



## **FINAL REMEDIATION REPORT**

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### **WORK ASSIGNMENT D003825-13**

**NORTHEAST ALLOYS AND METALS  
CITY OF UTICA (C)**

**SITE NO. 6-33-045  
ONEIDA COUNTY, NY**

Prepared for:  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
625 Broadway, Albany, New York

*Erin M. Crotty, Commissioner*

**DIVISION OF ENVIRONMENTAL REMEDIATION**

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**URS Corporation**  
282 Delaware Avenue  
Buffalo, New York 14202

**December 2001**

JAN 07 2002

**FINAL REMEDIATION REPORT  
NORTHEAST ALLOYS AND METALS SITE REMEDIATION  
UTICA, NEW YORK**

**NYSDEC SITE NO. 6-33-045**

**Prepared For:**

**NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION  
WORK ASSIGNMENT D003825-13**

**DECEMBER 2001**

**Prepared By:**

**URS CORPORATION  
282 DELAWARE AVENUE  
BUFFALO, NEW YORK 14202**

**CONSTRUCTION CERTIFICATION**  
**AT**  
**NORTHEAST ALLOYS AND METALS SITE REMEDIAL ACTION**  
**UTICA, NEW YORK**

URS Corporation Group Consultants personnel have inspected the remedial action construction at the Northeast Alloys and Metals Site according to generally accepted practices. Based on: field observations and inspections made by onsite personnel; field and laboratory test data; and data provided by the Contractor and its subcontractors, the remedial action construction at the site is considered to have been performed in substantial compliance with the NYSDEC Contract Documents, with the Record of Decision for the site dated March 1998, and as stated in this report.

URS Corporation Group Consultants certifies that the construction was completed in accordance with the Approved Contract Document Plans and Specifications (Titled: Site Name: Northeast Alloys and Metals, Site Number: 6-33-045, Location: City of Utica, Contract Number D004178, County of Oneida, New York, Contract Documents dated 5/25/2000) and incorporating the modifications presented herein.

The work was inspected and documented by competent people under my direct supervision.

DECEMBER 2001



Signature: \_\_\_\_\_

James Lanzo, P.E.

Date: \_\_\_\_\_

11/2/02

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## **1.0 INTRODUCTION**

### **1.1 Purpose and Scope**

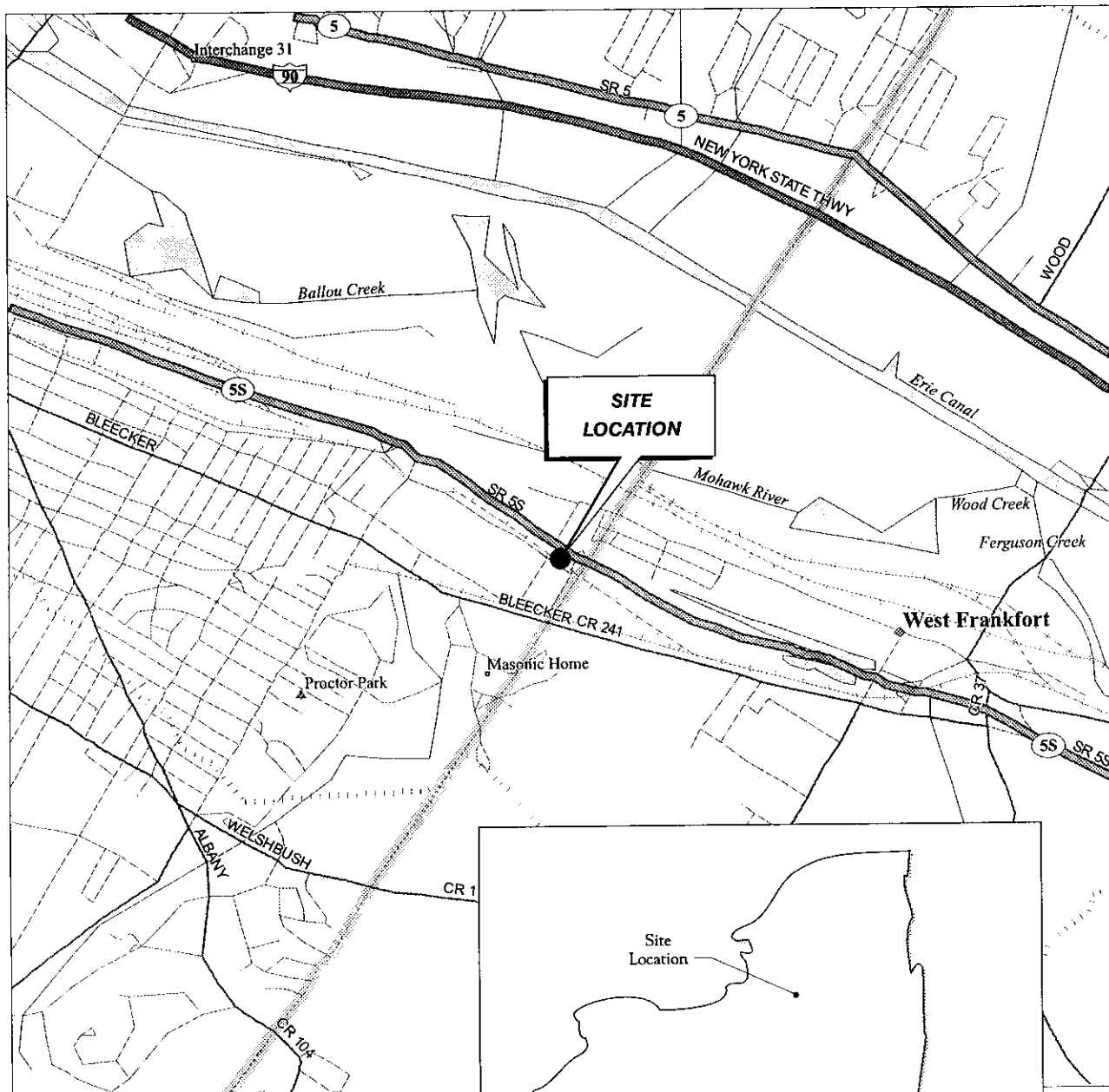
This Final Remediation Construction Report has been prepared to document the construction phase (including start-up and operation for one month) of the remedial action at the Northeast Alloys and Metals site as required under Task 6.3 of Work Assignment D003825-13. Only approved methods, materials, and equipment, as required by the Contract documents, were used on the project unless otherwise described in the following sections on variances and change orders. Provided within this document are:

- Certification by a Professional Engineer licensed to practice in New York State
- Record Drawings
- Discussion of any variances and change orders.

