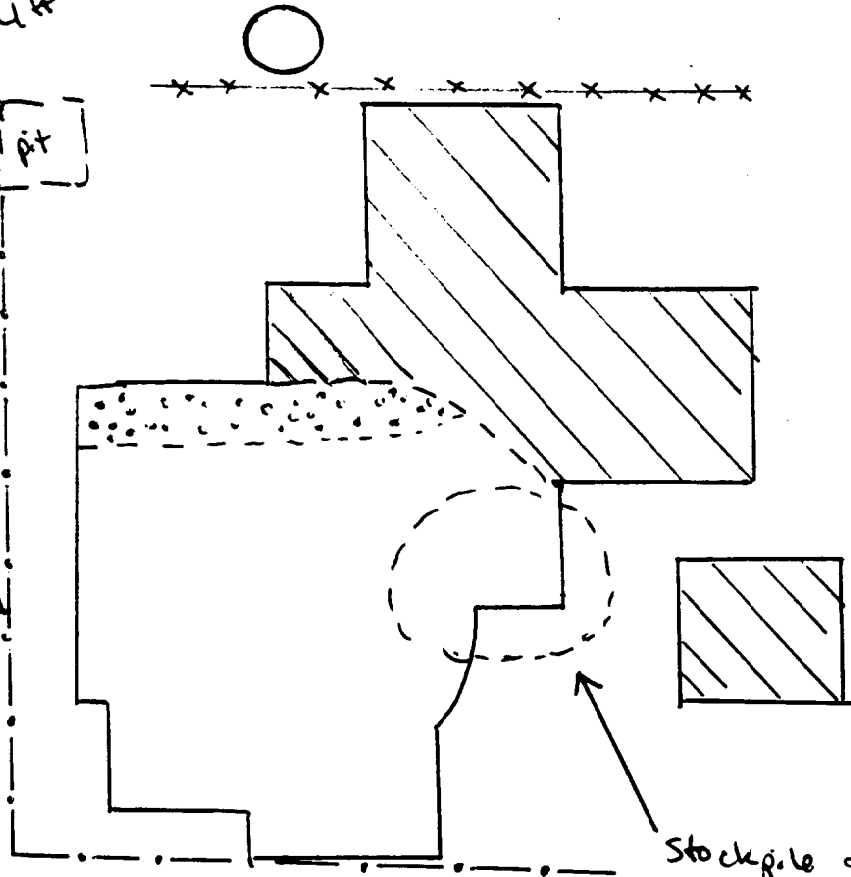
4/3/96



WWTP



8x8x4 ft  
pit

Erosion control  
work  
by 4/1/96  
to sediment  
retention  
pit



Stockpile of Excavated  
Soil from hole located  
on surface

TRUCK ENTRANCE/EXIT

-  Finished excavation to 4/4/96
-  Excavation in process

Part Sunny 48°

0700 CF @ site 2. Review point of excavation to this date. See diary pp 126

0830 CF meets w B. Doherty to note some items for job.  
 Review manifest problems @ rail yard.  
 Review manifest scratch out inconsistency @ rail yard  
 + CF BRAW recommendation that new manifests be fixed.

Review:

- FW unexplained discrepancies in actual work going on  
 FW 2016 yds = 3276 tons vs 4800 tons  
 projected by H. Lee on 4/1/96. CF notes  
 number may be larger.

CF notes excavators are putting s. deslipes soil into  
 div by pile when w.P. says it should be treated  
 clean

CF notes w.P. says s. deslipes 1:1.5 not being  
 achieved @ site.

CF notes decur paid debit from actual  
 are specified by C.F. Braw

Dump trailer not lined as specified in w.P.

Equipment projected in w.P. not same as on  
 site  
 CAT 325 not used  
 off road dump truck not used  
 D5 CAT not used

water truck used  
 Case 621 front loader used  
 John Deere 690 track hoe used

CA General

4/13/96  
 CF

B. Dolhany notes capacity: 6 buckets/dump @  $\approx 2-2.5$  cy/bucket  
 Avg 20 tons PCB soil/truck

B.D. calculates area to still be excavated has sideslopes of clean soil  $\approx 1550$  tons  $\Rightarrow \frac{1550 \text{ tons soil}}{85 \text{ tons/railcar}} \approx 18.5$  cars

soil to not be dumped into cars.

CF notes that in conversation w operators on 4/2/96 they informed CF that sideslope soil is going into the dirty pile not separate clean pile.

1030 C.F., B. Dolhany, L Niles, C Particos, A TAVANNA attend meeting for week.

B. Dolhany notes that according to H. Lassus Laidlaw is responsible for seeing safe operating procedures @ the rail yard. F.W. can do ~~not~~ <sup>not</sup> CF note to regulate operations @ the yard. B.D. agrees A.T. that Laidlaw not the Navy ~~with~~ <sup>CF</sup> is liable for all soil handling + shipping operations + activity. A.T. notes that Navy does have obligation to observe those things that can be possibly observed within ratson. B.D. notes that F.W. will clean the bucket used at the rail yard at end of operations.

B. Dolhany notes that air monitoring @ S. to 2 will and be done periodically + that the site will be kept wet to minimize dust.

C.F. notes that 2 piles of PCB contaminated soil were moved + were about equal in size  $\Rightarrow \approx 134$  tons (pp 103)

4/3/96 503760 lbs = 250 tons 12 loads 8:23 AM start 1:37 PM stop

Ch. Gennet

4/4/96

CF & B.D. show AT the excavation diagram. CF indicates to AT that FW work plans shows 2016 cu or 3276 tons for site 2 excavation. Notes that H. Lazzarus estimates 4800 tons at 4/1/96. Also notes that have already trucked close to 2000 tons or  $\approx$  30-40% of job finished. B.D. shows excavation side views & notes that will try to keep side slope soil in clean pile as proposed in u.P. B.D. & AT agree that this is difficult given the soil characteristics. B.D. agrees to field screen top soil & side slope piles to assure that they are clean for backfilling.

A.T. agrees to check on status of large soil pile located in S.W. corner of site. This could be used as good backfill. B.D. notes that he could field screen to assure clean if or to go with it.

B.D. notes that heavy soil in the old<sup>CF</sup> cross hatched portion of site on diagram was treated as dirty. This could explain some of the soil <sup>CF</sup> issues currently observed.

B.D. reminds rail car holding to A.T. Notes 10 cars scheduled for Monday & that may shut down next week since 25 cars needed for full week.

B.D. notes that slow Train Trolling @ HQ. regarding manifest problems @ railyard. According to them the following procedure must be followed to make changes to manifests:

1. Landlaw must notify DEC of NY & Utah hauling facility of manifest change
2. Landlaw must get authorization from generator to make change & must prove to generator that he has made the change

CA Lamm

4/4/96

3. Landlaw must make the correction to all copies of the manifests  
 CF

Currently all manifests have not been changed & no notifications have been completed. B.D. notes that he will notify D. Ard. to proceed. B.D. reviews all unused manifests from ROICC office

B.D. notes that C.F. observed P. Entwistle on rail tracks to manifests # 93 + # 94 to go into railcar already gone.

B.D. notes that T. Tealby issues may that if a manifest not attached then can often substitute a bill of lading to railcar + Utah dump site. This has been done before.

B.D. notes that should have manifest problems resolved for Mondays shipments but no guarantee

B.D. notes about if no work used - Fri. next week then he may run 1 loader + 1 operator on excavator + stacking clean soil until CF from side slopes until have cars.

1300 Meeting adjourned.

1330 CF off site for airport.

No trucks dumped today 4/4/96.

CA G...  
 \_\_\_\_\_

4/4/96

Overcast, 40°

- 0700 CF into site. Trucks being lighted + filled. Excavators continue unloading southeast portion of contaminated area.
- 0830 CF to rail yard. Pick up photographs of manifests. Changes made to these copies (98-109). No railcars in yard. P. Eubank notes that he will have 8-10 cars for today + tomorrow. Additional cars are scheduled to arrive for Wed →. Two untrained workers @ site + 2 Laidlaw people + Phil.
- 0930 CF to A. Tawanna's office to advise of moving developments.
- 0950 CF to FW trailer to see L. Niles regarding field sampling. Note that it would be cost saving if FW could take field screen samples in same location as me. Note gopher tunnel + cheaper to use field screen. Give Lynn copy of sample plan. Advise that we can accommodate her suggestions. She sees no real problem in doing this.

CF takes to Sparanza

- 1100 CF back @ Site 2. B. Dolhany + A. Tawanna both @ site. B. advises that he is having front end loader move clean topsoil into staging area in NW corner of site. Advise that he plans to field screen all "clean" piles today + will also screen large pile. Al wants to use as backfill. Will take several computers.

B. Dolhany advises CF that no problem taking samples @ my proposed locations.

Front loader bucket is decontaminated prior to unloading with clean soil but tires are not. Possible cross contamination

CA Stewart

4/8/96

Decan pad is still in good condition. Runoff collection device has captured some of site runoff. Silt net + sump from weekend rains.

1230 CF visits railyard. Four railcars @ site. 2 filled, 1-1/2 full, 1 empty. P Embrosica notes that he has 8-10 cars arriving tonight for Tues + wed work. Additional cars to arrive for Thurs + Fri.

CF ~~is~~ asks PE regarding manifest handling. Was not aware of procedure outlined in Thursdays meeting by B. Dolhoney. Noted that manifests in group #1 - '60 were caught in Utah in wrong EPA ID for LIRR + corrected above. Photocopies to be forwarded to ROICC. PE noted that he is still scratching out manifests.

Front-end loader was down for  $\approx$  1 hr today @ railyard. Trainers inform CF that ~~some~~ CF liners in some cars were 2 ft short. PE advises CF that ~~CF~~ ~~CF~~ has been corrected. PE advises CF that car #13 in Utah had water in the railcar head. PE notes that A. Ardito "took care of this" + that it is no problem for the ROICC.

1430 CF back @ site 2. New laborer at site to work full time on job. B. Dolhoney advises CF that no need for railyard + Laidlaw to change manifests + use policy described on Thursday. It's OK to scratch out the manifest + that is all they need will be done. Notes to CF that confirmations can be collected in 1/2 excavated area because of following field screen results:

CA General

4/6/96



<u>Date</u>	<u>Field test location</u>	<u>result</u>
4/2/96	SB-41	ND
4/2/96	SB-45	2.7 ppm
4/2/96	SB-46	2.8 ppm
4/2/96	SB-54	ND

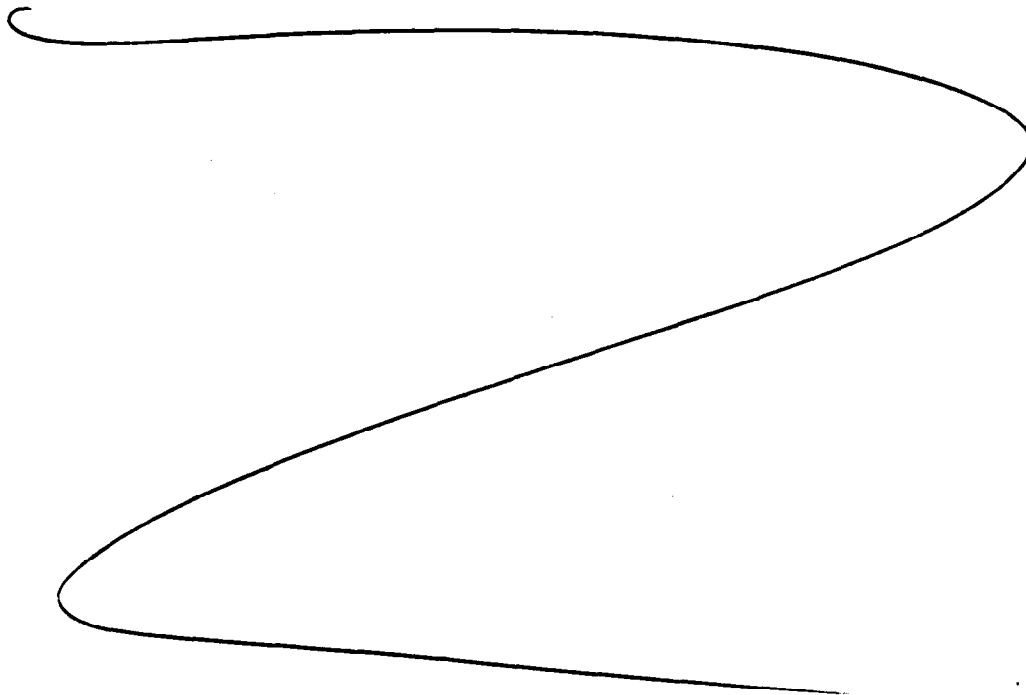
CF to begin to set up sample plots in sun.

Achiar level is 10 ppm

slw Joe about setting up samples. Notes Tues afternoon or Wed for some carbonating work.

1530 Trucks back to 5 to 2. Two trucks off to rail yard. Two trucks probably for tomorrow.

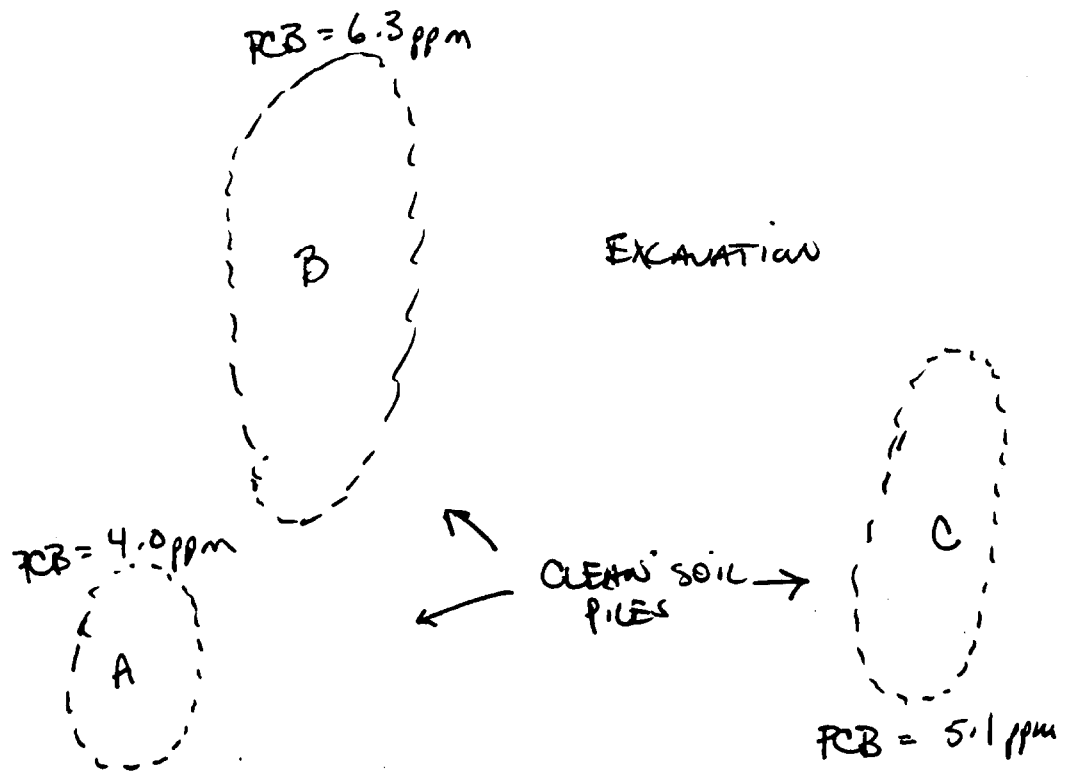
1600 CF offsite for curbing.



CF General

4/8/96

FIELD SCREEN SAMPLES  
COLLECTED CF 4/8/96  
WWTTP



WWTTP

↑ ENTRANCE ↑

ACTION LEVEL = 10 ppm

Overcast 38°

- 0700 CF into site. Excavation continues in area of SB-53, SB-52.
- 0800 CF into ROICC office. A Trammie notes that utility for confirmation on soil for backfill.
- 0830 CF into railyard. Note all 4 trucks lined up for dumping. Three full railcars @ ramp. No empties available. P. Emborscia notes that empty cars (10) are stacked in other yard & must be moved over @ 9:30 AM - 10:00 AM. Trucks must wait till then.

CF notes to PE that #1 → #93 of market copies #4 & #8 still have not been changed in ROICC office. Also photocopies #1 → 60 have not been changed to correct EPA ID for LTRR. #34 of photocopies has no railcar # on it. PE notes he will change. CF notes Navy concerns over Dountine.

CF picks up photocopies #110 → #125 for ROICC

0930 CF leaves railyard w/ no change in railcars yet.

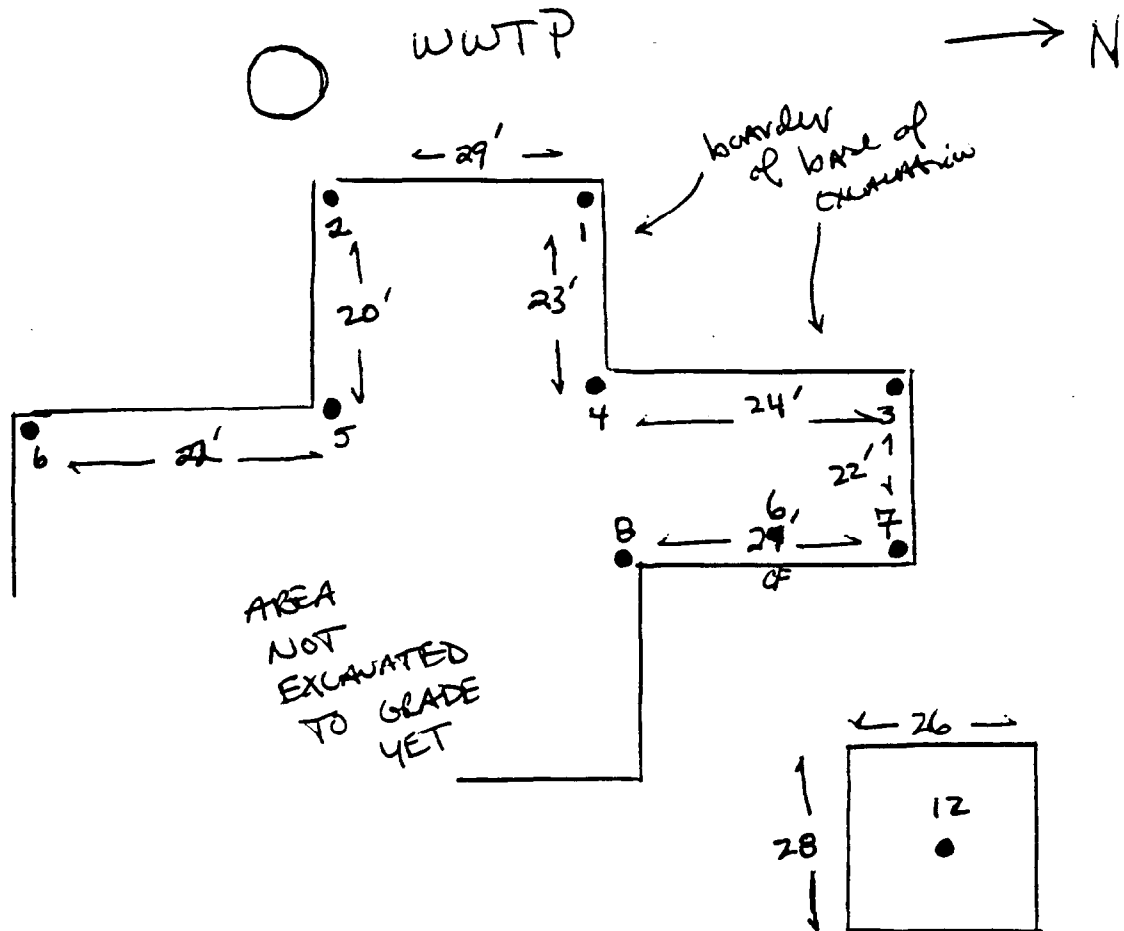
1000 CF informs ROICC of railyard problems  
 CF informs B. Dolhney of railyard problems

CF gets analytical results for clean soil piles:  
 see Diagram (pp 140)

A Trammie notes to CF that he would like to have pile B swabbed for vol's, semi-vols, metals before backfilling. CF tells B. Dolhney

CA General

4/9/96



FIELD SCREEN SAMPLE LOCATIONS  
(MEASURED DIST AT BASE EXCAVATION, PIN TO PIN)

NOTE! Some of these excavated sidewalls are under stress scaled on the cartoons provided by FW. Given that sidewalls are steeper than 1:1.5 in many places, this could explain the generation of extra soil @ the railyard.

- 1050 CF back to Site 2. First truck returns to Site 2 for 2nd load of dirt.
- CF notes to B. Dolhany that in afternoon some of field screen samples will be collected.
- 1330 CF finishes staking out field sample points in the excavated portion of the site (see figure p 142)
- 1445 FW collects field samples @ locations identified by CF  
 8 samples collected (composites) + 1 isolated location #12  
 The remaining portion of the site has not been excavated to grade.
- 1530 CF sees P Enworia in ROICC office. PE notes that filled  $\approx$  3.5 railcars today. Ran out of storage room on rail spur for more filling. Has 5 cars available for tomorrow & 4-5 cars avail for Thurs. Not sure for Friday yet. PE notes he is completing manifests today

The following production occurred yesterday:

<u>Date</u>	<u># Loads trucks</u>	<u>Total Expired</u>	<u>1st truck out</u>	<u>Last truck out</u>
4/8/96	76 <sup>CF</sup> 18	<del>340</del> tons 384	8:40 AM	CF 3:50 PM 4:30 PM
1620	CF off site			

CA Garsand

4/9/96

6" snow in AM 43°

- 0700 CF into site 2. Excavation continues along southern border.  
Two preloaded trucks sent
- 0830 CF to railyard. Three railcars @ site — 1 full, 2 empty.  
Trucks have unloaded.
- 0920 CF back to site 2 after picking up sample supplies. Sample  
paperwork filled out earlier in AM.

Sonny's truck is down on broken tarp support.

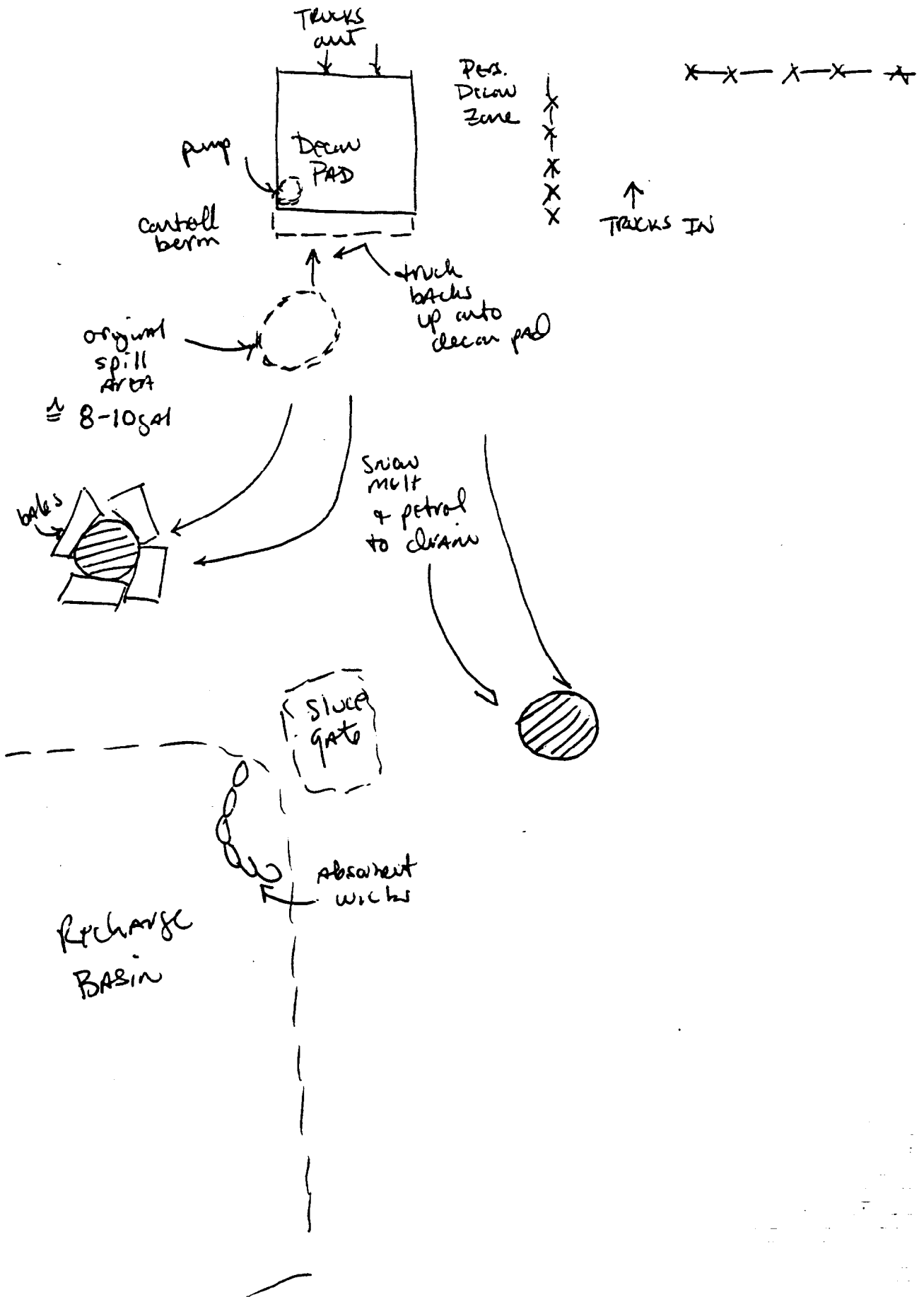
CF watches Dale's truck drive over decan pad lip & puncture  
the fuel oil tank. Fuel oil pouring onto melting snow  
outside decan pad. CF advises Trucher to position  
punctured tank over decan pad & then use plastic  
container to capture flow. Some visible fuel seen  
flowing on water into storm discharge drain. CF surrounds  
drain w/ hay bales as absorber. Area is covered by  
2-3" water & melting snow.

- 0950 B. Dolhany advised as arrives @ site. He returns from trailer  
w/ absorbent wicks & locates them around <sup>Storm</sup> drain in the flow.

Steady flow of water with sheen into storm drain. CF  
checks nearby slope gates into 2 large retention ponds.  
Sheen seen in water down in the well & gate system  
going into retention ponds. Trucher advises CF that  
he estimates 8-10 gallons of fuel oil lost. Decan pad  
pump on & heavy petrol in this area is piped into  
drums. Another layer of soil placed over the pit  
bump to prevent further tank punctures. Flow into  
drain of melting snow & water estimated at 15-25 gpm.

CA Gault

B 4/10/96  
CF



Two large pools of water to be seen have collected over a drain because of cracks in drain. Surface soil storm outside drain pad & over into the truck entrance area is covered by steam of petrol.

- 1050 CF over to ROTC to advise A. Taanuma of spill. AT phones Cannon & spill response.
- 1125 CF back to site 2. Cannon Corp. spill response team @ site to unroll sheets to absorb oil. ~~Cannon Environmental~~ CF ~~Controls office~~ ~~arrives~~ &
- 1145 B. Doherty returns to site 2. Cannon Environmental Control office arrives @ site. Advise BD to put absorbent mat in the catch basin (recycling basin) to capture any oil spilling out through the sewers. B. D. notes he will scrape 6-8" soil from driveway area & apply sand dikes to control H<sub>2</sub>O. Drain water from pad being drained.
- 1200 A. Taanuma arrives @ site to office note of Abc. Renew cleanup operations. Trucks are no longer being loaded as equipment is being used for cleanup.
- 1220 AT & Parker leave site 2  
CF assists with cleanup operations, water control
- 1400 CF leaves site 2. Site work under control. CF goes to get analytical results for yesterday's samples

CA Humber

4/12/96



Following analytical results were found: Field screens samples by FW

<u>Date</u>	<u>Sample Location</u>	<u>PCB conc.</u>
4/9/96	1	13.8 ppm
4/9	2	Non Det
4/9	3	3.2 ppm
4/9	4	1.9 ppm
"	5	2.9 ppm
"	6	N/D
"	7	20.8 ppm
"	8	3.0 ppm
"	12	N/D

Action level is 10 ppm. Areas by #1 + #7 will have to be further excavated.

1430 CF back to Site 2. Al Therman + Steve Holman are at site 2 reviewing excavation + site work

1450 AT + SL leave Site 2

1500 Weekly meeting is held in ROTCL office

Attendees: Steve Holman      C. Polios  
 Al Therman      L. Niles  
 C. Frates  
 B. Dolanney

- Bill Dolanney gives CF spill number from Crumman to be used for identification: 9600467
- B.D. notes that state NY DEC has been notified + will arrive @ Site 2 on Friday or Monday

CA Gammal

4/10/96

B.D. notes no visible sheen on recharge basins. Notes 8-10 gal fuel oil spilled. Laidlaw & Wills Trucking were notified by B.D. of spill. The decan pad is still fine & working. Soil contaminated by oil will be placed on liner in separate pile in the excavation area. Excavation of PCB-soils will continue again tomorrow.

B.D. & C.F. review sample plan for large pile of clean soil (pile B). 5 field test samples were collected & analyzed as 1 composite sample in trailer. All 5 samples were collected from the surface of the pile. C.F., L.N. BD and other members agree that some samples should be collected from depth in pile. A.T. & S.L. note that soil is from street sweeping, recharge basins & other sources. L.N. notes that volatiles, semivolatiles, metals analysis & TCLP shall be also analyzed as next series of composites collected from pile.

The 2 other clean piles will not have to be analyzed further as PCB concentration is satisfactory & all that has to be done.

CF asks B.D. to check w/ H Lazarus to see if a minimum tonnage of 85 tons is changed to none even if less than 85 tons is contained in rail cars in <sup>Utah</sup> ~~Utah~~ <sub>CF</sub>. B.D. agrees.

B.D. notes that he has requested Laidlaw to supply trailer trucks to replace larger dump trailers for diversion of job. Trailers have rated capacity of ~~73,000~~ 73,000 lbs. Trucks should arrive for use on Monday.

C.A. Stewart

4/10/96

AT notes that in today's work manifest #142 was missing. BD notes that truck 138 (same) was light-weighted & then his tarp broke. Consequently truck #138 never got loaded & was stayed only @ site 2. Manifest 142 will be corrected by B.D.

AT notes to B.D. that Nary should not incur any expenses due to clean-up. B.D. agrees & notes Nary was charged for 3 hrs slippy in AM. Carllan is responsible for clean up costs.

CF shows map of excavated AVCA & sample points. BD notes that approximately 60% complete re-examination. BD estimates that excavation of site 2 should be completed by Friday 4/19. Backfill of clean AVCA's of excavation will occur while other portion of site 2 is being excavated.

16:15 meety adjourned.

CF  
~~4:30~~  
 16:30

CF visits site 2 clean up. Site work almost finished for today. Some work to be completed in AM tomorrow.

5

16:45 CF off site.

CF General

4/10/96

August 35°

0700 CF into site 2. Site workers are still <sup>CF</sup> moving grading truck entrance AREA & hauling out petroleum contaminated soil pile located in entrance to site 2.

CF passed out copies of week 2 reports to all parties yesterday.  
CF passes out all copies of week ~~2~~ 3 reports today.

0730 P Embrosia arrives @ site 2 notes that Sonny's trailer should be fixed this AM. Four rail cars available today for filling today. Move rail cars in 2nd spur, but rail co. comes to more cars @ 09:30 so probably at 4 cars filled today.

10:00 Workers finish site 2 clean-up & reconstruction of oil spill @ this time. Backfilling of hole created by excavation of oil contaminated soil containers.

Truckloads of soil removed from site 2 containing oil:

<u>Date</u>	<u>Truck</u>	<u>Tons soil</u>	<u>Time out</u>
4/11/96	Ed - trailer #489	21	7:48 AM
4/11/96	Cree - trailer #446	21	8:10 AM
4/11/96	Dale - trailer #346	22	8:33 AM
4/11/96	Ed	22	9:16 AM
4/11/96	Cree	22	9:42 AM
		<u>108 tons</u>	

Dales next load of soil was from PCB pile

10:10 Joe begins backfilling hole for petroleum soil.

10:30 Joe finishes backfilling petroleum soil hole.

Sonny's trailer not fixed yet trailer #439  
At C. Farnos' request, B. Delaney notes that his people confirm that existing manifests w/ PCB indications will be fine for diesel fuel soil.

CA Farnes

4/11/96

- 1115 Sonys truck #439 back up & operating. Four trucks running again.
- 1215 S/W/L. Miles regarding sampling @ Site 2.  
 Pile B will be sampled in 5 separate locations from depths of 2-3 ft below surface. Samples will be analyzed for full suite including TCLP.
- Two hot locations #1 + #7 in excavation area will be sampled after excavation. The other 6 locations can be resampled as well.
- 1330 S/W/M Spurnea to confirm FW sampling plans of pile B. Spurnea notes that sampling plans seems satisfactory for pile. CF notes issue of cross contamination of clean areas during excavation. Spurnea agrees to talk to B. Dolhany & A. Thomas.
- 1400 CF S/W B. Dolhany notes that excavation equipment is <sup>driving</sup> ~~driving~~ <sup>of</sup> boundaries of contamination indicated on the map. Equipment goes from new contaminated to contaminated + back when excavating & filling trucks. Also see notes p/15. Bill notes that Kyle to control & that he will scrape surface layer off site after backfilling is finished.
- 1445 CF to A. Thomas file to check on truck manifests & release of cross contamination situation. AT in meeting so not told.
- 1450 CF back to Site 2 to see soil piles of ~~BCF~~ <sup>CF</sup> PCB soil being stockpiled in new location on site 2 - no plastic underneath. CF notes to BD that this may be classed AVCA on map. CF advises M Spurnea to <sup>force</sup> ~~force~~ <sup>CF</sup> H. Thomas <sup>plane</sup>

CF Thomas

4/11/96

1550 Washers finishing up bus today. Two trucks preloaded for tomorrow.

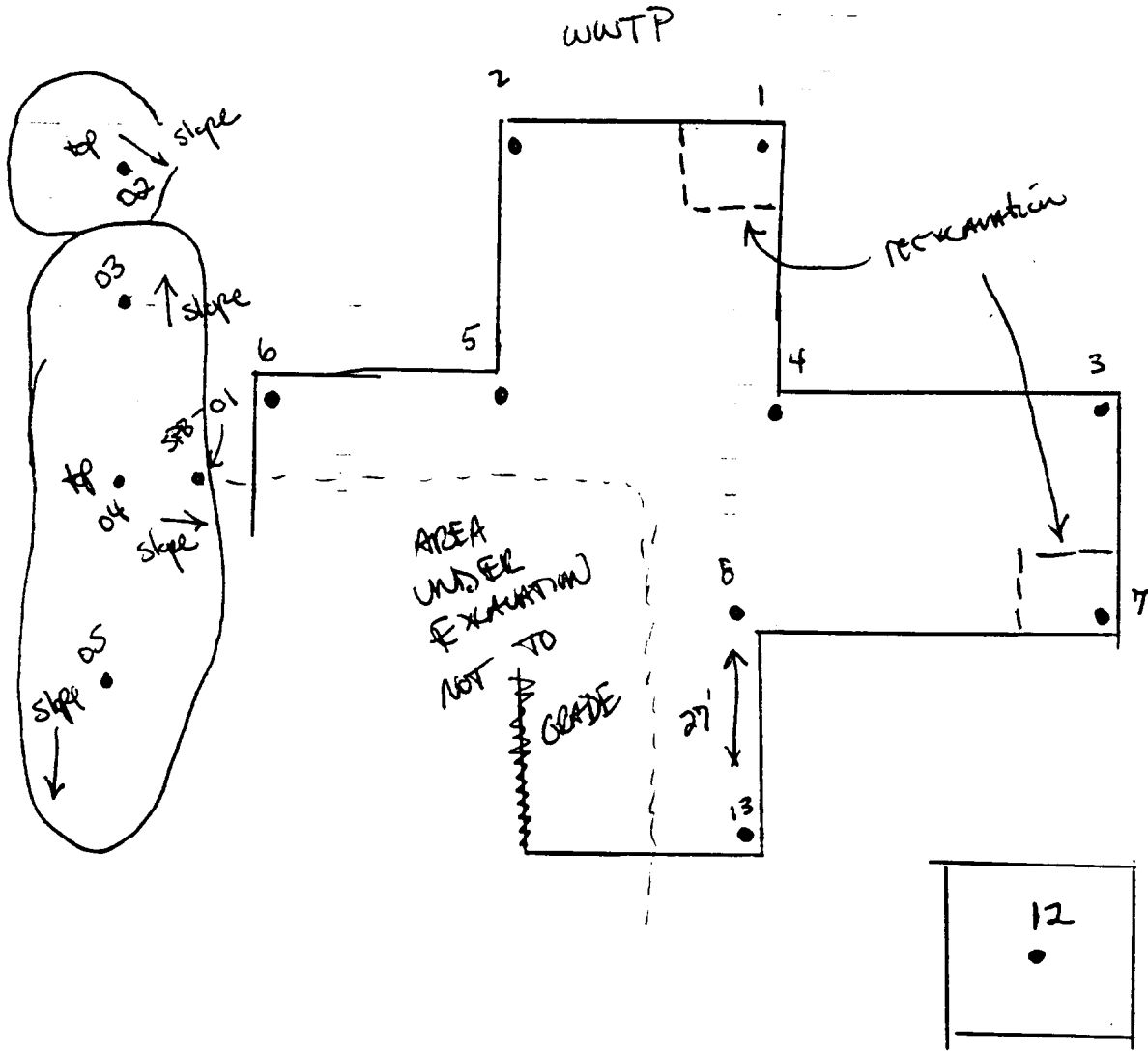
1600 CF offsite for evening.

The following excavation reports were collected from the night tickets:

<u>Date</u>	<u>washer reports</u>	<u>tons shipped</u>	<u>1st truck out</u>	<u>last truck out</u>
4/9/96	14	304 300 ton of	8:04 AM	3:39 PM
4/10/96	5	106 ton	9:14 AM	11:41 PM

CA Paund

4/11/96



Sunny 65°

0700 CF into site. Trucks are being loaded from the large stockpile of soil located @ the rim of excavation.

0730 Because field screen samples #1 + #7 were above 10 ppm limit (see p 149) these 2 locations were reexcavated to remove residual PCB contamination. (See diagram p 160). Each reexcavation was approximately 10' x 10' x 2' deep. All points 1 → 8 were then resampled by FW field test kit. Also, CF located sample point #13 & FW sampled this point as well (See also drawing p 142)

CF prepares sample bottles for collection if all FW came back below 10 ppm.

1000 The following analytical results were found by FW field test kit

<u>Sample Date</u>	<u>Location</u>	<u>Core. PCBs</u>	
4/12/96	1	17.8 ppm	EXCEEDS 10 ppm limit
4/12/96	2	ND	
4/12	3	5.2 ppm	
4/12	4	6.8	
4/12	5	1.8	
↓	6	1.0	
	7	5.9 ppm	
	8	4.9 ppm	
	13	4.5 ppm	

Because #1 exceed 10 ppm this area was reexcavated again over a 10' x 10' x 2' area & resampled again at the same location

~~Sample Date~~ CF

CA Stewart

4/12/96



1200 FW arrives in field test kit to resample #1 again after recreation.

Also, FW collects 5 ~~ft~~ <sup>CF</sup> samples from 2 portions of clean soil pile B for shipment to Lab + full suite of analyses. (See diagram pg 160) for approximate locations.

<u>sample #</u>	<u>sample depth</u>
SPB-01	3 ft
SPB-02	3 ft
SPB-03	3 ft
SPB-04	3 ft
SPB-05	5 ft

Samples to NYTEST Env. in Long Island. RCRA <sup>parameters</sup> TCL, TAL, TCLP tested for

FW reconstructs Area Ocean in a fresh surface layer.

1330 FW reports analytical report for sample #1 collected after 2nd recreation

<u>sample Date</u>	<u>sample location</u>	<u>PCB conc</u>
4/12/96	#1	ND

1335 CF goes into site to collect samples (confirmatory) for shipment to Quantova Labs.

CF                     

4/12/96

## C.F. Braum Carbonatay Samples (See Diagram p 160)

<u>Sample Date</u>	<u>Sample ID</u>	<u>Sample Location (Diag)</u>
4/12/96 ↓	<del>S2</del> S2 - A - 01	1
	S2 - A - 02	2
	S2 - A - 03	3
	S2 - A - 04	4
	S2 - A - 05	5
	S2 - A - 06	6
	S2 - A - 07	7
	S2 - A - 08	8
	S2 - A - 12	12
	S2 - A - 13	13
	S2 - A - 29	Duplicate of S2-A-03
	S2 - A - 30	MS/MSD

No clean required as disposable equipment used throughout

1500 CF finishes sample collection & sample packaging for Fed Ex Saturday delivery.

1530 CF start B.D. He notes that Lindlow may be taken off the job for good. Chem waste may be truly over job to their trucks. B.D. notes that this is not finalized H Lazarus is negotiating.

B.D. crews sampled portions of site in plastic for weekend. Wills trailers left @ site for weekend.

B.D. notes that he replaced Navy sand. Shows C.F. receipt for 25 tons of sand delivered to salt barn.

C.F. General

4/12/96

The following shipping data was recorded:

<u>Date</u>	<u>No trucks</u>	<u>Tons Soid Slipp</u>	<u>1st truck out</u>	<u>Last truck out</u>
4/11/96	17	373 tons	7:48 AM	4:09 PM
4/12/96	12	264 tons	7:31 AM	12:47 PM

No more trucks were filled on 4/12/96 as all rail cars were completed.

Total loads to date:

175 trucks moved 3762 tons soid from Slo 2  
since the start of the job till today.

Cd Howard

4/12/96

Sunny 60°

0700 CF into site - Excavation continues in AREA of SB-58 + SB-57  
 three wills truckers @ site. Gregs truck broke down this  
 AM. P. Embrosia comes @ site + after few minutes leaves. I will see @ RR.

0800 CF to railyard. Note 3 empty railcars available @ dump ramp.  
 P. Embrosia notes that LandTaw plans to substitute wills trucks  
 with 4 other trucks driven by local union workers. These  
 trucks are permitted to carry heavier loads on the roads.  
 P. Embrosia notes that in addition to 3 railcars, a large  
 additional group are stored in the staging area.

0900 CF to POTCC office. Deliver manifests. Note site conditions  
 + plans for excavation for week. Show Al + Bob map of  
 site, sample points. Give them copies of the map.

0935 CF to phone Mr. Swartz, travel service, lab

CF still D Brennan @ Quintera. Dave notes that samples  
 were received on Sat. Note: sample S2-A-30 is MSDS  
 is being treated as separate sample. If note not collected from  
 one of my sample points. Recommend alternative using S2-A-01  
 to derive MSDS sample from a careful analysis of S2-A-30.  
 Dave agrees to cancel # S2-A-30 + agrees to do MSDS  
 extraction on S2-A-01. Notes little extra work but will  
not cause any validation problems.

1130 CF back to site 2. Greg McLeod not @ site to pick  
 up truck bed. Three trucks running today.

1430 P. Embrosia advises truckers to decum beds @ site 2. wills trucking is  
 to be replaced on the job by a local union trucking shop. All truck  
 tires, beds being decum on site 2 pad.

CA G... 

4/15/96

1545 LAST of wills drafted & off site 2  
waters ready to go off site

1620 CF off site

CF [Signature]

4/15/96

Douglas 53°

0700 CF into site 2. Heavy rains. lots of runoff.

0730 Union trucks arrive @ site in P. Embrosia.  
The following tractors & trailers set up are made:

	<u>Tractor</u>	<u>Trailer</u>	<u>Driver</u>
1.	95 - 846	8085	Jim Byrne
2.	94 - 301	2	Bob Donnelly
3.	94 - 319	6	Cliff Sicker
4.	89 - 1	8004	Steve Arthur

According to P. Embrosia each truck is permitted to haul  
@ gross weight 120,000 lbs.

P. Embrosia will placard each truck properly &  
assure that tarps are properly placed.

Excavators begin to fill trucks from stockpile  
B. Dolney reviews site activity & route in drivers.

0800 1st trailer goes to scale for heavy weight.  
B. Ingram checks heel tarp. Finds it to be mesh  
not plastic. Learns from P. Embrosia that all  
tarp are mesh. B. Ingram prohibits trucking.

0820 P. Embrosia into ROTCC office. B. Ingram tells  
P.E. that no trucks will roll on any rainy day  
in mesh tarps. P.E. notes to B. & C. Farnes that  
ample supply of cars in the yard for today.  
C.F. requests manifest #65 copy for ROTCC.  
P.E. delivered photos of Utah manifests 1 → 106  
for attachment to May copies. P.E. to find out  
if ROTCC should be mailing out copies to state

Col Farrell

4/16/96

0900 Carter to Lampow. BF advises no excavation today to B. Dolboway. B. Dolboway advises unless to prepare erosion control of site.

Hay bales placed around PCB soil pile located in clean area of site. B.D. notes not enough plastic to cover.

B.D. directs track hoe into AREA near waste water plant to control runoff + erosion of banks. Additional runoff control devices are excavated in the area. Track hoe enters the area by driving over "clean" part of site. B.D. notes bank erosion + cone ins occurring in this area.

C.F. notes to B.D. that CF may want to find sweep sample locations + clean soil locations prior to backfilling. B.D. ~~and~~ CF agrees.

1100 CF to RACE to advise BF of days work. Labourers set to leave site for day.

C. J. Flannery

4/16/96

Overcast 35°

0700 CF into site. Excavation continues along eastern edge of Site 2.

0745 Trucks go to scale for heavy weight & delivery to rail yard. B. Ingram requests to see heavy permits for each of the 4 trucks. Permits not readily available. B. Ingram delays truck pickup until scale truck can produce permit for 120,000 lb hauling. Permits license numbers must match plates on trucks.

The following trucks are scheduled today:

<u>Driver</u>	<u>Tractor No.</u>	<u>Trailer No.</u>
Bob Deanehy	94-301	2
Joe Caterish	95-363	6
Jim Arthur	91-752	5
Dave Croner	89589	8084

0810 B. Ingram inspects wet tarp being used on trucks. Nothing not properly placed over top of soil. B. Ingram sends truck back to site 2 for proper fitting.

0900 CF visits rail yard. Picks up photocopies of manifests. Advises landman workers to stop using front loader to level loads in ~~trucks~~ <sup>CARS</sup> as some of soil is being spilled into gravel.

1010 CF back to Site 2

Col. Flannell

4/17/96



1215 CF gets permits from B. Dolhany for truck 94-301 and 95-363 which were simply with a permit. Photocopies of registration extension (FRP) received by B. Dolhany & given to C.F. Co. ROICC. C.F. goes to B.I. Trucks are satisfactory to row.

The following shipping information:

<u>Date</u>	<u>No Loads</u>	<u>Total Tons</u>	<u>1st truck out</u>	<u>Last truck out</u>
4/15/96	12	260 tons	7:33 Am (126)	2:07 Pm (12)
4/16/96		No loads row due to rain		

1400 Trucks continue to row.

1530 3 Trucks preloaded for tomorrow. Beds parked over the hot area in case of rain.

1610 CF applies for entry

CA Y. [Signature]

4/17/96

Sunny 55°

0700 Workers excavate AREA in SB-57. Workers setting grade.  
B.D. notes that may be able to sample on 4/19/96.

Two trucks in automatic conveyor dumps covering soil  
Two trucks in manually <sup>applied</sup> Applied & removed mesh strips

Following load information

<u>Date</u>	<u>Tot trucks</u>	<u>Tot tons</u>	<u>lit count</u>	<u>last and</u>
4/17/96	19	601	7:44 (189)	3:46 (207)

0940 B. Ingram arrives @ Site 2 to view operations. Looks @ extent of excavation. B. Dolhany notes that drums are supposed to be removed by Landstar from Site 1 + Site 2. D. Ardite notes he unaware that must use union labor to remove. B. Dolhany may use Site 2 laborers to prep drums for removal to rail yard. B. Dolhany notes excavation may be completed tomorrow. Joe to be up to field screen.

1000 B. Ingram leaves Site 2

1200 Trailer from JBT comes @ site to take trailer 8095 back to truck yard. Trailer backed over decar pad & sprayed out.

1235 Trailer off site.

1300 Excavation continues in hauling

*[Signature]*

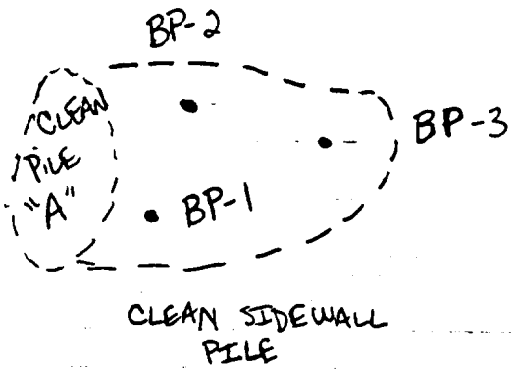
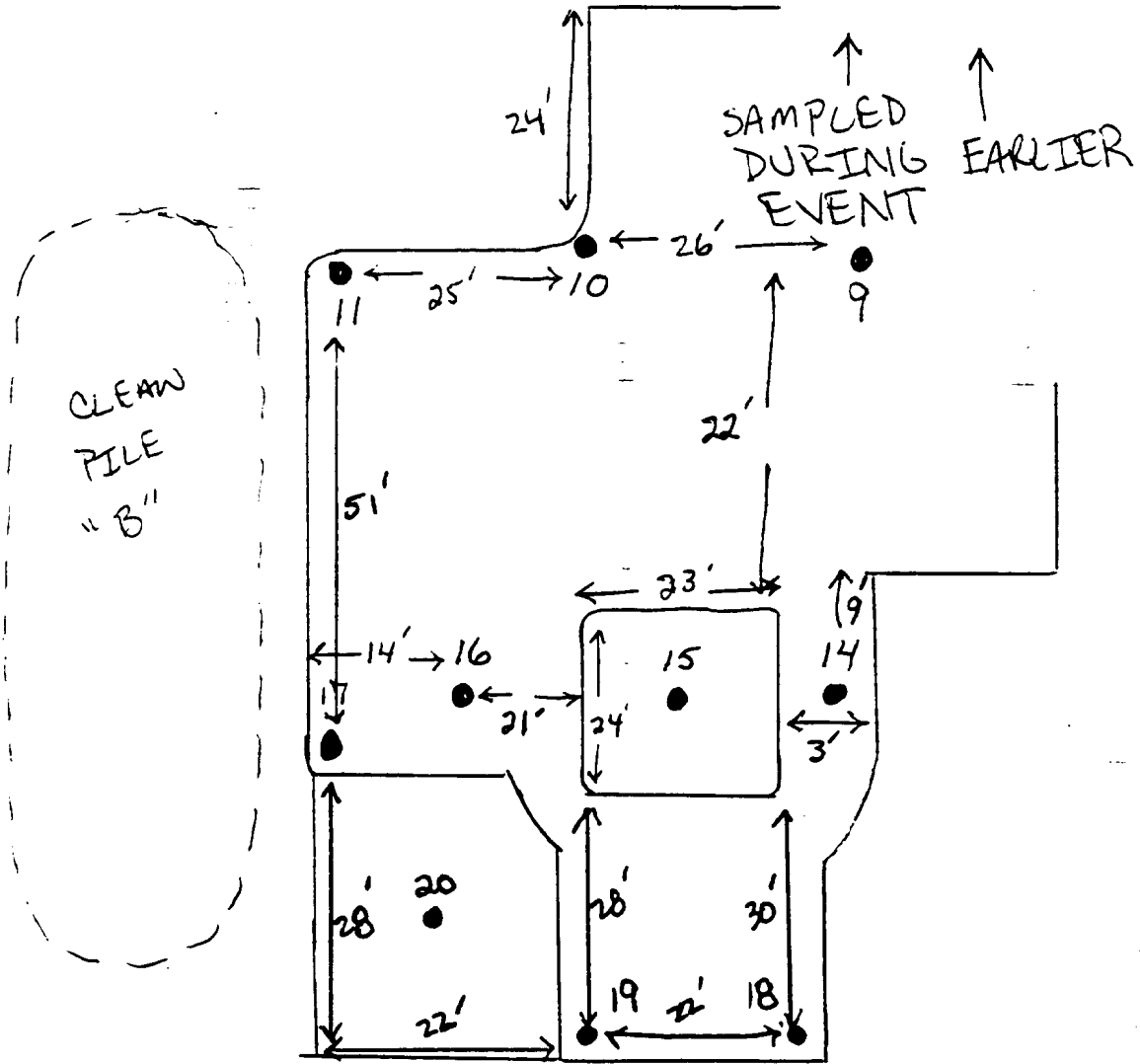
4/18/96

1330 C.F. slw B. Delaney + T. Eubank @ Site 2. The following items are discussed:

1. B.D. asks CF to check w M. Speranza to make sure soil pile "B" can be used as backfill. Change to <sup>CF</sup> Speck spec. C.F. tells Speranza, Speranza notes he will verify w S. Lehman. Sees no problem.
2. <sup>CF</sup> Drill cuttings from Site 1 will be moved to Site 2 in drums. <sup>PCB</sup> Soil out of drums & dumped into PCB pile @ Site 2. Drums crushed & delivered to soil to rail yard. Soils from Site 1 < 500 ppm except for 1 drum. Mixing will reduce concentration.
3. PPE from Site 2 will be bagged & delivered to PCB soil to rail yard.
4. Decan water from Site 2 removed from drums @ Site 2 & mixed w PCB soil from Site 2. Site 2 soil to rail yard.

C A Gault

4/18/96



NEW SAMPLE POINTS  
4/19/96

P. Sunny 60°

- 0700 CF into Site 2. Excavators continue in AREA of SB-62, SB-63. Cradles completed in other portions of site. H LAZARUS on site 2 this AM. See work.
- 0800 H LAZARUS leaves site 2
- 0815 CF into hole to place pin flags for F.W. field screen samples. Pin flags located for samples, 9, 10, 11, 14, 15, 16. (See diagram pp 184)
- 0900 FW field crew arrives @ site 2 to collect field screen samples @ 9, 10, 11, 14, 15
- 1000 CF into ROICC office to renew manifests. After looking over each manifest copy #4 & #3 CF notes that manifest 188 is out of sequence. It has been voided. All other manifests have DR EPA ID correct sigs correct & dates correct.  
 Manifest copy #3 Fed Excel to:  
 Utah State Div of Solid + Haz Waste  
 P.O. Box 14480  
 Salt Lake City, UT 84114-4880  
 address as per P. Embrosica  
 Manifest copy #4 Fed Excel to:  
 State of NY Dept of Env. Cons. Div of Haz Subs. Reg.  
 P.O. Box 12820  
 Albany NY 12212 AS per address @ top of manifest

CA Stued

4/19/96

1030 Weekly meeting begins

Attendees	C Farkos	B. Dolhney
	A. Tsoumias	C. Polias
	B. Ingram	H. Lazarus

The following items were discussed:

1. CF notes ROICC manifest 1 → 175 mailed Fed Ex today
2. CF notes to B Dolhney + H. Lazarus that <sup>JBT materials</sup> ~~what will be~~ of Rail yard bucket + rail yard hopper not be decon. B Ingram notes he does not trust Laidlaw a decon. H.L. agrees to assure that Navy is given release of liability for decon of these items. Cost is responsibility of Laidlaw. H. Lazarus notes that since Laidlaw proposed to use <sup>rail yard</sup> ~~decon pad~~ for additional work, Post. wheel will not cover demob costs @ ramp + yard.
3. Navy ROICC suggests possibly using rail spur into base. H.L. agrees to look into a Laidlaw.
4. H.L. + B. Dolhney note that they will demob Site 2 gap, but not materials. FW. will fix here by WWTP + replace gravel <sup>CF</sup> dug up in that area. The hole by Site 1 will not be excited again.
5. B. Dolhney notes that in order to cut down on slippage in fill for Site 2, he will cut up to 3ft deep of berm separately recharge basins + "hot zone" here to put into hole. Notes he will fix drainage direction in this area of excavation.

Ch. Gamm

4/19/96

6. CF notes that field screen samples should be used to confirm that Areas in hot zone where drum + equipment mixed + under PCB pile are not above 10 ppm level for PCBs. Also CF will locate 3 pin flags in soil piled onto pile of BA from sideslopes. This soil should also be sampled to assure that < 100 ppm Arsenic level. H.L. + B. DeLong agree to do. B.D. notes he will scrape 2-3" from hot zone area where trucks mixed. CF notes not to mix soil from outside hot zone. (Dwyer)
7. H.L. notes that CF must get exception letter so pile B can be used as backfill. Exception letter should note that OK if soil is not from off-site, also that OK if soil does not match geophysical parameters noted in design. H.L. will test pile B for geophysical parameters. B.D. will compact when applying.
8. B.D. notes that liquid in drums @ site 2 will be sprayed over PCB soil pile @ site 2. Drums here + drum by B&R outside site 2 + drums from site 1 will be sent to soil to rail yard. Site 1 dross cuttings + drums will be also mixed with site 2 PCB soil for delivery to rail yard.
9. Survey will be done on Site 2 on Monday or Tues. Topo survey @ base of hole. Backfill equipment ordered for Tuesday + 1 more operator for sackfill.
10. Mesh traps must be replaced for Site 1 week. Must have rainproof traps for rain tracking. No rubber traps no operate.
11. H.L. received preliminary field sample results for Site 1 + outlined extent of contamination. More information to follow as details develop CF develop.

CA Hamel

4/17/96

1200 CF back to Site 2. Excavation not completed so no more pin flags located. CF locates 3 pin flags in soil pile by pile "A". B.D. agrees to have Joe locate last 4 pin flags for sample locations once excavation complete today. CF instructs Joe. CF must leave for Pitt for funeral.

1330 CF offsite for pitt.

Following soil excavation #'s

<u>Date</u>	<u># Trucks</u>	<u>Tons</u>	<u>1st truck out</u>	<u>Last truck out</u>
4/18	14	429 tons	(205) 8:27 AM	3:20 PM (221)
4/19	15	454 tons	(222) 7:38 AM	2:40 PM (236)

Total for week: 1744 tons by 60 trucks  
 Total for job to 4/19/96: 5506 tons by 235 trucks.

CA Howard

4/19/96



Sunny 70°

- 0700 CF into Site 2. Excavation is completed for entire hole. Soil bag removed from stockpile + sent to yard by JBT. Same 4 trailers still in use.
- 0800 CF takes turnages for last cells. The following analytical results for samples shown on figure (pp 184)

<u>Sample</u>	<u>tot PCB conc</u>	<u>Field Screen Results</u>
9	2.8 ppm	←
10	3.1 ppm	
11	1.5 ppm	
14	2.5 ppm	
15	2.1 ppm	
16	3.6 ppm	
17	4.3 ppm	
18	2.0 ppm	
19	13.5 ppm	
20	2.7 ppm	
BP-1	2.5 ppm	
BP-2	2.3 ppm	
BP-3	7.1 ppm	

Since # 19 > 10 ppm Action level this area will be reexcavated.  
 All BP-# < 10 ppm soil can be used as backfill  
 in pile "A" + pile "C" soil

0945 CF to prepare sample bottles + make phone calls.

1100 P Embrosia to Site 2 to look over remaining <sup>soil</sup> ~~excavated~~ pile + estimate railcars removed. Estimated CF  
 additional 11 cars required.  
 Also visits ROICC office to explain list manifests to return from Utah - CF into ROICC  
 in P. Embrosia -

CF Keller

4/22/96

1220 CF watches drums being moved from Site 1 to Site 2 for disposal + destruction, Process as noted earlier in 4/15/96 notes. Total drum count by CF

Site 1

Drums filled w PCB soil	178 drums
Drums filled w decon H <sub>2</sub> O	49 drums
Drums filled w sample jars	1 drum
Drums empty	2 drums

Drums filled w decon H<sub>2</sub>O also contains hexane rinse. These drums will not be brought over to Site 2 for disposal. Must be handled separately by Landlaw Accordly to B. Dolhany

1330 Joe of FW arrives @ site 2 to collect samples. Will collect field screens @ sample location #19 + #13 based on sample results for FW reported pp 193 + reported below.

CF speaks w Quantara Labs. Faxed results to R. Sincich who updates CF of the following analytical results for C.F. Brown samples collected 4/12/96 (pp 165)

	<u>PCB conc</u> <u>ug/kg</u>		<u>PCB conc</u> <u>ug/kg</u>
S2-A-1	1000	S2-A-12	110
S2-A-2	170	S2-A-13	19000
S2-A-3	6700	S2-A-29	5600
S2-A-4	3000		
S2-A-5	1100		
S2-A-6	190		
S2-A-7	8600		
S2-A-8	4100		

- All detected concentrations  
AVE for Aroclor 1248  
All other forms of PCB  
were non detected.

CA Flann

4/22/96

Based on these analytical results from C.F. Braun + based on field screen results for FW, sample areas #13 + #19 must be reexcavated. B. Dehany instructs men to reexcavate approx 10ft x 10ft x 2ft deep area in each sample location.

Joe of FW recalls field screen samples @ location #13 + #19. The following analytical results are obtained:

<u>Field screen sample location</u>	<u>PCB conc</u>
#19	3.2 ppm
#13	7.0 ppm

Since both results are < 10 ppm action level CF collects confirmatory samples @ all locations listed below:

1600 <u>Sample ID</u>	<u>Sample location (diagram pg 184)</u>	
S2-A-09	9	
S2-A-10	10	
S2-A-11	11	
S2-A-14	14	
S2-A-15	15 (2)	ms/msd sample also collect
S2-A-16	16	
S2-A-17	17	
S2-A-18	18	
S2-A-19	19	
S2-A-20	20	
S2-A-30	Duplicate of #16	

1745 CF packs samples + leaves site for Fuel Ex

C.A. Hann

4/22/96

Sunny 70°

- 0700 CF into Site 2. Transfer & destruction of Site 1 drums to Site 2 continue today.  
 Site 2 soils are being loaded from the stock pile @ Site 2 & shipped to rail yard. Trailer # 8024 is staged @ Site 2 & is not being used as the trailer broke an axle @  $\approx$  1630 yesterday. Under repair off-site now.
- 0800 CF to ROICC office to show ROICC the 35 day manifest deadline from the UTAH facility. Current manifests 1  $\rightarrow$  5 are not back from Utah. The soil left NY facility 3/25/96. D. Ardito & P. Embrosica, H. Cozars & B. Delaney aware of issue. Also these men unaware of issue regarding weight difference on the manifests & the certificates of disposal.
- 0900 CF start lit Cozars @ Site 2 by phone. discuss manifesting. CF to trailer to phone Pitt.

Following data collected from weight tickets:

<u>Date</u>	<u>trucks</u>	<u>Tons</u>	<u>lit out</u>	<u>lost out</u>
4/22/96	17	534 tons	(23) 7:39	4:49 (253)

According to B. Delaney 12 buckets of soil removed from pile B to recreate drainage catchment trench below pile B + excavated area

Ch. Gurch

4/23/96

1130 C. Fahos phones J. Trepanowski @ Wayne office to review the following items because M. Sperma is on vacation:

1. It is proposed by FW to use clean piles A & C as backfill for the excavation. CF recommends that the piles be sampled prior to backfilling. H. Lantz notes that preliminary samples collected during site characterization indicate that clean piles A & C should not contain PCBs > 10 ppm. H. Lantz & B. Delaney propose using field screens as analytical determiner if piles contain PCB > < 10 ppm. CF notes that field screens is not equally accurate for all PCBs or for all locations as noted in phase investigation - Rapid Assay (see enclosed literature). CF requests action item: collect lab analyzed samples, use field screens, use nothing, what is S. Lehman's responsibility? What is S. Lehman's decision?
2. According to C.F. Braun's spec. with the spec. backfill must meet requirements listed on pp 1-6 of section 02250 of C.F. Braun spec June 1995. It is proposed by H. Lantz & B. Delaney to use pile B as s.l.e @ backfill. According to A. Tronier pile B is derived from numerous sources at the base. HL & BD note that full suite of analysis to be done by FW as this said. Also geophysical parameters. This pile violates portions of section 02220: CF "obtain" section 2.2, section 3.4, who directs approval to violate C.F. Braun spec? CF needs guidance
3. PCB soil is currently being excavated & stockpiled on site for loading & transp. off-site. This started 3/25/96. According to section 3.4 of 02220 no more than 30 days can elapse. Who can furnish CF with approval to violate this req? Should this be noted to Wayne?

J. Trepanowski advises CF to s/w R. Simich & D. Branch. CF s/w RS & DB, Rob Simich is designated to coordinate answers to each of these items as per "in charge" memo by Sperma.

Cd. Stum

4/23/96

CF slw R Smith & RS agrees to coordinate these items w  
S Lehman & J Tropanowski & keep CF informed of decisions.

1530 B. Dolaney informs CF that H Lazzarus received a verbal  
approval to use piles A & C as backfill w no further  
sampling. CF notifies R Smith of decision immediately.  
R Smith to slw ~~#2~~<sup>CF</sup> S. Lehman. CF at S to 2

1630 CF collects battery totals for days work

Date	# trucks	Tons	last truck out	last truck out
7/23/96	16	506	(2:4) 7:31 AM	(2:4) 4:08 PM

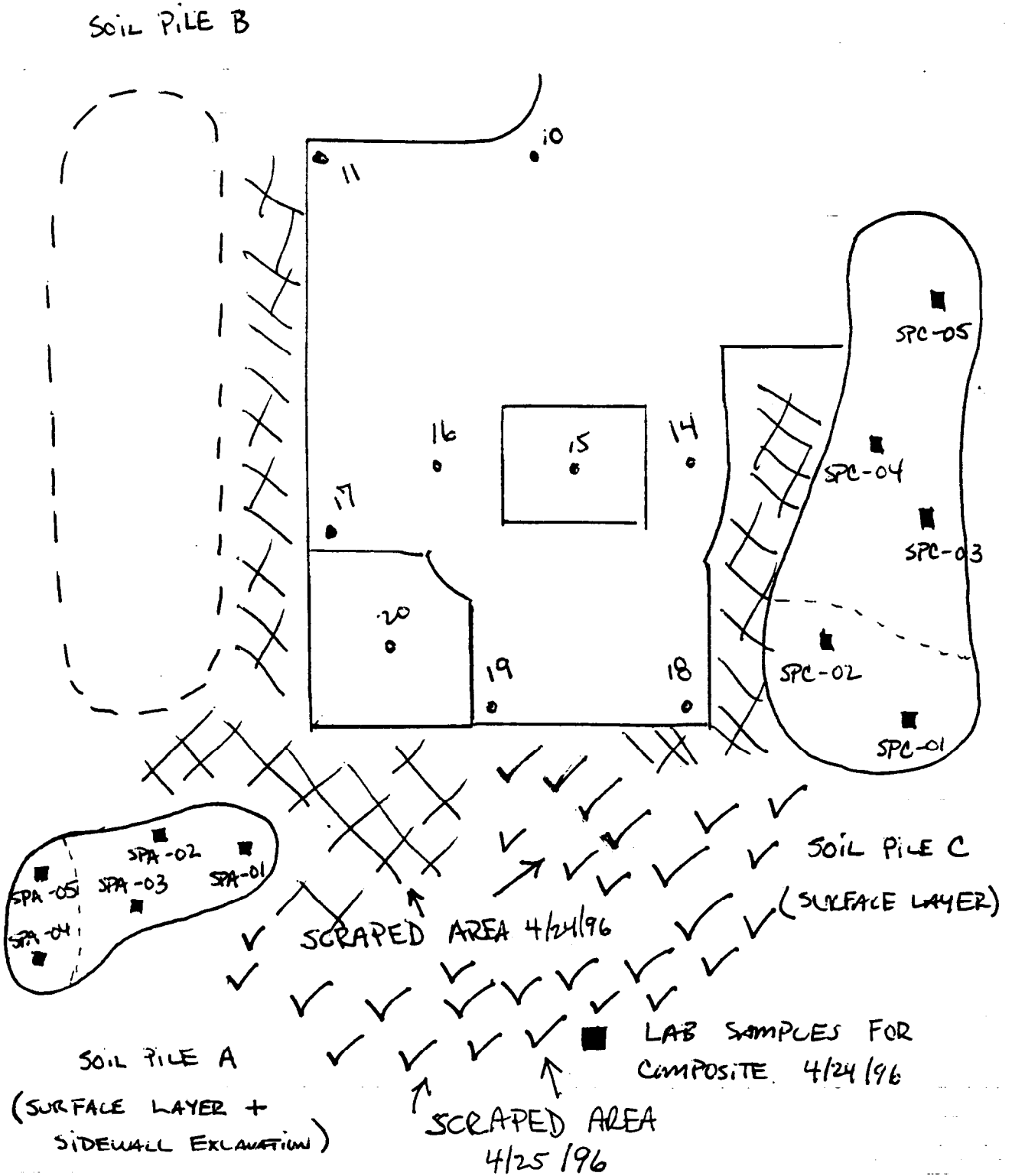
1700 B. Dolaney informs CF that H Lazzarus just notified him that  
C.F. Brown is to collect samples for lab analysis from piles  
A & C according to S Lehman's directive.

1730 A. Tammann arrives @ valves to note same info to C.F. that  
B.D. just indicated @ 1700 hrs.

1800 CF slw / R Smith also reiterates same info noted above @  
1700 hrs. RS notes that Lehman authorized 5  
samples from each pile. All 5 samples are to be  
composed by the lots for each pile while retaining  
some distinct soil in each jar for additional  
discrete sample if the composite comes up hot.  
CF to collect samples tomorrow. RS notes SL will  
not act on pile B w decision on backfill till analytical  
results are in for FW.

C. A. Glum

7/23/96



0700 CF into site 2. Surface layer on portion of site 2 where equipment traveled is being scraped + piled into separate PCB soil pile for hauling off site. (See diagram p 204).

Truck tractor 89589 + trailer 8084 are being decmed + sent off site for good accordly to B.D. instructions.

Other trucks are hauling old PCB soil pile off site to drum debris. Drum transfer from site 1 is complete  
4/23/96

0800 CF to trailer to prepare soil pile samples accordly to directions by R Smith, S. Johnson, B Johnson + A Trammitt.

Soil pile A is comprised of surface soil scraped during initial job phases + sediment cuttings excavated during (P140) later portions of the job (p 184). Both are now treated as pile A. samples BP-1, BP-2, BP-3 of 4/14/96 were never analyzed by FW @ trailer accordly to B.D.

Soil pile <sup>CF</sup> C is comprised of surface soil scraped during initial job phases as in pile A (p ~~140~~ <sup>CF</sup> 140)

The following samples were collected by CF for delivery to Quantem Labs: (see diagram p 204)

SOIL PILE A

SPA - 01  
SPA - 02  
SPA - 03  
SPA - 04  
SPA - 05

SOIL PILE C

SPC - 01  
SPC - 02 → Duplicates collected as per  
K. Johnston, R. Smith  
SPC - 03  
SPC - 04  
SPC - 05

- No MS/MSD collected as per D. Brownan Quantem + R. Johnston

CA Journal

4/24/96



Each of 5 samples from pile A + pile C will be composited into  
 1 lab sample → 1 for A 1 for C by the lab personnel.  
 Also discrete samples will be retained. 72 hr terminated in 2 samples.  
 CF notifies lab + D. Bowman of plans.

1000 CF props to take samples

1200 CF finishes collecting samples + delivers to Fed Exp office

1220 CF back @ Site 2.

D5 dozer + small roller used today for regrading

1330 CF checks w B.D. to see if has missed questions regarding manifests for ROICC  
 to telecon w B.D. in bit.

Trucks loaded for scraping of surface soil

<u>Date</u>	<u>Time</u>	<u>Truck #</u>	<u>Truck out</u>
4/24/96	30	6 (Joe)	10:55 AM
4/24/96	31	2 (Bob)	11:06 AM

1500 CF, B.D., P. Entroscuri + B. Ferguson meet to telecon w  
 Randy Miller @ the Utah disposal facility regarding manifest questions.

1545 Meeting Adjourned. Will hold tomorrow during weekly meeting

<u>Date</u>	<u>Time for day</u>	<u>total loads</u>	<u>1st out</u>	<u>last out</u>
4/24/96	436	14	(22) 7:36 AM	(283) 4:02 PM

1630 Trailers of JBT trucks are cleaned + sent off site.

1700 CF off site

CD General

4/24/96

103  
435 198

# CTO 212 BETHPAGE LOGBOOK II

Trailer (516) 576 - 8895

Fax (516) 576 - 1258

Mobile (201) 412 - 8299

H. LAZARUS (201) 842 - 7062

Art Holkom (215) 702 - 4000

Chery (201) 842 - 7118

TITLE

SUNNY 72°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into Site 2. Excavation of the hole is completed 4/24/96. Stockpile of PCB soil is removed from Site 2 4/24/96.

No trucks @ site. All trucks off site 4/24/96.

Excavator scraping traffic areas clean & placing scraped soil into site 2 stockpile. This final pile to be removed next week when confirmations for "clean piles" are received.

Workers moving straw bales from Site 2 to Site 1 & to WWTP AREA.

Front end loader moving gravel pile to Site 1 from Site 2

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60505

Work continued to Page

SIGNATURE

CA Gammal

DATE

4/25/96

WITNESS

DATE

1

Work continued from Page

Excavator big declined after  
scraping all traffic signs of  
Site 2

No sampling of scraped areas will  
be performed as per instructions  
from R. Simcik.

1030 Professional surveyors arrive today  
to survey excavation area  
boundaries + depths.

The following meeting minutes were  
recorded:

Attendees:

B. Dolhany

B. Ingram

C. Fathos

A. Trivani

Randy Miller - Callow USPCI deposits  
in Utah (by telecon)

SIGNATURE

C. Fathos

WITNESS

DATE

4/25/96

DATE

Work continued from Page

B. Dolhany & C. Farnes note the differences between the manifest weight (kg) printed on Laidlaw Record & manifest weight per written by ROICC on Actual manifest. R. Miller notes this is a conversion error.

B. D. & C. F. note difference between weight (lbs) on ROICC weight tickets & scale weight printed on USPCT record. B. Farnham notes that in most cases Laidlaw total for a railcar exceeds ROICC total for that railcar. B. D. notes that Laidlaw must light weight each truck prior to filling in Utah. R. M. notes that not being done.

R. Miller agrees to generate discrepancy curve every 50 manifests to see if the weights consistently favor the Laidlaw facility. If that

SIGNATURE

C. Farnham

DATE

4/25/96

WITNESS

DATE

Work continued from Page

is the case then Landau agrees  
to use many weight tickets (lbs)  
as basis for billing Navy.

C.F. notes that there is difference  
between kg weight written by  
ROTC on manifest & kg weight  
printed on Cert. of Disposal  
printed by Landau R.M.  
notes this is not an  
regulatory issue unless the  
difference is  $> 10\%$ . R.M.  
to monitor.

R.M. agrees to generate a letter  
reviewing both items noted above

B.D. notes 2 railcars @ rail yard  
to handle final excavation of  
soil & decan pad next week.

B.D. notes American materials  
will supply backfill & geophysical  
testing for Site 2 operations

SIGNATURE

*A. Gaur*

WITNESS

DATE

4/25/96

DATE

TITLE

PROJECT NO.

BOOK

Work continued from Page

B.D. notes he will pick up old boom  
& replace Crumman with a new  
boom.

Ramps being built into cleared  
portion of Site 2.

1145 meeting adjourned.

1200 CF back to Site 2.

1300 workers back from lunch.

Continue prepping Site 2 for backfill  
— straw bales, turning tape, scraping  
material & piling.

R. Somich informs CF not to  
collect any soil/matrix samples  
in scraped areas.

1400 Supervisors leave Site 2.

Site 2 equipment is decanned  
over decan pad.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

C. A. Gaudin

DATE

4/25/96

WITNESS

DATE

5

**TITLE**

PROJECT NO.

BOOK

Work continued from Page

1600 CF off side a in ring

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 40607

Work continued to Page

SIGNATURE

CA General

WITNESS

DATE

4/25/66

DATE

6



TITLE Sunny 70°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into Site 2 for moving. Site 2  
unders + equipment is being moved to  
Site 1 for excavation.

1030 Hot zone set up in Site 1 for  
excavation. Excavation to continue  
in 1 location as a test pit to  
locate leachate line from the  
underground holding tanks.

1100 One of these leachate lines is hit  
@ 3 ft below the ground surface  
4 in, clay line w no drainage  
holes in its walls. Soil  
around the line is sampled.  
4 separate samples by FW.  
Haul is backfilled w excavated  
material.

1400 CF off site for repair.

DEMCO BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

C. J. Fured

DATE

4/26/96

WITNESS

DATE

7

TITLE Overcast 55°

PROJECT NO.  
3007

Work continued from Page

0700 CF into 56. 1 JBT truck into  
56 2 to haul pile of PCB  
soil generated by scraping site 2.  
Truck bag loaded & sent to  
wasteland. ✓  
workers repairing dozen part.

0800 CF phones Quaterra for analytical  
results. CF receives analytical  
results from FW on "pile B".  
Based on analytical results,  
pile B soils contain excessive  
concentrations of chromium & zinc.  
H. Lazarus & B. Dolan note that  
it cannot be used as backfill.

1000 CF receives box from Quaterra  
the following analytical results:

Composite of pile A samples = 4.7 ppm

Composite of pile C samples = 6.0 ppm

All contamination is Aroclor 1248, only.

TITLE

Page

<u>Sample ID</u>	<u>Sample Location</u>	<u>PCB conc</u>
S2-A-17	17	2.1 ppm
S2-A-18	18	0.7 ppm
S2-A-19	19	1.3 ppm
S2-A-20	20	2.3 ppm
S2-A-30	30	6.5

- All detected conc. are for Aroclor 1248  
All other Aroclor types are N/D.

1350 CF goes to ROTEC to brief on activity to this point.

1500 Dzer repaired + ready for work.  
~~Workers~~ have been fixing since breakdown of operators

CF slw/m quantity. MS notes it is OK to do 2 ft lifts instead of several 1 ft lifts AS long AS analytical conc back on for geotech parameters. According to MS, S Lehman OKS using piles @ S.to if they violate spec for grain size, porosity etc

CHICAGO PRODUCTION CHICAGO 0960

Work continued to Page

SIGNATURE

CA Hume

DATE

4/29/96

WITNESS

DATE

11

TITLE

PROJECT NO.

400

Work continued from Page

M. Sperry, to give analytical to J  
Sanchuk for validation for base of  
excavation. Will have answer tomorrow.

The following high hits were reported  
by FW for pile B

<u>Test Date</u>	<u>Sample ID</u>	<u>Chromium</u>	<u>Zinc</u>
4/12/96	SPB-01	18.3 ppm	42.1 ppm
4/12/96	SPB-02	6.9 ppm	24.5
4/12/96	SPB-03	36.6	59.5
4/12/96	SPB-04	17.6	75.6 ppm
4/12/96	SPB-05	20.6	75.5 ppm

NY1 start draw-up Level	10 ppm	20 ppm
----------------------------	--------	--------

The following soil was trucked out

<u>Date</u>	<u>Tons</u>	<u>trchments</u>	<u>1st cut</u>	<u>Last cut</u>
4/29/96	97	3	(284) 8:20	(288) 11:39

All soil is from scraping off surface layer

ES/ENTRANCE/DOFF PRODUCTION/NO. 17/04/96/0057

Work continued to Page

12

SIGNATURE

CA Laurel

WITNESS

DATE

4/29/96

DATE

TITLE

PROJECT NO.

DATE

Continued from Page

CF phones M. Speranza for permy decision. M. Speranza notes that analytical results do not conform to PCB release documents - Clarify all 10 samples must be analyzed for lab. I ask MS if 72 hr turnaround or 7-day. I note that railcar ordering may be difficult & require 7-10 day lead time. P. Embrosica notes it may take up to 18 day lead. I tell MS. I note to MS that P. Braccia is handling price negotiations in Quatera. MS informs CF that J. Trepawski made decision to do corpus. 6 analysis of 5 samples for pile A + C. M. S. informs CF that he will call J. Trepawski & S. Lehman for operating orders for CF. CF agrees to phone back @ 11:30 for decisions.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 66605

Work continued to Page

SIGNATURE

CF Gunn

DATE

4/29/96

WITNESS

DATE

9

TITLE

PROJECT

DOE

Work continued from Page

1130 M Spent at infans CF that S Lehman  
was authorized to be turned on all  
10 samples collected from pile A + C.

Dozer @ Site 2 being worked on since  
AM to broken blade control lever.

P Embrosia @ Site 2. Notes that  
1 rail car available @ yard.  
It is empty being filled by truck  
delivery.

1330 The following analytical results are gotten  
from Quintera:

Sample ID	Sample Location	PCB conc
S2-A-09	9	4.0 ppm
S2-A-10	10	1.4 ppm
S2-A-11	11	N/D ppm
S2-A-13R	13	4.9 ppm
S2-A-14	14	1.8
S2-A-15	15	0.7
S2-A-16	16	5.0

SEE THE OTHER PROJECTIONS UNDER 100

Work continued to Page

SIGNATURE

*A. Paul*

DATE

4/29/80

10

WITNESS

DATE

Work continued from Page

1600 CF refines B. Dolhany test manifests  
# 22 through # 25 will expire the  
35 day limit on 5/1/96

# 82 through # 85 will expire the  
35 day limit on 5/7/96

B. D. refines CF test we will contact P Antonowicz  
today.

1630 CF off. to. Below listing CF manifests  
area described by B.D. test required  
additional sidewall excavation due  
to visible presence of PCBs.  
Area is marked at 31 ft long x  
8 ft wide, 6 ft depth along 28 ft,  
10 ft depth along 3 ft.