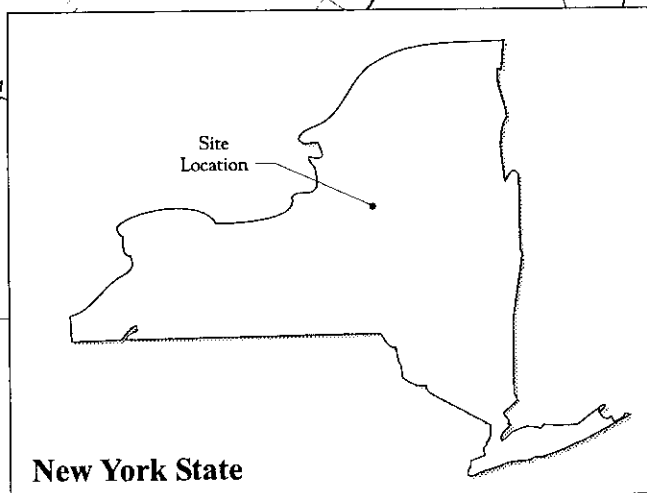
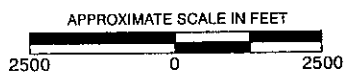
### **1.2 Site Description**

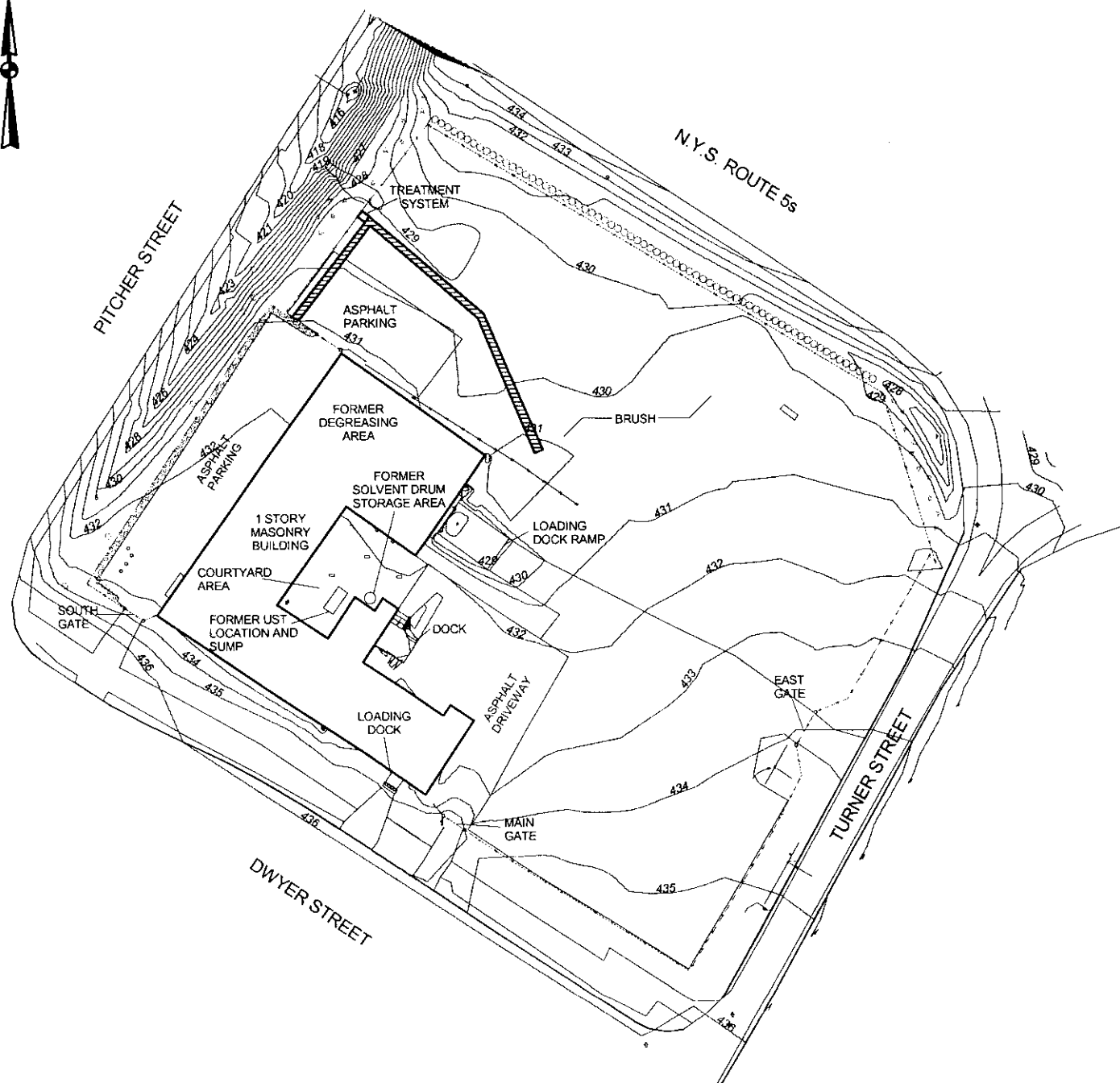
Northeast Alloys and Metals is a Class 2 site, listed on the New York State Department of Environmental Conservation (NYSDEC) Registry of Inactive Hazardous Waste Sites (NYSDEC Site No. 6-33-045). The site is located between State Route 5S and Dwyer Street in the City of Utica, Oneida County, New York. The property is located in a mixed industrial/commercial area just inside the city limits, and just inside the boundary between Oneida and Herkimer Counties (Figure 1). The CSX Railroad runs in an east-west direction approximately 1500 feet north of the site. The Mohawk River flows in an easterly direction and is located approximately 1800 feet to the north.

The facility occupies about 3.9 acres and consists of a plant building, asphalt parking area, and loading dock area which occupy the southwest portion of the property. The plant building, which occupies approximately 21,000 square feet, is a one-story masonry brick structure. A small portion of the paved parking lot area, which formerly contained an underground storage tank (UST) and drum storage area, is referred to as the "courtyard." The site layout is shown in Figure 2.



© 1993 DeLorme Mapping





### Legend

-  432 Topographic Contour Line
-  Groundwater Collection Trench (Approximate Location)

100 0 100 Feet

**URS**

NORTH EAST ALLOYS AND METALS  
SITE LAYOUT MAP

FIGURE 2



Contamination at the Northeast Alloys and Metals Site is primarily chlorinated solvents in the groundwater, specifically trichloroethene and its breakdown products. The use of chlorinated solvents was prevalent at the site, particularly in the metal degreasing operations. Spent solvents may also have been released when a drum of spent solvent was accidentally punctured. The groundwater at the courtyard area of the site is the most highly contaminated, with a plume that follows the groundwater flow to the north. Low concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) contaminants have also been detected in some of the downgradient wells. A system to intercept, collect, and treat the contaminated groundwater has been installed downgradient of the courtyard area.

### **1.3 Site History**

The property and buildings at the Northeast Alloys and Metals site have been used for the manufacturing of electronic components in the 1950s, as a machine shop in the 1960s, and as a commercial laundry in the 1970s. Northeast Alloys and Metals purchased the facility in April 1986 and used it to recycle specialty metal parts. In January 1989, Northeast Alloys and Metals leased the property to ELG Haniel Tradings to perform the metal recycling operations. Operations at the facility ceased in 1991. The facility is currently unoccupied.

The Record of Decision (ROD) for the site was issued by the NYSDEC in March 1998. A pre-design investigation was completed and reports issued by URS in June and October 1999. Contract documents (Contract No. D004178) for remedial construction were prepared by URS and issued by the NYSDEC in May 2000. The notice of intent to award the contract was issued on August 8, 2000 to Sciencetech NES, Inc. of Danbury, Connecticut. Notice to Proceed with construction at the site was given to Sciencetech on December 4, 2000. Major construction at the site was completed by March 2001, and all remaining construction at the site was completed by August 24, 2001.