SIGNATURE

G. H. H. H.

DATE

4/29/96

WITNESS

DATE

13

Work continued from Page

0700 CF into Site 2. Workers install fixed drier. Relocate PCB seal pile onto plastic in area adjacent to pile A. Bales around pile.

Roadway scraped along side of pile B for access to back of pit ramps.

0900 Bachf. rep comes to site 2 to see site. CF + BD give him copy of spec from CF BRAW specs for clarification. Truckload to show up later today.

0930 Workers idle until bachf. rep arrives. CF informs B.D. + workers that they can't work in area of site 2 not QA/QC by Samchuck (samples)

Dryer down to hydrostatic line problems.

SIGNATURE



WITNESS

DATE

4/30/96

DATE



Work continued from Page

1000 CF informs ROICC of drags activities.

1030 CF back @ S-to 2.

1200 CF slw/M Speranza. MS informs CF test samples results for bottom of hole are validated + OK. Hole can be backfilled. MS notes that he is using a state NY authorized to ~~see~~<sup>CF</sup> see if p.to B can be backfilled into hole. Things are looking good - final notification @ 1400.

1240 2 Trailblazers of backfill arrive from off-site. 2 different types - sample each & select best.

Additional labor<sup>CF</sup> operator on S-to 2 to run roller. Starts rolling now.

Still repairing dayer.

1400 First round of trucks delivering backfill for hole arrive. 2 trucks carrying sandy backfill are dumped, spread & rolled. Rotation will continue.

SIGNATURE

CA Jansen

DATE

4/30/96

WITNESS

DATE

15

TITLE

Swr

PROJECT NO

BOOK

Work continued from Page

1420 Dayer repaired & running

Geotester from lab not arrived yet.

1500 Dayer down due to fuse short

1530 Dayer up & fixed

1600 B.D. phones P Embrosica to advise of manifests required. Embrosica to supply.

The following soil loads delivered to site

Date	Total Loads	Total Tons	Type
4/30/96	3	124.49	Bankrun
4/30/96	1	40.20	Processed Fill

Density used by plant - American Materials is 1.25 ton/cy for both types of fill.

B.D. informs CF that he is working w/ Tom Treeling & H. Lazarus to determine if pile B may be returned to pit. Checks w/ S. Johnson & State NY.

1645 CF off site.

SCIENTIFIC BINDER PRODUCTIONS, CHICAGO, 60601

Work continued to Page

SIGNATURE

CA Stewart

DATE

4/30/96

16

WITNESS

DATE

TITLE

Sunny 65°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into silo 2. Walkers may sail in base of excavation around of capacity.

Also trucks are being sail down off side for entry into hole.

10 50 B.D. informs CF that a sample of the processed fill delivered yesterday is collected by B.D. & delivered to Materials Testing Service for analysis & explosive in spec. Brakeron was not sent to lab. BD feels it is very similar to outside conditions & noted that spec permitted use of "local material" to do lab test.

Backfilling continues all day.

1600 The filling backfill was delivered

Date	Total Loads	Total Ton	Type
5/1/96	10	414	Brakeron
1.25 ton / load = density by manifest			

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

CA General

DATE

5/1/96

WITNESS

DATE

17

Work continued from Page

0700 CF into site 2. Truckloads of soil being delivered & spread & rolled.

0800 Field tester from Materials Testing Inc arrives to check compaction & moisture content of site soils & backfill.

Checks processed fill for proctor & moisture content, check portion of original site material for moisture & proctor, check pile C for moisture & proctor

	Max Density	Moisture Cont	Proctor
Processed fill	123.2	10.5%	135
Original site 2 material	115.0	6.3% <del>5.3%</del> or	119.1 <del>122.1</del>
Pile C	126.0	5.3%	129.9

Uses Troxler nuclear test device to check backfilled & compacted material already in site 2. This material is bankrun from American materials. Compaction & moisture content compared to original site 2 material by Troxler.

Work continued from Page


Troxler is being tested @ approx every 20ft along 100 ft length of backfill area. Area by sample 12 is also tested.

No certificate of analysis has yet been produced for any of the backfilled material from the supplier. CF requests.

1000 CF phases Quantura for analytical on pile A + C. The following results are correct

<u>Sample ID</u>	<u>Total PCB</u>
SPA - 01	6.5 ppm
SPA - 02	3.5 ppm
SPA - 03	4.2 ppm
SPA - 04	2.7 ppm
SPA - 05	2.8 ppm
SPC - 01	4.4 ppm
SPC - 02	4.7 ppm

SIGNATURE



DATE

5/2/96

WITNESS

DATE

TITLE

PROJECT NO.

BOOK

Work continued from Page

Sample ID	Total PCB
SPC - 03	4.18 ppm
SPC - 04	3.5 ppm
SPC - 05 <sup>CF</sup>	5.5 ppm
SPC - 02FD	5.0 ppm

All detailed conc. are low Aroclor 1248 All other types are N/D.

CF shows results to B.D. Notes not validated

1045 B.D. instructs workers to use pile A & C as backfill for hole. workers start moving.

1800 Continue backfilling operation

B. Ingram notes that no meeting will be held this week. will schedule for next week

1600 CF off site

SIGNATURE

*[Handwritten Signature]*

DATE

5/21/96

WITNESS

DATE

TITLE

Rain 55°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into Site 2. Trucks are unloading to Anderson sail from American Materials. 4 trucks in rotation today. Till this date 2 trucks in rotation to date delays.

0830 CF off to mail back equipment

0930 CF back to Site 2.

John McGrath from Navy auditors arrives @ Site 2. Visits to B. Dolhany. Visits to C. Farkos.

HEAVY RAINS. Capacity shut down. Sail delivery continues.

CF ~~Front end loader~~ <sup>Track hoe</sup> being decanned.

1330 CF off to airport. Track hoe being decanned

No certificate of clearance has been given to CF yet for any of the fill

SIGNATURE

GA Yarnal

DATE

DATE

CF 5/31/96

TITLE

Overcast 60°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into site 2

Compressions of delivered bankrun  
containers. 5 trucks in rotation  
today. Geophysical dexter not present

0715 5 trucks in to soil during

Date	Trips	Tons	Type
5/2/96	2	CF <del>329</del> 84	Bankrun
5/2/96	6	245	Screen Sand
5/3/96	10	408	Screen Sand
5/3/96	2	83	Bankrun


1.25 ton/cy for bankrun

1.20 ton/cy for sand

0830 Lloyd from Materials Dept arrives @  
site to collect density info. Compressions  
OK up to now

Compression continues.

0900 Walkers finished spreading delivered  
soil. Day compression being done.  
Laborers not working

SIGNATURE  
  
WITNESS

DATE  
5/6/96  
DATE



Work continued from Page

1000 5 trucks in to sand delivery

DATA from Lloyd from Material Testing

Material	Max Density <sup>lb/cuft</sup>	Wet Den.	Dry Den.	% Moist
Pile C	126 <sup>lb/cuft</sup>	129 <sup>lb/cuft</sup>	123	5.3%
Sib 2 bank	115	119	112	6.3%
Processed Fill	123	135	123	10.5
Sieved sand	109	111	105	5.1%

1115 Waters finished spraying delivered material

1245 5 trucks in to sand delivery

1353 Waters finished spraying delivered material. Laborers not working

Bill Dehany not into Sib 2 today due to illness.

No lab specs on screened sand or bankrun or processed fill as of today.

CA Jannul

5/6/96

Work continued from Page

1440 Compacting finished.

1520 5 Tractorloads of soil into Site 2.  
Waters not moving soil as close  
to close dam line.

Today's Deliveries

<u>Date</u>	<u>Tons</u>	<u>Loads</u>	<u>Material</u>
5/6/96	745	18	Screened sand
5/6/96	82	2	bankrun

No cubic yard of cleanup has yet to  
be given to CF by FW staff.

SIGNATURE

*[Handwritten Signature]*

DATE

5/6/96

WITNESS

DATE

TITLE Sunny 63°

PROJECT NO.

BOOK

Work continued from Page

0700 CF into site 2. 5 Trucks  
dumping loads

B. Dolhany not into site because of  
sickness. Cannot question about  
supply of sand today. Received  
message through Cheryl yesterday.

B. Dolhany through Cheryl said  
"sand will be OK."

Geotester here to monitor compaction

0800 Under done grading. Just roller  
moving. 3 Laborers not working

0830 Roller finished. Site idle

0940 ~~4~~ <sup>4</sup> Trucks show up w another ~~5~~ <sup>4</sup> CF  
loads. 1 truck downed by NYDOT.

1050 Workers finished spreading. Roller continues  
Laborers down

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

CA Huent

DATE

5/2/96

WITNESS

DATE

25

Work continued from Page

1220 4 trucks dump loads. Grading +  
compaction continue.

1350 Operators finish. Roller continues.  
Laborers not working

CF speaks A. TAVANIT. Advises  
AT that sand is being put into hole  
along to bankrun & that no geotech  
LAB tests have been collected for either.  
CF notes that not sure if sand will  
pass lab spec & that CF concern has  
been brought up to B. Doherty.  
Also CF notes downtime between dumped  
loads.

AT notes that since arrival backfill  
spec for air & material to be used  
it's OK to use the sand. AT voiced  
concern over mixing of bankrun & sand.  
Noted CF concern over spec violation  
but said leave it go. Also AT  
concerned over labor downtime. AT  
Approved CF to leave 5/9/96 per

SIGNATURE

CA Howard

DATE

5/7/96

26

WITNESS

DATE

TITLE

PROJECT NO.

BOOK

View continued from Page

Calculation of Croton + Loose punch  
list for B. Engstrom.

1500 3 trucks deep lands. Cradly +  
compaction carture.

1530 Cradly + compaction finished for  
day.

Days dump data:

<u>Date</u>	<u>Tons</u>	<u>Lands</u>	<u>Type</u>
5/7/96	640	16	Screened Sand

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

*Ch. Farrell*

DATE

5/7/96

WITNESS

DATE

27

TITLE

Overcast/Drizzle 60"

PROJECT NO.

BOOK

Work continued from Page

0700 CF into Site 2

3 trucks entered processed fill  
B. Dolbony back on S. to J. B.D.  
notes to CF that lab spec on  
processed fill is ok. Confirms to  
design spec. CF rejects copy

0730 Costing field crew show up to  
test expansion.

0740 3 trucks <sup>CF</sup> entered processed fill  
Expansion continues  
CF expresses concern to B.D. about  
possible "pumping" of clayey fill  
in Quizzle. B.D. to monitor.

0810 Operators finished = probably  
labors idle.

0830 Compacting finished

B.D. Gives CF 1 bell curve from  
Utah Dept. to

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

*CA [Signature]*

WITNESS

DATE

5/8/96

DATE

Work continued from Page

0900 CF off site 2 to S/W/B. Fryman about job. Note that B.D. is putting processed fill into site 2. CF to get lab spec from B.D.

0925 B.D. into office w C Polus. S/W/B Fryman To meet @ 1330 today

0940 Engine out of office  
CF back to site 2  
3 trucks dump processed fill

0950 1 truck dumps processed fill

1007 1 truck dumps processed fill

1030 Material Testing rep notes that not getting compaction on lifts of processed fill. Too wet. Only getting 10-15% compaction. B.D. notified. B.D. leaves site 2.

Operators finished spreading fill.  
Working on side AVCA.

SIGNATURE

CA General

DATE

5/8/96

WITNESS

DATE

29

Work continued from Page

Compaction of fill continues.

1125 Operators + compaction finished.

1200 B.D. informs CF that he is searching for another hauler to bring in sand. Lab spec to accompany material. American materials to "dig into pile" to find dry material. C. Polios tells CF that no written spec on processed fill. Got verbal over phone. No hard copy yet.

1220 1 AM truck delivers load.

1240 2 AM trucks deliver proc. fill.  
1 operator + 1 roller working

1250 1 AM truck delivers load.

1330 CF to meeting w/ B.D., AT, B.F. + C.P.  
in ROTCC office.

Review items on purchase list.

B.D. notes he will ~~do~~ CF haul PCB  
skins + decans pad on 5/8/96  
9 CF

CA Hund

5/8/96

8



TITLE

PROJECT NO

BOOK

Work continued from Page

to RAILYARD. Will decan truck into railcar (decan water into railcar).

B.D. notes will decan front-end loader @ Site 2 + will contain decan water into drums + locate with Site 1 decan water.

B.D. notes he expects another hauler on Site 2 w/ backfill 5/8<sup>9cf</sup> or 5/8<sup>10</sup> cf. Expects to finish 5/8<sup>10</sup>.

1430 CF back to Site 2. 1 AM truck dumping processed fill.

1440 1 AM truck dumping processed fill

1450 1 AM truck dumps processed fill

1500 1 AM truck dumps processed fill

Operators have been spreading silt + opening up silt to dry along Site 2 per water since 1200

CLINTON CEMENTERY PRODUCT ONE CHICAGO, ILL.

Work continued to Page

SIGNATURE

CA Farnell

DATE

5/8/96

WITNESS

DATE

31

# TITLE

PROJECT NO.

BOOK

Work continued from Page

1530 loads offsite per day.

<u>Date</u>	<u>Loads</u>	<u>Tons</u>	<u>Material</u>
5/8/96	22	924	Processed fill

Reported density of material = 1.25 tons/cy  
for processed fill

CF still has received no cube of  
class soil for any soil dumped  
in hole.

1600 CF offsite per day, 3 dividers  
dumping processed fill

Work continued to Page

32

SIGNATURE  
*CA Gammal*  
WITNESS

DATE  
5/8/96  
DATE

TITLE

Owncast 55°

PROJECT NO.

BOOK

Work continued from Page

1300 CF into Site 2 from existing on  
Coherten Site

Backfill, compaction, compaction testing  
Cartons.

Decom pad + pile of PCB soil being  
removed from Site 2. Using  
JBT truck.

1530 Soil drying + compaction finished @  
Site 2.

Decom of front end loader begins

1700 Decom of front end loader complete  
All waste dumped into JBT truck  
for shipment to rail yard. Decom  
fluids to Site 1 for storage for  
land law.

JBT truck to be decom into  
rail yard after drying according to  
B. Dolanney.

SCIENTIFIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

CA Hume

DATE

5/9/96

WITNESS

DATE

33

TITLE

PROJECT NO.

DATE

Work continued from Page

The following dipping data was recorded:

<u>Date</u>	<u>Tons PCB soil</u>	<u># Loads</u>	<u>1st in</u>	<u>Last in</u>
5/9/96	160	5	7:55 AM	5:33 PM

<u>Date</u>	<u>Tons</u>	<u>Loads</u>	<u>Material</u>
5/9/96	767	18	Processed fill

1730 CF off site 2.

SCIENTIFIC ENQUIRY PRODUCTIONS CHICAGO 60604

Work continued to Page

SIGNATURE

CA Hummel

DATE

5/9/96

WITNESS

DATE

TITLE Overcast 55°

PROJECT 13

BOOK

Work continued from Page

0700 CF into Site 2. 6 Trucks  
dump sand & processed fill.

0800 1 truck dumps. 1 truck dumps  
blue stone for base

0815 1 truck dumps. Compaction being  
checked

0833 1 truck dumps

0850 1 truck dumps.

0900 1 truck blue stone. B Ingram to site to see

1000 CF off site 2 to mail Fed Ex

1050 CF back to Site 2. Laborers fixing  
base stay with P. Backfilling,  
compaction, testing continues

1200 1 truck arrives to dump

1205 1 truck arrives to dump

1210 1 truck arrives to dump

Hertz guy shows to where truck use.

GENERIC BINDERY PRODUCTIONS CHICAGO 60605

Work continued to Page

SIGNATURE

*CA [Signature]*

DATE

5/10/96

WITNESS

DATE

35

Work continued from Page

Labours continue working on here.  
Specially a comparison going on.  
Coasting continues.


CF notes to BD that still need  
following:

1. Exceptional response by H Larsons
2. Certificate of clearance for ship backfilled
3. Lab test results for processed milk
4. Letter of release of liability for  
Wang from party's request.

B.D. notes that will have labours  
& 1 operator @ S1e 2 on Monday  
5/13/76. Will finish job.

1320 CF off site for airport.

SIGNATURE



WITNESS

DATE

5/10/76

DATE

**APPENDIX C**

**HAZARDOUS WASTE MANIFESTS**

The hazardous waste manifest are available at the REICC office at NWIRP, Bethpage, New York, Navy Plant 3.

Attached is a list of the manifests and these corresponding weight information. This attachment also provides information explaining the differences in weights provided on the manifests.





April 25, 1996

Mr. Bill Dohancy  
Foster-Wheeler  
c/o U. S. Navy-REICC-Bethpage  
Mail Stop A-41-03  
NWIRP Navy Plant 3  
Grumman Aerospace Corporation  
Bethpage, New York 11714-3593

**RE: Evaluation and Resolution of Weight Differences**

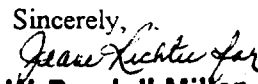
Dear Mr. Dohancy:

This letter confirms our telephone discussion of today referring to the differences to date in weights of waste volume received by U. S. Pollution Control, Inc.'s Grassy Mountain Facility from the Bethpage, New York project. As discussed, the shipments of rail loads of PCB Waste which has been transferred from truck to rail to truck have evidenced some variation in weight which is less than the 10% weight discrepancy. The nature of the discussions concerning weight differences is focused on assuring fair accounting of material for invoicing purposes under unit cost conditions.

The difference in weights could be due to random differences due to different scales, different application of conversion factors or other reasons. The customer indicates that it uses a certified scale and confirms these weights with a second certified scale, and these confirmations demonstrate a weight reproducibility of 0.1%. The Grassy Mountain Facility agrees to construct an analysis of fifty (50) loads comparing the generator's weight (in pounds from the scale ticket) to the Grassy Mountain Facility weight (in pounds from the scale ticket). If the comparison should random variations which in the aggregate essential cancel out Grassy Mountain will continue to invoice based on Grassy Mountain weights. If the comparison shows consistently heavier weights at the Grassy Mountain Facility, the facility agrees to change its weight determination for invoice purposes to reflect the generator's weight for each load. The previously invoiced loads could be rectified and credited as necessary.

The Grassy Mountain Facility will construct the first comparison on the first fifty loads and transmit the comparison to you when it is completed.

I appreciate your interest and absolutely concur that it is in the interest of all parties that the weights for invoice purposes be of understood and agreed-upon accuracy. Please feel free to call me at (801) 323-8960 if you have any questions regarding this letter. I will forward the comparison on the first fifty loads as soon as it is complete.

Sincerely,  
  
**W. Randall Miller**  
W. Randall Miller  
General Manager  
Grassy Mountain Facility

cc: Phil Embrescia  
Howard Lazarus

Via Fax: (516) 293-7486



May 7, 1996

Mr. Bill Dohancy  
Foster-Wheeler  
c/o U. S. Navy-REICC-Bethpage  
Mail Stop A-41-03  
NWTRP Navy Plant 3  
Grumman Aerospace Corporation  
Bethpage, New York 11714-3593

Via Fax: (201) 842-7025

RE: Follow Up of April 25, 1996 Letter: "Evaluation and Resolution of Weight Differences"

Dear Mr. Dohancy:

As discussed in the above referenced letter, I am enclosing the waste volume weight comparison report to you. Please review and I will call you Wednesday, May 8, 1996 to discuss the results of our random report.

Sincerely,

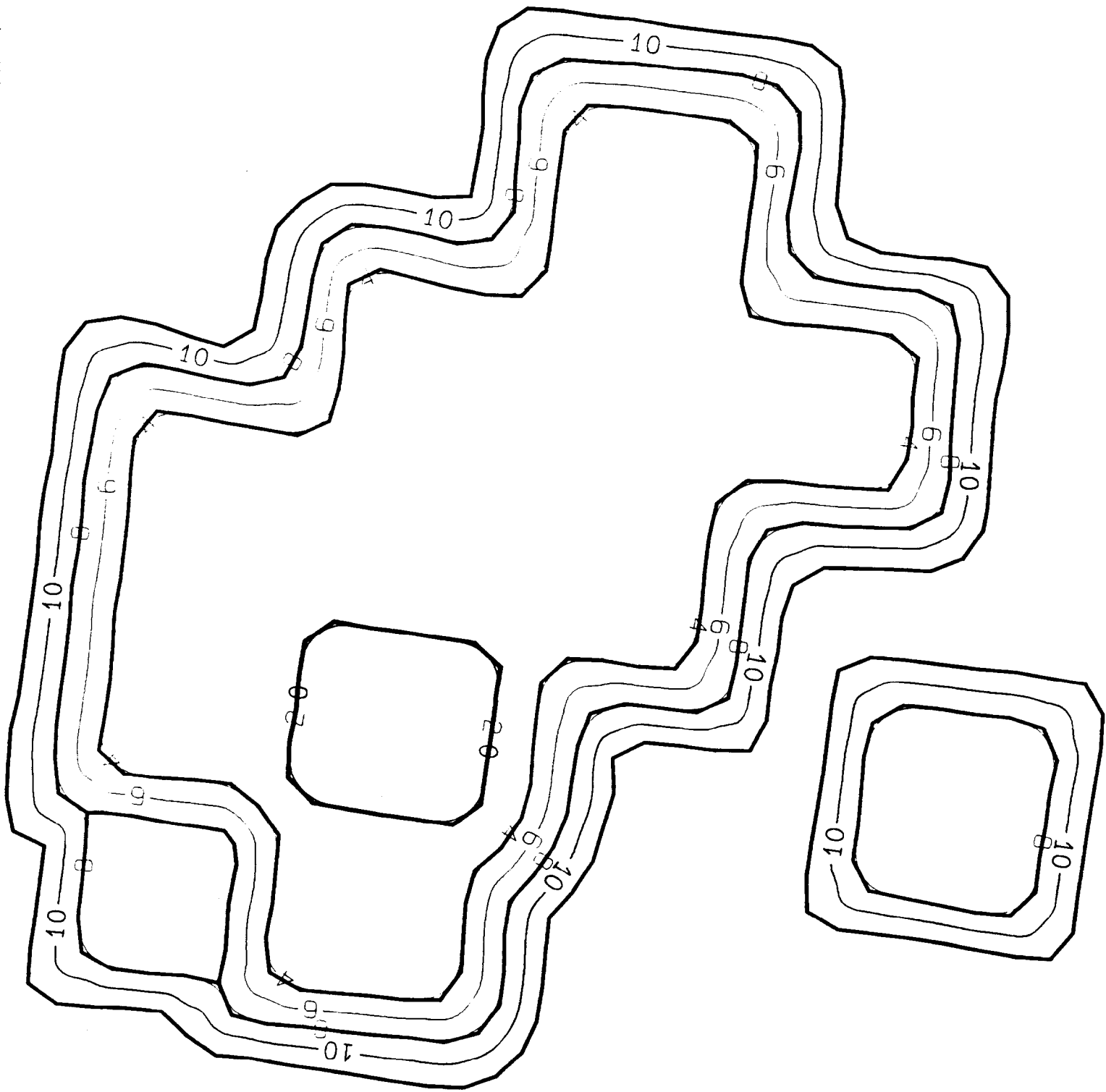
W. Randall Miller  
General Manager  
Grassy Mountain Facility

cc: Phil Embrescia  
Howard Lazarus

1996 load number	manifest number	arrival date	NAVY weight	GMF weight	difference
3386	00006	04/08/96	48000	47120	-880
3387	00007	04/08/96	43200	47260	4060
3374	00008	04/08/96	40820	55420	14600
3375	00009	04/08/96	43580	51280	7700
3388	00010	04/08/96	39240	37200	-2040
3389	00011	04/08/96	40940	44220	3280
3377	00012	04/08/96	43260	29260	-14000
3376	00013	04/08/96	44980	40760	-4220
3382	00014	04/08/96	41140	54020	12880
3383	00015	04/08/96	46220	54300	8080
3384	00016	04/08/96	46440	42680	-3760
3385	00017	04/08/96	47320	32180	-15140
3378	00018	04/08/96	43120	31280	-11840
3379	00019	04/08/96	45540	41720	-3820
3380	00020	04/08/96	43140	47360	4220
3381	00021	04/08/96	51100	62920	11820
3470	00026	04/11/96	46200	41380	-4820
3471	00027	04/11/96	45300	45780	480
3472	00028	04/11/96	45520	41740	-3780
3473	00029	04/11/96	45740	45480	-260
3466	00030	04/11/96	43940	44820	880
3467	00031	04/11/96	41760	39680	-2080
3468	00032	04/11/96	44040	42520	-1520
3474	00033	04/11/96	40320	53440	13120
3469	00034	04/11/96	42440	52680	10240
3475	00035	04/11/96	43680	50500	6820
3476	00036	04/11/96	44620	28660	-15960
3477	00037	04/11/96	43780	41680	-2100
3516	00038	04/12/96	46400	46080	-320
3517	00039	04/12/96	42380	48380	6000
3518	00040	04/12/96	46600	42040	-4560
3519	00041	04/12/96	41660	43040	1380
3512	00042	04/12/96	45340	60240	14900
3513	00043	04/12/96	44860	44140	-720
3514	00044	04/12/96	44480	34320	-10160
3515	00045	04/12/96	47400	45480	-1920
3486	00046	04/11/96	42100	52620	10520
3487	00047	04/11/96	45580	41400	-4180
3488	00048	04/11/96	43140	33740	-9400
3489	00049	04/11/96	32720	39720	7000
3598	00050	04/15/96	42840	45520	2680
3624	00051	04/15/96	42540	52840	10300
3625	00052	04/15/96	34320	33660	-660
3626	00053	04/15/96	43660	35520	-8140
3627	00054	04/15/96	43260	41600	-1660
3628	00055	04/15/96	41500	42560	1060
3629	00056	04/15/96	40900	42360	1460
3631	00057	04/15/96	42100	40440	-1660
3630	00058	04/15/96	39220	48440	9220
3632	00059	04/15/96	40320	50880	10560

totals 2168700 2212360 43660

**APPENDIX D**  
**VOLUME CALCULATIONS**



TOTAL SITE VOLUME = SIDE SLOPES

BROWN & ROOT ENVIRONMENTAL  
 661 ANDERSEN DRIVE  
 PITTSBURGH, PA 15220 1-800-245-2730  
 Fri Apr 5 12:42:51 1996

PROJECT: n:bethpage.pro

-----  
 DTM TO DTM VOLUME

Cut and Fill Volumes

Shrinkage/swell factors:		Cut	1.0000	Fill	1.0000
Original DTM Layer Name	# of Points	Final DTM Layer Name	# of Points		
SURFACE	4	EXCAV	391		
Cut Volume (yd3)	Cumulative Cut Volume	Fill Volume (yd3)	Cumulative Fill Volume		
3398.8	3398.8	0.0	0.0		

VOLUME SUMMA AREA = SIDE SLOPES

BROWN & ROOT ENVIRONMENTAL  
661 ANDERSEN DRIVE  
PITTSBURGH, PA 15220 1-800-245-2730  
Fri Apr 5 12:50:50 1996

PROJECT: n:bethpage.pro

DTM TO DTM VOLUME

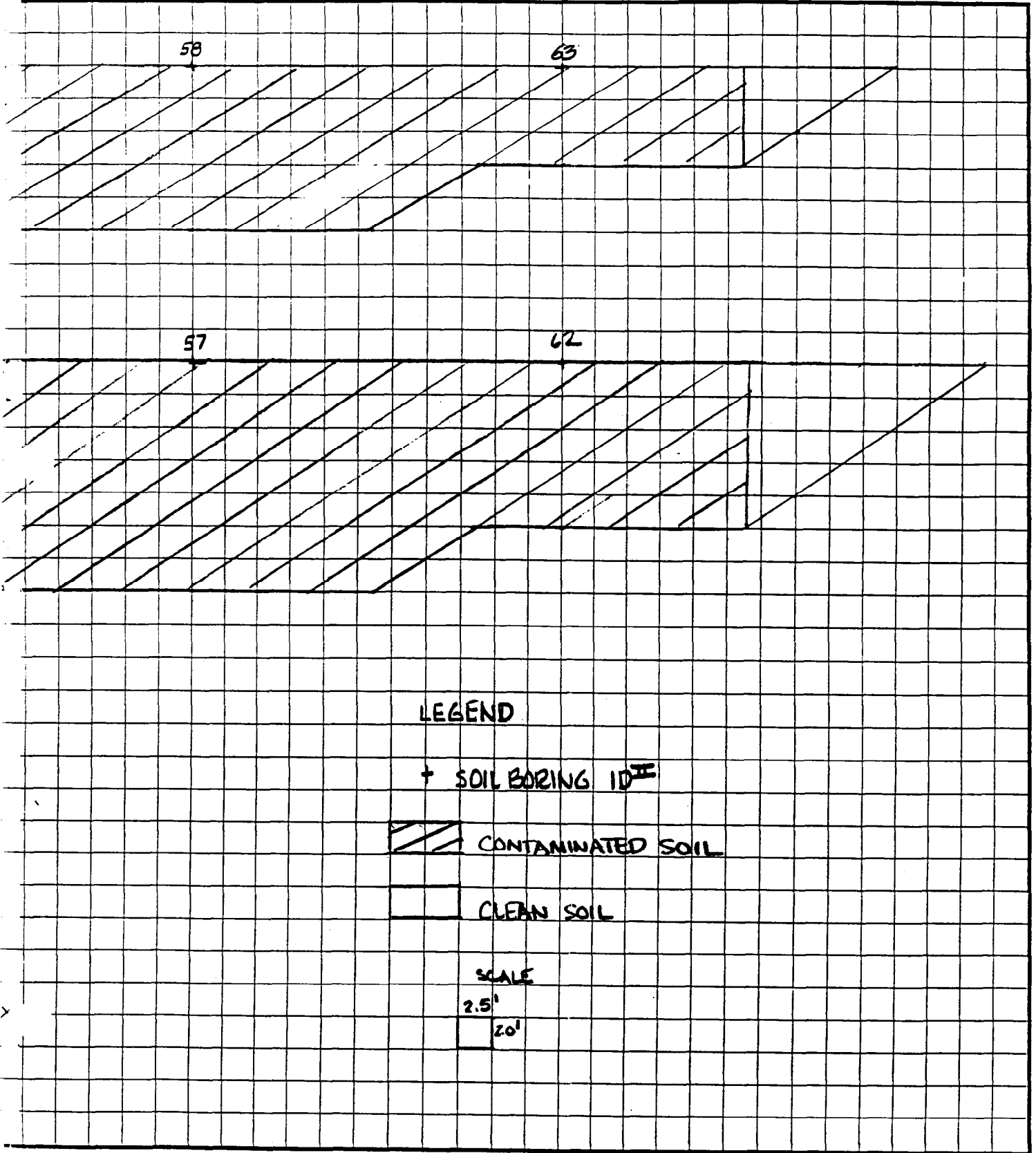
Cut and Fill Volumes

Shrinkage/swell factors:	Cut	1.0000	Fill	1.0000
Original DTM Layer Name	# of Points	Final DTM Layer Name	# of Points	
SURFACE	4	EXCAV	391	
Cut Volume (yd3)	Cumulative Cut Volume	Fill Volume (yd3)	Cumulative Fill Volume	
162.1	162.1	0.0	0.0	

OFS NO. 1284.0004.9904.15000 DEPT NO. EC

BY H. LAZARUS DATE 12/19/95

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

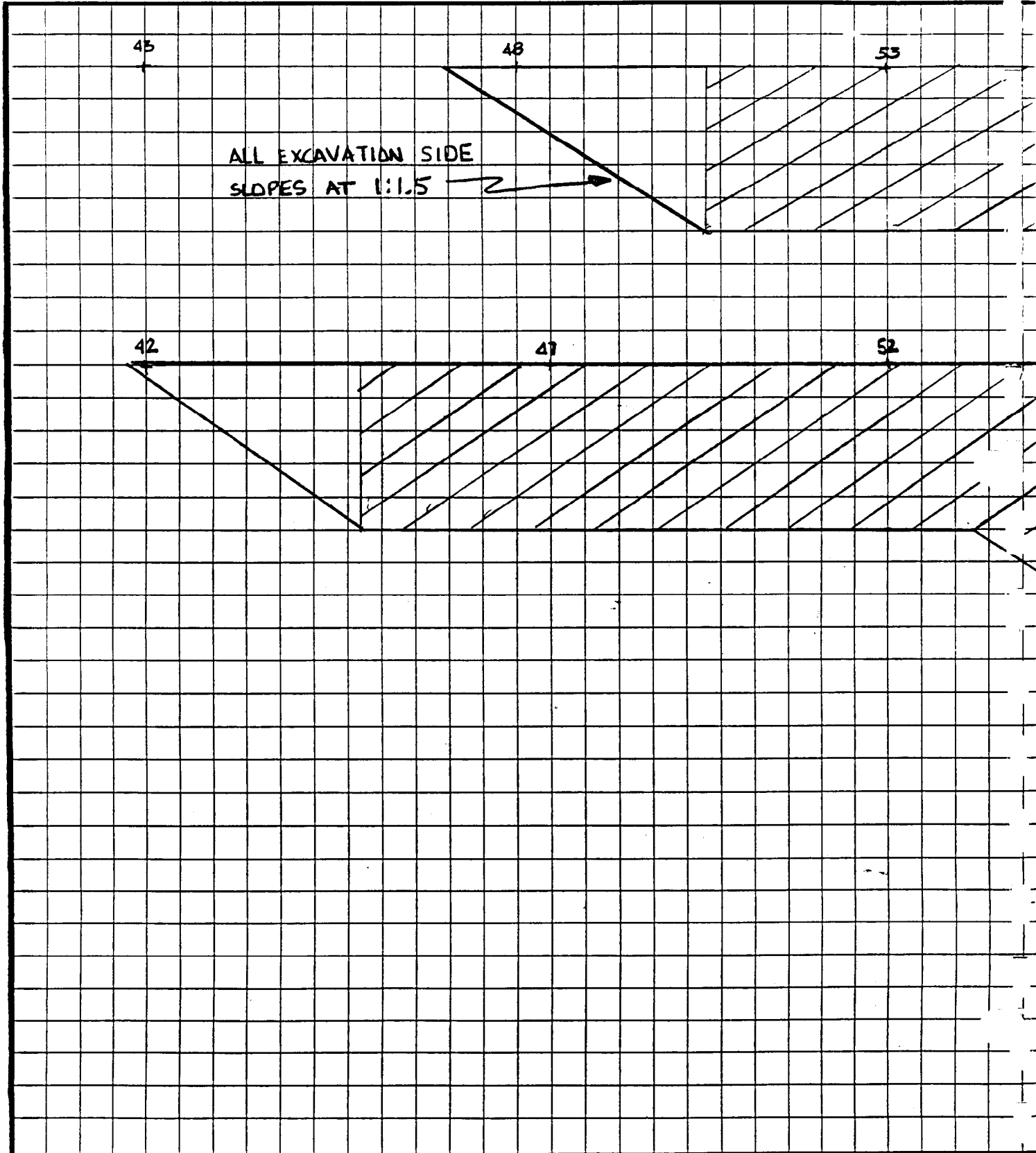




CLIENT US NAVY - NORDIV

PROJECT DO#4 - NWIRP BETHPAGE

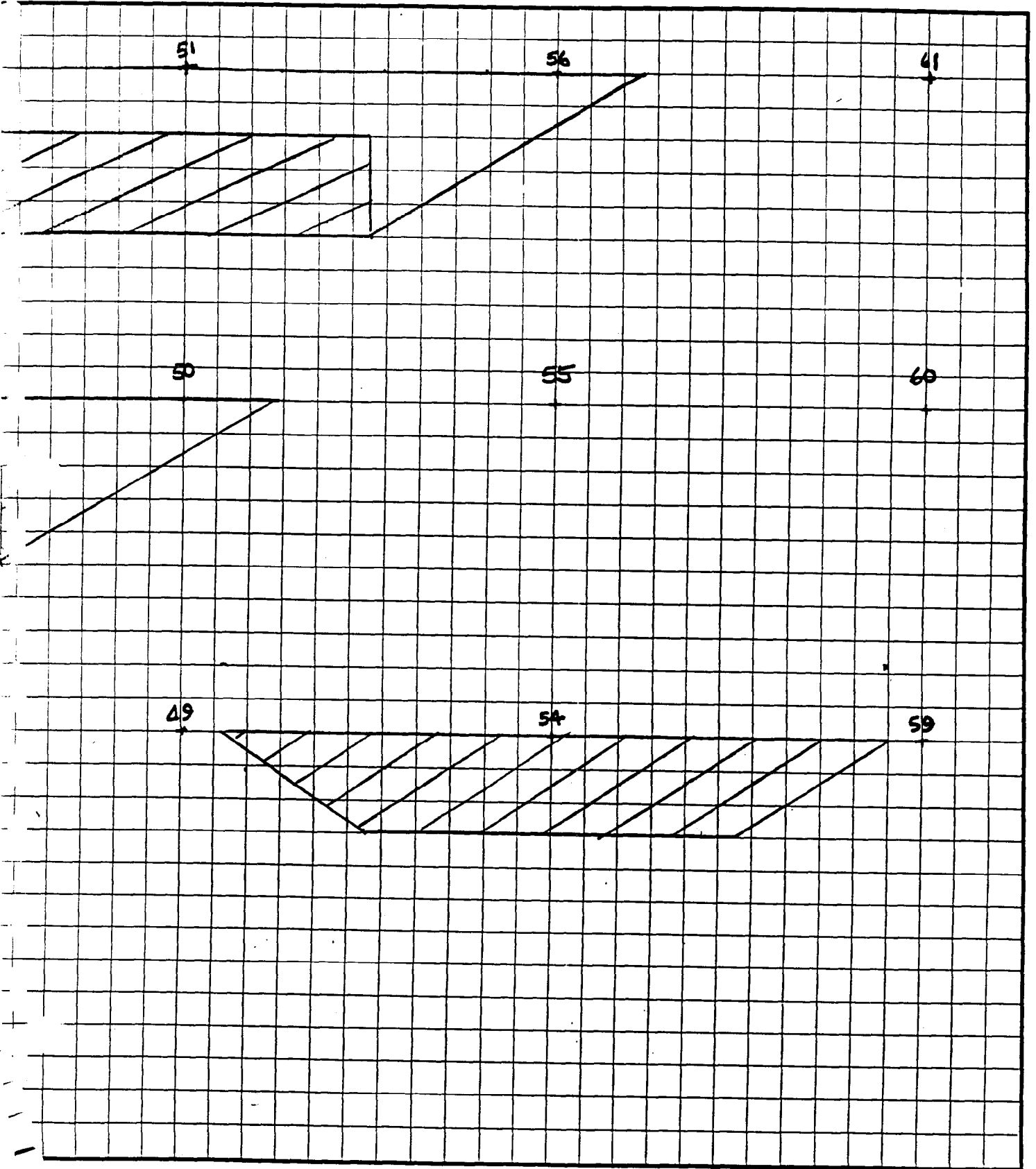
SUBJECT SITE 2 EXCAVATION CROSS-SECTIONS



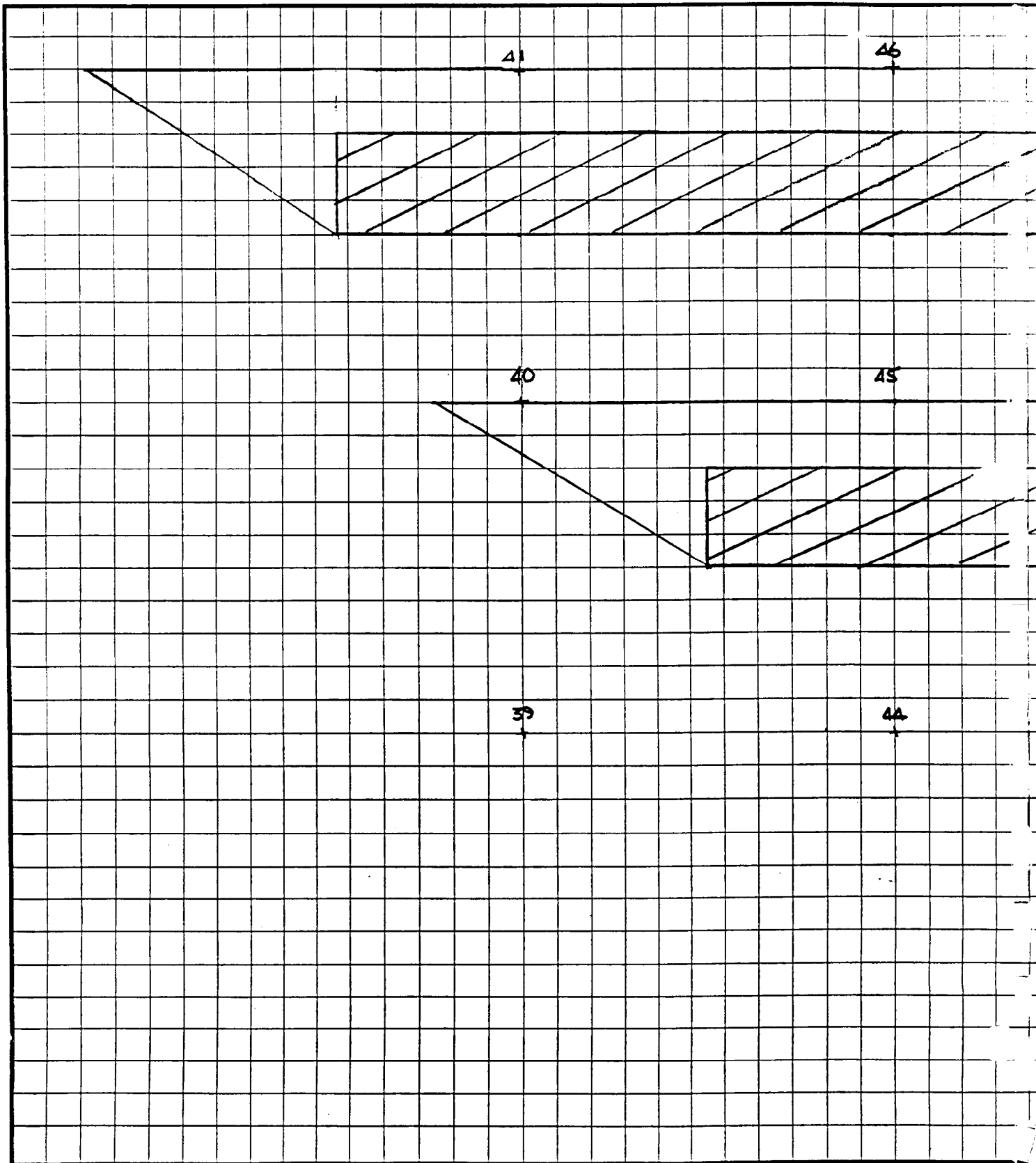
OFS NO. 1284.0004 9904.15000 DEPT NO. EC

BY H. LAZARUS DATE 12/19/95

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



CLIENT US NAVY - NORDIV  
PROJECT DO#9 - NWIRP BETHPAGE  
SUBJECT SITE 2 EXCAVATION CROSS-SECTIONS



**APPENDIX E**

**CERTIFICATES OF "CLEAN SOIL"**

5 February 1995

VIA FACSIMILE

SCORP, INC.  
Hillside Road  
Kings Park, New York

American Materials, Inc.  
168 Townline Road  
Kings Park, NY 11754

RE: 10/28/93

Find attached for your information and use copies of LRS  
correspondence of October 27, 1993 and DEP of October 28, 1993  
wherein it is certified that the excavated stockpile of fill  
material located on the above referenced site is not contaminated  
or hazardous.