Sciencetech started-up and operated the groundwater collection and treatment system for a period of one month (from approximately March 21 through April 18, 2001) as required by the Contract Documents. At that point, ownership and responsibility for operation and maintenance of the remedial system was turned over to the NYSDEC.

## **2.0 SUMMARY OF REMEDIAL WORK**

### **2.1 Summary of Remedial Construction Work**

The main work items completed by the Contractor under this Contract included:

1. Construction and subsequent removal of an area for the staging of potentially contaminated soil.
2. Excavation and analysis of soil near the east gate that potentially contained contamination at concentrations exceeding the NYSDEC cleanup criteria. Approximately 427.5 cubic yards of soil were excavated in this area. A total of 6 soil samples of the excavated soil were collected and analyzed for VOCs. Based upon visual observations and the analytical results, which indicated that soil concentrations did not exceed TAGM 4046 criteria, all of the soil was backfilled into the existing excavation, and no soil was taken offsite for disposal.
3. Installation of borings along the proposed groundwater collection trench alignment
4. Construction of a groundwater collection trench.
5. Construction of a groundwater pumping and treatment system to pump water from the collection trench, and treat the contaminated groundwater to meet the discharge limitations.
6. Construction of a gravity discharge line from the groundwater treatment system to a nearby sanitary manhole of the Oneida County Sewer District.
7. Construction of secure system housing, and installation of all required above- and below-ground utilities (electrical, telephone, piping, etc.) as required for operation of the treatment system.

8. Startup, performance testing, reporting, operation, and maintenance of the groundwater treatment system for a period of one month.
9. Delivery of a fully operational system to the NYSDEC for long-term operation.

## **2.2 General Requirements**

### **2.2.1 On-Site Inspection**

Daily inspection of the construction activities was performed by URS throughout the Contract. URS prepared *daily inspection reports* to document the work performed by Scienteck and their subcontractors, to document the equipment and labor used, and to verify that the requirements of the Contract Documents were satisfied. Copies of daily inspection reports are on file at the NYSDEC and at URS.

### **2.2.2 Record Drawings**

Based on survey information and drawings submitted by Scienteck, URS prepared drawings to show the *final condition of the work completed*. URS verified these drawings based on our oversight of the daily construction activities. Record drawings are included with this report as Appendix A.

### **2.2.3 Construction Photographs**

Photographs to document the condition of the site and the progress of construction were taken by URS throughout the duration of our oversight activities. Photographs representing *significant work items* are included in Appendix B. A more complete set of construction photographs is on file at the NYSDEC and at URS.

#### **2.2.4 Subcontractors**

Sciencetech utilized the following subcontractors during construction at the Northeast Alloys and Metals Site:

**ADT Drilling** – Borings and Well Installation

**Engel Electric** – Electrician

**BISCO** – Remedial Systems Design

**Icon Co.** – Trenching Forms

**Mid-York Fence Co** – Fencing

**Mitkem** – Analytical

**Central Paving** – Paving

**Modi Engineering** – Survey

**Labor Ready NE** – Personnel

#### **2.3 Variances**

Variances are modifications to the Contract Documents that do not involve changes to the contract cost or the contract schedule. Variances were implemented following approval by URS and/or the NYSDEC of a request from the Contractor (Sciencetech), or as initiated by URS. Specific variances to the contract are discussed in Section 3.0.

#### **2.4 Change Orders**

##### **2.4.1 Description**

Modifications to the Contract Documents for work items that change either the contract price or the contract schedule are processed through change orders. Only one change order, consisting of multiple work items, was prepared for this contract. Appendix C contains a copy of the executed change order. Further discussion of specific change order items is also included in Section 3.0.

#### **2.4.2 Cost Adjustments**

Table 1 summarizes the original contract bid prices and quantities for the project. Over the course of the project, there were several adjustments to the original contract amounts for work items that were either added to or deleted from the scope of work. The most significant cost changes were associated with snow delays, construction of the groundwater collection trench, and elimination of the off-site soil disposal. Table 1 also includes the change order costs and the final project cost. Specific change order items are discussed in Section 3.0.

#### **2.4.3 Schedule Modifications**

The Schedule for the project consisted only of Substantial and Final Completions. Sciencetech received Notice-to-Proceed (NTP) from the Department on December 4, 2000. The contract specified a period of 120 days (April 3, 2001) for Substantial Completion, defined as construction and startup of the treatment system. Sciencetech completed construction and began continuous operation of the system on March 22, 2001. To accommodate several minor tasks that were not completed until warmer weather, the duration of the contract was extended by 150 days, at no additional cost, until August 31, 2001.

#### **2.5 Final Inspection**

A substantial completion inspection and walkthrough for the project was conducted on March 1, 2001. This inspection was attended by representatives of Sciencetech, URS, and the NYSDEC. Based on this inspection, it was determined that Sciencetech's construction and operation of the project was complete with the exception of the punchlist items noted below:

- Survey locations of the trench, cleanouts, and piezometers and submit final red-line drawings
- Repair the roof of the treatment building where shingles had blown off
- Complete the regrading of the site
- Complete the electrical wiring
- Demobilize all equipment

**Table 1**  
**Summary of Contract Costs**  
**Northeast Alloys and Metals Site**

| Item No.                                                                                                    | Description                            | Unit       | CONTRACT |             |                     |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------|------------|----------|-------------|---------------------|
|                                                                                                             |                                        |            | Quantity | Unit Price  | Total               |
| LS-1                                                                                                        | General                                | LS         | 1        | \$7,844.88  | \$7,844.88          |
| LS-2                                                                                                        | Site Preparation                       | LS         | 1        | \$9,804.41  | \$9,804.41          |
| LS-3                                                                                                        | Site Facilities and Services           | LS         | 1        | \$3,085.89  | \$3,085.89          |
| LS-4                                                                                                        | Groundwater Collection System          | LS         | 1        | \$19,626.17 | \$19,626.17         |
| LS-5                                                                                                        | Groundwater Treatment System           | LS         | 1        | \$52,591.07 | \$52,591.07         |
| LS-6                                                                                                        | Electrical                             | LS         | 1        | \$24,450.50 | \$24,450.50         |
| LS-7                                                                                                        | Utility Allowance                      | LS         | 1        | \$1,000.00  | \$1,000.00          |
| UC-1                                                                                                        | East Gate Area Soil Excavation         | CY         | 234      | \$59.87     | \$14,009.58         |
| UC-2                                                                                                        | East Gate Area Soil Disposal           | Ton        | 100      | \$174.58    | \$17,458.00         |
| UC-3                                                                                                        | Groundwater Collection Trench          | SF         | 5180     | \$13.33     | \$69,049.40         |
| UC-4                                                                                                        | Treated Groundwater Gravity Discharge  | LF         | 110      | \$80.92     | \$8,901.20          |
| UC-5                                                                                                        | Fencing                                | LF         | 64       | \$24.98     | \$1,598.72          |
| UC-6                                                                                                        | Groundwater Treatment System Operation | Month      | 1        | \$14,406.41 | \$14,406.41         |
| UC-7                                                                                                        | Health and Safety                      | person/day | 104      | \$59.95     | \$6,234.80          |
| <b>Total Original Contract</b>                                                                              |                                        |            |          |             | <b>\$250,061.03</b> |
| <b>CHANGE ORDERS</b>                                                                                        |                                        |            |          |             |                     |
| (Quantities indicate increases (positive) or decreases (negative) relative to original contract quantities) |                                        |            |          |             |                     |
| LS-8                                                                                                        | Snow Delay                             | LS         | 1        | \$25,312.50 | \$25,312.50         |
| LS-9                                                                                                        | Additional Paving                      | LS         | 1        | \$2,110.00  | \$2,110.00          |
| UC-1                                                                                                        | East Gate Area Soil Excavation         | CY         | 35.1     | \$59.87     | \$2,101.44          |
| UC-2                                                                                                        | East Gate Area Soil Disposal           | Ton        | -100     | \$174.58    | (\$17,458.00)       |
| UC-3                                                                                                        | Groundwater Collection Trench          | SF         | -5180    | \$13.33     | (\$69,049.40)       |
| UC-3                                                                                                        | Groundwater Collection Trench          | SF         | 4058     | \$20.50     | \$83,189.00         |
| UC-4                                                                                                        | Treated Groundwater Gravity Discharge  | LF         | 14       | \$80.92     | \$1,132.88          |
| UC-5                                                                                                        | Fencing                                | LF         | 9.6      | \$24.98     | \$239.81            |
| UC-7                                                                                                        | Health and Safety                      | person/day | -47      | \$59.95     | (\$2,817.65)        |
| UC-8                                                                                                        | Additional Fencing                     | LF         | 61.4     | \$44.06     | \$2,705.28          |
| <b>Total Change Order No. 1</b>                                                                             |                                        |            |          |             | <b>\$27,465.86</b>  |
| <b>TOTAL REVISED CONTRACT</b>                                                                               |                                        |            |          |             | <b>\$277,526.89</b> |

- Transfer utility billing to the NYSDEC

A letter declaring the project to be substantially complete as of August 24, 2001 was prepared and issued by the NYSDEC on September 10, 2001.

### **3.0 DETAILED DESCRIPTION OF VARIANCES AND CHANGE ORDERS**

The following sections outline all of the significant departures from the original design that was included in the contract documents. Some changes were made with no change in contract price (variances), while others resulted in either an increase or a decrease in the contract price (change orders). Change order items that involve an increase or decrease in quantities only are not discussed in this section, but are included with the actual change order in Appendix C.

#### **3.1 Site Work and Site Facilities**

Variances and change orders associated with site work and site facilities included the following:

1. The contractor elected to construct a small wooden shed to house both the aeration blowers and control system in the same structure. The shed replaced individual housings for the blower and control equipment. (*Variance*)
2. Due to a several month delay by the NYSDEC in giving Sciencetech notice to proceed, the construction phase of the project was pushed into the winter months. The poor weather conditions during the winter months required the contractor to rent additional equipment and to spend additional time for the removal of snow. Additionally, the weather conditions slowed the contractor's productivity for the actual construction activities. (*Change Order*)
3. Because the construction was pushed into the winter months, the contractor was required to install a temporary street patch at the location where the gravity discharge line crossed Pitcher Street. The Contractor then returned to the site in the spring to properly repair the street. (*Change Order*)



### **3.2 East Gate Area Soil Excavation**

Change orders associated with the excavation of soil from the east gate area included the following:

1. It was not necessary for any of the soil excavated in the east gate area to be taken for offsite disposal. Based on screening with a photoionization detector and on the analysis of soil samples, it was determined that none of the soil excavated from the east gate area exceeded the criteria that would require its removal from the site. Following receipt of the soil analytical results, the soil was replaced into the excavation. The results of the soil analysis are located in Appendix E. (*Change Order*)

### **3.3 Groundwater Collection and Treatment System**

Variances and change orders associated with the construction of the groundwater collection trench and treatment system are summarized below:

1. The actual layout of the trench was modified slightly from the original plan. The locations of the collection sump and treatment manhole were moved eastward approximately 15 feet to keep all of the system components inside the existing fenceline. To accommodate this change, the low elevation of the trench also was moved eastward, but without affecting the effectiveness or capture zone of the trench. (*Variance*)
2. The contractor elected to construct the trench by first dewatering the site, and then using trench forms to support the sidewall during excavation. Groundwater extraction wells were installed adjacent to the proposed location of the trench for the purpose of dewatering the site. Because sufficient information regarding the subsurface characteristics was obtained from these extraction wells, the contractor was not required to install the pre-construction borings along the profile of the trench. (*Variance*)

3. The trench form system used by the contractor required that the filter fabric could not be installed as a continuous piece along each side of the trench. Instead, each approximately 20-foot segment of the trench is wrapped in fabric, including the ends of the segment. This modification does not affect the effectiveness of the trench. *(Variance)*
4. Instead of a Modicon programmable logic controller, the contractor elected to use a programmable computer system by EOS, Inc. for the purpose of system control and data acquisition. *(Variance)*
5. The actual quantity for construction of the collection trench was significantly less than the original bid quantity. Additionally, construction of the trench was made more difficult due to unexpected site conditions, i.e., the presence of old canal walls and structures. Therefore, both the quantity and the unit price for this item were adjusted. *(Change Order)*

## **4.0 SYSTEM STARTUP AND CHECKOUT**

### **4.1 System Startup**

Scientech's contract included the operation and maintenance of the groundwater treatment system for a minimum period of one month. During the month of operation, Scientech was responsible for operating the system, maintaining the system components, and monitoring the operation of the system in accordance with the requirements of the contract documents. There were no variances or change orders associated with the operation of the system.

### **4.2 System Monitoring**

During their one month of operation, Scientech collected and analyzed samples of the untreated and treated groundwater collected by the system. These samples were collected to verify that the treatment system was successfully reducing the concentrations of VOCs in the groundwater, and to verify that the contaminant concentrations in the effluent met the criteria for discharge to the City of Utica sanitary system. In addition to VOCs, these samples were also analyzed for pH, metals, dissolved and suspended solids, and hardness. Table 2 summarizes the removal efficiency of the groundwater treatment system based on the samples collected by Scientech. Based on this information, the treatment system is meeting the desired objectives. Complete analytical reports have been included as Appendix F.

**Table 2**  
**Summary of Groundwater Analytical Data**  
**Northeast Alloys and Metals Site**

| Contaminant            | Sampling Date |          |          |          |          |          |          |          | Average  |          | Removal |
|------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
|                        | 3/28/01       |          | 4/4/01   |          | 4/11/01  |          | 4/18/01  |          |          |          |         |
|                        | Influent      | Effluent | Influent | Effluent | Influent | Effluent | Influent | Effluent | Influent | Effluent |         |
| Chloromethane          |               |          | 3        |          |          |          | 3        |          | 1.5      | 0        | 100%    |
| Vinyl Chloride         | 35            | 2        | 19       |          | 27       |          | 22       | 1        | 25.75    | 0.75     | 97%     |
| 1,1-Dichloroethene     | 1             |          |          |          |          |          |          |          | 0.25     | 0        | 100%    |
| cis-1,2-Dichloroethene | 200           | 20       | 230      |          | 290      | 28       | 210      | 33       | 232.5    | 20.25    | 91%     |
| Benzene                | 2             |          | 2        |          |          |          |          |          | 1        | 0        | 100%    |
| Trichloroethene        | 3             |          | 4        |          | 3        |          |          |          | 2.5      | 0        | 100%    |
| Toluene                | 16            | 1        | 13       |          | 11       |          | 11       | 2        | 12.75    | 0.75     | 94%     |
| Chlorobenzene          | 2             |          | 2        |          |          |          |          |          | 1        | 0        | 100%    |
| Ethylbenzene           | 5             |          | 5        |          | 4        |          | 4        |          | 4.5      | 0        | 100%    |
| Xylene                 | 55            | 3        | 48       |          | 42       | 4        | 37       | 6        | 45.5     | 3.25     | 93%     |
| 1,2-Dichlorobenzene    | 2             |          | 3        |          |          |          |          |          | 1.25     | 0        | 100%    |
| Totals                 |               |          |          |          |          |          |          |          | 328.5    | 25       | 92%     |

All results are in  $\mu\text{g/L}$ .  
Only detected analytes are shown.