Very truly yours,

*Daniel B. Reddan*

Daniel B. Reddan, P.E.  
Project Superintendent

**APPENDIX F**

**COMPACTION AND GEOPHYSICAL TEST RESULTS**



# MATERIALS TESTING LAB INC.

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

## FIELD DENSITY REPORT (NUCLEAR)

PROJECT \_\_\_\_\_  
 CLIENT FOSTER WHEELER  
 TIME ARRIVE \_\_\_\_\_  
 PERMIT # \_\_\_\_\_

DATE May 21, 1996  
 TECHNICIAN Lloyd A. Buckner  
 TIME DEPART \_\_\_\_\_  
 JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D.		M%	PROCTOR			
			lbs./cu ft			W.D.	D.D.	MAX D.D.	COMP
SANDY	SITE # 2 Bethpage	2' ELE.	128.5	118.9	8.1			123.3	96.4
"	"	"	132.8	124.0	7.1			"	100.7
"	"	"	124.6	123.9	8.6			"	100.17
"	"	"	129.5	121.8	6.3			"	98.5
"	"	"	130.4	122.6	6.4			"	99.1
"	"	2' ELE	131.4	123.2	6.7			"	99.9
"	"	"	127.7	117.9	8.3			"	95.6
"	"	"	129.7	122.4	6.0			"	99.3
"	"	"	127.7	117.7	6.7			"	97.1
"	"	"	133.6	122.5	9.1			"	99.3
"	Pit	2' ELE	126.3	119.6	5.6			"	97.0
"	"	"	128.1	121.0	5.9			"	98.1
"	"	4"	130.7	122.4	6.8			"	99.3
"	"	"	128.8	120.7	6.7			"	97.9

REMARKS:

PROCTOR =

WT OF MOLD EMPTY = 9.4  
 WT OF MOLD & MATERIAL = 13.37 13.7  
 (-) WT OF MOLD = 3.79 4.5 4.33  
 (X) 30 = PROCTOR WT 119.1 135.0 129.9  
 DRY DENSITY DERIVED FROM PROCTOR 112.0 122.3  
 MAXIMUM DRY DENSITY 115.0/123.3 126.0  
 DERIVED FROM FAMILY CHART # \_\_\_\_\_



# MATERIALS TESTING LAB INC.

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

## FIELD DENSITY REPORT (NUCLEAR)

PROJECT \_\_\_\_\_

DATE May 2, 1996

CLIENT FOSTER WHEELER

TECHNICIAN Lloyd A. Buckner

TIME ARRIVE 7:30 AM

TIME DEPART \_\_\_\_\_

PERMIT # \_\_\_\_\_

JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D.		M%	PROCTOR			COMP
			LBS./CU FT			W.D.	D.D.	MAX D.D.	
sand soil	"	6' ELE.	135.5	125.1	8.9			123.3	10.7
"	"	"	132.1	121.4	9.1			"	98.5
"	"	8' ELE.	133.8	122.3	9.4			"	99.2
"	"	"	133.3	121.6	9.6			"	98.0

REMARKS:

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PROCTOR =  
 WT OF MOLD EMPTY =  
 WT OF MOLD & MATERIAL =  
 (-) WT OF MOLD =  
 (X) 30 = PROCTOR WT \_\_\_\_\_  
 DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_  
 MAXIMUM DRY DENSITY \_\_\_\_\_  
 DERIVED FROM FAMILY CHART # \_\_\_\_\_





# MATERIALS TESTING LAB INC.

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

## FIELD DENSITY REPORT (NUCLEAR)

PROJECT GAUDMAN AIR FORCE FACILITY

DATE MAY 31 1996

CLIENT FOOTEL WHEELER

TECHNICIAN loyd A. Buckner

TIME ARRIVE 7:00 AM

TIME DEPART 3:00 PM

PERMIT # \_\_\_\_\_

JOB # \_\_\_\_\_

MATERIAL	SITE # 2 Both pages		DEPTH	W.D./D.D.		M%	PROCTOR			COMP
	LOCATION	ELEVATION		LBS./CU FT	W.D.		D.D.	MAX D.D.		
SAND	SB-42	29 200 AREA	119.73	114.5	108.6	5.4	111.0	105.2	109.5	99.2%
SAND	SB-45	"	122.14	114.8	109.3	5.0	"	"	"	99.8%
	SB-53	"	123.0	112.9	107.6	4.9	"	"	"	98.3%
	SB-51	"	123.09	113.7	108.6	4.7	"	"	"	99.2%
	SB-62	"	124.0	113.1	107.1	5.6	"	"	"	97.8%
	SB-62	"	122.05	118.2	111.1	6.4	"	"	"	100.7%
	SB-54	"	124.71	129.0	120.8	6.8	131.7	122.9	126.3	95.6%
	"	"	124.71	134.6	125.6	7.2	"	"	126.3	99.4%
	"	"	123.71	125.7	120.3	4.5	"	"	"	95.2%
	"	"	123.71	133.3	125.1	6.5	"	"	"	99.0%

PROCTOR -

WT OF MOLD EMPTY = 9.4 / 9.4

WT OF MOLD & MATERIAL = 13.79 / 13.1

(-) WT OF MOLD = 4.39 / 3.7

(X) 30 = PROCTOR WT 131.7 / 111.0

DRY DENSITY DERIVED FROM PROCTOR 122.9 / 105.2

MAXIMUM DRY DENSITY 126.3 / 109.5

DERIVED FROM FAMILY CHART # \_\_\_\_\_

ASPHALT • CONCRETE • SOILS • NDT  
PLANT • FIELD INSPECTION



MATERIALS TESTING LAB INC. *lg #2*

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-1474  
FAX: (718) 359-8648

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER & WHEELER

PROJECT: ARMYMAN AIR FORCE FACILITY

LOCATION: SOIL #2 AREA SQ 200

*W. 111.3 W. 120.9 N. 111.3*  
*111.3 111.3*  
*111.3 111.3*

TEST	DEPTH	EXACT LOCATION	PASS/FAIL
#1	Elevation 122.62	SB-27	97.7
#2	123.06	SB-52	97.4
#3	123.52	SB-57	96.7
#4	124.98	SB-58	97.4
#5	121.75	SB-53	96.6
#6	122.02	SB-27	100%

TECHNICIAN: Lloyd A Bucknor *1104*

TIME ON SITE: FROM 11:30 TO 3:30



MATERIALS TESTING LAB INC.

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-1474  
FAX: (718) 359-8648

Pg #2

DATE: MAY. 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER WHEELER

PROJECT: GLUMANN AIR FORCE FACILITY

LOCATION: SITE # 2 BETHPAGE AREA SQ 200

TEST	DEPTH	EXACT LOCATION	PASS/ FAIL
#1	ELEVATION 122.46	SB-52	99.7
#2	122.92	SB-57	96.8
#3	124.38	SB-58	100.0%
#4	121.15	SB-53	98.8%
#5	121.49	SB-51	98.8
#6	122.03	SB-46	100.0%

TECHNICIAN: Lloyd A. Bucknor

TIME ON SITE: FROM . 7:30

TO . 3:30



MATERIALS TESTING LAB INC.

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-1474  
FAX: (718) 359-8648

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: KOSTIK WHEELER

PROJECT: GAUMAN AIR FORCE FACILITY

LOCATION: SITE #2 BETH PAGE AREA SB 200

TEST	DEPTH	EXACT LOCATION	PASS/ FAIL
#1	ELEVATION 121.42	SB <del>49</del>	97.3
#2	121.86	SB <del>42</del>	99.8
#3	122.33	SB-57	98.9
#4	123.78	SB 58	95.9
#5	120.55	SB 53	99.8
#6		SB. 51	99.0

SB-A7

100%

TECHNICIAN: Lloyd A. Bucknor

*[Handwritten signature: Lloyd A. Bucknor]*

TIME ON SITE: FROM . 7:30

TO . 3:30



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GULLYAM AIR FORCE FACILITY  
 CLIENT FOSTER WHEELER  
 TIME ARRIVE 9:00 AM  
 PERMIT # \_\_\_\_\_

DATE MAY 23 1996  
 TECHNICIAN Lloyd A Bucknor  
 TIME DEPART \_\_\_\_\_  
 JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D. LBS./CU FT		M%	W.D.	PROCTOR D.D. MAX D.D.		COMP
GRAVEL	SITE # 2 BETHPAGE SG 200 AREA	ELEVATION				111.6	106.2	110.5	
"	SB-A5	123.0	113.6	109.6	5.6	"	"	"	97.3
"	SB-A6	122.63	115.0	110.0	4.5	"	"	"	99.5
"	SB-A7	122.87	115.2	109.6	5.1	"	"	"	99.2
"	SB-53	122.35	114.9	108.8	5.6	"	"	"	98.5
"	SB-51	122.09	112.9	107.5	5.0	"	"	"	96.9
"	SB-58	125.58	117.6	110.2	6.9	"	"	"	99.7
"	SB-62	122.0	117.0	112.4	4.5	"	"	"	100.5
"	" "	121.0	113.3	107.8	5.1	"	"	"	97.6
"	" "	120.0	113.7	108.2	5.1%	"	"	"	97.9

REMARKS:

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PROCTOR =

WT OF MOLD EMPTY = 9.4

WT OF MOLD & MATERIAL = 13.12

(-) WT OF MOLD = 3.72

(X) 30 = PROCTOR WT 111.6

DRY DENSITY DERIVED FROM PROCTOR 106.2

MAXIMUM DRY DENSITY 110.5

DERIVED FROM FAMILY CHART # 2



MATERIALS TESTING LAB INC. *lg #2*

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445  
FAX: (718) 359

DATE: MAY 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER & WHEELER

PROJECT: ARMYMAN AIR FORCE FACILITY

LOCATION: SOIL #2 AREA SQ 200

DUG SAND

W.D. 111.3

WD 120.9 MIXED or Pure SILTY

SD 105.2

DD. 111.6

MAX 110.5

max 113.5

TEST	DEPTH	EXACT LOCATION	PAS % FAIL
#1	ELEVATION 122.62	SB-27	97
#2	123-06	SB-52	97.4
#3	123-52	SB-57	100
#4	124.98	SB-58	97.4
#5	121.75	SB-53	96.6
#6	122.02	SB-27	100

TECHNICIAN: Lloyd A Buckner *1104*

TIME ON SITE: FROM 11:30

TO 2:30

Pg #2



**MATERIALS TESTING LAB INC.**

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 445-1474  
FAX: (718) 359-8648

DATE: MAY. 7, 1996

SOIL COMPACTION TEST RESULTS:

CLIENT: FOSTER WHEELER

PROJECT: GLUMANN AIR FORCE FACILITY

LOCATION: SITE # 2 BETHPAGE, AREA 36, 700

TEST	DEPTH	EXACT LOCATION	PASS FAIL
#1	Elevation 122.46	SB-52	99.7
#2	122.92	SB-57	96.8
#3	124.38	SB-58	100.0
#4	121.15	SB-53	98.8
#5	121.49	SB-51	98.2
#6	122.03	SB-46	100.0

TECHNICIAN: Lloyd A. Ruckmoe

*(Signature)*

TIME ON SITE: FROM . 9:30

TO . 3:30



**MATERIALS TESTING LAB INC.**

130-07 26th AVENUE  
SUITE 100  
FLUSHING, NEW YORK 11354

(718) 44F  
FAX: (718) 3 48

DATE: MAY 7, 1996

**SOIL COMPACTION TEST RESULTS:**

CLIENT: POSTAL WHEELER

PROJECT: ARMY AIR FORCE FACILITY

LOCATION: SITE #2 BETHPAGE AREA SQ 22

TEST	DEPTH	EXACT LOCATION	P. S. F. I.
#1	ELEVATION 121.42	SB 49	97
#2	121.86	SB 48	99
#3	122.33	SB-57	
#4	123.78	SB 58	92
#5	120.55	SB 53	91
#6		SB. 51	90

SB-47

TECHNICIAN: Lloyd A. Bucknor

TIME ON SITE: FROM 7:30 TO 3:30





**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GRUMAN AIR FORCE FACILITY DATE MAY 8, 1996  
 CLIENT FOSTER WHEELER TECHNICIAN Lloyd A. Bucknor  
 TIME ARRIVE 7:30 AM TIME DEPART \_\_\_\_\_  
 PERMIT # \_\_\_\_\_ JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH ELEVATION	W.D./D.D. LBS./CU FT		MC	W.D.	PROCTOR D.D.	MAX D.D.	COMP
SANDY SOIL				116.6	19.6%			121.0	
"	3B-47	120.42	132.4	116.6	13.6%			"	96.4
"	3B-45	120.0	129.9	115.0	13.0%			"	95.0
"	3B-58	122.78	131.8	115.6	14.0%			"	95.6
"	3B-52	120.86	131.0	116.2	12.6%			"	96.2
"	3B-46	120.43	132.0	117.1	12.7%			"	96.8
"	3B-57	121.7	130.6	115.5	13.1%			"	95.4
"	3B-51	119.89	130.5	115.6	12.9%			"	95.6
"	3B-53	119.55	131.3	116.7	12.5%			"	96.4

REMARKS:

MDR DERIVED FROM 5 POINT  
PROCTOR

PROCTOR =

WT OF MOLD EMPTY =

WT OF MOLD & MATERIAL =

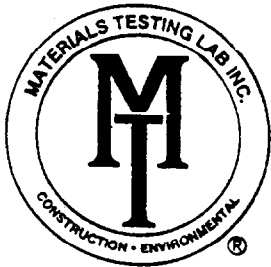
(-) WT OF MOLD =

(X) 30 = PROCTOR WT \_\_\_\_\_

DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_

MAXIMUM DRY DENSITY \_\_\_\_\_

DERIVED FROM FAMILY CHART # \_\_\_\_\_



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

9500 -1- mi

**FIELD DENSITY REPORT (NUCLEAR)**

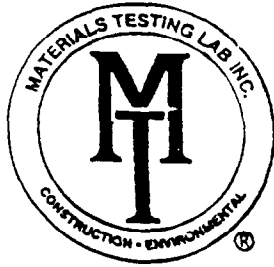
PROJECT \_\_\_\_\_  
 CLIENT FOSTER WHEELER  
 TIME ARRIVE \_\_\_\_\_  
 PERMIT # \_\_\_\_\_

DATE MAY 9, 1996  
 TECHNICIAN Lloyd A. Bucknor  
 TIME DEPART \_\_\_\_\_  
 JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D.		M%	W.D.	PROCTOR		COM
			LBS./CU FT				D.D.	MAX D.D.	
SANDY SOIL								121.0	
	SB. 62	120.73	131.0	116.3	12.6				95.
	"	119.73	129.8	116.1	11.8				96.0
	"	118.73	130.3	116.7	11.6				96.0
	SB. 54	122.74	131.0	116.1	12.8				96.0
	SB. 53	118.55	131.0	118.5	10.5				96.0
	SB. 48	121.14	131.7	116.6	13.0				97.0
	SB. 45	122.0	131.7	116.0	13.5				96.0
	SB. 57	121.33	131.4	116.8	12.5				96.5
	"	120.33	129.2	115.9	14.1				95.8

REMARKS:  
 MDE 121.0

PROCTOR =  
 WT OF MOLD EMPTY =  
 WT OF MOLD & MATERIAL =  
 (-) WT OF MOLD =  
 (X) 30 = PROCTOR WT \_\_\_\_\_  
 DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_  
 MAXIMUM DRY DENSITY \_\_\_\_\_  
 DERIVED FROM FAMILY CHART # \_\_\_\_\_



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION  
 1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-669

**FIELD DENSITY REPORT (NUCLEAR)**

PROJECT GRANDVIEW AIR FORCE FACILITY DATE MAY 10, 1996  
 CLIENT ROSEY WHEELER TECHNICIAN Lloyd A. Busch  
 TIME ARRIVE 7:30 AM TIME DEPART 1:00 PM  
 PERMIT # \_\_\_\_\_ JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D.		M%	PROCTOR	
			LBS./CU FT			D.D.	MAX D
SAWY SOIL	SB-53	Grade	129.7	118.0	7.9		121

REMARKS:	PROCTOR =
	WT OF MOLD EMPTY =
	WT OF MOLD & MATERIAL =
	(-) WT OF MOLD =
	(X) 30 = PROCTOR WT _____
	DRY DENSITY DERIVED FROM PROCTOR _____
	MAXIMUM DRY DENSITY _____
	DERIVED FROM FAMILY CHART # _____



# MATERIALS TESTING LAB INC.

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6600

## FIELD DENSITY REPORT (NUCLEAR)

PROJECT BAUMANN AIR FORCE FACILITY

DATE MAY 10, 1998

CLIENT POSTAL WHEELER

TECHNICIAN Lloyd A. Buchner

TIME ARRIVE 7:30 AM

TIME DEPART 3:30 PM

PERMIT # \_\_\_\_\_

JOB # \_\_\_\_\_

MATERIAL	LOCATION	DEPTH	W.D./D.D. LBS./CU FT		M%	W.D.	PROCTOR D.D.	MAX D
Small Soil	Site # 2 65TH 2096 84 200 AREA	ELEVATION						121.0
"		136.4	122.4	11.2				"
"	SB. 62	Grade	136.1	122.4	11.2			"
"	SB. A1	118.73	130.8	118.3	10.6			"
"	"	Grade	131.9	119.5	10.4			"
"	SB. A5	121.0	129.4	118.7	9.0			"
"	"	120.0	129.6	123.8	6.4			"
"	"	Grade	135.0	121.7	10.9			"
"	SB. 54	Grade	128.4	120.4	6.6			"
"	SB. A7	119.42	123.9	116.6	6.3			"
"	"	Grade	132.9	120.8	10.0			"
"	SB. 57	120.7	131.8	119.2	10.6			"
"	"	118.7	130.7 118.7	118.6 118.0	10.2 9.6			"
"	"	Grade	131.6	119.3	9.9			"

**REMARKS:**

M D R 121.0

**PROCTOR =**

- WT OF MOLD EMPTY = \_\_\_\_\_
- WT OF MOLD & MATERIAL = \_\_\_\_\_
- (-) WT OF MOLD = \_\_\_\_\_
- (X) 30 = PROCTOR WT \_\_\_\_\_
- DRY DENSITY DERIVED FROM PROCTOR \_\_\_\_\_
- MAXIMUM DRY DENSITY \_\_\_\_\_
- DERIVED FROM FAMILY CHART # \_\_\_\_\_



**MATERIALS TESTING LAB INC.**

NEW YORK DIVISION

1529 JERICHO TURNPIKE • NEW HYDE PARK, NEW YORK 11040 • (516) 354-6600 • FAX (516) 354-6690

CLIENT: FOSTER WHEELER ENVIRONMENTAL REPORT #: 96FOS-005  
 2300 LINCOLN HIGHWAY EAST DATE: 05/04/96  
 ONE OXFORD VALLEY STE#200  
 LANGHOM, PA 19047-1824

PROJECT: NAVY CONTRACT N62472-94-D-0398

SAMPLE: Soil Fill

TEST: GRADATION, #200 WASH, PLASTICITY

METHOD: ASTM 136, ASTM D1140, ASTM D4318, ASTM D2488

SAMPLED BY: CLIENT ON: 05/01/96 DELIVERED BY: CLIENT

<u>SIEVE SIZES</u>	<u>% PASSING</u> <u>#1</u>	<u>ITEM 2.11</u> <u>SPECIFICATION</u>
4"	100	-
1"	91.4	-
1/4	69.2	-
#40	37.6	-
#200	14.3	0-25

<u>PLATICITY INDEX</u>	<u>SPECIFICATION</u>	<u>SOIL CLASSIFICATION</u>
#1- N/P	12 MAX.	#1- SP

LOCATIONS:

#1- N/A

**APPENDIX G**

**CHAIN OF CUSTODIES**

# Chain of Custody Record



QUA-4124-1

Client: Halliburton NUS Project Manager: M Spewanz Date: 4/12/96 Chain Of Custody Number: 50977  
 Address: Foster Plaza #7 661 Audubon Telephone Number (Area Code)/Fax Number: 412-921-8916 Lab Number: \_\_\_\_\_  
 City: Pittsburgh State: PA Zip Code: 15220 Site Contact: C Farhos Lab Contact: \_\_\_\_\_  
 Project Name: OTO 212 NW, RP / Bethpage Contract/Purchase Order/Quote No.: \_\_\_\_\_

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives							Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt	
			Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NiOH	ZnAc	NiOH			
S2-A-01 ✓	4/12/96	1:38			1										
S2-A-02 ✓		1:35			1										
S2-A-03 ✓		1:45			1										
S2-A-04 ✓		1:40			1										
S2-A-05 ✓		1:33			1										
S2-A-06 ✓		1:30			1										
S2-A-07 ✓		2:00			1										
S2-A-08 ✓		2:05			1										
S2-A-09 ✓		1:53			1										
S2-A-12 ✓		2:20			1										
S2-A-13 ✓		2:15			1										
S2-A-30 ✓		1:55			1										

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_

1. Relinquished By: [Signature] Date: 4/12/96 Time: 2:50 1. Received By: [Signature] Date: 4/12/96 Time: 3:10  
 2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ 2. Received By: [Signature] Date: 4/13/96 Time: 10:30  
 3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ 3. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_

# Chain of Custody Record



QUA-4124-1

Client: Halliburton NUS # 063642 Project Manager: M. SPENANZA Date: 4/22/96 Chain Of Custody Number: 50978  
 Address: 661 Andersen Dr. Foster PA #7 Telephone Number (Area Code)/Fax Number: 412-921-8208 Lab Number: \_\_\_\_\_ Page 1 of 2

City: Pittsburgh State: PA Zip Code: 15220 Site Contact: C Farkos Lab Contact: \_\_\_\_\_  
 Project Name: NWIRP / Birthpage Carrier/Waybill Number: \_\_\_\_\_  
 Analysis (Attach list if more space is needed): \_\_\_\_\_  
 Special Instructions/Conditions of Receipt: \_\_\_\_\_

Sample I.D. No. and Description <small>(Containers for each sample may be combined on one line)</small>	Date	Time	Matrix			Containers & Preservatives						PCB CLP	Special Instructions/Conditions of Receipt	
			Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH			
SD-A-09	4/22/96	4:40			1							X		
SD-A-10		4:43			1							X		
SD-A-11		4:46			1							X		
SD-A-14		4:52			1							X		
SD-A-15		4:48			1							X		
SD-A-15		4:48			1							X		MS/MSD
SD-A-16		4:55			1							X		
SD-A-17		4:35			1							X		
SD-A-18		4:30			1							X		
SD-A-19		4:58			1							X		
SD-A-20		5:01			1							X		
SD-A-30	✓	5:05			1							X		

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_  
 QC Requirements (Specify): \_\_\_\_\_

1. Relinquished By: <u>[Signature]</u>	Date: <u>4/22/96</u>	Time: <u>6:00</u>	1. Received By: <u>[Signature]</u>	Date: _____	Time: _____
2. Relinquished By: _____	Date: _____	Time: _____	2. Received By: _____	Date: _____	Time: _____
3. Relinquished By: _____	Date: _____	Time: _____	3. Received By: _____	Date: _____	Time: _____

Comments: \_\_\_\_\_



# Chain of Custody Record



QUA-4124-1

Client: Halliburton NUS Project Manager: M Sponawza Date: 4/22/96 Chain Of Custody Number: 50979  
 Address: Foster Plaza #7 661 Andersen Telephone Number (Area Code)/Fax Number: 412 (921) - 8208 Lab Number: \_\_\_\_\_  
 City: Pittsburgh State: PA Zip Code: 15220 Site Contact: C Fathos Lab Contact: \_\_\_\_\_  
 Project Name: NWIP P / Bethpage Carrier/Waybill Number: \_\_\_\_\_  
 Contract/Purchase Order/Quote No. \_\_\_\_\_

Sample I.D. No. and Description <small>(Containers for each sample may be combined on one line)</small>	Date	Time	Matrix			Containers & Preservatives						Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt	
			Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc2			NaOH
<u>SD - A - 13R</u>	<u>4/22/96</u>	<u>5:08</u>			<u>1</u>									

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal:  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_

QC Requirements (Specify) \_\_\_\_\_

1. Relinquished By: <u>NA Samuel</u>	Date: <u>4/22/96</u>	Time: <u>6:00</u>	1. Received By: <u>Jed Exp</u>	Date: <u>4/22/96</u>	Time: _____
2. Relinquished By: _____	Date: _____	Time: _____	2. Received By: _____	Date: _____	Time: _____
3. Relinquished By: _____	Date: _____	Time: _____	3. Received By: _____	Date: _____	Time: _____

Comments: \_\_\_\_\_

12 HR 10K+AROUND  
**FOSTER WHEELER ENVIRONMENTAL CORPORATION**  
**CHAIN OF CUSTODY RECORD**

PROJECT					NO. CONTAINERS	PCB CAP TEST	REMARKS OR SAMPLE LOCATION	PRESERVATION		
NWIRP/BETHPAGE								ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN	
SAMPLERS: (Signature) #7551										
063642 HALLIBURTON WWS										
SAMPLE NUMBER	DATE	TIME	COMP.	GRAB						
SPA - 01	4/24/96	10:16	X		1	X	}	GENERATE 1 Composite for ANALYSIS SAVE SAMPLES		
SPA - 02		10:22	X		1	X				
SPA - 03		10:25	X		1	X				
SPA - 04		10:31	X		1	X				
SPA - 05		10:35	X		1	X				
SPC - 01		10:42	X		1	X				
SPC - 02		10:48	X		1	X				
SPC - 02		10:48	X		1	X			Field Duplicate	
SPC - 03		10:52	X		1	X				
SPC - 04		10:56	X		1	X				
SPC - 05	X	11:00	X		1	X			GENERATE 1 Composite for ANALYSIS SAVE SAMPLES	

Relinquished by: (Signature) ①	Date / Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date / Time	Shipped via:
CA Faural	4/24/96/1130	T. C. Fed Exp			
Relinquished by: (Signature) ②	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
Relinquished by: (Signature) ③	Date / Time	Received by: (Signature)	Remarks		

**APPENDIX H**

**VALIDATED CONFIRMATION SAMPLE ANALYTICAL RESULTS**



# Brown & Root Environmental

# INTERNAL CORRESPONDENCE

C-49-04-6-222

**TO:** MARK SPERANZA                      **DATE:** APRIL 29, 1996  
**FROM:** MICHELLE L. ALLEN              **COPIES:** DV FILE  
**SUBJECT:** ORGANIC DATA VALIDATION - PCBs  
                 CTO 212, NWIRP BETHPAGE, BETHPAGE, NEW YORK  
                 SDG NO. S2-A-01

**SAMPLES:** 11/Soil/  
  
                 S2-A-01                      S2-A-02                      S2-A-03                      S2-A-04  
                 S2-A-05                      S2-A-06                      S2-A-07                      S2-A-08  
                 S2-A-12                      S2-A-13                      S2-A-29

## INTRODUCTION

A validation was performed on the analytical data from the Target Compound List (TCL) polychlorinated biphenyl (PCB) organic compound analyses of eleven (11) soil environmental samples. These samples were analyzed by Quanterra Environmental Services under SDG S2-A-01. Brown & Root Environmental personnel, a division of Halliburton NUS Corporation, collected these samples on April 12, 1996. No field duplicate pairs were included in this SDG.

All analyses were conducted in accordance with Naval Energy and Environmental Support Activity (NEESA) Level D Quality Assurance/Quality Control (QA/QC) criteria, using SW846/8080 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- \*        •        Holding times
- \*        •        Initial and continuing calibrations
- \*        •        Laboratory blank results
- \*        •        Surrogate spike recoveries
- Matrix spike/matrix spike duplicate results
- \*        •        Blank spike results
- \*        •        Compound identification
- Compound quantitation
- \*        •        Detection limits

The symbol (\*) indicates that all quality control criteria were met for this parameter. Documentation of compliance for these indicated parameters is provided in the attached Appendix C (Support Documentation).

**MEMO TO: MARK SPERANZA**  
**DATE: APRIL 29, 1996 - PAGE 2**

PCB fraction

The surrogate spike compounds, decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX), were not detected in some samples. No qualifications were necessary since the surrogates were diluted out.

The Percent Recovery (%R) for TCX was above the upper quality control limit in the Matrix Spike Duplicate (MSD) sample, S2-A-01MSD. No actions were necessary since this is a quality control sample and the surrogate %Rs were acceptable in the unspiked sample.

The Matrix Spike (MS)/MSD analyses of sample S2-A-01 yielded high %Rs for Aroclor 1016. No action was warranted since no positive result was reported for this PCB in the unspiked sample.

It should be noted that the laboratory used only one column (instead of two) for the analyses of the environmental samples. Hence, the positive results reported for Aroclor 1248 were not confirmed by a second column analyses. Additionally, the positive results of sufficiently high concentration were not confirmed by GC/MS analysis. No validation action was taken for this deviation in the analytical methodology.

Upon review of the sample quantitation, the data reviewer noted some slight discrepancies between the positive results reported on the sample Form Is and the calculated results. Furthermore, the results for nondetected analytes reported on sample Form Is did not agree with the results presented on the electronic deliverables. The amended results were reported in Appendix A - Qualified Analytical Results and Appendix B - Results as Reported by the Laboratory.

Region II Worksheets were not used in the data validation since non-Contract Laboratory Procedures (CLP) were used in the analyses of the samples.

The data for these analyses were reviewed with reference to the EPA "Functional Guidelines for Organic Data Validation (2/94)", as amended for use within EPA Region II, and the NEESA guidelines "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program" (20.2-047B, 6/88). The text of this report has been formulated to address only those problem areas affecting data quality.

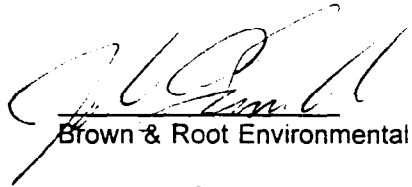
"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NEESA guidelines and the Quality Assurance Project Plan (QAPP)."



Brown & Root Environmental

Michelle L. Allen  
Chemist/Data Validator

MEMO TO: MARK SPERANZA  
DATE: APRIL 29, 1996 - PAGE 3



Brown & Root Environmental

Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

**Data Qualifier Key**

U - Value is a nondetect as reported by the laboratory or has been qualified based on blank contamination.



CTO 212 - NWIRP BETHPAGE  
 SOIL DATA  
 QUANTERRA - PITTSBURGH

	S2-A-01	S2-A-02	S2-A-03	S2-A-04	S2-A-05
SAMPLE NUMBER:	S2-A-01	S2-A-02	S2-A-03	S2-A-04	S2-A-05
SAMPLE DATE:	04/12/96	04/12/96	04/12/96	04/12/96	04/12/96
LABORATORY ID:	A669W101	A669X101	A66A0101	A66A1101	A66A2101
QC_TYPE:	Normal	Normal	Normal	Normal	Normal
% SOLIDS:	96.8 %	96.6 %	96.9 %	97.1 %	97.5 %
	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>PESTICIDES/PCBs</b>					
AROCLOR-1016	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG
AROCLOR-1221	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG
AROCLOR-1232	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG
AROCLOR-1242	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG
AROCLOR-1248	1000 UG/KG	170 UG/KG	6700 UG/KG	3000 UG/KG	1100 UG/KG
AROCLOR-1254	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG
AROCLOR-1260	170 U UG/KG	34 U UG/KG	680 U UG/KG	340 U UG/KG	170 U UG/KG

	S2-A-06		S2-A-07		S2-A-08		S2-A-12		S2-A-13	
SAMPLE NUMBER:	04/12/96		04/12/96		04/12/96		04/12/96		04/12/96	
SAMPLE DATE:	A66A3101		A66A4101		A66A5101		A66A7101		A66A8101	
LABORATORY ID:	Normal		Normal		Normal		Normal		Normal	
QC_TYPE:	97.1 %		96.6 %		95.3 %		98.1 %		93.3 %	
% SOLIDS:	RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS	
<b>PESTICIDES/PCBs</b>										
AROCLOR-1016	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG
AROCLOR-1221	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG
AROCLOR-1232	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG
AROCLOR-1242	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG
AROCLOR-1248	190	UG/KG	8600	UG/KG	4100	UG/KG	110	UG/KG	19000	UG/KG
AROCLOR-1254	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG
AROCLOR-1260	34	U UG/KG	680	U UG/KG	350	U UG/KG	34	U UG/KG	1800	U UG/KG



OTO 212 - MWIRP BETHPAC  
 SOI DATA  
 QUANTERRA - PITTSBURGH

	S2-A-01	S2-A-02	S2-A-03	S2-A-04	S2-A-05
SAMPLE NUMBER:	S2-A-01	S2-A-02	S2-A-03	S2-A-04	S2-A-05
SAMPLE DATE:	04/12/96	04/12/96	04/12/96	04/12/96	04/12/96
LABORATORY ID:	A669W102	A669X102	A66A0102	A66A1102	A66A2102
QC_TYPE:	Normal	Normal	Normal	Normal	Normal
% SOLIDS:	96.8 %	96.6 %	96.9 %	97.1 %	97.5 %
	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>GENERAL CHEMISTRY</b>					
% MOISTURE	3.2	% 3.4	% 3.1	% 2.9	% 2.5
pH	7.0	7.0	7.4	7.3	6.9

CTO 212 - NWIRP BETHPAGE  
 SOIL DATA  
 QUANTERRA - PITTSBURGH

	S2-A-06	S2-A-07	S2-A-08	S2-A-12	S2-A-13
SAMPLE NUMBER:	S2-A-06	S2-A-07	S2-A-08	S2-A-12	S2-A-13
SAMPLE DATE:	04/12/96	04/12/96	04/12/96	04/12/96	04/12/96
LABORATORY ID:	A66A3102	A66A4102	A66A5102	A66A7102	A66A8102
QC_TYPE:	Normal	Normal	Normal	Normal	Normal
% SOLIDS:	97.1 %	96.6 %	95.3 %	98.1 %	93.3 %
	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>GENERAL CHEMISTRY</b>					
% MOISTURE	2.9	% 3.4	% 4.7	% 1.9	% 6.7
pH	5.6	7.7	8.2	7.4	7.5

SAMPLE NUMBER:	S2-A-29				
SAMPLE DATE:	04/12/96	//	//	//	//
LABORATORY ID:	A66A6102				
QC_TYPE:	Normal				
% SOLIDS:	96.5 %	100.0 %	100.0 %	100.0 %	100.0 %
	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>GENERAL CHEMISTRY</b>					
% MOISTURE	3.5 %				
pH	7.6				

**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A01
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001001

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      3                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/16/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/17/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      5.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG	Q
---------	----------	---------------------------	---

12674-11-2-----	AROCLOR-1016	170	U
11104-28-2-----	AROCLOR-1221	170	U
11141-16-5-----	AROCLOR-1232	170	U
53469-21-9-----	AROCLOR-1242	170	U
12672-29-6-----	AROCLOR-1248	1000	
11097-69-1-----	AROCLOR-1254	170	U
11096-82-5-----	AROCLOR-1260	170	U



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A02
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001002

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      3                      DECANTED: (Y/N)      N

DATE RECEIVED: 04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/16/96 <sup>3 cm 4/18/96</sup>

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/17/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 1.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	34	U
11104-28-2-----AROCLOR-1221	34	U
11141-16-5-----AROCLOR-1232	34	U
53469-21-9-----AROCLOR-1242	34	U
12672-29-6-----AROCLOR-1248	160 <sup>170</sup>	U
11097-69-1-----AROCLOR-1254	34	U
11096-82-5-----AROCLOR-1260	34 <sup>mt</sup>	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A03
-------

LAB CODE: QPITT      CASE NO.: NWIRP      SAS NO.:      SDG.: S2A01

MATRIX: (soil/water) SOIL      LAB SAMPLE ID: C6D130001003

SAMPLE wt/vol: 30.0      (g/ml) G      LAB FILE ID:

% MOISTURE      3      DECANTED: (Y/N)      N      DATE RECEIVED: 04/12/96

EXTRACTION: (SEPF/CONT/SONC)      SONC      DATE EXTRACTED: 04/18<sup>3 am</sup>/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)      DATE ANALYZED: 04/17/96

INJECTION VOLUME: 1.00 (uL)      DILUTION FACTOR: 20.0

GPC CLEANUP: (Y/N)      N      pH: 7.4      SULFUR CLEANUP: (Y/N)      N

CAS NO.      COMPOUND      CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	680	U
11104-28-2-----AROCLOR-1221	680	U
11141-16-5-----AROCLOR-1232	680	U
53469-21-9-----AROCLOR-1242	680	U
12672-29-6-----AROCLOR-1248	680	U
11097-69-1-----AROCLOR-1254	680	U
11096-82-5-----AROCLOR-1260	680	U

6800 6700  
MLA  
4/22/96

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A04
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001004

SAMPLE wt/vol: 30.0      (g/ml) G

LAB FILE ID:

% MOISTURE      3      DECANTED: (Y/N) N

DATE RECEIVED: 04/12/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/18/96 *3 cm 4/18/96*

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/17/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N      pH: 7.3

SULFUR CLEANUP: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/KG	Q
---------	----------	----------------------------	---

12674-11-2-----AROCLOR-1016	340	U
11104-28-2-----AROCLOR-1221	340	U
11141-16-5-----AROCLOR-1232	340	U
53469-21-9-----AROCLOR-1242	340	U
12672-29-6-----AROCLOR-1248	3000	U
11097-69-1-----AROCLOR-1254	340	U
11096-82-5-----AROCLOR-1260	340	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A05

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001005

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      3                      DECANTED: (Y/N)    N

DATE RECEIVED:    04/12/96

EXTRACTION:    (SEPF/CONT/SONC)    SONC

DATE EXTRACTED: 04/13/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:    04/17/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR:    5.0

GPC CLEANUP: (Y/N) N                      pH: 6.9

SULFUR CLEANUP: (Y/N)    N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG    Q

12674-11-2-----AROCLOR-1016	170	U
11104-28-2-----AROCLOR-1221	170	U
11141-16-5-----AROCLOR-1232	170	U
53469-21-9-----AROCLOR-1242	170	U
12672-29-6-----AROCLOR-1248	1100	U
11097-69-1-----AROCLOR-1254	170	U
11096-82-5-----AROCLOR-1260	170	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A06
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001006

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      3                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/13/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/17/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      1.0

GPC CLEANUP: (Y/N) N                      pH: 5.6

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2----- <del>AROCLOR</del> -1016	34	U
11104-28-2-----AROCLOR-1221	34	U
11141-16-5-----AROCLOR-1232	34	U
53469-21-9-----AROCLOR-1242	34	U
12672-29-6-----AROCLOR-1248	190	
11097-69-1-----AROCLOR-1254	34	U
11096-82-5-----AROCLOR-1260	34	

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A07
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001007

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      3                      DECANTED: (Y/N)    N

DATE RECEIVED:    04/12/96

EXTRACTION:      (SEPF/CONT/SONC)    SONC

DATE EXTRACTED:    04/13/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:    04/17/96

INJECTION VOLUME:    1.00      (uL)

DILUTION FACTOR:    20.0

GPC CLEANUP: (Y/N) N                      pH: 7.7

SULFUR CLEANUP: (Y/N)    N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG    Q

CAS NO.	COMPOUND	CONCENTRATION	UNITS
12674-11-2	-----AROCLOR-1016	680	U
11104-28-2	-----AROCLOR-1221	680	U
11141-16-5	-----AROCLOR-1232	680	U
53469-21-9	-----AROCLOR-1242	680	U
12672-29-6	-----AROCLOR-1248	680	U
11097-69-1	-----AROCLOR-1254	<del>2500</del> 8600	U
11096-82-5	-----AROCLOR-1260	680	U
		680	U

*mt*  
*4/22/96*

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A08

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001008

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      5                      DECANTED: (Y/N)      N

DATE RECEIVED: 04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/13/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/17/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N                      pH: 8.2

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	4100	U
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A12

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001010

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/13/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/17/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      1.0

GPC CLEANUP: (Y/N) N                      pH: 7.4

SULFUR CLEANUP: (Y/N) N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	34	U
11104-28-2-----AROCLOR-1221	34	U
11141-16-5-----AROCLOR-1232	34	U
53469-21-9-----AROCLOR-1242	34	U
12672-29-6-----AROCLOR-1248	<del>34</del> 110	U
11097-69-1-----AROCLOR-1254	34	U
11096-82-5-----AROCLOR-1260	34	U

*ml 4/22/96*



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A13

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001011

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      *27 Lm 4/18/96*      DECANTED: (Y/N)      N

DATE RECEIVED: 04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/13/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED: 04/17/96

INJECTION VOLUME: 1.00      (uL)

DILUTION FACTOR: 50.0

GPC CLEANUP: (Y/N) N                      pH: 7.5

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	1800	U
11104-28-2-----AROCLOR-1221	1800	U
11141-16-5-----AROCLOR-1232	1800	U
53469-21-9-----AROCLOR-1242	1800	U
12672-29-6-----AROCLOR-1248	<del>20000</del> 19000	
11097-69-1-----AROCLOR-1254	1800	
11096-82-5-----AROCLOR-1260	1800	

*MLA  
4/22/96*

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A29
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A01

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D130001009

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      *73 Lm 4/18/96*      DECANTED: (Y/N)      N

DATE RECEIVED:      04/12/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/13/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/17/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      20.0

GPC CLEANUP: (Y/N) N                      pH: 7.6

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	680	U
11104-28-2-----AROCLOR-1221	680	U
11141-16-5-----AROCLOR-1232	680	U
53469-21-9-----AROCLOR-1242	680	U
12672-29-6-----AROCLOR-1248	<del>5500</del> <i>5600</i>	
11097-69-1-----AROCLOR-1254	680	U
11096-82-5-----AROCLOR-1260	680	U

**APPENDIX C**

**SUPPORT DOCUMENTATION**

## SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

<u>WO #</u>	<u>LABORATORY ID</u>	<u>SAMPLE IDENTIFICATION</u>	<u>DATE/TIME SAMPLED</u>	
A669W	C6D130001-001	S2-A-01	4/12/96	1:38
A669X	C6D130001-002	S2-A-02	4/12/96	1:35
A66A0	C6D130001-003	S2-A-03	4/12/96	1:45
A66A1	C6D130001-004	S2-A-04	4/12/96	1:40
A66A2	C6D130001-005	S2-A-05	4/12/96	1:33
A66A3	C6D130001-006	S2-A-06	4/12/96	1:30
A66A4	C6D130001-007	S2-A-07	4/12/96	2:00
A66A5	C6D130001-008	S2-A-08	4/12/96	2:05
A66A6	C6D130001-009	S2-A-29	4/12/96	1:53
A66A7	C6D130001-010	S2-A-12	4/12/96	2:20
A66A8	C6D130001-011	S2-A-13	4/12/96	2:15

## ANALYTICAL METHODS SUMMARY

### Parameters

Polychlorinated Biphenyls  
pH - CLP  
% Moisture-CLP

### Methods

SW846 8080  
CLP OLM01.8  
CLP ILM 1.8

### **References:**

- CLP USEPA Contract Laboratory Program Statement of Work for Organic Analysis Multi-Media, Multi-Concentration
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, September, 1986 and subsequent revisions

April 19, 1996



## CASE NARRATIVE

Laboratory Name: Quanterra Environmental Services Pittsburgh, Pennsylvania  
Project Name: NWIRP/Bethpage NY  
Project Number: CTO#0212  
Lot Number: C6D130001  
SDG Number: S2-A-01  
Sample Number:

S2-A-01	S2-A-02	S2-A-03	S2-A-04
S2-A-05	S2-A-06	S2-A-07	S2-A-08
S2-A-29	S2-A-12	S2-A-13	

### Shipment

13 soil samples were received at the Quanterra Environmental Services Pittsburgh Laboratory on April 13, 1996, for various analysis.

### PCBs

The laboratory requested additional sample volume of one of the samples for MS/MSD analysis. Due to a misunderstanding between the lab and the sampler, a separate unrelated sample, S2-A-30, was submitted. After discussion with the sampler, this sample was cancelled and the lab was asked to perform an MS/MSD on sample S2-A-01. Due to the rush TAT, the samples had already been extracted, so the MS/MSD was extracted on a separate day with an extraction blank and blank spike.

The MS/MSD on sample S2-A-01 had high recoveries on Aroclor1016. This was due to interference from Aroclor1248, which was found in the sample.

David F. Brennan

David F. Brennan, Project Manager

April 19, 1996

Date

BBB

2F  
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

Level: (low/med) LOW

EPA		S1	OTHER
SAMPLE NO.		(DBE) #	TCX
=====		=====	=====
01	PBLK1	71	59
02	PBLK2	81	64
03	BLANKSPIKE1	81	124
04	BLANKSPIKE2	80	76
05	S2A01	84	72
06	S2A01MS	92	72
07	S2A01MSD	123	195
08	S2A02	139	130
09	S2A03	0 D	0 D
10	S2A04	89	70
11	S2A05	75	68
12	S2A06	79	75
13	S2A07	0 D	0 D
14	S2A08	88	73
15	S2A12	77	72
16	S2A13	0 D	0 D
17	S2A29	0 D	0 D

ADVISORY  
QC LIMITS  
( 20-150)

S1 (DBE) = ~~Dibutylchlorodate~~ *Dechlorosiphmyl*  
*DCO* *um 4/18/96* *um 4/18/96*

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

# Chain of Custody Record



QUA-4124-1

Client: **Halliburton NUS** Project Manager: **M SPANANZA** Date: **4/12/96** Chain Of Custody Number: **50977**

Address: **Foster Plaza #7 661 Andersen** Telephone Number (Area Code)/Fax Number: **412-921-8966** Lab Number: \_\_\_\_\_

City: **Pittsburgh** State: **PA** Zip Code: **15220** Site Contact: **C Farhos** Lab Contact: \_\_\_\_\_

Project Name: **OTO 212 NWIRP / Bcthpge** Contract/Purchase Order/Quote No.: \_\_\_\_\_

Page **1** of **1**

Sample I.D. No. and Description <small>(Containers for each sample may be combined on one line)</small>	Date	Time	Matrix			Containers & Preservatives						Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
			Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc2		
S2-A-01 ✓	4/12/96	1:38											MS/MSD
S2-A-02 ✓		1:35											
S2-A-03 ✓		1:45											
S2-A-04 ✓		1:40											
S2-A-05 ✓		1:33											
S2-A-06 ✓		1:30											
S2-A-07 ✓		2:00											
S2-A-08 ✓		2:05											
S2-A-09 ✓		1:53											
S2-A-12 ✓		2:20											
S2-A-13 ✓		2:15											
S2-A-30 ✓		1:55											

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal:  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_

1. Relinquished By: **[Signature]** Date: **4/12/96** Time: **2:50** 1. Received By: **[Signature]** Date: **4/12/96** Time: **3:10**

2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ 2. Received By: **[Signature]** Date: **4/13/96** Time: **10:30**

3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ 3. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: S2A01

MATRIX SPIKE - EPA SAMPLE NO.: S2A01

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	333	0	900	270	(50-150)
AR1260	333	0	340	102	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	QC LIMITS RPD	REC
AR1016	333	900	270	0	(50-150)	(50-150)
AR1260	333	440	132	26	(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 2 OUT OF 4 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2

BB

8E

PESTICIDE EVALUATION STANDARDS SUMMARY  
 Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

Instrument ID: 58903A07

GC Column ID: DB608

Dates of Analyses: 04/14/96 to 04/17/96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	AR1660	EA14001	04/14/96	2115	0.0	
02	AR1660	EA14002	04/14/96	2134	0.0	
03	AR1660	EA14003	04/14/96	2154	0.0	
04	AR1660	EA14004	04/14/96	2214	0.0	
05	AR1660	EA14005	04/14/96	2233	0.0	
06	AR1221	EA14006	04/14/96	2253	0.0	
07	AR1221	EA14007	04/14/96	2312	0.0	
08	AR1221	EA14008	04/14/96	2332	0.0	
09	AR1221	EA14009	04/14/96	2351	0.0	
10	AR1221	EA14010	04/15/96	0011	0.0	
11	AR1232	EA14011	04/15/96	0030	0.0	
12	AR1232	EA14012	04/15/96	0050	0.0	
13	AR1232	EA14013	04/15/96	0110	0.0	
14	AR1232	EA14014	04/15/96	0129	0.0	
15	AR1232	EA14015	04/15/96	0149	0.0	
16	AR1242	EA14016	04/15/96	0208	0.1	
17	AR1242	EA14017	04/15/96	0228	0.0	
18	AR1242	EA14018	04/15/96	0247	0.0	
19	AR1242	EA14019	04/15/96	0307	0.0	
20	AR1242	EA14020	04/15/96	0327	0.0	
21	AR1248	EA14021	04/15/96	0346	0.0	
22	AR1248	EA14022	04/15/96	0406	0.0	
23	AR1248	EA14023	04/15/96	0425	0.1	
24	AR1248	EA14024	04/15/96	0445	0.0	
25	AR1248	EA14025	04/15/96	0504	0.0	
26	AR1254	EA14026	04/15/96	0524	0.0	
27	AR1254	EA14027	04/15/96	0544	0.0	
28	AR1254	EA14028	04/15/96	0603	0.0	
29	AR1254	EA14029	04/15/96	0623	0.0	
30	AR1254	EA14030	04/15/96	0642	0.0	
31	AR1221	EA17002	04/17/96	0617	0.0	
32	AR1232	EA17003	04/17/96	0637	0.0	
33	AR1242	EA17004	04/17/96	0656	0.0	
34	AR1248	EA17005	04/17/96	0716	0.0	
35	AR1254	EA17006	04/17/96	0736	0.0	
36	AR1660	EA17008	04/17/96	0830	-0.1	
37	S2A02	C6D130001002	04/17/96	0852	-0.1	
38	S2A06	C6D130001006	04/17/96	0911	0.0	

\* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

8E  
 PESTICIDE EVALUATION STANDARDS SUMMARY  
 Evaluation of Retention Time Shift for Dibutylchloroendate

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

Instrument ID: 58903A07

GC Column ID: DB608

Dates of Analyses: 04/14/96 to 04/17/96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
	=====	=====	=====	=====	=====	=====
01	S2A12	C6D130001010	04/17/96	0931	0.1	
02	ZZZZZ	VOID41701	04/17/96	0951	0.0	
03	S2A05	C6D130001005	04/17/96	1010	0.1	
04	ZZZZZ	VOID41702	04/17/96	1030		
05	S2A03	C6D130001003	04/17/96	1049		*
06	S2A07	C6D130001007	04/17/96	1109		*
07	PBLK1	C6D130001BLK	04/17/96	1129	0.1	
08	BLANKSPIKE2	C6D130001LCS	04/17/96	1148	0.1	
09	AR1660	EA17019	04/17/96	1208	0.1	
10	S2A29	C6D130001009	04/17/96	1227		*
11	S2A13	C6D130001011	04/17/96	1247		*
12	AR1660	EA17022	04/17/96	1306	0.1	
13	S2A04	C6D130001004	04/17/96	1339	-0.1	
14	S2A08	C6D130001008	04/17/96	1359	0.1	
15	PBLK2	BLKC6D130001	04/17/96	1418	0.1	
16	BLANKSPIKE1	LCSC6D130001	04/17/96	1438	0.1	
17	S2A01	C6D130001001	04/17/96	1458	0.1	
18	S2A01MS	6D130001001S	04/17/96	1517	0.1	
19	S2A01MSD	6D130001001D	04/17/96	1537	0.1	
20	AR1660	EA17030	04/17/96	1556	0.1	

\* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

B

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

BLANKSPIKE1

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: LCSC6D130001

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1016	Column 1 3.79	3.72	3.86	Y	N
02	Column 2	0.00	0.00	N	N
03 Aroclor-1260	Column 1 8.56	8.50	8.64	Y	N
04	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

BLANKSPIKE2

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001LCS

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1016	Column 1 3.79	3.72	3.86	Y	N
02	Column 2	0.00	0.00	N	N
03 Aroclor-1260	Column 1 8.57	8.50	8.64	Y	N
04	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A01

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001001

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A02
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001002

Lab File ID: (only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.25	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A03
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001003

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:



10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A04
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001004

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD		QUANT?	GC/MS?
		FROM	TO	(Y/N)	(Y/N)
01 Aroclor-1248	Column 1 5.25	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A05

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001005

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A06
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001006

Lab File ID: (only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD		QUANT? (Y/N)	GC/MS? (Y/N)
		FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A07
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001007

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD		QUANT? (Y/N)	GC/MS? (Y/N)
		FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A08
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001008

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A12

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001010

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A13

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001011

Lab File ID: (only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:

10  
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

S2A29
-------

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A01

GC Column ID (1): DB608

GC Column ID (2):

Instrument ID (1): 58903A07

Instrument ID (2):

Lab Sample ID: C6D130001009

Lab File ID:

(only if confirmed by GCMS)

=====

PESTICIDE/PCB	RETENTION TIME	RT WINDOW		QUANT? (Y/N)	GC/MS? (Y/N)
		OF STANDARD FROM	TO		
01 Aroclor-1248	Column 1 5.24	5.17	5.31	Y	N
02	Column 2	0.00	0.00	N	N

Comments:





# Brown & Root Environmental

INTERNAL CORRESPONDENCE

C-49-05-6-045

**TO:** MARK SPERANZA **DATE:** MAY 13, 1996

**FROM:** ANNE K. BATTISTA **COPIES:** DV FILE

**SUBJECT:** ORGANIC DATA VALIDATION-POLYCHLORINATED BIPHENYL ORGANIC COMPOUNDS  
CTO 212, NWIRP BETHPAGE, BETHPAGE, NEW YORK  
SDG S2-A-09

**SAMPLES:** 12/Soil/

S2-A-09	S2-A-10	S2-A-11
S2-A-13R	S2-A-14	S2-A-15
S2-A-16	S2-A-17	S2-A-18
S2-A-19	S2-A-20	S2-A-30

## INTRODUCTION

The sample set for the CTO 212, Bethpage, New York site, SDG S2-A-09, consists of twelve (12) soil environmental samples. All samples were analyzed for polychlorinated biphenyl (PCB) organic compounds. The field crew designated sample S2-A-15 for Matrix Spike/Matrix Spike Duplicate analyses. A field duplicate pair was not included in this SDG.

The samples were collected by Brown and Root Environmental on April 22nd, 1996 and analyzed by Quanterra Environmental Services. All analyses were conducted in accordance with Naval Energy and Environmental Support Activity (NEESA) Level D Quality Assurance/Quality Control (QA/QC) criteria, using Test Methods for Evaluating Solid Wastes (SW-846) Method 8080 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- \* • Data completeness
- \* • Holding times
- \* • Initial/continuing calibrations
- \* • Field and laboratory method blank results
- • Surrogate spike recoveries
- • Matrix Spike/Matrix Spike Duplicate results
- \* • Compound identification
- \* • Compound quantitation
- \* • System performance
- \* • Detection limits

The symbol (\*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Appendix B contains the results as reported by the laboratory.

**MEMO TO: MARK SPERANZA**  
**DATE: MAY 13, 1996 - PAGE 2**

### SUMMARY

#### PCB Organic Compound Analysis

It should be noted that the laboratory case narrative states that the samples were received on April 13, 1996. However, this date is incorrect. Based on the dates reported on the chain of custody forms, the samples were received in the laboratory on April 23, 1996. The data reviewer has amended the appropriate form.

A high Percent Recovery (%R) for the surrogate decachlorobiphenyl (DCB) was reported in sample S2A13R. However, no action was taken since Region II data validation protocol requires both surrogates to be noncompliant in order to take action.

The Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample S2-A-15 yielded high %Rs for Aroclor 1016. No action was necessary since Region II data validation protocol does not require action based on MS/MSD noncompliances alone.

A transcription/calculation error was noted in the quantitation of Aroclor 1248 in the following samples: S2-A-15, S2-A-16, S2-A-17, S2-A-18, S2-A-19, S2-A-20 and S2-A-30. The results reported for this compound in the aforementioned samples were reported lower than the calculated value. The data reviewer has amended the appropriate forms based on compound quantitation for each sample.

It should be noted that Region II requires a set of Regional worksheets to be completed by the data reviewer concerning compliances/noncompliances noted in the data package. However, these worksheets are based on the Contract Laboratory Program (CLP) Statement of Work (SOW) OLM01.8 and the samples were analyzed via SW-846. Therefore, since the worksheets do not apply to SW-846, they were not included with this validation letter.

No other problems affecting data usability were noted.

### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** A high %R was noted for the surrogate DCB in sample S2-A-13R. Several samples had incorrect results reported for Aroclor 1248.

**Other Factors Affecting Data Quality:** The MS/MSD analyses of sample S2-A-15 yielded high %Rs for Aroclor 1016.

MEMO TO: MARK SPERANZA  
DATE: MAY 13, 1996 - PAGE 3

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (1/92), as amended for use within EPA Region II, and the NEESA guidelines "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program" (20.2-047B, 6/88). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NEESA guidelines and the Quality Assurance Project Plan (QAPP)."

  
Brown and Root Environmental

Anne K. Battista  
Chemist/Data Validator

  
Brown and Root Environmental

Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

SC. DATA  
 QUANTERRA - PITTSBURGH

	S2-A-09	S2-A-10	S2-A-11	S2-A-13R	S2-A-14					
SAMPLE NUMBER:	S2-A-09	S2-A-10	S2-A-11	S2-A-13R	S2-A-14					
SAMPLE DATE:	04/22/96	04/22/96	04/22/96	04/22/96	04/22/96					
LABORATORY ID:	A6739101	A673A101	A673C101	A673M101	A673D101					
QC_TYPE:	Dilution	Dilution	Normal	Dilution	Dilution					
% SOLIDS:	99.0 %	98.0 %	99.0 %	93.0 %	100.0 %					
	RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS		RESULT QUAL UNITS	
<b>PESTICIDES/PCBs</b>										
AROCLOR-1016	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG
AROCLOR-1221	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG
AROCLOR-1232	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG
AROCLOR-1242	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG
AROCLOR-1248	4000	UG/KG	1400	UG/KG	33.0	U UG/KG	4900	UG/KG	1800	UG/KG
AROCLOR-1254	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG
AROCLOR-1260	330	U UG/KG	170	U UG/KG	33.0	U UG/KG	350	U UG/KG	160	U UG/KG

CTO 212 - NWIRP BETHPAGE  
 SOIL DATA  
 QUANTERRA - PITTSBURGH

SAMPLE NUMBER:	S2-A-15	S2-A-16	S2-A-17	S2-A-18	S2-A-19
SAMPLE DATE:	04/22/96	04/22/96	04/22/96	04/22/96	04/22/96
LABORATORY ID:	A673E101	A673F101	A673G101	A673H101	A673J101
QC_TYPE:	Dilution	Dilution	Dilution	Dilution	Dilution
% SOLIDS:	99.0 %	98.0 %	98.0 %	98.0 %	98.0 %
	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>PESTICIDES/PCBs</b>					
AROCLOR-1016	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170
AROCLOR-1221	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170
AROCLOR-1232	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170
AROCLOR-1242	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170
AROCLOR-1248	690 UG/KG 5500	UG/KG 5500	UG/KG 2300	UG/KG 680	UG/KG 1400
AROCLOR-1254	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170
AROCLOR-1260	67.0 U UG/KG 340	U UG/KG 340	U UG/KG 170	U UG/KG 67.0	U UG/KG 170

SO ATA  
 QUAN TERRA - PITTSBURGH

SAMPLE NUMBER:		S2-A-20	S2-A-30			
SAMPLE DATE:		04/22/96	04/22/96	//	//	//
LABORATORY ID:		A673K101	A673L101			
QC_TYPE:		Dilution	Dilution			
% SOLIDS:		99.0 %	98.0 %	100.0 %	100.0 %	100.0 %
		RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS	RESULT QUAL UNITS
<b>PESTICIDES/PCBs</b>						
AROCLOR-1016	170	U UG/KG	670	U UG/KG		
AROCLOR-1221	170	U UG/KG	670	U UG/KG		
AROCLOR-1232	170	U UG/KG	670	U UG/KG		
AROCLOR-1242	170	U UG/KG	670	U UG/KG		
AROCLOR-1248	2400	UG/KG	6700	UG/KG		
AROCLOR-1254	170	U UG/KG	670	U UG/KG		
AROCLOR-1260	170	U UG/KG	670	U UG/KG		

**Data Qualifier Key**

U - Value is a nondetect as reported by the laboratory or has been qualified based on blank contamination.



**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A09
-------

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002001

SAMPLE wt/vol: 30.0 (g/ml) G

LAB FILE ID:

% MOISTURE 1 DECANTED: (Y/N) N

DATE RECEIVED: 04/23/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/24/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.00

GPC CLEANUP: (Y/N) N pH: 7.0

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG

Q

12674-11-2-----AROCLOR-1016	330		U
11104-28-2-----AROCLOR-1221	330		U
11141-16-5-----AROCLOR-1232	330		U
53469-21-9-----AROCLOR-1242	330		U
12672-29-6-----AROCLOR-1248	4000		U
11097-69-1-----AROCLOR-1254	330		U
11096-82-5-----AROCLOR-1260	330		U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A10
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002002

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/24/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      5.0

GPC CLEANUP: (Y/N) N                      pH: 6.7

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	170	U
11104-28-2-----AROCLOR-1221	170	U
11141-16-5-----AROCLOR-1232	170	U
53469-21-9-----AROCLOR-1242	170	U
12672-29-6-----AROCLOR-1248	1400	U
11097-69-1-----AROCLOR-1254	170	U
11096-82-5-----AROCLOR-1260	170	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO:

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A11

LAB CODE: QPITT	CASE NO.: NWIRP	SAS NO.:	SDG.: S2A09
MATRIX: (soil/water) SOIL		LAB SAMPLE ID: C6D230002003	
SAMPLE wt/vol: 30.0	(g/ml) G	LAB FILE ID:	
% MOISTURE 1	DECANTED: (Y/N) N	DATE RECEIVED: 04/23/96	
EXTRACTION: (SEPF/CONT/SONC) SONC		DATE EXTRACTED: 04/23/96	
CONCENTRATED EXTRACT VOLUME 10000 (uL)		DATE ANALYZED: 04/24/96	
INJECTION VOLUME: 1.00 (uL)		DILUTION FACTOR: 1.0	
GPC CLEANUP: (Y/N) N	pH: 5.0	SULFUR CLEANUP: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG	Q
12674-11-2-----	AROCLOR-1016	33	U
11104-28-2-----	AROCLOR-1221	33	U
11141-16-5-----	AROCLOR-1232	33	U
53469-21-9-----	AROCLOR-1242	33	U
12672-29-6-----	AROCLOR-1248	33	U
11097-69-1-----	AROCLOR-1254	33	U
11096-82-5-----	AROCLOR-1260	33	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A13R

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002012

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      7                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/25/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 6.9

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	4900	U
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N .

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A14

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002004

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      0                      DECANTED: (Y/N)      N

DATE RECEIVED: 04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/24/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 5.0

GPC CLEANUP: (Y/N) N                      pH: 6.6

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	160	U
11104-28-2-----AROCLOR-1221	160	U
11141-16-5-----AROCLOR-1232	160	U
53469-21-9-----AROCLOR-1242	160	U
12672-29-6-----AROCLOR-1248	1800	U
11097-69-1-----AROCLOR-1254	160	U
11096-82-5-----AROCLOR-1260	160	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A15

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002005

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      1                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/24/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      2.0

GPC CLEANUP: (Y/N) N                      pH: 6.4

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	67	U
11104-28-2-----AROCLOR-1221	67	U
11141-16-5-----AROCLOR-1232	67	U
53469-21-9-----AROCLOR-1242	67	U
12672-29-6-----AROCLOR-1248	67	U
11097-69-1-----AROCLOR-1254	<del>67</del> 690	U
11096-82-5-----AROCLOR-1260	67	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N...

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A16

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002006

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/24/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 6.4

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	340	U
11104-28-2-----AROCLOR-1221	340	U
11141-16-5-----AROCLOR-1232	340	U
53469-21-9-----AROCLOR-1242	340	U
12672-29-6-----AROCLOR-1248	500 <i>5500</i>	U
11097-69-1-----AROCLOR-1254	340	U
11096-82-5-----AROCLOR-1260	340	U



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A17

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002007

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)    N

DATE RECEIVED:    04/23/96

EXTRACTION:      (SEPF/CONT/SONC)    SONC

DATE EXTRACTED:  04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:    04/24/96

INJECTION VOLUME:  1.00      (uL)

DILUTION FACTOR:    5.0

GPC CLEANUP: (Y/N) N                      pH: 5.8

SULFUR CLEANUP: (Y/N)    N

CAS NO.                      COMPOUND

CONCENTRATION UNITS: UG/KG    Q

12674-11-2-----AROCLOR-1016	170	U
11104-28-2-----AROCLOR-1221	170	U
11141-16-5-----AROCLOR-1232	170	U
53469-21-9-----AROCLOR-1242	170	U
12672-29-6-----AROCLOR-1248	170	U
11097-69-1-----AROCLOR-1254	170	U
11096-82-5-----AROCLOR-1260	170	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A18

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002008

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/24/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      2.0

GPC CLEANUP: (Y/N) N                      pH: 6.9

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	67	U
11104-28-2-----AROCLOR-1221	67	U
11141-16-5-----AROCLOR-1232	67	
53469-21-9-----AROCLOR-1242	67	
12672-29-6-----AROCLOR-1248	67	
11097-69-1-----AROCLOR-1254	67	U
11096-82-5-----AROCLOR-1260	67	

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A19

LAB CODE: QPITT	CASE NO.: NWIRP	SAS NO.:	SDG.: S2A09
MATRIX: (soil/water) SOIL		LAB SAMPLE ID: C6D230002009	
SAMPLE wt/vol: 30.0	(g/ml) G	LAB FILE ID:	
% MOISTURE 2	DECANTED: (Y/N) N	DATE RECEIVED: 04/23/96	
EXTRACTION: (SEPF/CONT/SONC) SONC		DATE EXTRACTED: 04/23/96	
CONCENTRATED EXTRACT VOLUME 10000	(uL)	DATE ANALYZED: 04/25/96	
INJECTION VOLUME: 1.00	(uL)	DILUTION FACTOR: 5.00	
GPC CLEANUP: (Y/N) N	pH: 5.1	SULFUR CLEANUP: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/KG	Q
---------	----------	----------------------------	---

12674-11-2-----AROCLOR-1016	170	U
11104-28-2-----AROCLOR-1221	170	U
11141-16-5-----AROCLOR-1232	170	U
53469-21-9-----AROCLOR-1242	170	U
12672-29-6-----AROCLOR-1248	<del>170</del> 1400	U
11097-69-1-----AROCLOR-1254	170	U
11096-82-5-----AROCLOR-1260	170	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A20

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002010

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      1                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/25/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      5.00

GPC CLEANUP: (Y/N) N                      pH: 5.4

SULFUR CLEANUP: (Y/N)      N

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG	Q
---------	----------	---------------------------	---

12674-11-2-----	AROCLOR-1016	170	U
11104-28-2-----	AROCLOR-1221	170	U
11141-16-5-----	AROCLOR-1232	170	U
53469-21-9-----	AROCLOR-1242	170	U
12672-29-6-----	AROCLOR-1248	<del>2300.2400</del>	U
11097-69-1-----	AROCLOR-1254	170	U
11096-82-5-----	AROCLOR-1260	170	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

S2A30
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: S2A09

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D230002011

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      2                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/23/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/23/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/25/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      20.00

GPC CLEANUP: (Y/N) N                      pH: 6.3

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	670	U
11104-28-2-----AROCLOR-1221	670	U
11141-16-5-----AROCLOR-1232	670	U
53469-21-9-----AROCLOR-1242	670	U
12672-29-6-----AROCLOR-1248	<del>6500</del> 6700	U
11097-69-1-----AROCLOR-1254	670	U
11096-82-5-----AROCLOR-1260	670	U

**APPENDIX C**  
**SUPPORT DOCUMENTATION**

April 29, 1996



### CASE NARRATIVE

Laboratory Name: Quanterra Environmental Services Pittsburgh, Pennsylvania  
Project Name: NWIRP/Bethpage NY  
Project Number: CTO#0212  
Lot Number: C6D230002  
SDG Number: S2-A-09  
Sample Number:

S2-A-09	S2-A-10	S2-A-11	S2-A-14
S2-A-15	S2-A-16	S2-A-17	S2-A-18
S2-A-19	S2-A-20	S2-A-30	S2-A-13R

#### Shipment

12 soil samples were received at the Quanterra Environmental Services Pittsburgh Laboratory on April <sup>23</sup> 13, 1996, for PCB analysis.

#### PCBs

The MS/MSD on sample S2-A-15 had high recoveries on Aroclor1016. This was due to interference from Aroclor1248, which was found in the sample.

David F. Brennan  
David F. Brennan, Project Manager

04/29/96  
Date

AKB  
5-3-96

**Chain of Custody Record**



QUA-4124-1

Client: Halliburton NUS # 063642 Project Manager: M. SPANANEA Date: 4/22/96 Chain Of Custody Number: 50978  
 Address: 661 Andersen Dr. Foster PA #7 Telephone Number (Area Code)/Fax Number: 412-921-8208 Lab Number: \_\_\_\_\_  
 City: Pittsburgh State: PA Zip Code: 15220 Site Contact: C Farkos Lab Contact: \_\_\_\_\_  
 Project Name: NWIRP / Bothpage Carrier/Waybill Number: \_\_\_\_\_  
 Contract/Purchase Order/Quote No: \_\_\_\_\_

Page 1 of 2

Sample I.D. No. and Description <small>(Containers for each sample may be combined on one line)</small>	Date	Time	Matrix			Containers & Preservatives							Special Instructions/ Conditions of Receipt		
			Aqueous	Solid	Soil	Ureane	H2SO4	HNO3	HCl	NaOH	ZnAc2	NaOH			
[REDACTED] ✓	4/22/96	4:40			1										
[REDACTED] ✓		4:43			1										
[REDACTED] ✓		4:46			1										
[REDACTED] ✓		4:52			1										
[REDACTED] ✓		4:48			1										
[REDACTED] ✓		4:48			1										
[REDACTED] ✓		4:55			1										
[REDACTED] ✓		4:35			1										
[REDACTED] ✓		4:30			1										
[REDACTED] ✓		4:58			1										
[REDACTED] ✓		5:01			1										
[REDACTED] ✓		5:05			1										

ms/msd

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal:  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_

QC Requirements (Specify): \_\_\_\_\_

1. Relinquished By: CA Gunn Date: 4/22/96 Time: 6:00

2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

1. Received By: Fred Axx Date: \_\_\_\_\_ Time: \_\_\_\_\_

2. Received By: [Signature] Date: 4/23/96 Time: 1000

3. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_



# Chain of Custody Record



QUA-4124-1

Client <b>Halliburton NUS</b>		Project Manager <b>M SPANAZA</b>		Date <b>4/22/96</b>	Chain Of Custody Number <b>50979</b>
Address <b>Foster Plaza #7 661 Anderson</b>		Telephone Number (Area Code)/Fax Number <b>412 (921 - 8208)</b>		Lab Number	Page <b>2</b> of <b>2</b>
City <b>Pittsburgh</b>	State <b>PA</b>	Zip Code <b>15220</b>	Site Contact <b>C Falho</b>	Lab Contact	Analysis (Attach list if more space is needed)
Project Name <b>HWIP / Botlyage</b>			Carrier/Waybill Number		
Contract/Purchase Order/Quote No.					

Sample I.D. No. and Description <small>(Containers for each sample may be combined on one line)</small>	Date	Time	Matrix			Containers & Preservatives							Special Instructions/ Conditions of Receipt	
			Aqueous	Sed.	Soil	Urease	H2SO4	HNO3	HCl	NaOH	ZnAc2	NaOH		
<b>[REDACTED]</b>	<b>4/22/96</b>	<b>5:08</b>			<b>1</b>									

Possible Hazard Identification			Sample Disposal			DC Requirements (Specify)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	(A fee may be assessed if samples are retained longer than 3 months)
Turn Around Time Required								
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input checked="" type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other _____			
1. Relinquished By <b>[Signature]</b>	Date <b>4/22/96</b>	Time <b>6:00</b>	1. Received By <b>[Signature]</b>	Date <b>4/22/96</b>	Time <b>[Blank]</b>	2. Received By <b>[Signature]</b>	Date <b>4/23/96</b>	Time <b>10:00</b>
2. Relinquished By	Date	Time	3. Received By	Date	Time			
3. Relinquished By	Date	Time						
Comments								

## ANALYTICAL METHODS SUMMARY

Parameters

[REDACTED]  
pH - CLP  
& Moisture-CLP

Methods

[REDACTED]  
CLP OLM01.8  
CLP ILM 1.8

**References:**

- CLP USEPA Contract Laboratory Program Statement of Work for Organic Analysis Multi-Media, Multi-Concentration
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, September, 1986 and subsequent revisions

BB

8E

**PESTICIDE EVALUATION STANDARDS SUMMARY**  
 Evaluation of Retention Time Shift for Dibutylchlorodate

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A09

Instrument ID: 58903A07

GC Column ID: DB608

Dates of Analyses: 04/24/96 to 04/25/96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
	=====	=====	=====	=====	=====	=====
01	AR1660	EA24001	04/24/96	0953	-0.2	
02	AR1660	EA24002	04/24/96	1014	-0.1	
03	AR1660	EA24003	04/24/96	1035	-0.1	
04	AR1660	EA24004	04/24/96	1055	-0.1	
05	AR1660	EA24005	04/24/96	1116	-0.1	
06	AR1221	EA24006	04/24/96	1136	-0.1	
07	AR1221	EA24007	04/24/96	1157	-0.1	
08	AR1221	EA24008	04/24/96	1218	-0.1	
09	AR1221	EA24009	04/24/96	1238	-0.1	
10	AR1221	EA24010	04/24/96	1259	-0.1	
11	AR1232	EA24011	04/24/96	1319	0.0	
12	AR1232	EA24012	04/24/96	1340	0.0	
13	AR1232	EA24013	04/24/96	1401	0.0	
14	AR1232	EA24014	04/24/96	1421	0.0	
15	AR1232	EA24015	04/24/96	1442	0.0	
16	AR1242	EA24016	04/24/96	1502	0.0	
17	AR1242	EA24017	04/24/96	1523	0.0	
18	AR1242	EA24018	04/24/96	1544	0.0	
19	AR1242	EA24019	04/24/96	1604	0.0	
20	AR1242	EA24020	04/24/96	1625	0.0	
21	AR1248	EA24021	04/24/96	1645	0.0	
22	AR1248	EA24022	04/24/96	1706	0.0	
23	AR1248	EA24023	04/24/96	1726	0.0	
24	AR1248	EA24024	04/24/96	1747	0.0	
25	AR1248	EA24025	04/24/96	1808	0.0	
26	AR1254	EA24026	04/24/96	1828	0.0	
27	AR1254	EA24027	04/24/96	1849	0.0	
28	AR1254	EA24028	04/24/96	1909	0.0	
29	AR1254	EA24029	04/24/96	1930	0.0	
30	AR1254	EA24030	04/24/96	1950	0.0	
31	PBLK1	BLKC6D230002	04/24/96	2011	0.0	
32	PCBSPIKE1	LCSC6D230002	04/24/96	2032	0.0	
33	S2A09	C6D230002001	04/24/96	2052	0.1	
34	S2A10	C6D230002002	04/24/96	2113	0.0	
35	S2A11	C6D230002003	04/24/96	2133	0.0	
36	S2A14	C6D230002004	04/24/96	2154	0.0	
37	S2A15	C6D230002005	04/24/96	2214	0.0	
38	S2A15MS	6D230002005S	04/24/96	2235	0.0	

\* Values outside of QC limits (2.0% for packed columns,  
 0.3% for capillary columns)

page 1 of 2

FORM VIII PEST-2

1/87 Rev.

74

8E  
 PESTICIDE EVALUATION STANDARDS SUMMARY  
 Evaluation of Retention Time Shift for Dibutylchloredate

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A09

Instrument ID: 58903A07

GC Column ID: DB608

Dates of Analyses: 04/24/96 to 04/25/96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	S2A15MSD	6D230002005D	04/24/96	2256	0.0	
02	S2A16	C6D230002006	04/24/96	2316	0.0	
03	AR1660	EA24041	04/24/96	2337	0.0	
04	S2A17	C6D230002007	04/24/96	2357	0.1	
05	S2A18	C6D230002008	04/25/96	0018	0.1	
06	S2A19	C6D230002009	04/25/96	0038	0.1	
07	S2A20	C6D230002010	04/25/96	0059	0.1	
08	ZZZZZ	VOID1	04/25/96	0120		*
09	S2A13R	C6D230002012	04/25/96	0140	0.5	
10	AR1660	EA24048	04/25/96	0201	0.0	
11	AR1660	EA25001	04/25/96	1155	-0.1	
12	S2A30	C6D230002011	04/25/96	1215		*
13	AR1660	EA25003	04/25/96	1236	0.0	

\* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

BB

2F  
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: S2A09

Level: (low/med) LOW

EPA SAMPLE NO.	S1	OTHER
	(DBC) #	TCX
01 PBLK1	87	81 0
02 PCBSPIKE1	96	84 0
03 S2A09	134	80 0
04 S2A10	92	82 0
05 S2A11	86	80 0
06 S2A13R	215 *	80 0
07 S2A14	99	88 0
08 S2A15	89	81 0
09 S2A15MS	93	82 0
10 S2A15MSD	100	87 0
11 S2A16	92	80 0
12 S2A17	97	88 0
13 S2A18	97	82 0
14 S2A19	87	82 0
15 S2A20	87	82 0
16 S2A30	0 D	00 0

ADVISORY  
QC LIMITS  
( 20-150)

S1 (DBC) = Dibutylchloroendate

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: S2A09

MATRIX SPIKE - EPA SAMPLE NO.: S8A15

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	330	0	647	196	(50-150)
AR1260	330	0	348	105	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	RPD	QC LIMITS REC
AR1016	330	681	206	5.0	(50-150)	(50-150)
AR1260	330	373	113	7.3	(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 2 OUT OF 4 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2

Bethpage, NY

S2A09 Aroclor 1248 4,000 ug/kg column 1

Areas  
603520  
351317  
469655  
389725  
+ 161243

$$\frac{1975460}{5} = 395092$$

$$\frac{395092}{335000} \times \frac{10000 \mu\text{L}}{30.0\text{g}} \times \frac{10 \text{ DLE}}{.99 \% \text{ sol.}} = 3,971 \text{ ug/kg} = \underline{4.00}$$

---

S2A10 Aroclor 1248 1400 ug/kg

459521  
249966  
315559  
252549  
23966

$$1381621 \div 5 = 276324$$

$$\frac{276324}{335000} \times \frac{10,000}{30} \times \frac{5}{.98} = 1402 = 1400$$

---

S2A13R Aroclor 1248 4,900 ug/kg

$$2275300 \div 5 = \frac{455060}{335000} \times \frac{10,000}{30} \times \frac{10}{.93} = 4,868 =$$

4900

---

S2A14 Aroclor 1248 1,800 ug/kg

$$1845857 \div 5 = \frac{369171}{335000} \times \frac{10,000}{30} \times \frac{5}{1} = 1,837 = \underline{1800}$$

S2A15 660 ug/kg Anclor 1248

$$1711851 \div 5 = \frac{342370}{335000} \times \frac{10000}{30} \times \frac{2.0}{.99} = 688$$

---

S2A16 5000 ug/kg Anclor 1248

$$2690832 \div 5 = \frac{538166}{335000} \times \frac{10,000}{30} \times \frac{10}{.98} = 5,464$$

---

S2A17 2100 ug/kg Anclor 1248

$$2230606 \div 5 = \frac{446121}{\cancel{335} 000} \times \frac{10,000}{30} \times \frac{5}{.98} = 2,100$$

---

S2A18 Anclor 1248 650 ug/kg

$$1662560 \div 5 = \frac{332512}{335000} \times \frac{10,000}{30} \times \frac{2}{.98} = 650$$

---

S2A19 Anclor 1248 1300 ug/kg

$$\frac{1349938}{5} = \frac{269988}{335000} \times \frac{10,000}{30} \times \frac{5}{.98} = 1300$$

---

~~WA~~ S2A20 Anclor 1248 2300 ug/kg

$$2371927 \div 5 = \frac{474385}{335000} \times \frac{10,000}{30} \times \frac{5}{.99} = 2,300$$

---

S2A30 Anclor 1248 6500 ug/kg

$$1637882 \div 5 = \frac{327576}{335000} \times \frac{10,000}{30} \times \frac{20}{.98} = 6,650$$



Software Version: 3.2 <16C20>

Sample Name : C6D230002-002

Sample Number: X5

Operator : DE 4-25-96

Time : 4/25/96 10:45

Study :

Instrument : GC #3

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 2120574792 Data Acquisition Time: 4/24/96 21:13

Delay Time : 0.00 min.

End Time : 19.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : f:\acquire\gc3\EA24034.raw

Result File : f:\acquire\gc3\EA24034.rst

Instrument File: F:\ACQUIRE\GC1\GEN3C.ins

Process File : f:\acquire\met\_seq\GEN3A.prc

Sample File : f:\acquire\met\_seq\1248E.smp

Sequence File : f:\acquire\met\_seq\efa2496.seq

Inj. Volume : 1 ul

Sample Amount : 30.0000

Area Reject : 5000.00

Dilution Factor : 5.00

# AROCLOR 1248 ( ug/ml) ON 03608

Quanterra Pittsburgh

CKD BY: M4-25-96

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	Height [uV]	RF HEIGHT	RF AREA	Amount [ug/ml]
1	0.881		644761	85851	133151	8	0.6448
2	1.518		8394	2442	290921	3	0.0084
4	2.615	TCDF	27375	7447	2273082	4	0.0033
8	3.556		33144	5037	151986	7	0.0331
10	4.182		14194	3367	237189	4	0.0142
11	4.297		127678	27084	212439	5	0.1275
12	4.510		23509	4702	200021	5	0.0235
13	4.720		119963	21773	187757	5	0.1160
14	4.878		59944	11608	287301	5	0.0539
15	5.014	AROCLOR-1248 A	459581	81396	335397	6	0.2627
16	5.351		69037	13272	192237	5	0.0690
17	5.476		33089	7676	226495	4	0.0330
18	5.640		258873	53871	287249	5	0.2561
19	5.763		220503	32586	147778	7	0.2205
20	5.896		89598	19777	220730	5	0.0896
21	6.155		21508	4332	201390	5	0.0215
22	6.367	AROCLOR-1248 B	249966	48853	338397	5	0.1457
23	6.468		97848	20004	200000	4	0.0977
24	6.647		100000	20000	200000	6	0.2194
25	6.820		100000	20000	200000	5	0.2179
26	6.939		100000	20000	200000	5	0.2109
27	7.090	AROCLOR-1248 C	100000	20000	200000	5	0.2109
28	7.266		100000	20000	200000	5	0.2109
29	7.488		100000	20000	200000	5	0.2109
30	7.574		100000	20000	200000	5	0.2109
31	7.726	AROCLOR-1248 D	100000	20000	200000	5	0.2109
32	8.000		100000	20000	200000	5	0.2109
33	8.200		100000	20000	200000	5	0.2109
34	8.300		100000	20000	200000	5	0.2109
35	8.500		100000	20000	200000	5	0.2109
36	8.618	AROCLOR-1248 E	100000	20000	200000	5	0.2109
37	8.751		100000	20000	200000	5	0.2109

829.

39	9.029	21365	4097	191740	5	0.0214
40	9.198	46761	9247	197738	5	0.0468
41	9.359	5370	1311	244174	4	0.0054
42	9.475	5311	805	151503	7	0.0053
43	9.701	6138	1486	242057	4	0.0061
44	9.915	58600	13305	227054	4	0.0586
45	10.040	18272	3692	202040	5	0.0183
46	10.128	7230	2022	279733	4	0.0072
47	10.264	27839	5676	203900	5	0.0278
48	10.345	11120	3262	293316	3	0.0111
49	10.628	191976	11769	61307	16	0.1920
52	11.318	5485	1284	234129	4	0.0055
53	11.421	6674	1129	169108	6	0.0067
54	11.524	17501	3884	221943	5	0.0175
57	12.677	6558	1557	237413	4	0.0066
58	16.611 DCB	48107	5898	1614929	8	0.0037
-----						
		4850266	892639	14280656	253	4.2138

9270

Group Report For : AR 1248

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	Height [uV]	RF HEIGHT	RF AREA	Amount [ug/ml]
2	5.014	AROCLOR-1248 A	459581	81396	335397	6	0.2627
3	6.367	AROCLOR-1248 B	249966	48853	335397	5	0.1457
4	7.090	AROCLOR-1248 C	315559	64646	335397	5	0.1928
5	7.736	AROCLOR-1248 D	252549	55032	335397	5	0.1641
6	8.618	AROCLOR-1248 E	103966	22970	335397	5	0.0685
-----							
			1381621	272898	1676985	25	0.8137

$0.8137 \times 5 \times 330 = 1340 \mu\text{g/kg}$

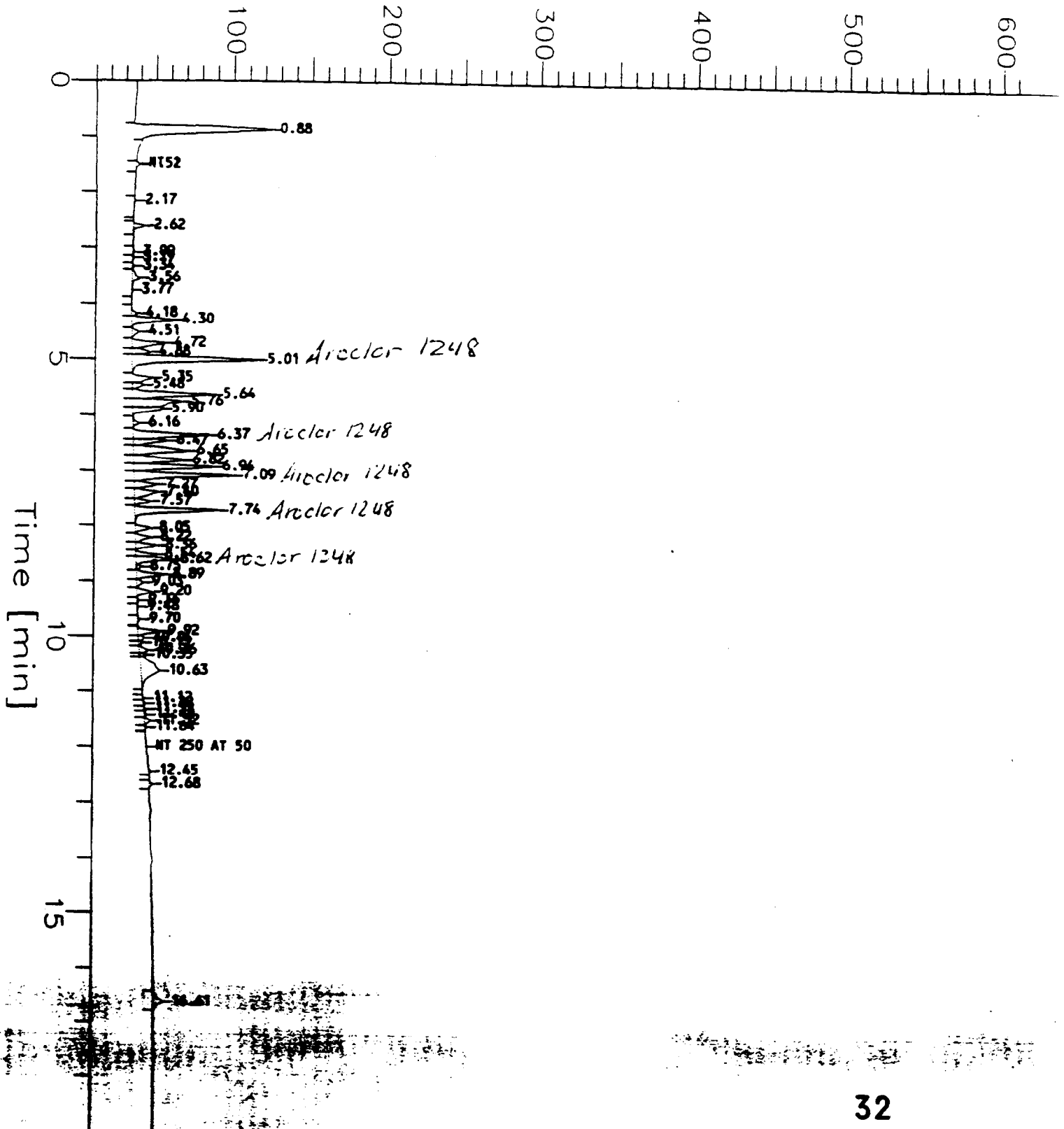
Report Stored in ASCII File: f:\acquire\gc3\EA24034.TX0

Sample Name : C60230002-002  
Filename : f:\acquire\gc3\EA24034.raw  
Method : GEN3C.ins  
Start Time : 0.00 min  
Scale Factor : 0

End Time : 19.00 min  
Plot Offset : 10 mV

Sample #: X5  
Date : 4/25/96 10:45  
Time of Injection: 4/24/96 21:13  
Low Point : 10.00 mV  
High Point : 610.00 mV  
Plot Scale: 600 mV

### Response [mV] Quanterra Pitt



```

=====
Software Version: 3.2 <16C20>
Sample Name   : MHIGH 1248           Time       : 4/25/96  10:12
Sample Number: 246-82-6             Study      :
Operator      : DE4-2546

Instrument    : GC_#3                Channel    : A          A/D mV Range : 10
AutoSampler  : NONE
Rack/Vial    : 0/0

```

```

Interface Serial # : 2120574792   Data Acquisition Time: 4/24/96  17:47
Delay Time       : 0.00   min.
End Time        : 19.00   min.
Sampling Rate    : 2.0000   pts/sec

```

```

Raw Data File   : f:\acquire\gc3\EA24024.raw
Result File     : f:\acquire\gc3\EA24024.rst
Instrument File : F:\ACQUIRE\GC1\GEN3C.ins
Process File    : f:\acquire\met_seq\GEN3A.prc
Sample File     : f:\acquire\met_seq\1248E.smp
Sequence File   : f:\acquire\met_seq\efa2496.seq

```

```

Inj. Volume    : 1 ul                Area Reject    : 5000.00
Sample Amount  : 1.0000              Dilution Factor : 1.00

```

=====

## AROCLOR 1248 ( 1.0 ug/ml) ON DB608

=====

Quanterra Pittsburgh CKD BY: *AL4-15-96*

=====

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	Height [uV]	RF HEIGHT	RF AREA	Amount [ug/ml]
1	0.836		1698524	383528	225801	4	1.6985
2	1.521		12271	3111	253545	4	0.0123
5	2.615	TCMX	370467	95640	637600	4	0.1500
7	3.185		6259	1552	247965	4	0.0063
9	3.556		16396	3961	240361	4	0.0164
11	4.294		130915	28107	214694	5	0.1309
12	4.510		8398	1760	209558	5	0.0084
13	4.720		58830	11245	191138	5	0.0588
14	4.881		43802	10331	235852	4	0.0438
15	5.004	AROCLOR-1248 A	341512	54989	36659	6	1.5000
16	5.349		94648	21288	224918	4	0.0947
17	5.476		39899	8841	221590	5	0.0399
18	5.644		278915	57801	207236	5	0.2789
19	5.761		259146	40565	156534	6	0.2592
20	5.899		121885	24641	202163	5	0.1219
21	6.154		19461	4774	245313	4	0.0195
22	6.366	AROCLOR-1248 B	293135	60239	40159	5	1.5000
23	6.465		100131	24675	246423	4	0.1001
24	6.646		267872	44813	167293	6	0.2679
25	6.818		225125	40955	181924	6	0.2251
26	6.936		322665	69411	215119	5	0.3227
27	7.088	AROCLOR-1248 C	359215	72109	48073	5	1.5000
28	7.264		131041	26025	198602	5	0.1310
29	7.396		160049	26310	164388	6	0.1601
30	7.570		85108	19086	224260	5	0.0851
31	7.735	AROCLOR-1248 D	296827	64421	42947	5	1.5000
32	8.050		82720	18234	220425	5	0.0827
33	8.215		88653	17634	198913	5	0.0887
34	8.360		103267	23683	229338	4	0.1033
35	8.530		71104	18538	260713	4	0.0711
36	8.616	AROCLOR-1248 E	189268	40925	27283	5	1.5000
37	8.749		17778	4360	245270	4	0.0178

38	8.888		149088	30910	207329	5	0.1491
39	9.024		19562	4521	231119	4	0.0196
40	9.189		70056	14645	209040	5	0.0701
41	9.357		10641	2513	236106	4	0.0106
42	9.466		6025	1337	221898	5	0.0060
44	9.699		6141	1517	247039	4	0.0061
45	9.912		117499	25875	220215	5	0.1175
46	10.027		16517	3843	232650	4	0.0165
47	10.126		9892	2397	242333	4	0.0099
48	10.262		33405	6526	195361	5	0.0334
51	11.318		15631	2172	138952	7	0.0156
52	11.524		8855	1451	163834	6	0.0089
53	12.672		20280	763	37614	27	0.0203
54	16.608	DCB	525977	70116	467441	8	0.1500
			7304847	1492115	9512983	244	12.7285

Group Report For : AR 1248

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	Height [uV]	RF HEIGHT	RF AREA	Amount [ug/ml]
2	5.004	AROCLOR-1248 A	341512	54989	36659	6	1.5000
3	6.366	AROCLOR-1248 B	293135	60239	40159	5	1.5000
4	7.088	AROCLOR-1248 C	359215	72109	48073	5	1.5000
5	7.735	AROCLOR-1248 D	296827	64421	42947	5	1.5000
6	8.616	AROCLOR-1248 E	189268	40925	27283	5	1.5000
			1479956	292682	195121	25	7.5000

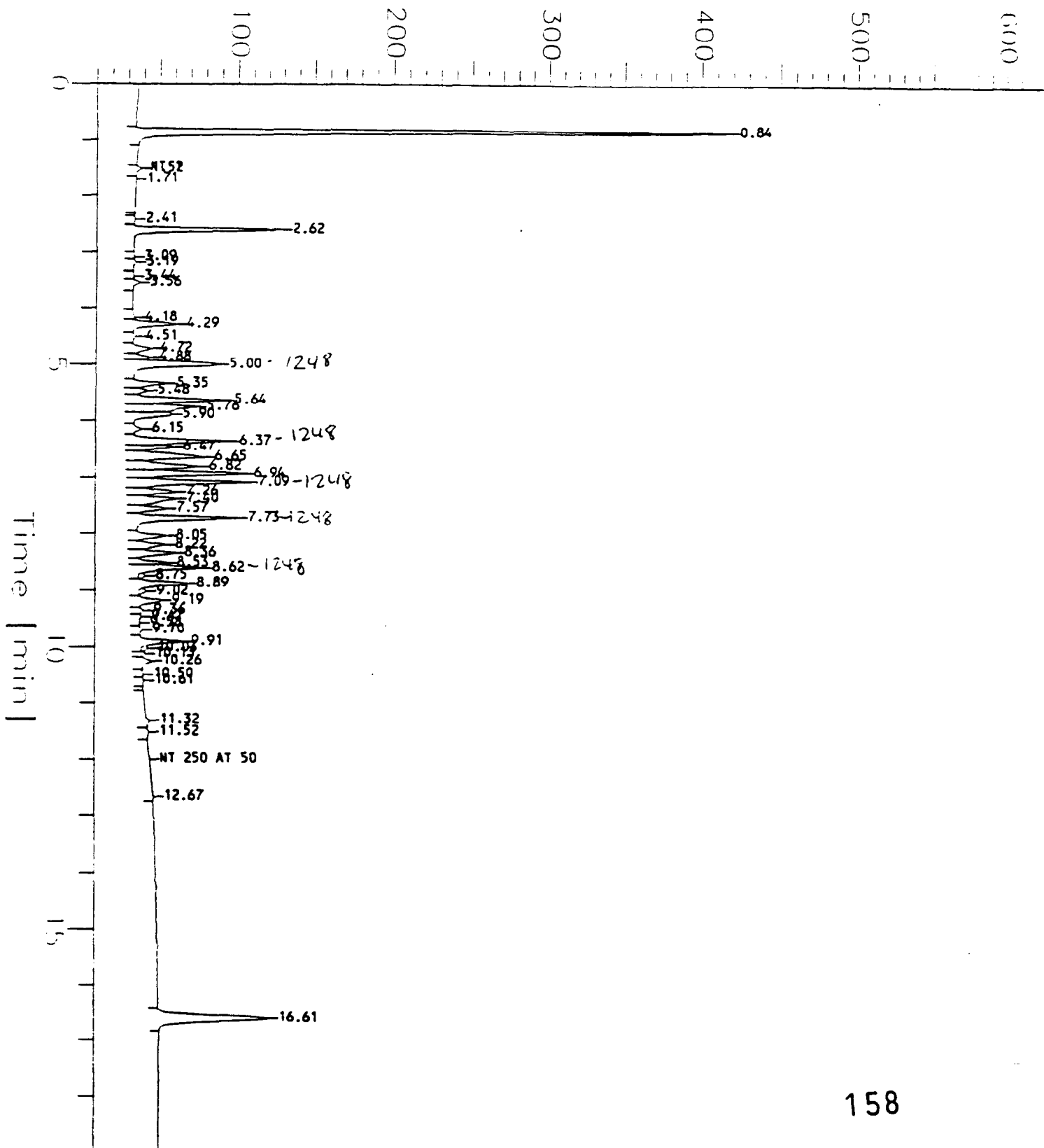
Report Stored in ASCII File: f:\acquire\gc3\EA24024.TX0

Sample Name : MHIGH 1248  
FileName : f:\acquire\gc3\EA24024.raw  
Method : GEN3C.ins  
Start Time : 0.00 min  
Scale Factor : 0

End Time : 19.00 min  
Plot Offset : 10 mV

Sample #: 246-82-6  
Date : 4/25/96 10:12  
Time of Injection: 4/24/96 17:47  
Low Point : 10.00 mV  
High Point : 610.00 mV  
Plot Scale: 600 mV

### Response [mV] Quanterra Pitt



**APPENDIX I**

**STOCKPILE SAMPLE ANALYTICAL RESULTS**

## **ANALYTICAL REPORT**

**PROJECT NO. CTO NO. 0212**

**NWIRP/BETHPAGE, NY**

**MARK SPERANZA**

**CF BRAUN**

**QUANTERRA INCORPORATED**

*David J. Brennan*

**David Brennan**  
Project Manager

**May 2, 1996**



## TABLE OF CONTENTS

- A) TITLE PAGE**
- B) TABLE OF CONTENTS**
- C) SAMPLE SUMMARY**
- D) CHAIN OF CUSTODY**
- E) METHOD SUMMARY**
- F) CASE NARRATIVE**
- G) GC SEMIVOLATILES**
  - Sample Data Summary Package*
  - QC Summary*
  - Sample Data*
  - Standards Data*
  - Raw QC data*
- H) General Chemistry**
  - Sample Results*
  - Blank Results*
  - Check Standard Results*
  - Matrix Spike Results*
  - Duplicate Results*
  - All Raw Data*
  - Sample Control Summary*

## SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

<u>WO #</u>	<u>LABORATORY ID</u>	<u>SAMPLE IDENTIFICATION</u>	<u>DATE/TIME SAMPLED</u>
A677M	C6D250003-001	PILE A COMPOSITE	4/24/96 10:16
A677N	C6D250003-002	PILE C COMPOSITE	4/24/96 10:42

## SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

<u>WO #</u>	<u>LABORATORY ID</u>	<u>SAMPLE IDENTIFICATION</u>	<u>DATE/TIME SAMPLED</u>
A67E3	C6D290003-001	SPA-01	4/24/96 10:16
A67E4	C6D290003-002	SPA-02	4/24/96 10:22
A67E5	C6D290003-003	SPA-03	4/24/96 10:25
A67E6	C6D290003-004	SPA-04	4/24/96 10:31
A67E7	C6D290003-005	SPA-05	4/24/96 10:35
A67E8	C6D290003-006	SPC-01	4/24/96 10:42
A67E9	C6D290003-007	SPC-02	4/24/96 10:48
A67EA	C6D290003-008	SPC-02 FIELD DUPLICATE	4/24/96 10:48
A67EC	C6D290003-009	SPC-03	4/24/96 10:52
A67ED	C6D290003-010	SPC-04	4/24/96 10:56
A67EE	C6D290003-011	SPC-05	4/24/96 11:00

7212 TURNER

FOSTER WHEELER ENVIRONMENTAL CORPORATION  
CHAIN OF CUSTODY RECORD

PROJECT					NO. CONTAINERS	REMARKS OR SAMPLE LOCATION	PRESERVATION		
NWIRP/BETHPAGE							PCB CLP/PEST	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
SAMPLERS: (Signature) #7551 063642 HALLIBURTON WWS									
SAMPLE NUMBER	DATE	TIME	COMP.	GRAB					
SPA - 01	4/24/96	10:16	X		1	X	}	GENERATE 1 Composite for ANALYSIS SAVE SAMPLES	
SPA - 02		10:22	X		1	X			
SPA - 03		10:25	X		1	X			
SPA - 04		10:31	X		1	X			
SPA - 05		10:35	X		1	X			
SPC - 01		10:42	X		1	X			
SPC - 02		10:48	X		1	X			
SPC - 02		10:48	X		1	X			Field Duplicate
SPC - 03		10:52	X		1	X			
SPC - 04		10:56	X		1	X			
SPC - 05	X	11:00	X		1	X	GENERATE 1 Composite for ANALYSIS SAVE SAMPLES		

Relinquished by: (Signature) ① C. Farkos	Date / Time 4/24/96 11:30	Received by: (Signature) TO Fed Exp	Relinquished by: (Signature) ④	Date / Time	Shipped via:
Relinquished by: (Signature) ② C. Farkos	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time 4/25/96 10:00	Shipping Ticket No.
Relinquished by: (Signature) ③	Date / Time	Received by: (Signature)	Remarks		

## ANALYTICAL METHODS SUMMARY

### Parameters

Polychlorinated Biphenyls  
pH - CLP  
% Moisture-CLP

### Methods

SW846 8080  
CLP OLM01.8  
CLP ILM 1.8

### **References:**

- CLP USEPA Contract Laboratory Program Statement of Work for Organic Analysis Multi-Media, Multi-Concentration
- EPA Methods for the Determination of Organic Compounds in Finished Drinking Water, USEPA, EMSL, Cincinnati, Ohio, December, 1988 and its supplements.
- MCAWW Methods for Chemical Analysis of Water and Wastes, EMSL: Cincinnati, OH: March 1983 and subsequent revisions
- SM16 Standard Methods for the Examination of Water and Wastewater 16th Edition, 1985
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, September, 1986 and subsequent revisions
- USEPA Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions

May 2, 1996



**CASE NARRATIVE**

Laboratory Name: Quanterra Environmental Services Pittsburgh, Pennsylvania  
Project Name: NWIRP/Bethpage NY  
Project Number: CTO#0212  
Lot Number: C6D250003,C6D290003  
SDG Number: PILEA  
Sample Number:

PILE A	PILE C	SPA-01	SPA-02
COMPOSITE	COMPOSITE		
SPA-03	SPA-04	SPA-05	SPC-01
SPC-02	SPC-02 FIELD	SPC-03	SPC-04
	DUP		
SPC-05			

Shipment

11 soil samples were received at the Quanterra Environmental Services Pittsburgh Laboratory on April 25, 1996, for PCB analysis. Upon receipt of the samples, an equal portion of all SPA samples were composited to make sample PILE A COMPOSITE, and an equal portion of all SPC samples were composited to make sample PILE C COMPOSITE.

PCBs

The samples and MS/MSDs were diluted 20x because of the concentration of Aroclor 1248 in the sample. This dilution caused the MS/MSD and all surrogates to be diluted out.

David F. Brennan  
David F. Brennan, Project Manager

05/02/96  
Date

# **DATA PACKAGE**

# **GC SEMIVOLATILES**



**SAMPLE DATA  
SUMMARY  
PACKAGE**

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

FILE\_A

LAB CODE: QPITT	CASE NO.: NWIRP	SAS NO.:	SDG.: PILEA
MATRIX: (soil/water) SOIL		LAB SAMPLE ID: C6D250003001	
SAMPLE wt/vol: 30.0 (g/ml) G		LAB FILE ID:	
% MOISTURE 4	DECANTED: (Y/N) N	DATE RECEIVED: 04/25/96	
EXTRACTION: (SEPF/CONT/SONC) SONC		DATE EXTRACTED: 04/25/96	
CONCENTRATED EXTRACT VOLUME 10000 (uL)		DATE ANALYZED: 04/26/96	
INJECTION VOLUME: 1.00 (uL)		DILUTION FACTOR: 20.0	
GPC CLEANUP: (Y/N) N	pH: 7.2	SULFUR CLEANUP: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG	Q
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12674-11-2-----AROCLOR-1016	690	U
11104-28-2-----AROCLOR-1221	690	U
11141-16-5-----AROCLOR-1232	690	U
53469-21-9-----AROCLOR-1242	690	U
12672-29-6-----AROCLOR-1248	4700	
11097-69-1-----AROCLOR-1254	690	U
11096-82-5-----AROCLOR-1260	690	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

PILE_C
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LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D250003002

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      8                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/25/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/25/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/26/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      20.0

GPC CLEANUP: (Y/N) N                      pH: 7.2

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	720	U
11104-28-2-----AROCLOR-1221	720	U
11141-16-5-----AROCLOR-1232	720	U
53469-21-9-----AROCLOR-1242	720	U
12672-29-6-----AROCLOR-1248	6000	U
11097-69-1-----AROCLOR-1254	720	U
11096-82-5-----AROCLOR-1260	720	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPA01

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003001

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      6                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      20.0

GPC CLEANUP: (Y/N) N                      pH: 7.1

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	700	U
11104-28-2-----AROCLOR-1221	700	U
11141-16-5-----AROCLOR-1232	700	U
53469-21-9-----AROCLOR-1242	700	U
12672-29-6-----AROCLOR-1248	6500	U
11097-69-1-----AROCLOR-1254	700	U
11096-82-5-----AROCLOR-1260	700	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPA02
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LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003002

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      4                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	340	U
11104-28-2-----AROCLOR-1221	340	U
11141-16-5-----AROCLOR-1232	340	U
53469-21-9-----AROCLOR-1242	340	U
12672-29-6-----AROCLOR-1248	3500	
11097-69-1-----AROCLOR-1254	340	U
11096-82-5-----AROCLOR-1260	340	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPA03

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: FILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003003

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      4                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/KG	Q
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12674-11-2-----AROCLOR-1016	340	U
11104-28-2-----AROCLOR-1221	340	U
11141-16-5-----AROCLOR-1232	340	U
53469-21-9-----AROCLOR-1242	340	U
12672-29-6-----AROCLOR-1248	4200	U
11097-69-1-----AROCLOR-1254	340	U
11096-82-5-----AROCLOR-1260	340	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPA04
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LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003004

SAMPLE wt/vol: 30.0 (g/ml) G

LAB FILE ID:

% MOISTURE 6 DECANTED: (Y/N) N

DATE RECEIVED: 04/29/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N pH: 8.0

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	2700	
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPA05
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LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003005

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      6                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      5.0

GPC CLEANUP: (Y/N) N                      pH: 7.9

SULFUR CLEANUP: (Y/N)      N

CAS NO.	COMPOUND	CONCENTRATION	UNITS:UG/KG	Q
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12674-11-2-----	AROCLOR-1016	180		U
11104-28-2-----	AROCLOR-1221	180		U
11141-16-5-----	AROCLOR-1232	180		U
53469-21-9-----	AROCLOR-1242	180		U
12672-29-6-----	AROCLOR-1248	2800		
11097-69-1-----	AROCLOR-1254	180		U
11096-82-5-----	AROCLOR-1260	180		U



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC01
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LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003006

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      8                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00 (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 7.5

SULFUR CLEANUP: (Y/N)      N

CAS NO.                      COMPOUND                      CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	360	U
11104-28-2-----AROCLOR-1221	360	U
11141-16-5-----AROCLOR-1232	360	U
53469-21-9-----AROCLOR-1242	360	U
12672-29-6-----AROCLOR-1248	4400	
11097-69-1-----AROCLOR-1254	360	U
11096-82-5-----AROCLOR-1260	360	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC02

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: FILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003007

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE    10                      DECANTED: (Y/N)    N

DATE RECEIVED:    04/29/96

EXTRACTION:    (SEPF/CONT/SONC)    SONC

DATE EXTRACTED:    04/30/96

CONCENTRATED EXTRACT VOLUME 10000    (uL)

DATE ANALYZED:    05/01/96

INJECTION VOLUME:    1.00    (uL)

DILUTION FACTOR:    20.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)    N

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG	Q
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12674-11-2-----AROCLOR-1016	730	U
11104-28-2-----AROCLOR-1221	730	U
11141-16-5-----AROCLOR-1232	730	U
53469-21-9-----AROCLOR-1242	730	U
12672-29-6-----AROCLOR-1248	4700	U
11097-69-1-----AROCLOR-1254	730	U
11096-82-5-----AROCLOR-1260	730	U

9

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC02FI
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LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003008

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      9                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      20.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	730	U
11104-28-2-----AROCLOR-1221	730	U
11141-16-5-----AROCLOR-1232	730	U
53469-21-9-----AROCLOR-1242	730	U
12672-29-6-----AROCLOR-1248	5000	
11097-69-1-----AROCLOR-1254	730	U
11096-82-5-----AROCLOR-1260	730	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC03

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003009

SAMPLE wt/vol: 30.0 (g/ml) G

LAB FILE ID:

% MOISTURE 6 DECANTED: (Y/N) N

DATE RECEIVED: 04/29/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N pH: 8.1

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	4800	
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC04

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003010

SAMPLE wt/vol: 30.0 (g/ml) G

LAB FILE ID:

% MOISTURE 4 DECANTED: (Y/N) N

DATE RECEIVED: 04/29/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N pH: 8.5

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS:UG/KG Q

12674-11-2-----AROCLOR-1016	340	U
11104-28-2-----AROCLOR-1221	340	U
11141-16-5-----AROCLOR-1232	340	U
53469-21-9-----AROCLOR-1242	340	U
12672-29-6-----AROCLOR-1248	3500	
11097-69-1-----AROCLOR-1254	340	U
11096-82-5-----AROCLOR-1260	340	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC05

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:              SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003011

SAMPLE wt/vol: 30.0              (g/ml) G

LAB FILE ID:

% MOISTURE      7              DECANTED: (Y/N)    N

DATE RECEIVED:    04/29/96

EXTRACTION:      (SEPF/CONT/SONC)    SONC

DATE EXTRACTED:    04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:    05/01/96

INJECTION VOLUME:    1.00      (uL)

DILUTION FACTOR:    10.0

GPC CLEANUP: (Y/N) N              pH: 7.8

SULFUR CLEANUP: (Y/N)    N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG    Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	5500	
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

PILE\_CMS

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: 6D250003002S

SAMPLE wt/vol: 30.0      (g/ml) G

LAB FILE ID:

% MOISTURE      8      DECANTED: (Y/N)      N

DATE RECEIVED: 04/25/96

EXTRACTION: (SEPF/CONT/SONC) SONC

DATE EXTRACTED: 04/25/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/26/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 20.0

GPC CLEANUP: (Y/N) N      pH: 7.2

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	720	U
11104-28-2-----AROCLOR-1221	720	U
11141-16-5-----AROCLOR-1232	720	U
53469-21-9-----AROCLOR-1242	720	U
12672-29-6-----AROCLOR-1248	5500	
11097-69-1-----AROCLOR-1254	720	U
11096-82-5-----AROCLOR-1260	720	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

FILE\_CMSD

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: 6D250003002D

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      8                      DECANTED: (Y/N)      N

DATE RECEIVED: 04/25/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/25/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 04/26/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 20.0

GPC CLEANUP: (Y/N) N                      pH: 7.2

SULFUR CLEANUP: (Y/N) N

CAS NO.

COMPOUND

CONCENTRATION UNITS:UG/KG      Q

12674-11-2-----AROCLOR-1016	720	U
11104-28-2-----AROCLOR-1221	720	U
11141-16-5-----AROCLOR-1232	720	U
53469-21-9-----AROCLOR-1242	720	U
12672-29-6-----AROCLOR-1248	6500	
11097-69-1-----AROCLOR-1254	720	U
11096-82-5-----AROCLOR-1260	720	U



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC03M

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:

SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: 6D290003009S

SAMPLE wt/vol: 30.0      (g/ml) G

LAB FILE ID:

% MOISTURE      6      DECANTED: (Y/N)      N

DATE RECEIVED: 04/29/96

EXTRACTION: (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 10.0

GPC CLEANUP: (Y/N) N      pH: 8.1

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	5000	U
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

SPC03MSD

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: FILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: 6D290003009D

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      6                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/29/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/30/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      05/01/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      10.0

GPC CLEANUP: (Y/N) N                      pH: 8.1

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	350	U
11104-28-2-----AROCLOR-1221	350	U
11141-16-5-----AROCLOR-1232	350	U
53469-21-9-----AROCLOR-1242	350	U
12672-29-6-----AROCLOR-1248	5000	U
11097-69-1-----AROCLOR-1254	350	U
11096-82-5-----AROCLOR-1260	350	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

BLANKSPIKE1

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: FILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D250003LCS

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      0                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/25/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/25/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED:      04/26/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      1.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	280	
11104-28-2-----AROCLOR-1221	33	U
11141-16-5-----AROCLOR-1232	33	U
53469-21-9-----AROCLOR-1242	33	U
12672-29-6-----AROCLOR-1248	33	U
11097-69-1-----AROCLOR-1254	33	U
11096-82-5-----AROCLOR-1260	300	

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

BLANKSPIKE2
-------------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003LCS

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      0                      DECANTED: (Y/N)      N

DATE RECEIVED:

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000 (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00 (uL)

DILUTION FACTOR: 1.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	280	
11104-28-2-----AROCLOR-1221	33	U
11141-16-5-----AROCLOR-1232	33	U
53469-21-9-----AROCLOR-1242	33	U
12672-29-6-----AROCLOR-1248	33	U
11097-69-1-----AROCLOR-1254	33	U
11096-82-5-----AROCLOR-1260	290	U

BBB

2F  
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: PILEA

Level: (low/med) LOW

EPA SAMPLE NO.	S1 (DBC) #	OTHER TCX
01 PBLK1	92	89 0
02 PBLK2	86	83 0
03 BLANKSPIKE1	92	86 0
04 BLANKSPIKE2	90	82 0
05 PILE_A	0 D	0 D
06 PILE_C	0 D	0 D
07 SPA01	0 D	0 D
08 SPA02	0 D	0 D
09 SPA03	0 D	0 D
10 SPA04	0 D	0 D
11 SPA05	0 D	0 D
12 SPC01	0 D	0 D
13 SPC02	0 D	0 D
14 SPC02FD	0 D	0 D
15 SPC03	0 D	0 D
16 SPC04	0 D	0 D
17 SPC05	0 D	0 D
18 PILE_CMS	0 D	0 D
19 PILE_CMSD	0 D	0 D
20 SPC03MS	0 D	0 D
21 SPC03MSD	0 D	0 D

LMS/2/96

ADVISORY  
QC LIMITS  
( 20-150)

S1 (DBC) = Dibutylchloroendate

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: PILE\_C

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	360	0		0D	(50-150)
AR1260	360	0		0D	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC
AR1016	360		0D		(50-150)	(50-150)
AR1260	360		0D		(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 0 OUT OF 4 OUTSIDE LIMITS

COMMENTS: D DILUTED OUT

FORM III PBC-2

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: SPC03

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	360	0		0D	(50-150)
AR1260	360	0		0D	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC
AR1016	360		0D		(50-150)	(50-150)
AR1260	360		0D		(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 0 OUT OF 4 OUTSIDE LIMITS

COMMENTS: D DILUTED OUT

FORM III PBC-2

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: BLANKSPIKE1

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS %REC	QC LIMITS REC
AR1016	330	0	280	85	(50-150)
AR1260	330	0	300	91	(50-150)

SPIKE RECOVERY: 0 OUT OF 2 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2



## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: BLANKSPIKE2

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS %REC	QC LIMITS REC
AR1016	330	0	280	85	(50-150)
AR1260	330	0	290	88	(50-150)

SPIKE RECOVERY: 0 OUT OF 2 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2

B

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: QUANTERRA PITT Contract:  
 Lab Code: QPITT Case No.: NWIRP SAS No.: SDG No.: PILEA  
 Lab Sample ID: C6D250003BLK Lab File ID:  
 Matrix:(soil/water) SOIL Level:(low/med) LOW  
 Date Extracted: 04/25/96 Extraction:(SepF/Cont/Sonc) SONC  
 Date Analyzed (1): 04/26/96 Date Analyzed (2):  
 Time Analyzed (1): 0946 Time Analyzed (2):  
 Instrument ID (1): 58903A07 Instrument ID (2):  
 GC Column ID (1): DB608 GC Column ID (2):

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	=====	=====	=====	=====
01	BLANKSPIKE1	C6D250003LCS	04/26/96	
02	PILE_A	C6D250003001	04/26/96	
03	PILE_C	C6D250003002	04/26/96	
04	PILE_CMS	6D250003002S	04/26/96	
05	PILE_CMSD	6D250003002D	04/26/96	

COMMENTS:

4C  
PESTICIDE METHOD BLANK SUMMARY

Lab Name: QUANTERRA PITT	Contract:		
Lab Code: QPITT	Case No.: NWIRP	SAS No.:	SDG No.: PILEA
Lab Sample ID: C6D290003BLK	Lab File ID:		
Matrix:(soil/water) SOIL	Level:(low/med) LOW		
Date Extracted: 04/30/96	Extraction:(SepF/Cont/Sonc) SONC		
Date Analyzed (1): 05/01/96	Date Analyzed (2):		
Time Analyzed (1): 1337	Time Analyzed (2):		
Instrument ID (1): 58903A07	Instrument ID (2):		
GC Column ID (1): DB608	GC Column ID (2):		

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BLANKSPIKE2	C6D290003LCS	05/01/96	
02	SPA01	C6D290003001	05/01/96	
03	SPA02	C6D290003002	05/01/96	
04	SPA03	C6D290003003	05/01/96	
05	SPA04	C6D290003004	05/01/96	
06	SPA05	C6D290003005	05/01/96	
07	SPC01	C6D290003006	05/01/96	
08	SPC02	C6D290003007	05/01/96	
09	SPC02FD	C6D290003008	05/01/96	
10	SPC03	C6D290003009	05/01/96	
11	SPC04	C6D290003010	05/01/96	
12	SPC05	C6D290003011	05/01/96	
13	SPC03MS	6D290003009S	05/01/96	
14	SPC03MSD	6D290003009D	05/01/96	

COMMENTS:

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

PBLK1

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D250003BLK

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      0                      DECANTED: (Y/N)      N

DATE RECEIVED:      04/25/96

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED:      04/25/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED:      04/26/96

INJECTION VOLUME:      1.00      (uL)

DILUTION FACTOR:      1.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	33	U
11104-28-2-----AROCLOR-1221	33	U
11141-16-5-----AROCLOR-1232	33	U
53469-21-9-----AROCLOR-1242	33	U
12672-29-6-----AROCLOR-1248	33	U
11097-69-1-----AROCLOR-1254	33	U
11096-82-5-----AROCLOR-1260	33	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB NAME: QUANTERRA PITT

CONTRACT:

PBLK2
-------

LAB CODE: QPITT      CASE NO.: NWIRP

SAS NO.:                      SDG.: PILEA

MATRIX: (soil/water) SOIL

LAB SAMPLE ID: C6D290003BLK

SAMPLE wt/vol: 30.0                      (g/ml) G

LAB FILE ID:

% MOISTURE      0                      DECANTED: (Y/N)      N

DATE RECEIVED:

EXTRACTION:      (SEPF/CONT/SONC)      SONC

DATE EXTRACTED: 04/30/96

CONCENTRATED EXTRACT VOLUME 10000      (uL)

DATE ANALYZED: 05/01/96

INJECTION VOLUME: 1.00      (uL)

DILUTION FACTOR: 1.0

GPC CLEANUP: (Y/N) N                      pH: 7.0

SULFUR CLEANUP: (Y/N)      N

CAS NO.

COMPOUND

CONCENTRATION UNITS: UG/KG      Q

12674-11-2-----AROCLOR-1016	33	U
11104-28-2-----AROCLOR-1221	33	U
11141-16-5-----AROCLOR-1232	33	U
53469-21-9-----AROCLOR-1242	33	U
12672-29-6-----AROCLOR-1248	33	U
11097-69-1-----AROCLOR-1254	33	U
11096-82-5-----AROCLOR-1260	33	U

QC  
SUMMARY

BBB

2F  
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: PILEA

Level: (low/med) LOW

EPA SAMPLE NO.	S1 <sup>13/16</sup> (DBC) # CA	OTHER TCX
01 PBLK1	92	89 d
02 PBLK2	86	83 d
03 BLANKSPIKE1	92	86 d
04 BLANKSPIKE2	90	82 d
05 PILE_A	0 D	0 D
06 PILE_C	0 D	0 D
07 SPA01	0 D	0 D
08 SPA02	0 D	0 D
09 SPA03	0 D	0 D
10 SPA04	0 D	0 D
11 SPA05	0 D	0 D
12 SPC01	0 D	0 D
13 SPC02	0 D	0 D
14 SPC02FD	0 D	0 D
15 SPC03	0 D	0 D
16 SPC04	0 D	0 D
17 SPC05	0 D	0 D
18 PILE_CMS	0 D	0 D
19 PILE_CMSD	0 D	0 D
20 SPC03MS	0 D	0 D
21 SPC03MSD	0 D	0 D

Lms/2/96

ADVISORY  
QC LIMITS  
( 20-150)

S1 (DBC) = Dibutylchloroendate

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: PILE\_C

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	360	0		0D	(50-150)
AR1260	360	0		0D	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC
AR1016	360		0D		(50-150)	(50-150)
AR1260	360		0D		(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 0 OUT OF 4 OUTSIDE LIMITS

COMMENTS: D DILUTED OUT



## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.:NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: SPC03

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS %REC	QC LIMITS REC
AR1016	360	0		0D	(50-150)
AR1260	360	0		0D	(50-150)

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC
AR1016	360		0D		(50-150)	(50-150)
AR1260	360		0D		(50-150)	(50-150)

RPD: 0 OUT OF 2 OUTSIDE LIMITS

SPIKE RECOVERY: 0 OUT OF 4 OUTSIDE LIMITS

COMMENTS:D DILUTED OUT

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: BLANKSPIKE1

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS %REC	QC LIMITS REC
AR1016	330	0	280	85	(50-150)
AR1260	330	0	300	91	(50-150)

SPIKE RECOVERY: 0 OUT OF 2 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2

## SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

LAB NAME: QUANTERRA PITT

CONTRACT:

LAB CODE: QPITT

CASE NO.: NWIRP

SAS NO.:

SDG NO.: PILEA

MATRIX SPIKE - EPA SAMPLE NO.: BLANKSPIKE2

LEVEL: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS %REC	QC LIMITS REC
AR1016	330	0	280	85	(50-150)
AR1260	330	0	290	88	(50-150)

SPIKE RECOVERY: 0 OUT OF 2 OUTSIDE LIMITS

COMMENTS:

FORM III PBC-2

B

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: QUANTERRA PITT Contract:  
 Lab Code: QPITT Case No.: NWIRP SAS No.: SDG No.: PILEA  
 Lab Sample ID: C6D250003BLK Lab File ID:  
 Matrix:(soil/water) SOIL Level:(low/med) LOW  
 Date Extracted: 04/25/96 Extraction:(SepF/Cont/Sonc) SONC  
 Date Analyzed (1): 04/26/96 Date Analyzed (2):  
 Time Analyzed (1): 0946 Time Analyzed (2):  
 Instrument ID (1): 58903A07 Instrument ID (2):  
 GC Column ID (1): DB608 GC Column ID (2):

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	=====	=====	=====	=====
01	BLANKSPIKE1	C6D250003LCS	04/26/96	
02	PILE_A	C6D250003001	04/26/96	
03	PILE_C	C6D250003002	04/26/96	
04	PILE_CMS	6D250003002S	04/26/96	
05	PILE_CMSD	6D250003002D	04/26/96	

COMMENTS:

4C  
PESTICIDE METHOD BLANK SUMMARY

Lab Name: QUANTERRA PITT

Contract:

Lab Code: QPITT

Case No.: NWIRP

SAS No.:

SDG No.: PILEA

Lab Sample ID: C6D290003BLK

Lab File ID:

Matrix: (soil/water) SOIL

Level: (low/med) LOW

Date Extracted: 04/30/96

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 05/01/96

Date Analyzed (2):

Time Analyzed (1): 1337

Time Analyzed (2):

Instrument ID (1): 58903A07

Instrument ID (2):

GC Column ID (1): DB608

GC Column ID (2):

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	=====	=====	=====	=====
01	BLANKSPIKE2	C6D290003LCS	05/01/96	
02	SPA01	C6D290003001	05/01/96	
03	SPA02	C6D290003002	05/01/96	
04	SPA03	C6D290003003	05/01/96	
05	SPA04	C6D290003004	05/01/96	
06	SPA05	C6D290003005	05/01/96	
07	SPC01	C6D290003006	05/01/96	
08	SPC02	C6D290003007	05/01/96	
09	SPC02FD	C6D290003008	05/01/96	
10	SPC03	C6D290003009	05/01/96	
11	SPC04	C6D290003010	05/01/96	
12	SPC05	C6D290003011	05/01/96	
13	SPC03MS	6D290003009S	05/01/96	
14	SPC03MSD	6D290003009D	05/01/96	

COMMENTS:

**APPENDIX J**

**BACKFILL MATERIAL DELIVERY TICKETS**

2

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 4-30 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 125  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY,  
TRUCK ID: 19047-1829  
SUITE 200 LANGHORNE  
WGT-IN 39220 LB

→ GROSS 09:18AM 20ENT96  
→ TARE GROSS 119620 LB  
W TARE 39220 LB  
NET 80400 LB  
→ NET  
TOTAL 40.20 ~~TON~~  
TON  
TIME AND DATE 10:08AM 20ENT96

TONS TOTAL 37.16 Cu.Ys.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT #1
- GRAVEL
- BANORUN
- PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 0195  
D-0398  
GRUMMAN AERO SPACE CORP. BETHPAGE, N.Y. (SITE #2)

1

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 4-30 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 124  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY  
TRUCK ID: 19047-1829  
SUITE 200 LANGHORNE  
WGT-IN 36520 LB

→ GROSS 09:18AM 20ENT96  
→ TARE GROSS 119100 LB  
W TARE 36520 LB  
NET 82580 LB  
→ NET  
TOTAL 41.29 ~~TON~~  
TON  
TIME AND DATE 09:54AM 20ENT96

TONS TOTAL 33.03 Cu.Ys.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT #1
- GRAVEL
- BANORUN
- 

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 019A  
D-0398  
GRUMMAN AERO SPACE CORP. BETHPAGE, N.Y. (SITE #2)

3

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 4-30 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 127  
2300 LINCOLN HWY. EAST, ONE OXFORD VALLEY,  
SUITE 200 LANTHERNE A. 19047-1829

→ GROSS	12:26PM	20ENT96
→ TARE	GROSS	121240 LB
	W TARE	39540 LB
→ NET	NET	81700 LB
	TOTAL	40.85 <del>TON</del>

TIME AND DATE 12:41PM 20ENT96

TONS TOTAL 32.68 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

*Keep F.W.*

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:  
NAVY CONTRACT # N62472-94- T No 0196  
D-0398

BRIDGE N.Y. (SITE # 2)

4

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 4-30 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 129  
2300 LINCOLN HWY. EAST, ONE OXFORD VALLEY,  
SUITE 200 LANTHERNE A. 19047-1829

→ GROSS	12:28PM	20ENT96
→ TARE	GROSS	121380 LB
	W TARE	36680 LB
→ NET	NET	84700 LB
	TOTAL	42.35 <del>TON</del>

TIME AND DATE 12:43PM 20ENT96

TONS TOTAL 33.88 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

*Keep F.W.*

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:  
NAVY CONTRACT No. N62472-94- T No 0197  
D-0398

SPACE CORP. BETHANY N.Y. ( # 2 )



6

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

5-1-96 (60)

DATE ~~4-28~~ 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 132  
2300 LINCOLN HUNT EAST ONE OXFORD VALLEY,  
SUITE 200 LANGHORNE PA. 19047-1829

TRUCK TO: TRUCK TO:  
WGM-IN 39700 LB  
WGM-IN 36520 LB

→ GROSS 02:28PM 20ENT96

→ TARE

GROSS	121520 LB
W TARE	39700 LB
NET	81820 LB

→ NET

TOTAL 40.91 ~~TONS~~  
TON

TIME AND DATE 03:07PM 20ENT96

TONS TOTAL 32.77 CU.YD.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND  
 CONCRETE SAND  
 GRIT  
 GRAVEL  
 BANKRUN

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T NO 0199  
0-0398

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

5

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

5-1-96 (60)

DATE ~~4-28~~ 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 131  
2300 LINCOLN HUNT EAST ONE OXFORD VALLEY,  
SUITE 200 LANGHORNE PA. 19047-1829

TRUCK TO: TRUCK TO:  
WGM-IN 36520 LB  
WGM-IN 36520 LB

→ GROSS 02:25PM 20ENT96

→ TARE

GROSS	122480 LB
W TARE	36520 LB
NET	85960 LB

→ NET

TOTAL 42.98 ~~TONS~~  
TON

TIME AND DATE 02:45PM 20ENT96

TONS TOTAL 34.88 CU.YD.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND  
 CONCRETE SAND  
 GRIT  
 GRAVEL  
 BANKRUN

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T NO 0198  
0-0398

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

5

DATE 5-1 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 135  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 HANSHAWNE PA 17047-1829

→ GROSS	06:48AM	21ENT96
→ TARE	GROSS	121200 LB
	W TARE	39680 LB
→ NET	NET	81520 LB
	TOTAL	40.76 <del>TON</del>

TIME AND DATE 07:15AM 21ENT96

TONS TOTAL 37.60 CU YD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:  
NAVY CONTRACT NO. N 62472-94-T No 0204  
D-0398

SP. MA. 1 TEAM SPACE CORP. BETHPAGE, N.Y. (SITE #2)

*Ruff*  
*J.F.W.*

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

7

DATE 5-1 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 134  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 HANSHAWNE PA 17047-1829

→ GROSS	06:46AM	21ENT96
→ TARE	GROSS	118600 LB
	W TARE	36740 LB
→ NET	NET	81860 LB
	TOTAL	40.93 <del>TON</del>

TIME AND DATE 07:05AM 21ENT96

TONS TOTAL 32.74 CU YD.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:  
NAVY CONTRACT NO. N 62472-94-T No 0202  
D-0398

TR MA AER" SPACE CORP BETHPAGE, N.Y. (SITE #2)

*Ruff*  
*J.F.W.*

10  
**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-1 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 140  
2300 LINCOLN HWY. EAST SIDE OF FORD VALLEY  
SUITE 200 TRUCK ID: 19047-1829

→ GROSS 09:18AM 21ENT96  
→ TARE GROSS 122280 LB  
W TARE 39660 LB  
NET 82620 LB  
→ NET TOTAL 41.31 ~~TONS~~  
TON

TIME AND DATE 09:33AM 21ENT96 33.04 Cu. Yd

TONS TOTAL XXX

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*Das Unb...*

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-0-0398 T No 0206

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

7  
**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-1 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 141  
2300 LINCOLN HWY. EAST SIDE OF FORD VALLEY  
SUITE 200 TRUCK ID: 19047-1829

→ GROSS 09:19AM 21ENT96  
→ TARE GROSS 119340 LB  
W TARE 36720 LB  
NET 82620 LB  
→ NET TOTAL 41.31 ~~TONS~~  
TON

TIME AND DATE 09:42AM 21ENT96 33.04 Cu. Yd

TONS TOTAL XXX

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*Das Unb...*

DELIVERED TO:

NAVY CONTRACT # N62472-94-0-0398 T No 0207

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

12

DATE 5-1 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 145  
2300 LINCOLN HWY. EASTSIDE OF FORD VALLEY  
SUITE 200 TRUCK TO: LAUGHORNE RD. 49047-1829  
WGHT-IN 39740 LB

➔ GROSS 11:27AM 21ENT96  
➔ TARE GROSS 120820 LB  
W TARE 39740 LB  
NET 81080 LB  
➔ NET  
TOTAL 10.54

TIME AND DATE 11:40AM 21ENT96

TONS TOTAL 32.43 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*FW*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0209  
D-0398

FRUMMAN AEROSPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

11

DATE 5-1 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 145  
2300 LINCOLN HWY EASTSIDE OF FORD VALLEY  
SUITE 200 TRUCK TO: LAUGHORNE RD. 49047-1829  
WGHT-IN 36660 LB

➔ GROSS 11:12AM 21ENT96  
➔ TARE GROSS 120540 LB  
W TARE 36660 LB  
NET 83880 LB  
➔ NET  
TOTAL 41.94

TIME AND DATE 11:23AM 21ENT96

TONS TOTAL 33.55 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*FW*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0208  
D-0398

FRUMMAN AEROSPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

14

DATE 5-1 19 96

SOLD TO: FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 148  
200 LINCOLN HWY. EAST JERSEY OXFORD VALLEY  
TRUCK ID: SUITE 200 BROOKLYN RD. 19047-1829

→ GROSS 01:05PM 21ENT96  
→ TARE GROSS 119920 LB  
W TARE 36440 LB  
NET 83480 LB  
→ NET TOTAL 41.74 ~~TON~~  
TIME AND DATE 01:21PM 21ENT96

TONS TOTAL 33.39 CUYA

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:

NAVY CONTRACT NO. NO 2472-94-T No 0214  
D-0398

GRIMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

13

DATE 5-1 19 96

SOLD TO: FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 150  
200 LINCOLN HWY. EAST JERSEY OXFORD VALLEY  
TRUCK ID: SUITE 200 BROOKLYN RD. 19047-1829

→ GROSS 01:15PM 21ENT96  
→ TARE GROSS 122460 LB  
W TARE 39680 LB  
NET 82780 LB  
→ NET TOTAL 41.39 ~~TON~~  
TIME AND DATE 01:29PM 21ENT96

TONS TOTAL 33.11 CUYA

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:

NAVY CONTRACT NO. NO 2472-94-T No 0215  
D-0398

GRIMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

(16)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-2 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 152  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY  
TRUCK TO: SUITE 200 LANGHURNE PA 19047-1823

→ GROSS HIGH-IN 02:57PM 21ENT96 36340 LB  
→ TARE GROSS 121620 LB  
W TARE 36340 LB  
NET 85280 LB  
→ NET TOTAL 42.64

TIME AND DATE 03:21PM 21ENT96

TONS TOTAL 34.11 air

CASH  C.O.D.  CHARGE  PICK UP  DEL

- J.H.*
- FINE SAND
  - CONCRETE SAND
  - GRIT
  - GRAVEL
  - BANKRUN
  -

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94 T No 0219  
D-0398

GRU... 16... 20... 30... 40... 50... 60... 70... 80... 90... 100...

(17)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-2 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 151  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY  
TRUCK TO: SUITE 200 LANGHURNE PA 19047-1823

→ GROSS HIGH-IN 02:53PM 21ENT96 39620 LB  
→ TARE GROSS 122320 LB  
W TARE 39620 LB  
NET 82700 LB  
→ NET TOTAL 41.35

TIME AND DATE 03:11PM 21ENT96

TONS TOTAL 33.08 C.Y.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*Polio*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94 T No 0218  
D-0398

GRU... 16... 20... 30... 40... 50... 60... 70... 80... 90... 100...

No. 00049

DATE 5/2/96

(16)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

Material: Grumman with special Corp  
Baltimore, MD. (Site # 2)

Material Contact # 410-472-94  
D-0398

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford Rd  
Suite 200 Langhorne PA, 19047-1800

22:27	01/02/00	122640.	1b	GROSS
		38480.	1b (K)	TARE
		84160.	1b	NET
		42.080	tn	
		35.07	yds	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFO

SIGNED BY JRBL FW

No. 00040

DATE 5/2/96

(17)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

22:23	01/02/00	121440.	1b	GROSS
		36620.	1b (K)	TARE
		84820.	1b	NET
		42.410	tn	
		35.35	yds	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFO

SIGNED BY JRBL FW

AF

. 00050

DATE 5-2-76

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 LINDALE HWY EAST ONE VALLEY  
200 LANGHORNE PA. 19047-1823

GROSS

02:12 00/00/00 115300. 1b TARE  
36620. 1b (K) NET

78680. 1b  
39.340 tn

33 ycl

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY LM

SIGNED BY [Signature]

0  
EXED

(19)

No. 00051

DATE 5-2-76

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 LINDALE HWY EAST ONE VALLEY  
SUITE 200 LANGHORNE PA. 19047-1823

GROSS

Del to: Grumman Aero Space Corp  
Bethpage, N.Y. (cont # 2)  
Navy Contract # 176 2472-94  
D-0398

02:19 00/00/00 116560. 1b TARE  
38480. 1b (K) NET

78080. 1b  
39.040 tn

32.54 yds

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY LM

SIGNED BY [Signature]



Nº. 00402

DATE 5-2-96 (21)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

SUITE LANGHORNE PA. 19047-1823

GROSS

01:00 01/03/00 117340. 1b

TARE

36620. 1b (K)

NET

80720. 1b  
40.360 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Diana

SIGNED BY [Signature] FW

Nº. 00401

DATE 5/2/96 (22)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler - Environmental Corp

3300 Lincoln Hwy East, One Diced V...  
Suite 200 Langhorne, PA. 19047-1829

GROSS

00:53 01/03/00 121980. 1b

TARE

38480. 1b (K)

NET

83500. 1b  
41.750 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Diana

SIGNED BY [Signature] FW

note: American Env Space Corp  
1322 20th St (1st fl) (2)  
Langhorne PA 19047-1829  
D-0398

Nº. 00053

DATE 5/3/96

(24)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental  
Corp 2300 Lincoln Hwy.  
East, one oxford valley  
Suite 200 Langhorne Pa. 19047-1800

GROSS

Delivered to  
Navy contract No. N62472-94-  
D-0398

06:07 00/00/00 117520. 1b

TARE

37440. 1b (K)

NET

Grumman space corp Bethpage NY (Site # 2)

80080. 1b  
40.040 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY SFO

SIGNED BY [Signature] (FW)

Nº. 00052

DATE 5/3/96

(23)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental  
2300 Lincoln Hwy. East one Oxford  
Suite 200 Langhorne PA. 19047-1800

GROSS

DLV. TO  
Navy contract No. N62472-94-  
- D-0398

06:02 00/00/00 114800. 1b

TARE

34940. 1b (K)

NET

Grumman space corp. Bethpage, N.Y.  
Site # 2

79860. 1b  
39.930 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY [Signature]

SIGNED BY [Signature] (FW)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND  
B/K

5:30 JVS 6:40

DATE 5-3 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 174  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANSINGBURG PA. 19047-1829  
TRUCK ID: WGH-IN 36340 LB

GROSS 03:03PM 22ENT96  
TARE GROSS 120880 LB  
W TARE 36340 LB  
NET 84540 LB  
NET  
TOTAL 42.27

TIME AND DATE 03:19PM 22ENT96

TONS TOTAL 33.81 C.W.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

J.B. F.W.

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0222  
D-0398

GRUMMAN SPACE CORP. BETHPAGE N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-3 1996

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 175  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANSINGBURG PA. 19047-1829  
TRUCK ID: WGH-IN 39240 LB

GROSS 03:06PM 22ENT96  
TARE GROSS 120080 LB  
W TARE 39240 LB  
NET 80840 LB  
NET  
TOTAL 40.42

TIME AND DATE 03:20PM 22ENT96

TONS TOTAL 32.33 C.W.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

J.B. F.W.

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0223  
D-0398

GRUMMAN SPACE CORP. BETHPAGE N.Y. (SITE #2)

Nº. 00403

hold

DATE 5/3/96 (21)

FA 39

BUYER Easter Wheeler Environmental

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

09:41 00/00/00 115020. 1b

TARE

36620. 1b (K)

NET

78400. 1b  
39.200 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Diana

SIGNED BY [Signature]

Nº. 00404

DATE 5/3/96 (28)

BUYER Easter Wheeler Environmental Corp  
2300 Lincoln Hwy East, One Oxford Valley  
Suite 200 Langhorne PA. 19047-1829

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

09:51 00/00/00 118240. 1b

TARE

36620. 1b (K)

NET

81620. 1b  
40.810 tn

34 yds.

Del to: Navy Contract # N6247294  
D-0398

Brunman Space Corp  
Barbours, N.Y. (site #2)

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Diana

SIGNED BY [Signature]

Nº. 00054

DATE 5/3/96

(29)

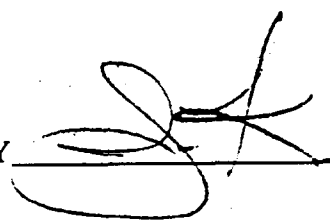
**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
2300 Lincoln Hwy. East, One Oxford V.  
Suite 200 LangHorse PA. 19047-1829

DLV. TO	10:01 00/00/00	116260.	1b	GROSS
Navy contract NO. N62472-94-D-0398		34940.	1b (K)	TARE
Grumman Space Corp. Beth Page, N.Y. (site # 2)		81320.	1b	NET
		40.660	tn	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFS      SIGNED BY 

Nº. 00055

DATE 5/3/96

(30)

**American Materials Inc.**


168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
one Oxford vally Suite 200  
Lang Horn Pa. 19047-1829  
GROSS

Delivered to

Navy Contract No. N62472-94-09:56 00/00/00	116940.	1b	TARE
D-0398	37440.	1b (K)	NET
Grumman Space Corp. Beth page (site # 2)	79500.	1b	
	39.750	tn	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFO      SIGNED BY 

Nº. 00060

DATE

5/3/96 <sup>(31)</sup>

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
2300 Lincoln Hwy. East, One Oxford Valley  
Suite 200 Langhorne PA. 19047-1829

DLV. 70

NAVY Contract NO. N62472-94-D0138 12:24 00/00/00 115200. 1b

Griffin Spill Corp. Bethpage, N.Y.  
Site # 2

34940. 1b (K)

80260. 1b  
40.130 tn

GROSS

TARE

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY DIANE

SIGNED BY RBF/FFV

Nº. 00058

DATE

5-3-96 <sup>(32)</sup>

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental <sup>TK# 39</sup>

100260

36600  
83640

41.82

GROSS

TARE

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Scam

SIGNED BY [Signature]

354d

Nº. 00059

DATE 5/3/96 <sup>(33)</sup>

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Highway East One Oxford Valley  
Suite 200 Langhorne PA 19047-1829

125340. GROSS  
38480.  
87660. TARE  
43.53 NET

Del to: Navy Contract # N62472-94  
D-0398

Grumman Space Corp  
Bethpage, NY (site #2)

3665  
405

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY Sigala

SIGNED BY [Signature]

Nº. 00056

DATE

(34)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER 5/3/96  
Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford Valley  
Suite 200 Langhorne Pa 19047-1829  
GROSS

Delivered to  
Navy contract NO. N62472-94-  
D-0398

12:19 00/00/00 122480. 1b  
37440. 1b (K) TARE  
85040. 1b NET  
42.520 tn

Grumman Space Corp. Bethpage (site #2)

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY Sigala

SIGNED BY [Signature] F.W.

37440  
No. 00064

35

DATE 5/3/96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
One Oxford Valley Suite 200  
Langhorne Pa 19047-1829  
GROSS

Delivered to

14:51 00/00/00 118620. 1b

TARE

Navy contract No. N62472-94-D0398

37440. 1b (K)

NET

Grumman Space Corp - Beth Page (site #2)

81180. 1b  
40.590 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Am

SIGNED BY KBR (FW)

37440  
No. 00063

36

DATE 5-3-96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford Valley  
Suite 200 Langhorne PA, 19047-1829  
GROSS

DLV. 70

Navy Contract # N62472-94-D-0398 14:42 00/00/00 116180. 1b

TARE

34940. 1b (K)

NET

GRUMMAN Space Corp, Beth Page N.Y.  
Site # 2

81240. 1b  
40.620 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Am

SIGNED BY KBR (FW)



3/1/20  
2/1/20

should be  
37 CF

Nº. 00061

LOW

DATE 5-3-96

PK#39

BUYER Foster Wheeler

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

14:39 00/00/00 112360. 1b

TARE

36620. 1b (K)

NET

75740. 1b  
37.870 tn

30.30 Cu. Yd

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY

KIM

SIGNED BY

[Signature]

1/2/20  
2/1/20

should be  
38 CF

Nº. 00062

DATE 5-3-96

BUYER Foster Wheeler - Environmental Corp  
2300 Lincoln Hwy East, one Oxford Hall  
Suite 200 Langhorne, PA 19047-182

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

Del to: Navy Contract # N62472-94  
D-5398

14:44 00/00/00 117980. 1b

TARE

38480. 1b (K)

NET

79500. 1b  
39.750 tn

31.80 Cu. Yd.

Human spare sand  
Bathhouse n.4 (n.4 #2)

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

nobody there dumped load  
at 3:30. [Signature]

WEIGHED BY

KIM

SIGNED BY

[Signature] [Signature]

Nº. 00068

DATE 5-6-96 (39)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental  
2300 LINCOLN HWY, EST. 1 OXFORD VULLY,  
SUITE 200 LUNYHORN PK. 11017-1829

GROSS

17:48 00/00/00 117800. 1b

35380. 1b (K)

TARE

82420. 1b  
41.210 tn

NET

DEL TO  
NAVY CONTRACT # N621172-511-D  
-0375  
GRUMMAN SPACE CORP BETHPAGE NY  
SITE #2

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SD SIGNED BY JR FW

Nº. 00067

DATE 5/6/96 (40)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental  
corp 2300 Lincoln Hwy East One  
Oxford Vully Suite 200 Luny Horn PK.  
19047-1829

GROSS

17:43 00/00/00 119580. 1b

37440. 1b (K)

TARE

82140. 1b  
41.070 tn

NET

Delivered To  
Navy contract No. N62472-94-  
00398  
Grumman Space Corp - Bethpage (site #2)

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY \_\_\_\_\_ SIGNED BY KR FW

No. 00066

DATE 5/6/96

(41)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
200 Lincoln Hwy. East, One Oxford Valley  
Suite 200 Longmont PA. 19047-1829

7Lvs. TO

Navy contract NO. N62472-94-D-0398

GROSS

TARE

Grumman space corp., Bellport N.Y.  
(Site #2)

17:40 00/00/00 116180. 1b

NET

34940. 1b (K)

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

81240. 1b  
40.620 tn

WEIGHED BY \_\_\_\_\_

SIGNED BY RBR (F.W.)

(42)

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-6-96

SOLD TO Foster Wheeler Environmental Corp.  
TICKET NO. 181  
200 Lincoln Hwy. East, One Oxford Valley

Suite 200 Longmont PA. 19047-1829

↑ GROSS	12:16PM 24ENT96	123320 LB
↑ TARE		36760 LB
↑ NET		86560 LB
		TOTAL 13.28 <del>TON</del>

TIME AND DATE 12:39PM 24ENT96

TONS CD ~~XXXX~~ 54.62 Cur to

CASH  C.O.D.  CHARGE  PICKUP  DEL

FINE SAND  
 CONCRETE SAND  
 GRIT  
 GRAVEL  
 BANK RUN

RBR (F.W.)

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T NO 0237  
D-0398

43

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-6 19 96  
SOLD TO: FOSTER WHEEL ENVIRONMENTAL CORP.  
TICKET NO.: 182  
2200 Lincold Mt. Express Excess Material  
State of New York LA 19047-1899  
WCH-IN 39700 LB

↑ GROSS 12:14PM 24ENT96  
↑ TARE 116920 LB  
↑ NET 39700 LB  
NET 77220 LB  
TOTAL 38.61 TONS

TIME AND DATE 12:57PM 24ENT96

TONS TOTAL 38.88 C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANK RUN



DELIVERED TO:  
NANT CONTRACT # A162472-94 - I No 0238  
0-0398

LOU K#39

No. 00039

DATE 5-6-96

44

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheelre

			GROSS
21:00	00/00/00	115600.	1b
			TARE
		36620.	1b (K)
			NET
		78980.	1b
		39.490	tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFA

SIGNED BY RBL FW

217 yds.

43

Nº 00070

DATE 5/6/96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER ~~Foster Wheeler Environmental~~  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANGHORNE, PA 19047-1829

Del to: Navy contract # N62473-94  
D-0398

Grumman Aero Space Corp  
Bethpage N.Y. (site #2)

21:03	00/00/00	121440.	1b	GROSS
		38480.	1b (K)	TARE
		82960.	1b	NET
		41 40	tn	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SA SIGNED BY FR FW

46

Nº 00071

DATE 3/6/96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER ~~Foster Wheeler Environmental Corp.~~  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANGHORNE PA. 19047-1829

PLV. to  
Navy contract # N62472-94-D-0398  
Grumman Space Corp. Beth Page, N.Y.  
Site #2)

21:09	00/00/00	118200.	1b	GROSS
		34940.	1b (K)	TARE
		83260.	1b	NET
		41.630	tn	

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SA SIGNED BY FR FW

Nº. 00072

DATE 5-6-96

47

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANGHORN PA 19047-1829

Delivered to  
NAVY CONTRACT NO. (2472-94-D)  
-0375  
GRUMMAN SPACE CORP BETHPAGE NY  
SITE #2

			GROSS
21:15	00/00/00	119960.	1b
		35380.	1b (K) TARE
		84580.	1b NET
		42 290	tn

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SEO SIGNED BY J.R.B. F.W.

Nº. 00073

DATE 5-6-96

48

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
2300 LINCOLN HWY EAST ONE OXFORD VALLEY  
SUITE 200 LANGHORN PA 19047-1829

Delivered to  
NAVY CONTRACT NO. N62472-94-D0398  
GRUMMAN SPACE CORP - BETHPAGE (SITE #2)

			GROSS
21:17	00/00/00	123640.	1b
		37440.	1b (K) TARE
		86200.	1b NET
		43.100	tn

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SEO SIGNED BY J.R.B. F.W.

Nº. 00077

DATE 5/6/94 <sup>(49)</sup>

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER 5-6-94

FOSTER WHEELER ENVIRONMENTAL CORP.  
2300 LINCOLN HWY. EST 1 OXFORD VILL  
SUITE 200 LONG HORN PA. 19047-1829

Del. To  
NAVY CONTRACT # N62472-94-D  
345

23:49 00/00/00 118960. 1b

GROSS

35380. 1b (K)

TARE

83580. 1b  
41.790 tn

NET

GRUMMAN SPACE CORP BOTH PAGES LNU  
Site 2

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY L. Ianna

SIGNED BY R. K. FW

Nº. 00078

DATE 5/6/94 <sup>(50)</sup>

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp.  
2300 LINCOLN HWY. EST 1 OXFORD VILL  
SUITE 200 LONG HORN PA. 19047-1829

Del. To  
NAVY CONTRACT # N62422-94-D-0398  
GRUMMAN SPACE CORP BOTH PAGES N.Y.  
Site 2

23:45 00/00/00 121100. 1b

GROSS

34940. 1b (K)

TARE

86160. 1b  
43.80 tn

NET

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY L. Ianna

SIGNED BY R. K. FW

Nº. 00075

DATE 5/6/96 (81)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One  
Oxford Valley Suite 200 Langhorne Pa  
19047-1829

Delivered to  
Navy contract No. N62472-94-D0398  
Grumman space corp - Beth page (site #2)

23:47 00/00/00 119020. 1b GROSS  
37440. 1b (K) TARE  
81580. 1b NET  
40.790 tn

- DELIVERED  PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY W. Miller

SIGNED BY J.R. (FW)

Nº. 00078

DATE 5/6/96 (82)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford  
Suite 200 Langhorne PA 19047-1829

Del to: Navy contract - N62472-94  
D-0398  
Grumman space corp  
Beth page (site #2)

23:50 00/00/00 121720. 1b GROSS  
38480. 1b (K) TARE  
83240. 1b NET  
41.620 tn

- DELIVERED  PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY W. Miller

SIGNED BY J.R. (FW)



LOW #39

53

No. 00076

DATE 5/6/96

BUYER Foster Wheeler

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

23:32 00/00/00 122680. 1b

TARE

36620. 1b (K)

NET

86060. 1b  
43.030 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY Sigalla

SIGNED BY [Signature] (FW)

FD 25940

No. 00081

54

DATE 5-6-96

BUYER Foster Wheeler Environmental Corp.  
2500 Lincoln Hwy East, 10th Floor Valley  
Suite 200 Longhorne PA. 19047-1829

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

GROSS

DLW. 10 Navy Contract # N62472-94-D-0318 02:17 00/01/00 118900. 1b

TARE

Grimm's spec cont. Beth Page N.Y.  
(Site #2)

35940. 1b (K)

NET

82960. 1b  
41.480 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY [Signature]

SIGNED BY [Signature]

35380  
35380

(53)

Nº. 00079

DATE 5-6-96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

FORT WHEELER ENVIRONMENTAL CORP  
2300 LINCOLN HWY, EST. 10 OFFICE SUITE 200  
LANGHORN PA 19047-1829

NAVY CONTRACT NO - N62472-94-00398

	02:08	00/01/00	113880.	1b	GROSS
			35380.	1b (K)	TARE
			78500.	1b	NET
			39.250	tn	

GRUMMAN SPACE CORP BETHPAGE NY

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY LAM

SIGNED BY [Signature]

60  
37440

(56)

Nº. 00081

DATE 5-6-96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Ester Wheeler Environmental

2300 LINCOLN HWY EAST  
ONE OFFICE SUITE 200  
LANGHORN PA 19047-1829

Delivered to  
NAVY CONTRACT NO - N62472-94-00398

	02:12	00/01/00	118300.	1b	GROSS
			37440.	1b (K)	TARE
			80860.	1b	NET
			40.430	tn	

GRUMMAN SPACE CORP - BETHPAGE (SITE #2)

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY LAM

SIGNED BY [Signature] (FW)

4  
34102

No. 00083

DATE 5-6-96 (58)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Instrumental Corp  
2300 Lincoln Hwy East One Oxford Jct  
Suite 200 Langhorne PA 19057-182

See also 1000 contract = 127472-94  
0-0398  
Human Care Space Cap  
Berkshire, NY. (note 2)

			GROSS
02:20	00/01/00	120900.	1b
		38480.	1b (K) TARE
		82420.	1b NET
		41.210	tn

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY KIM SIGNED BY JRL F.W.

35 120  
34620

441 TR #39

No. 00082

DATE 5-6-96 (57)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

			GROSS
02:16	00/01/00	118040.	1b
		36620.	1b (K) TARE
		81420.	1b NET
		40.710	tn

- DELIVERED       PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY KIM SIGNED BY JRL F.W.

604 11239

59

Nº. 00005

DATE 5/7/96

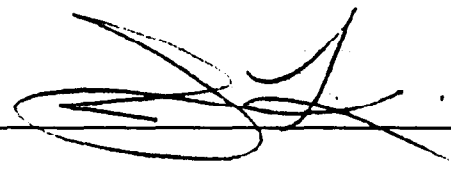
**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

			GROSS
05:14	00/01/00	117280.	1b
		36620.	1b (K) TARE
		80660.	1b NET
		40.330	tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFO SIGNED BY 

60

Nº. 00090

DATE 5/7/96

**American Materials Inc.**

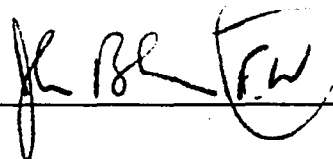
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler  
2300 Rivercenter Way, East One Oxford  
Suite 200 Langhorne PA 19047-187

Del to: my contact  
762473-94  
D-0398  
Sumner (no name)  
Pittsburgh (11202)

			GROSS
05:18	00/01/00	118300.	1b
		38480.	1b (K) TARE
		79820.	1b NET
		39.910	tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFO SIGNED BY 

61

No. 00081

DATE 5/7/96

BUYER

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East of Oxford Valley  
Suite 200 Langhorn Pa 19047-1829

GROSS

04:58 00/01/00 115820. 1b

35380. 1b (K)

TARE

80440. 1b

NET

40.220 tn

Delivered to  
Vauy contract # N62472-94-  
D-038

Trumanan space corp Bethpage  
NY site #2

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SKD

SIGNED BY [Signature]

62

No. 00085

DATE 5/7/96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental  
Corp 2300 Lincoln Hwy. East  
one Oxford Valley Suite 200  
Langhorn Pa 19047-1829

GROSS

Delivered to

Vauy contract No# N62472-94-D-0398 04:55 00/01/00 115280. 1b

37440. 1b (K)

TARE

77840. 1b

NET

Trumanan space corp - Bethpage (site #2)

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

38.920 tn

WEIGHED BY SKD

SIGNED BY [Signature]

(63)

Nº. 00000

DATE 5/7/96

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East, 1 Oxfild Valley,  
Suite 200 Long Horse PA. 19047-1829

DLW. P  
Navy contract # N62472-94-D-0338  
Grimmman Spate Corp. Beth Pax N.Y.  
Site #2

GROSS  
05:03 00/01/00 115460. 1b  
34940. 1b (K) TARE  
80520. 1b NET  
40.260 tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFA SIGNED BY [Signature]

(64)

601 Act 39  
Nº. 00091

DATE 5/7/96

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

GROSS  
07:54 00/01/00 114600. 1b  
36620 TARE  
77980  
38.99+tw> NET

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFA SIGNED BY [Signature]

65

No. 00093

DATE 5/7/90

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
Lang Horn Pa 19047-1829

Delivered to  
Navy Contract No#  
N62472-94-00398  
Grumman Space Corp Bethpage  
NY 11764

116440 GROSS  
35380 TARE  
81060 NET  
40.53

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFA SIGNED BY KBL FW

66

No. 00094

DATE 5/7/90

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
one oxford vally suite 200  
Lang Horn Pa 19047-1829

Delivered to  
Navy Contract No#  
N62472-94-00398  
Grumman Space Corp - Bethpage (site #2)

08:07 00/01/00 118880. 1b GROSS  
37440. 1b (K) TARE  
81440. 1b NET  
40.720 tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SFA SIGNED BY KBL FW

67

Nº. 00099

DATE 5/7/96

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
Suite 200 Langhorne Pa 19047-1829

Delivered to  
Navy contract No #  
N-62472-94-D0398  
Bethpage NY (site #2)

114720 GROSS  
38480 TARE  
76240 NET  
38.12

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY SJD SIGNED BY [Signature]

68

Nº. 00099

DATE 5/7/96

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler Environmental Corp

2300 Lincoln Hwy East  
one oxford valley suite 200  
Langhorne Pa 19047-1829

Delivered to  
Navy contract No #  
N-62472-94-D0398

10:44 00/01/00 115900. 1b GROSS  
37440. 1b (K) TARE  
78460. 1b NET  
39.230 tn

Grumman space corp - Bethpage (site #2)

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY [Signature] SIGNED BY [Signature]



Nº. 00096

DATE 5/7/96

(69)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

FOOTING MATERIAL ENVIRONMENTAL  
200 LINDEN ROAD, ST. JAMES, NY  
PH. 516-777-1621

D11 10

ORDER # NC 1472 - 111-D 0315  
CONCRETE SPREAD  
BATCH # 111-D 0315

10:42 00/01/00 116140. 1b

35380. 1b (K)

80760. 1b  
40.380 tn

GROSS

TARE

NET

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY W. King

SIGNED BY [Signature] (FW)

Nº. 00096

DATE 5/7/96

(70)

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Frank Wheeler Environmental Corp

2300 Linden Road, Ste. One Oxford, NY  
Suite 200 Langhorne, PA 19047-1234

Order # NC 1472 - 111-D 0315  
CONCRETE SPREAD  
BATCH # 111-D 0315

10:51 00/01/00 119900. 1b

38480. 1b (K)

81420. 1b  
40.710 tn

GROSS

TARE

NET

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY W. King

SIGNED BY [Signature]

600 TRF 39

Nº. 0000

71

DATE 5/1/96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS-PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER Foster Wheeler

GROSS

10:47 00/01/00 116340. 1b

TARE

36620. 1b (K)

NET

79720. 1b  
39.860 tn

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY C-101191

SIGNED BY FW

37440

Nº. 00101

72

DATE 5-7-96

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East  
one oxford vally suite 200  
Lang Horn Pa 19047-1829

GROSS

13:19 00/01/00 121880. 1b

TARE

37440. 1b (K)

NET

37440  
42.22

Delivered to

Vavy contract No#

N-62472-94-00398

Grumman space corp Beth Page (site #2)

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY KIM

SIGNED BY FW

35300

73

Nº. 00100

DATE 5 7 76

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

FOSTER WHEELER ENVIRONMENTAL CORP  
100 LINDEN HILL RD  
SOUTH OAK CAMPUS  
PA. 19047-8241

Del to

Call to A W (2472-44-038)  
Bull page 5122

13:14 00/01/00 120360. 1b

35380. 1b (K)

84980. 1b  
42.490 tn

GROSS

TARE

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY

KIN

SIGNED BY

RBL FW

Nº. 00102

DATE 5 7 76

74

**American Materials Inc.**

168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

2300 Lincoln Hwy East one side  
date 200 Townline PA 19047-8241

Call to A W (2472-44-038)  
Bull page 5122

13:41 00/01/00 112340. 1b

38480. 1b (K)

73860. 1b  
36.930 tn

GROSS

TARE

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY

KIN

SIGNED BY

RBL FW

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO Foster-Wheeler Environmental Corp.  
TICKET NO. 193  
2300 LINCOLN HWY. EAST, OXFORD VALLEY  
Suite 200, Lonsdale, Pa. 17047-1829

→ GROSS	03:31PM	27ENT96
→ TARE	GROSS	124320 LB
	W TARE	40160 LB
→ NET	NET	84160 LB
	TOTAL	42.08

TIME AND DATE 05:52PM 27ENT96

TONS TOTAL 33.66 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

*Handwritten initials: RLB, F.V.*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0246  
D-0398

*Handwritten note: ED JACON... B... (10/2/96)*

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO Foster-Wheeler Environmental Corp.  
TICKET NO. 194  
2300 LINCOLN HWY. EAST, OXFORD VALLEY  
Suite 200, Lonsdale, Pa. 17047-1829

→ GROSS	03:32PM	27ENT96
→ TARE	GROSS	120080 LB
	W TARE	36820 LB
→ NET	NET	83260 LB
	TOTAL	41.63

TIME AND DATE 05:31PM 27ENT96

TONS TOTAL 33.30 Cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

*Handwritten signature*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 0247  
D-0398

*Handwritten note: COMMERCIAL AERIAL SPACE CORP... (10/2/96)*

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 196  
2300 LINCOLN HUNT EAST 195TH OXFORD VALLEY  
TRUCK ID: PA 19047-1829  
SUITE 200

→ GROSS	04:52AM	28ENT96	
→ TARE	GROSS	118080 LB	
	W TARE	37520 LB	
→ NET	NET	80560 LB	
	TOTAL	40.28	<del>40.28</del>

TIME AND DATE 05:22AM 28ENT96

TONS TOTAL 32.27 C.W.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED ALL

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 1008  
D-0398

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 195  
2300 LINCOLN HUNT EAST 195TH OXFORD VALLEY  
TRUCK ID: PA 19047-1829  
SUITE 200

→ GROSS	04:49AM	28ENT96	
→ TARE	GROSS	117020 LB	
	W TARE	35380 LB	
→ NET	NET	81640 LB	
	TOTAL	40.82	<del>40.82</del>

TIME AND DATE 05:09AM 28ENT96

TONS TOTAL 32.65 C.W.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED ALL

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 1007  
D-0398

17

LOW

AK#347

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 1996

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 198  
230 Lincoln Hill East, Ox-Ford Valley  
TRUCK TO: STATE 200  
WGH-IN 36400 LB  
19847-1829

➔ GROSS	06:57AM	28ENT96
➔ TARE	GROSS	122420 LB
	W TARE	36400 LB
➔ NET	NET	86020 LB
	TOTAL	43.01

TIME AND DATE 07:14AM 28ENT96

TONS TOTAL 34.40 Cu.Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 1010  
D-0398

*R.P.H.*  
*(FW)*

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 1996

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 197  
230 Lincoln Hill East, Ox-Ford Valley  
TRUCK TO: STATE 200  
WGH-IN 37720 LB  
19847-1829

➔ GROSS	04:59AM	28ENT96
➔ TARE	GROSS	122000 LB
	W TARE	37720 LB
➔ NET	NET	84280 LB
	TOTAL	42.14

TIME AND DATE 05:33AM 28ENT96

TONS TOTAL 33.71 Cu.Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT NO. N62472-94-T No 1009  
D-0398

*R.P.H.*  
*(FW)*

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSGER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 201  
2300 LINCOLN HWY. EAST OXFORD VALLEY  
TRUCK TO: Suite 200 Parkhurst Rd. 19047-1829  
WGT-IN 35280 LB

→ GROSS 07:31AM 28ENT96  
→ TARE GROSS 122280 LB  
W TARE 35280 LB  
NET 87000 LB  
→ NET TOTAL 43.50

TIME AND DATE 07:49AM 28ENT96

TONS TOTAL 34.80 C.W.D.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:  
NAVY CONTRACT No. N62472-94-T No 1012  
D-0398

*Handwritten initials/signature*

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSGER WHEELER ENVIRONMENTAL CORP.  
TICKET NO. 199  
2300 LINCOLN HWY. EAST OXFORD VALLEY  
TRUCK TO: Suite 200 Parkhurst Rd. 19047-1829  
WGT-IN 39900 LB

→ GROSS 06:58AM 28ENT96  
→ TARE GROSS 118600 LB  
W TARE 39900 LB  
NET 78700 LB  
→ NET TOTAL 39.35

TIME AND DATE 07:22AM 28ENT96

TONS TOTAL 31.48 C.W.D.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

*Handwritten initials/signature*

DELIVERED TO:  
NAVY CONTRACT No. N62472-94-T No 1011  
D-0398

*Handwritten note at bottom of page*

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER-WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 203  
2300 LINCOLN HWY. EAST, OXFORD VALLEY  
TRUCK TO: SITE 300, CONROCK, PA. 19047-1829  
WGT IN 37620 LB

→ GROSS 07:38AM 28ENT96

→ TARE	GROSS	118160 LB
	W TARE	37620 LB
	NET	80540 LB
→ NET	TOTAL	40.27 <del>TONS</del>

TIME AND DATE 08:18AM 28ENT96

TONS TOTAL 32.21 Cu Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN

PROCESSED FILL *Des Unb...*

DELIVERED TO:  
NAVY CONTRACT NO. N6247-94- T No 1014  
D-0398

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER-WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 202  
2300 LINCOLN HWY. EAST, OXFORD VALLEY  
TRUCK TO: SITE 300, CONROCK, PA. 19047-1829  
WGT IN 37300 LB

→ GROSS 07:32AM 28ENT96

→ TARE	GROSS	119580 LB
	W TARE	37300 LB
	NET	82280 LB
→ NET	TOTAL	41.14 <del>TONS</del>

TIME AND DATE 08:00AM 28ENT96

TONS TOTAL 32.91 Cu Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN

PROCESSED FILL *Des Unb...*

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94- T No 1013  
D-0398

GRUMMAN AERO SPACE CORP. BETHPAGE N.Y. (SITE #2)



85

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 204  
2300 LINCOLN HWY. EAST SIDE OXFORD VALLEY  
TRUCK ID: SUITE 200 LANCASTER PA 17047-1829  
WGT-IN 36400 LB

➔ GROSS	10:00AM	28ENT96
➔ TARE	GROSS	120160 LB
	W TARE	36400 LB
	NET	83760 LB
➔ NET	TOTAL	41.88 <del>41.88</del>

TIME AND DATE 10:30AM 28ENT96

TONS TOTAL 33.50 C.W.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 1015  
D-0398

84

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 205  
2300 LINCOLN HWY. EAST SIDE OXFORD VALLEY  
TRUCK ID: SUITE 200 LANCASTER PA 17047-1829  
WGT-IN 35120 LB

➔ GROSS	10:04AM	28ENT96
➔ TARE	GROSS	119240 LB
	W TARE	35120 LB
	NET	84120 LB
➔ NET	TOTAL	42.06 <del>42.06</del>

TIME AND DATE 10:30AM 28ENT96

TONS TOTAL 33.64 C.W.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 1016  
D-0398

SKIPPING OVER FACE REP. - [unclear] 11/15/96

[unclear] [unclear] [unclear] [unclear] [unclear]

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 207  
2300 LINCOLN HWY. EASTDAVE OXFORD VALLEY  
TRUCK ID: 17047-1829  
Suite 200

→ GROSS

WEIGHT IN 37360 LB  
10:05AM 28ENT96

GROSS 37360 LB  
W TARI 37360 LB  
NET 87440 LE  
TOTAL 43.72

TIME AND DATE 11:07AM 28ENT96

TONS TOTAL 34.97 cu. Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- SANDGRUN

*Handwritten initials/signature*

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 206  
2300 LINCOLN HWY. EASTDAVE OXFORD VALLEY  
TRUCK ID: 17047-1829  
Suite 200

→ GROSS

WEIGHT IN 37180 LB  
10:05AM 28ENT96

GROSS 37180 LB  
W TARI 37180 LB  
NET 87260 LE  
TOTAL 43.08

TIME AND DATE 10:50AM 28ENT96

TONS TOTAL 33.66

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- SANDGRUN

89

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 211  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY  
TRUCK ID: SUITE 200 LANDMARK DR. 19047-1829

→ GROSS	12:36PM	28ENT96
→ TARE	GROSS	117320 LB
	W TARE	34960 LB
→ NET	NET	82360 LB
	TOTAL	41.18

TIME AND DATE 12:51PM 28ENT96

TONS TOTAL 32.94 Cu. Yd

CASH  C.O.D.  CHARGE  PICKUP  DEL

*FW*

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 1020  
0-0398

88

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 10 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 210  
2300 LINCOLN HWY. EAST ONE OXFORD VALLEY  
TRUCK ID: SUITE 200 LANDMARK DR. 19047-1829

→ GROSS	12:25PM	28ENT96
→ TARE	GROSS	118300 LB
	W TARE	36300 LB
→ NET	NET	82000 LB
	TOTAL	41.00

TIME AND DATE 12:40PM 28ENT96

TONS TOTAL 32.80 Cu. Yd

CASH  C.O.D.  CHARGE  PICKUP  DEL

*FW*

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:  
NAVY CONTRACT NO. N62472-94-T No 1019  
0-0398

STANDARD AFRU ...

STANDARD AFRU ...

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER LABELER ENVIRONMENTAL CORP.  
TICKET NO.: 213  
2300 LINCOLN HWY. EAST, ONE OXFORD VALLEY  
SUITE 200, LANSHIRE, PA. 17047-1829

→ GROSS	12:43PM	28ENT96
→ TARE	GROSS	123280 LB
	W TARE	37400 LB
	NET	85880 LB
→ NET	TOTAL	42.94 <del>TONS</del>

TIME AND DATE 01:11PM 28ENT96

TONS TOTAL 34.35 Cu.Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT NO. N62477-94-T No 1022  
0-0398 (0-0398)

GRUMMAN AEROSPACE CORP. BETHANY, N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER-LABELER ENVIRONMENTAL CORP.  
TICKET NO.: 212  
2300 LINCOLN HWY. EAST, ONE OXFORD VALLEY  
SUITE 200, LANSHIRE, PA. 17047-1829

→ GROSS	12:36PM	28ENT96
→ TARE	GROSS	126140 LB
	W TARE	37060 LB
	NET	89080 LB
→ NET	TOTAL	44.54 <del>TONS</del>

TIME AND DATE 01:01PM 28ENT96

TONS TOTAL 35.63 Cu.Yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT NO. N62477-94-T No 1021  
0-0398

GRUMMAN AEROSPACE CORP. BETHANY, N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO Foster-Walker Environmental Corp.  
TICKET NO. 215  
2300 Lucard Hill, Eastford, Oxford Valley  
TRUCK ID: Suite 200, Eastford, PA 19049-1829

→ GROSS	02:12PM	28ENT96
	GROSS	121120 LB
	W TARE	34880 LB
	NET	86240 LB
	TOTAL	43.12

TIME AND DATE 02:40PM 28ENT96

TONS TOTAL 34.49

CASH  C.O.D.  CHARGE  PICKUP  DEL.

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BARRIKAD

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO Foster-Walker Environmental Corp.  
TICKET NO. 214  
2300 Lucard Hill, Eastford, Oxford Valley  
TRUCK ID: Suite 200, Eastford, PA 19049-1829

→ GROSS	02:09PM	28ENT96
	GROSS	120200 LB
→ TARE	W TARE	30000 LB
	NET	90200 LB
→ NET	TOTAL	42.16

TIME AND DATE 02:29PM 28ENT96

TONS TOTAL 33.72

CASH  C.O.D.  CHARGE  PICKUP  DEL.

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BARRIKAD

Described as:

*John*

110

(94)  
**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 216  
2300 LINCOLN HWY EAST, ONE OXFORD VALLEY  
SUITE 200, LYNDENBURG, PA. 19047-1829  
TRUCK TO:  
WGT IN: 37100 LB

→ GROSS

02:22PM 28ENT96

→ TARE

GROSS 122600 LB  
W TARE 37100 LB  
NET 85500 LB

→ NET

TOTAL 42.75

TIME AND DATE 02:51PM 28ENT96

TONS TOTAL 34.05 Cu.Yd

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN

PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT No. N62472-94-0398 T No 1025

AMERICAN SAND CORP. RETURNED N.Y. (SITE 07)

(95)  
**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-8 19 96

SOLD TO FOSTER WHEELER ENVIRONMENTAL CORP.  
TICKET NO.: 217  
2300 LINCOLN HWY EAST, ONE OXFORD VALLEY  
SUITE 200, LYNDENBURG, PA. 19047-1829  
TRUCK TO:  
WGT IN: 37250 LB

→ GROSS

02:35PM 28ENT96

→ TARE

GROSS 122350 LB  
W TARE 37250 LB  
NET 85100 LB

→ NET

TOTAL 42.55

TIME AND DATE 03:01PM 28ENT96

TONS TOTAL 34.04 Cu.Yd

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN

PROCESSED FILL

DELIVERED TO:

NAVY CONTRACT No. N62472-94-00398 T No 1027

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 1996

SOLD TO Foster Wheeler Environmental Corp.  
2300 LINCOLN HWY BIX 224 OFFICE VALLEY  
Suite E 200 Carthage Rd. 19017-1829

TRUCK ID: NEW-11 37120 LE  
GROSS 04:35PM 28ENT96  
TARE GROSS 123750 LB  
W TARE 37120 LB  
NET 86640 LB  
NET TOTAL 43.32

TIME AND DATE 05:30PM 28ENT96 (CD)

TONS TOTAL 34.65 c. yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:

NY CONTRACT No. N62472-94-T No 1032  
D-0398

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 1996

SOLD TO Foster Wheeler Environmental Corp.  
2300 LINCOLN HWY BIX 222 OFFICE VALLEY  
Suite E 200 Carthage Rd. 19017-1829

TRUCK ID: NEW-11 39640 LE  
GROSS 04:33PM 28ENT96  
TARE GROSS 124340 LB  
W TARE 34640 LB  
NET 89700 LB  
NET TOTAL 44.85

TIME AND DATE 04:59PM 28ENT96

TONS TOTAL 35.88 c. yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

DELIVERED TO:

NY CONTRACT No. N62472-94-T No 1030  
D-0398

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp.  
2300 Lincoln Hwy East of the Oxford Valley  
Suite 200 Fairbairn Rd. Pt. 19047-1829

TICKET NO.: 221  
TRUCK ID: 35940 LB  
WEIGHT-IN

→ GROSS 04:31PM 28ENT96

→ TARE GROSS 124520 LB  
W TARE 35940 LB  
NET 88580 LB

→ NET TOTAL 44.29

TIME AND DATE 04:49PM 28ENT96

TONS TOTAL 35.43 cu. yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*KBL*  
*F.W.*

DELIVERED TO:

NY CONTRACT NO. N62472-94-T No 1033  
D-0398

DELIVERED TO: NEW STATE HIGHWAY N.Y. (SITE #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp.  
2300 Lincoln Hwy East of the Oxford Valley  
Suite 200 Fairbairn Rd. Pt. 19047-1829

TICKET NO.: 220  
TRUCK ID: 35940 LB  
WEIGHT-IN

→ GROSS 04:01PM 28ENT96

→ TARE GROSS 119820 LB  
W TARE 37040 LB  
NET 82780 LB

→ NET TOTAL 41.89 YARDS

TIME AND DATE 04:20PM 28ENT96

TONS TOTAL cu yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*KBL*  
*F.W.*

Delivered to:  
NY Contract No N624-72-94-T No 1036  
D-0398

Delivered to: NEW STATE HIGHWAY N.Y. (SITE #2)



101

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9-1996

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 222  
2300 Lincoln Hwy East, Oxford Valley  
TRUCK TO: Suite 200, Langhorne, PA 19047-1829

→ GROSS

WCH-IN 34600 LB  
05:44AM 29ENT96

→ TARE

GROSS 118860 LB  
W TARE 34600 LB  
NET 84260 LB

→ NET

TOTAL 42.13

TIME AND DATE 05:09AM 29ENT96

TONS TOTAL 33.70 cu yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

*Des Urbano*

Delivered to: Navy Cont. # No N62472-94-1398  
T No 1037

100

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9-1996

SOLD TO Foster Wheeler Environmental Corp.  
TICKET NO.: 223  
2300 Lincoln Hwy. East, Oxford Valley  
TRUCK TO: Suite 200, Langhorne, PA 19047-1829

→ GROSS

WCH-IN 34600 LB  
04:34PM 28ENT96

→ TARE

GROSS 121940 LB  
W TARE 37000 LB  
NET 84940 LB

→ NET

TOTAL 42.47 YARDS

TIME AND DATE 05:09PM 28ENT96

TONS TOTAL                      a. b.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

*Handwritten initials*

DELIVERED TO: NAVY CONTRACT NO. N62472-94-1398  
T No 1031

123

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO. = 225  
2300 Lincoln Hwy East of the Oxford Valley  
State 201 TRUCK ID: 19847-1829  
WGH-ITX 36120 LB

→ GROSS	06:42AM	29ENT96	
→ TARE	GROSS	121140 LB	
	W TARE	36180 LB	
→ NET	NET	84960 LB	
	TOTAL	42.48	<del>██████</del>

TIME AND DATE 07:06AM 29ENT96

TONS TOTAL 33.98 cu yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

*[Signature]*  
F.W.

Delivered to:  
Navy Contract No N62472-94  
T 1039

T No 1039

122

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO. = 227  
2300 Lincoln Hwy East of the Oxford Valley  
State 201 TRUCK ID: 19847-1829  
WGH-ITX 36780 LB

→ GROSS	06:42AM	29ENT96	
→ TARE	GROSS	120960 LB	
	W TARE	36780 LB	
→ NET	NET	84180 LB	
	TOTAL	42.09	<del>██████</del>

TIME AND DATE 07:20AM 29ENT96

TONS TOTAL 33.67 cu yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

*[Signature]*  
F.W.

Delivered to:  
Navy Contract No N62472-94  
T 1039

T No 1039

104

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

105

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 230  
2300 Lincoln Hwy East Stone Luford Valley  
TRUCK TO: Site 201, Kings Highway Pt 19417-1829

→ GROSS

WGT-IN 36400 LB  
09:12AM 29ENT96

→ TARE

GROSS 121740 LB  
W TARE 36400 LB  
NET 85340 LB

→ NET

TOTAL 42.67 ~~YARDS~~

TIME AND DATE 09:33AM 29ENT96

TONS

TOTAL 34.13 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

*Miller*

Delivered to:

Navy Contract No N62472-94-T No 1041  
D-0398

Site 2

104

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 229  
2300 Lincoln Hwy East Stone Luford Valley  
TRUCK TO: Site 201, Kings Highway Pt 19417-1829

→ GROSS

WGT-IN 34840 LB  
07:57AM 29ENT96

→ TARE

GROSS 115800 LB  
W TARE 34840 LB  
NET 80960 LB

→ NET

TOTAL 40.43 YARDS

TIME AND DATE 08:27AM 29ENT96

TONS

TOTAL 32.38 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

*Miller*

Delivered to:

Navy Contract No N62472-94-T No 1040  
D-0398

Site 2

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 1096

1001  
SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 233  
3300 Lincoln Hwy East 2300 Oxford Valley  
TRUCK ID: 19047-1829  
Suite 200 Langhorne, Pa

➔ GROSS	09:55AM	29ENT96
➔ TARE	GROSS	119000 LB
	W TARE	34560 LB
➔ NET	NET	84440 LB
	TOTAL	42.22

TIME AND DATE 10:10AM 29ENT96

TONS TOTAL 33.77 CYD.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

delivered to:  
Navy Contract No N62472-94 T No 1043  
D-0398

General Aero Space Corp Bethpage NY (Site #2)

*KFB*  
*(F.V.)*

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

1001  
DATE 5-9 1096

SOLD TO Foster Wheeler Environmental Corp  
TICKET NO.: 231  
3300 Lincoln Hwy East 2300 Oxford Valley  
TRUCK ID: 19047-1829  
Suite 200 Langhorne, Pa

➔ GROSS	09:13AM	29ENT96
➔ TARE	GROSS	124920 LB
	W TARE	36860 LB
➔ NET	NET	88060 LB
	TOTAL	44.03

TIME AND DATE 09:47AM 29ENT96

TONS TOTAL 35.22 CYD.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- 

Delivered to:  
Navy Contract No N62472-94 T No 1042  
D-0398

General Aero Space Corp Bethpage NY (Site #2)

*KFB*  
*(F.V.)*

109

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

sold to Foster Wheeler Environmental Corp  
TICKET NO. 235  
2300 Lincoln Hwy East, Duffield Valley  
State 200, TRUCK ID: PA 19DN7-1829  
W.H. IN 36700 LB

→ GROSS 11:12AM 29ENT96  
→ TARE GROSS 117400 LB  
W TARE 36700 LB  
NET 80700 LB  
→ NET TOTAL 40.35

TIME AND DATE 11:40AM 29ENT96

TONS

TOTAL 2.28 CYD

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND  
 CONCRETE SAND  
 GRIT  
 GRAVEL  
 BANKRUN  
 Processed Kill

T No 1045

Delivered to:  
Navy Contract No N62472-94  
D-0398

108

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

sold to Foster Wheeler Environmental Corp  
TICKET NO. 234  
2300 Lincoln Hwy East, Duffield Valley  
State 200, TRUCK ID: PA 19DN7-1829  
W.H. IN 36060 LB

→ GROSS 11:09AM 29ENT96  
→ TARE GROSS 119020 LB  
W TARE 36060 LB  
NET 82960 LB  
→ NET TOTAL 41.48

TIME AND DATE 11:31AM 29ENT96

TONS

TOTAL 3.18 CYD

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND  
 CONCRETE SAND  
 GRIT  
 GRAVEL  
 BANKRUN  
 Processed Kill

T No 1044

Delivered to:  
Navy Contract No N62472-94  
D-0398

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

Sold to Foster Wheeler Environmental Corp  
TICKET NO. 237  
2300 Lincoln Hwy East, Lanesford Valley  
TRUCK ID: State 200 Langhorne Pt. NY 47-1829

→ GROSS	01:04PM	29ENT96
→ TARE	GROSS	122300 LB
	W TAPE	36160 LB
→ NET	NET	86140 LB
	TOTAL	43.07

TIME AND DATE 01:19PM 29ENT96

TONS TOTAL 34.45 WYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to:  
Navy Contract No N62472-94  
D-698

T No 1047

Common Aero Space Corp, Bethpage NY (Site #2)

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

Sold to Foster Wheeler Environmental Corp  
TICKET NO. 235  
2300 Lincoln Hwy East, Lanesford Valley  
TRUCK ID: State 200 Langhorne Pt. NY 47-1829

→ GROSS	11:29AM	29ENT96
→ TARE	GROSS	118560 LB
	W TAPE	34700 LB
→ NET	NET	83860 LB
	TOTAL	41.93

TIME AND DATE 11:50AM 29ENT96

TONS TOTAL 33.54 WYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to:  
Navy Contract No N62472-94  
D-698

T No 1047

Common Aero Space Corp, Bethpage NY (Site #2)

113

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

Sold to Foster Wheeler Environmental Corp

TICKET NO. 238  
2300 Lincoln Hwy East, Duxbury Valley

TRUCK TO: State 200, Washington, Pa. 19047-1829

WGT IN 36600 LB

→ GROSS

01:05PM 29ENT96

→ TARE

GROSS 121780 LB  
W TARE 36600 LB  
NET 85180 LB

→ NET

TOTAL 42.59 ~~42.59~~

TIME AND DATE 01:30PM 29ENT96

TONS

TOTAL 34.07 CU YD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to:  
Navy Contract No N62472-94  
D-D398

T No 1040

112

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

Sold to Foster Wheeler Environmental Corp

TICKET NO. 239  
2300 Lincoln Highway East, Duxbury Valley

TRUCK TO: State 200, Washington, Pa. 19047-1829

WGT IN 34620 LB

→ GROSS

01:11PM 29ENT96

→ TARE

GROSS 125860 LB  
W TARE 34620 LB  
NET 91240 LB

→ NET

TOTAL 45.62 ~~45.62~~

TIME AND DATE 01:46PM 29ENT96

TONS

TOTAL 36.49 CU YD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to:  
Navy Contract No N62472-94  
D-D398

T No 1040

FW

FW

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-9 10 96

SOLD TO Peter Wheeler Environmental Corp  
TICKET NO. 241  
2300 Lincoln Hwy East Norwich Valley  
TRUCK TO: 19047-1029  
Site 200

→ GROSS

02:32PM 29ENT96

→ TARE

GROSS 122680 LB  
W TARE 34920 LB  
NET 87760 LB

→ NET

TOTAL 43.88 ~~102.96~~

TIME AND DATE 03:09PM 29ENT96

TONS

TOTAL 35.70 CU YD

CASH

C.O.D.

CHARGE

PICKUP

DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

T No 1050

Delivered to:  
Mary Contract No NB2472-94  
D-1598

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

SOLD TO Peter Wheeler Environmental Corp  
TICKET NO. 241  
2300 Lincoln Hwy East Norwich Valley  
TRUCK TO: 19047-1029  
Site 200

→ GROSS

02:56PM 29ENT96

→ TARE

GROSS 124740 LB  
W TARE 36120 LB  
NET 88620 LB

→ NET

TOTAL 44.31 ~~102.96~~

TIME AND DATE 03:36PM 29ENT96

TONS

TOTAL 35.44 CU YD

CASH

C.O.D.

CHARGE

PICKUP

DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to:  
Mary Contract No NB2472-94  
D-1598

T No 1051



# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

sold to Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East, Deerfield Valley  
Suite 200, Deerfield Valley, VT 05648  
TRUCK ID: PA 19047-1829

→ GROSS

05:52AM 30ENTSE

→ TARE

GROSS 120460 LB  
W TAPE 35140 LB  
NET 85320 LB

→ NET

TOTAL 42.56

TIME AND DATE 06:14AM 30ENTSE

TONS

TOTAL 34.12 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to

Army Contract No 1162472-94  
D 1098

T No 1054

1054

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

sold to Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East, Deerfield Valley  
Suite 200, Deerfield Valley, VT 05648  
TRUCK ID: PA 19047-21829

→ GROSS

05:54AM 30ENTSE

→ TARE

GROSS 123080 LB  
W TAPE 36460 LB  
NET 86620 LB

→ NET

TOTAL 48.31

TIME AND DATE 06:23AM 30ENTSE

TONS

TOTAL 34.64 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered To

Army Contract No 1162472-94  
D 1098

T No 1055

1055

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 1996

SOLD TO Foster Wheeler Environmental Corp  
2300 Woodside Highway East Lake Buford Valley  
State 200, Kings Park, NY 11754-1829

TICKET NO. 245  
TRUCK TO: 19LW7-1829  
WGT-IN 36940 LB

→ GROSS	05:13AM	30ENT96	
→ TARE	GROSS	119220 LB	
	W TAPE	36940 LB	
→ NET	NET	82280 LB	
	TOTAL	41.14	<del>XXXX</del>

TIME AND DATE 05:12AM 30ENT96 WYD

TONS TOTAL 32.91 cu. yd.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Recycled Fill

diverted to  
my contract No. 1162477-911

T No 1056

*Dus Valente*

**AMERICAN MATERIALS INC.**

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 1996

SOLD TO Foster Wheeler Environmental Corp  
2300 Woodside Highway East Lake Buford Valley  
State 200, Kings Park, NY 11754-1829

TICKET NO. 247  
TRUCK TO: 19LW7-1829  
WGT-IN 34860 LB

→ GROSS	05:13AM	30ENT96	
→ TARE	GROSS	116080 LB	
	W TAPE	34860 LB	
→ NET	NET	81220 LB	
	TOTAL	40.61	<del>XXXX</del>

TIME AND DATE 05:17AM 30ENT96 WYD

TONS TOTAL 32.48 cu. yd.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Recycled Fill

T No 1057

*Dus Valente*

123

(125)

Nº. 00105

DATE 5/10/96

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy. East One Oxford Valley,  
Suite 200 Long Horn Pa 19047-1829

Delivered to:

Navy Contract # N62472-94-00398

18:06 00/02/00 114320. 1b

GROSS

TARE

Grumman Space Corp. Bethpage Site #2

37620. 1b (K)

NET

76700. 1b  
38.350 tn

DELIVERED       PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY SFA

SIGNED BY [Signature]

Nº. 00107

DATE 5/10/96 (124)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy. East One Oxford Valley  
Suite 200 Long Horn Pa. 19047-1829

Delivered to

Navy contract NO#

18:11 00/02/00 115880. 1b

GROSS

TARE

V62472-94-00398

37440. 1b (K)

NET

Grumman space Corp - Bethpage (site #2)

78440. 1b  
39.220 tn

DELIVERED       PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY SFA

SIGNED BY [Signature]

(127)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

SOLD TO Fuchs Wheeler Environmental Corp  
2300 Lincoln Hwy East Box 1400 Valley  
State 201 Springfield PA 19147-1829

TICKET NO. 251  
TRUCK ID  
WGA-IN 36480 LB  
07:53AM 30ENT96

➔ GROSS		
➔ TARE	GROSS	120700 LB
	W TAPE	36480 LB
	NET	84220 LB
➔ NET	TOTAL	42.11

TIME AND DATE 08:12AM 30ENT96

TONS TOTAL 33.68 cu. yd.

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Invoice  
Buy Contract No NB2472-94 T No 1059  
D-6798

*B.W.C.*

(127)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

SOLD TO Fuchs Wheeler Environmental Corp  
2300 Lincoln Hwy East Box 1400 Valley  
State 201 Springfield PA 19147-1829

TICKET NO. 249  
TRUCK ID  
WGA-IN 35020 LB  
07:47AM 30ENT96

➔ GROSS		
➔ TARE	GROSS	119800 LB
	W TAPE	35020 LB
	NET	84840 LB
➔ NET	TOTAL	42.42

TIME AND DATE 08:03AM 30ENT96

TONS TOTAL 33.93 cu yd

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to  
Buy Contract No NB2472-94 T No 1059

*John*

NY State

128

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

SOLD TO Koster Wheeler Environmental Corp

TICKET NO.: 252  
2300 Lincoln Hwy East, Chesapeake Valley

TRUCK NO.: 19467-1829  
State 200, Kings Highway, Pt 19467-1829

➔ GROSS	09:22AM	30ENT96	
➔ TARE	GROSS	119960 LB	
	W TAPE	34720 LB	
➔ NET	NET	85240 LB	
	TOTAL	42.62	<del>42.62</del>

TIME AND DATE 08:43AM 30ENT96 Wyd

TONS TOTAL 42.62 cu. yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed fill

Delivered to  
Buy Contract No. W62472-94 T No. 1061  
D-0398

State #2

129

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 10 96

SOLD TO Koster Wheeler Environmental Corp

TICKET NO.: 252  
2300 Lincoln Hwy East, Chesapeake Valley

TRUCK NO.: 19467-1829  
State 200, Kings Highway, Pt 19467-1829

➔ GROSS	08:03AM	30ENT96	
➔ TARE	GROSS	123350 LB	
	W TAPE	36860 LB	
➔ NET	NET	86520 LB	
	TOTAL	43.26	<del>43.26</del>

TIME AND DATE 08:22AM 30ENT96 Wyd

TONS TOTAL 34.60 cu. yd.

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed fill

*Pro*

Delivered to  
Buy Contract No. W62472-94 T No. 1060  
D-0398

State #2

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10-96

Sold to Foster Wheeler Environmental Corp  
TICKET NO: 256  
2812 Lincoln Hwy East, Oneida Valley  
TRUCK TO: Suite 200, Longview Rd, 19167-1829  
WGT IN: 34880 LB

→ GROSS

09:45AM 30ENT96

→ TARE

GROSS 121600 LB  
W TAPE 34880 LB  
NET 86720 LB

→ NET

TOTAL 43.36 ~~100.00~~

TIME AND DATE 10:00AM 30ENT96

TONS

TOTAL 34.68 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to:  
Navy Contract No N62472-94 T No 1067  
D-1398

Contract No 1067 Longview NY (Site #2)

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10-96

Sold to Foster Wheeler Environmental Corp  
TICKET NO: 259  
2812 Lincoln Hwy East, Oneida Valley  
TRUCK TO: Suite 200, Longview Rd, 19167-1829  
WGT IN: 34580 LB

→ GROSS

10:05AM 30ENT96

→ TARE

GROSS 118920 LB  
W TAPE 34680 LB  
NET 84240 LB

→ NET

TOTAL 42.12 ~~100.00~~

TIME AND DATE 10:48AM 30ENT96

TONS

TOTAL 33.69 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to  
Navy Contract No N62472-94 T No 1065  
D-1398

Contract No 1065 Longview NY (Site #2)

Nº. 00100

DATE 5/11/94

(133)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy. East One Oxford Valley  
Suite 200 Lang Horn Pa 19047-1829

Delivered to

GROSS

Navy contract No# N62472-94-D0398

21:05 00/02/00 119840. 1b

37440. 1b (K)

TARE

Grumman Space Corp - Bethpage (site #2)

82400. 1b  
41.200 tn

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY \_\_\_\_\_

SIGNED BY

*RBR FW*

Nº. 00109

DATE 5/11/94

(132)

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford Valley  
Suite 200 Lang Horn Pa. 19047-1829

Delivered to:

GROSS

Navy contract # N62472-94-D0398

21:02 00/02/00 119220. 1b

37620. 1b (K)

TARE

Grumman Space Corp. Bethpage site #2

81600. 1b  
40.800 tn

NET

DELIVERED  PICKED UP

SCREEN SAND

BANK RUN

WEIGHED BY \_\_\_\_\_

SIGNED BY

*RBR FW*

(131)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

175  
# 39

Suffolk: 368-6200  
800-439-SAND

LOW

DATE 5-10-96

sold to Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East Lake Linn Valley  
Suite 200  
TRUCK ID: 19467-1829

→ GROSS	11:34AM	30ENT96
→ TARE	GROSS	121060 LB
	W TARE	35280 LB
	NET	84780 LB
→ NET	TOTAL	42.39 YARDS

TIME AND DATE 11:55AM 30ENT96

TONS TOTAL 33.91 CYD

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to  
Navy Contract No NL2472-94 T No 1067  
D-139E

Delivered to Foster Wheeler Environmental Corp Delhage NY (Site #2)

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

179

Suffolk: 368-6200  
800-439-SAND

DATE 5-10-96

sold to Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East Lake Linn Valley  
Suite 200  
TRUCK ID: 19467-1829

→ GROSS	11:26AM	30ENT96
→ TARE	GROSS	118980 LB
	W TARE	34980 LB
	NET	84100 LB
→ NET	TOTAL	42.05 YARDS

TIME AND DATE 11:40AM 30ENT96

TONS TOTAL 33.64 CYD

CASH  C.O.D.  CHARGE  PICK UP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Fill

Delivered to  
Navy Contract No NL2472-94 T No 1066  
D-139E

Delivered to Foster Wheeler Environmental Corp Delhage NY (Site #2)



AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

(153)

DATE 5-10 10 96

WOL  
sold to Foster Wheeler Environmental Corp  
TICKET NO. 263  
230 Lincoln Hwy East Use Oxford Valley  
TRUCK ID: Site zu, Longhorne, Pa 19407-1829  
WEIGHT 36640 LB

→ GROSS 11:58AM 30ENT96  
→ TARE GROSS 127040 LB  
W TARE 36640 LB  
NET 90400 LB  
→ NET TOTAL 45.20 ~~45.20~~

TIME AND DATE 12:13PM 30ENT96

TONS TOTAL 36.16 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Mill

*FW*  
invered to  
Navy Contract No N62472-94 T No 1068  
D-139E

... ..

AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

(36)

DATE 5-10 10 96

WOL  
sold to Foster Wheeler Environmental Corp  
TICKET NO. 263  
230 Lincoln Hwy East Use Oxford Valley  
TRUCK ID: Site zu, Longhorne, Pa 19407-1829  
WEIGHT 36440 LB

→ GROSS 09:46AM 30ENT96  
→ TARE GROSS 122290 LB  
W TARE 36440 LB  
NET 85840 LB  
→ NET TOTAL 42.92 ~~42.92~~

TIME AND DATE 10:12AM 30ENT96

TONS TOTAL 34.33 CYD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Mill

*FW*  
Delivered to  
Navy Contract No N62472-94 T No 1063  
D-139E

... ..

137

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 1996

SOLD TO Under Wheeler Environmental Corp  
TICKET NO. 257  
2310 Lincoln Hwy East, Oneida Valley  
TRUCK ID: 194707-1829  
Date 20 June 94

→ GROSS 12:24PM 30ENT96

→ TARE GROSS: 120250 LB  
W TARE 34580 LB  
NET 85670 LB

→ NET

TOTAL 42.84

TIME AND DATE 12:37PM 30ENT96

TONS TOTAL 31.27 CU YD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Invoiced to  
Mary Contract No. 1472-94 T No 1064  
D-178

138

# AMERICAN MATERIALS INC.

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

DATE 5-10 1996

SOLD TO Under Wheeler Environmental Corp  
TICKET NO. 258  
2310 Lincoln Hwy East, Oneida Valley  
TRUCK ID: 194707-1829  
Date 20 June 94

→ GROSS 09:53AM 30ENT96

→ TARE GROSS: 119420 LB  
W TARE 36620 LB  
NET 82800 LB

→ NET

TOTAL 41.40

TIME AND DATE 10:37AM 30ENT96

TONS TOTAL 33.12 CU YD

CASH  C.O.D.  CHARGE  PICKUP  DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

*Bill*

Delivered To  
Mary Contract No. 1472-94 T No 1064  
D-178

Nº. 00110

DATE 5-10-94 <sup>171</sup>

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp.  
2300 Lincoln Hwy East One Oxford Valley  
Suite 200 Lang Hrn Pa 19047-1829

Delivered to:

Navy Contract # N62472-94-00398  
Grumman Space Corp. Bethpage Site #2

23:51 00/02/00 119360. 1b GROSS  
37620. 1b (K) TARE  
81740. 1b NET  
40.870 tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY KIM SIGNED BY \_\_\_\_\_

Nº. 00111

DATE 5-10-94 <sup>140</sup>

**American Materials Inc.**  
168 TOWNLINE ROAD  
KINGS PARK, NEW YORK 11754  
OFFICE PHONE: (516) 368-6200

BUYER \_\_\_\_\_

Foster Wheeler Environmental Corp  
2300 Lincoln Hwy East One Oxford Valley  
Suite 200 Lang Hrn Pa 19047-1829

Delivered to

Navy contract No N62472-94-00398  
Grumman Space Corp Bethpage (Site #2)

23:55 00/02/00 120360. 1b GROSS  
37440. 1b (K) TARE  
82920. 1b NET  
41.460 tn

- DELIVERED
- PICKED UP
- SCREEN SAND
- BANK RUN

WEIGHED BY KIM SIGNED BY \_\_\_\_\_



# AMERICAN MATERIALS INC.

1429D

168 Town Line Road  
Kings Park, New York 11754

Suffolk: 368-6200  
800-439-SAND

P.O. # 1284-04-5008

5-13-96 (20)

DATE 5-13 10 96

SOLO TO Foster Wheeler Environmental Corp  
TICKET NO. 277  
2300 Lincoln Hwy East Gate Oxford Valley  
Suite 200 TRUCK  
Highline, PA 19107-1829

→ GROSS

08:29AM 03

→ TARE

GROSS 123090 LB  
W TARE 34960 LB  
NET 88120 LB

→ NET

TOTAL 44.06 ~~1000~~

TIME AND DATE 08:49AM 03

TONS

TOTAL 35.24 CWYD

CASH

C.O.D.

CHARGE

PICKUP

DEL

- FINE SAND
- CONCRETE SAND
- GRIT
- GRAVEL
- BANKRUN
- Processed Kill

Delivered to  
Navy Contract No NB2472-94  
D-UPB

T No

19