J:\35618.04\Excel\[effluent summary.xls]Sheet1

## CONSTRUCTION PHOTOGRAPHS OF MAJOR SITE ACTIVITIES

1. Construction of the discharge line across Pitcher Street.
2. Cleanout located in the discharge line.
3. *Installing the lower section of the treatment manhole.*
4. Traps and cleanout on the gravity discharge line from the treatment manhole.
5. Lines feeding groundwater into the treatment manhole.
6. Icon trench forms and construction of the collection trench.
7. Icon trench forms and construction of the collection trench.
8. *Looking into the trench.*
9. Trench with filter fabric draped over the sides.
10. Men installing the collection pipe and stone in the trench.
11. The baffles in the treatment manhole.
12. Aeration manifold, ladder, and dog.
13. *Looking into the treatment manhole.*
14. Looking into the collection sump, with two pumps and discharge lines.
15. The control system.
16. The blower skid.
17. Discharge air vent beside the treatment manhole.
18. *Restoration of the hillside along Pitcher Street.*
19. Shed to house the aeration blowers and control system.
20. The area of the collection trench, after backfilling soil.



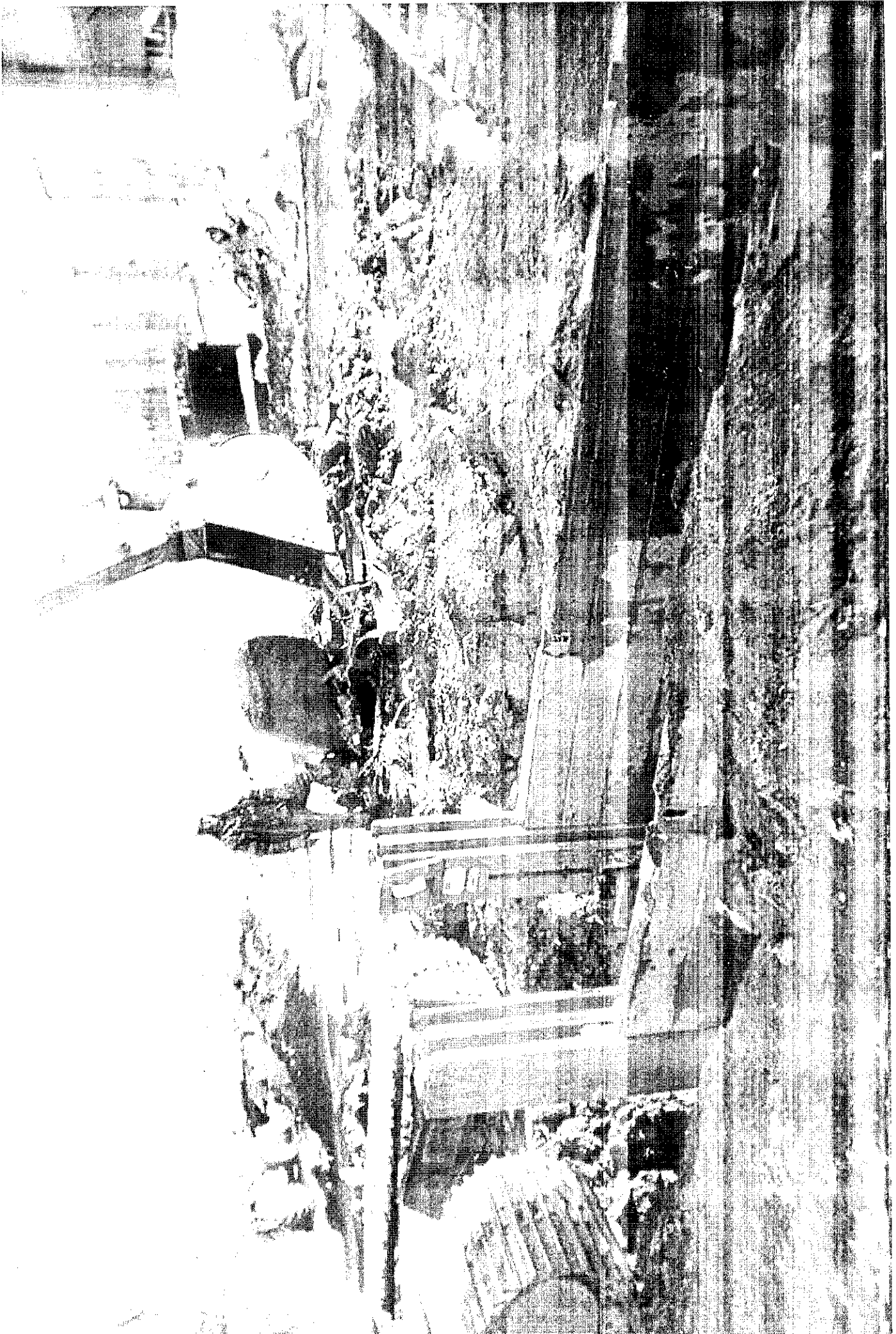










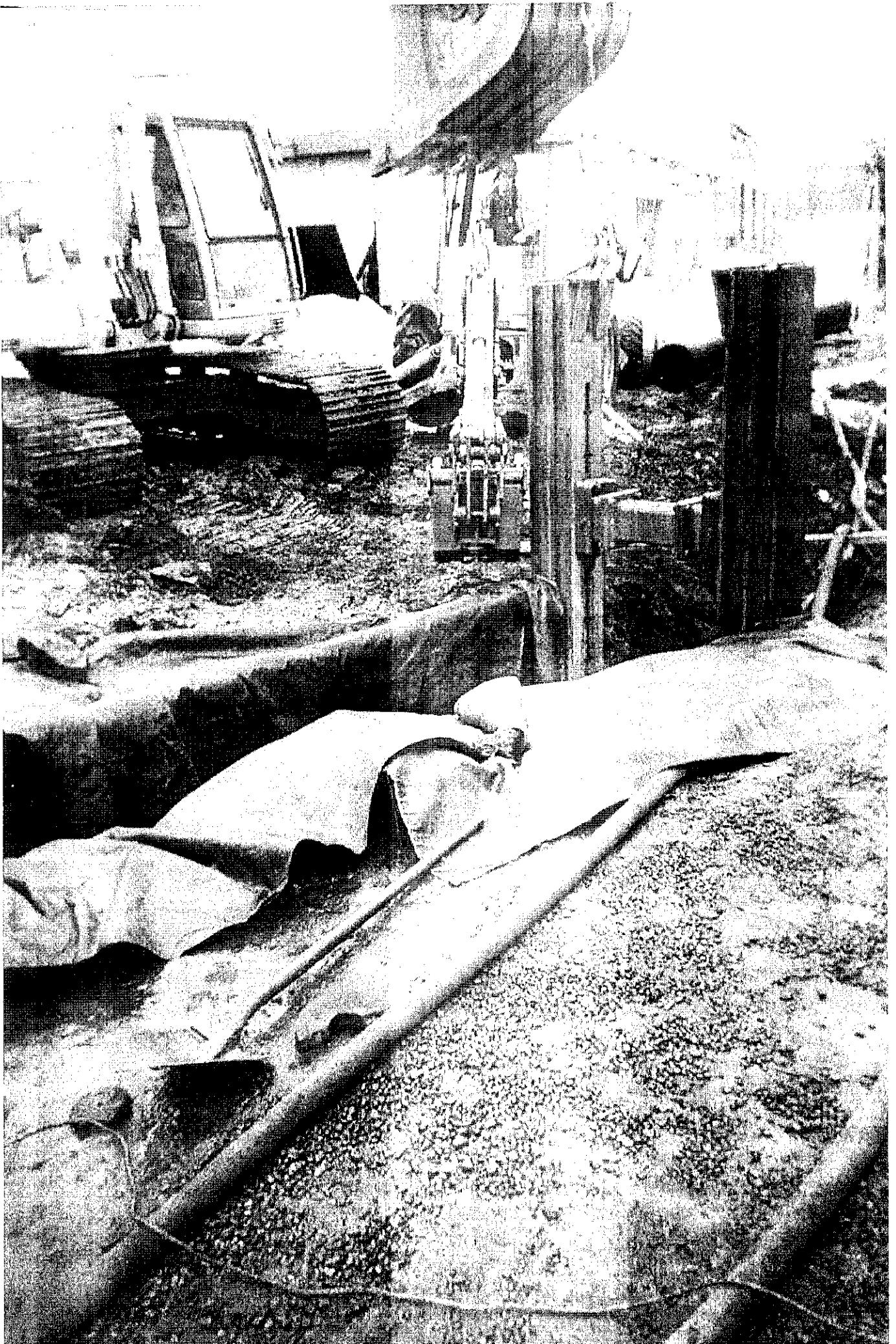






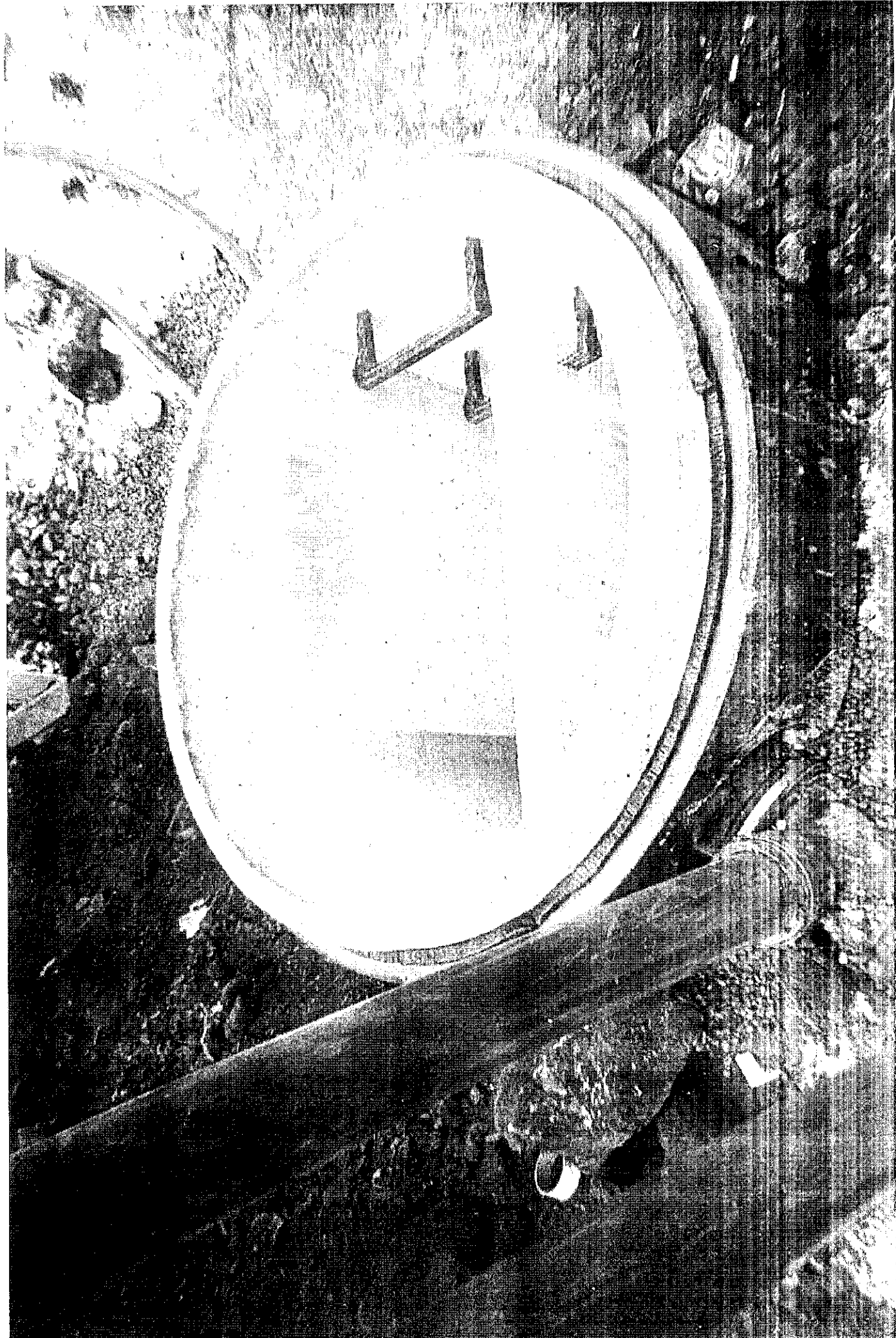






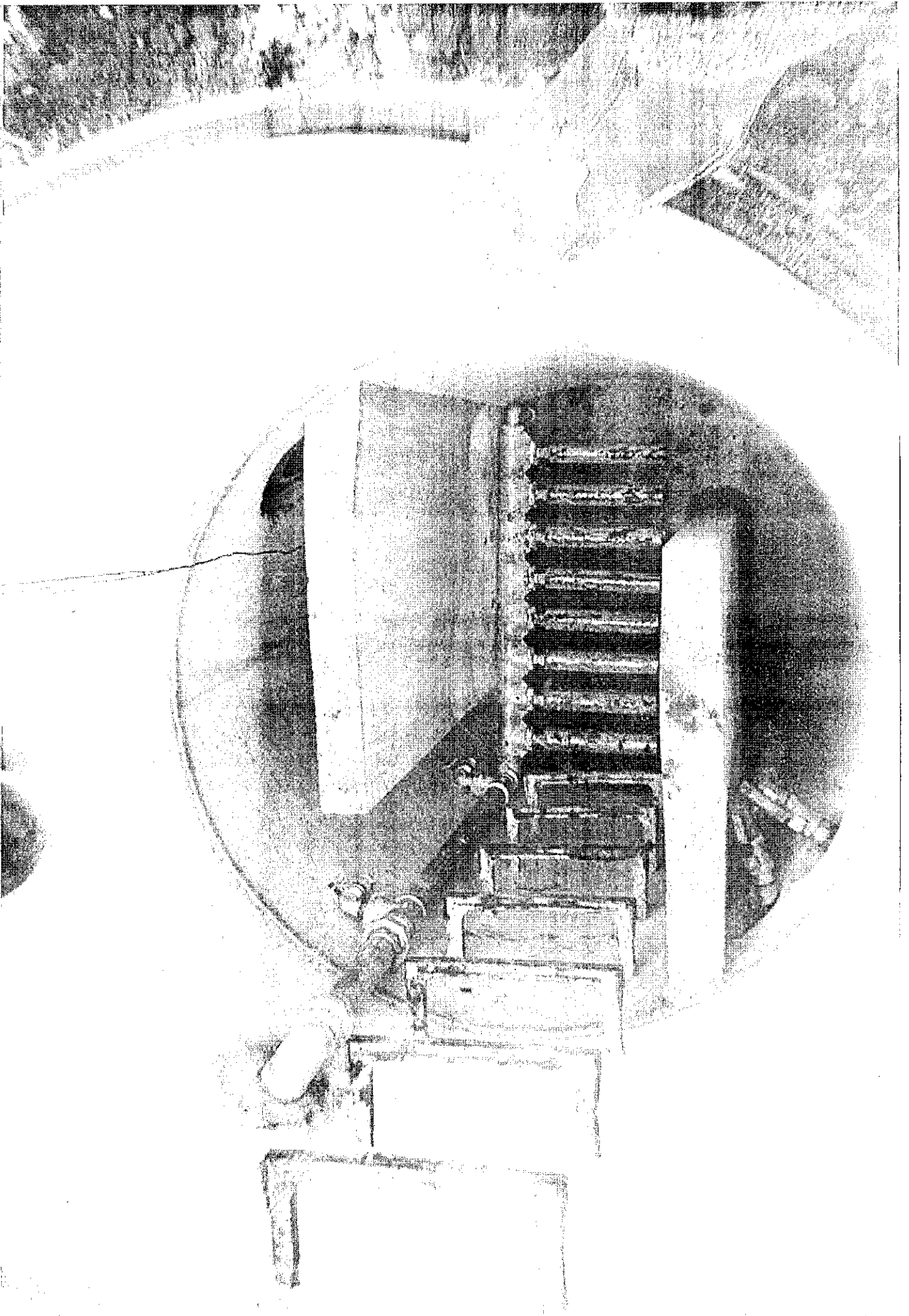




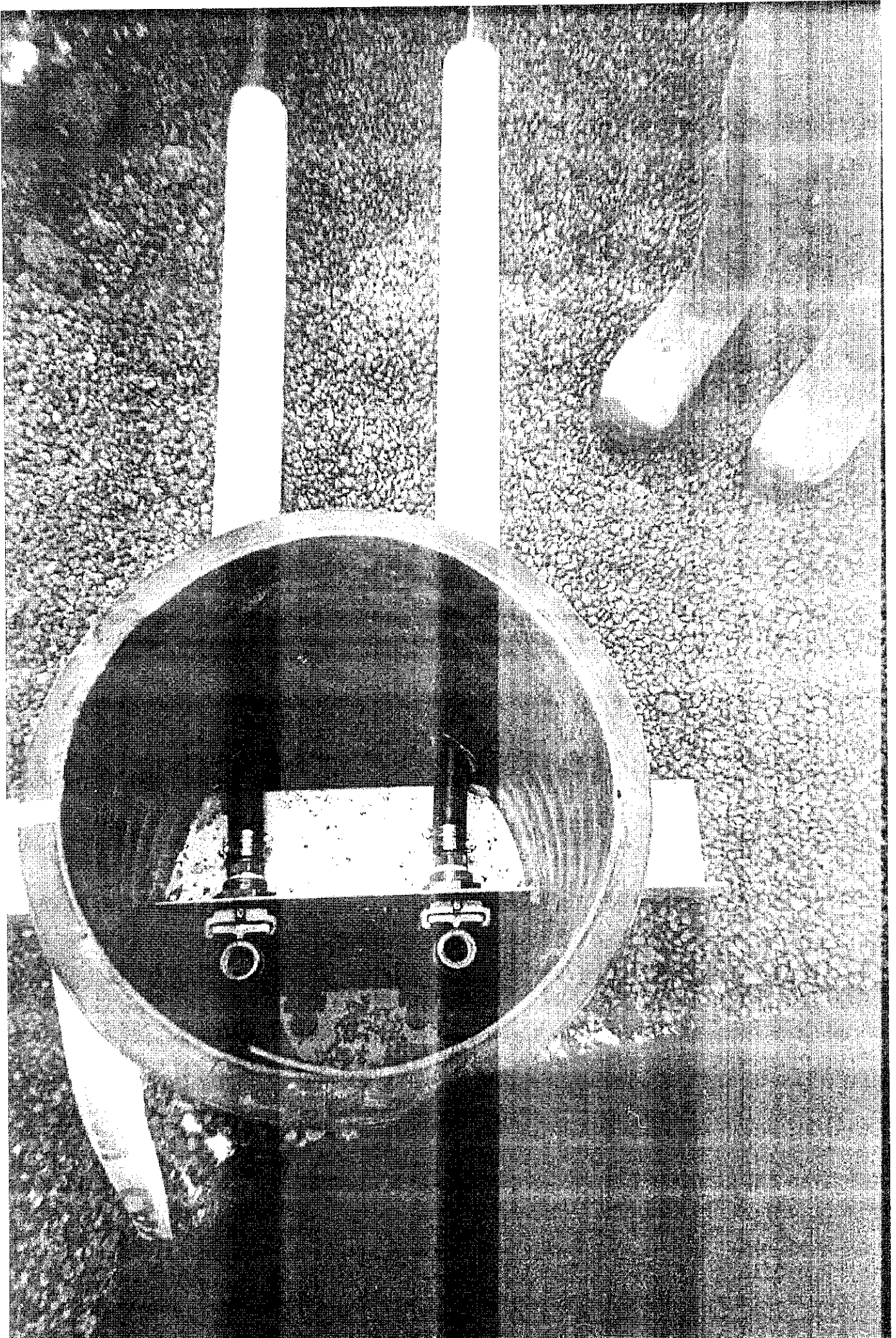


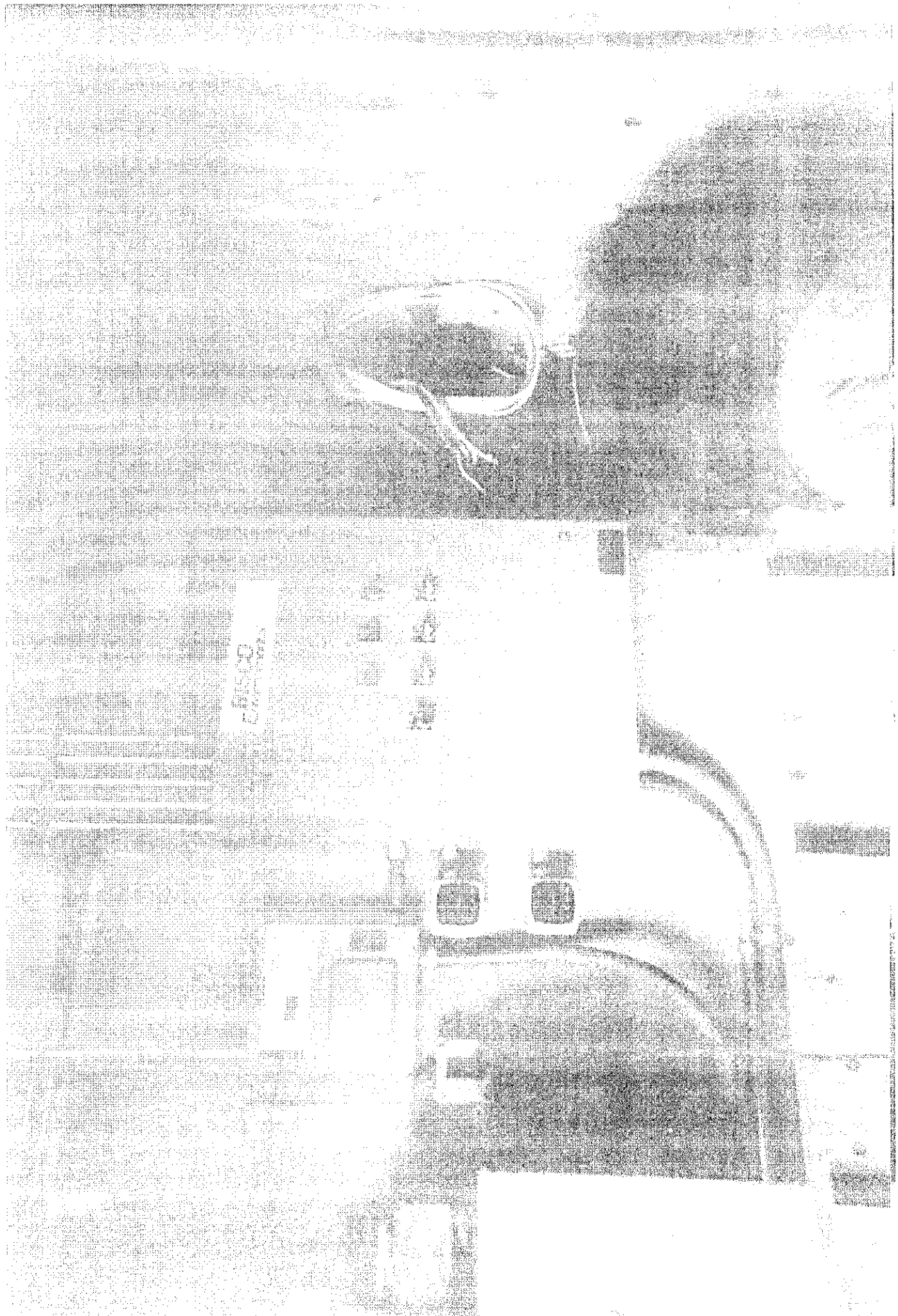




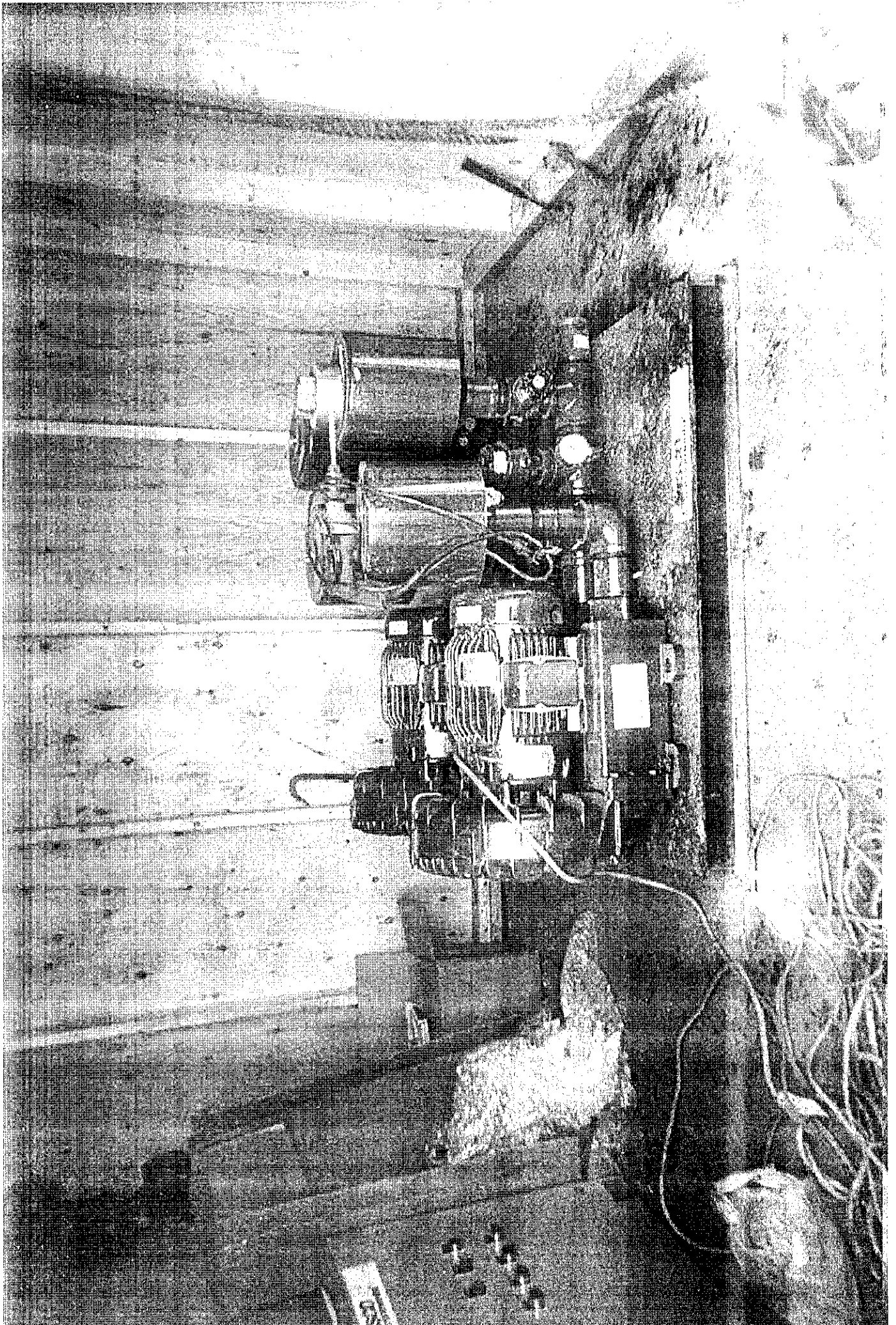


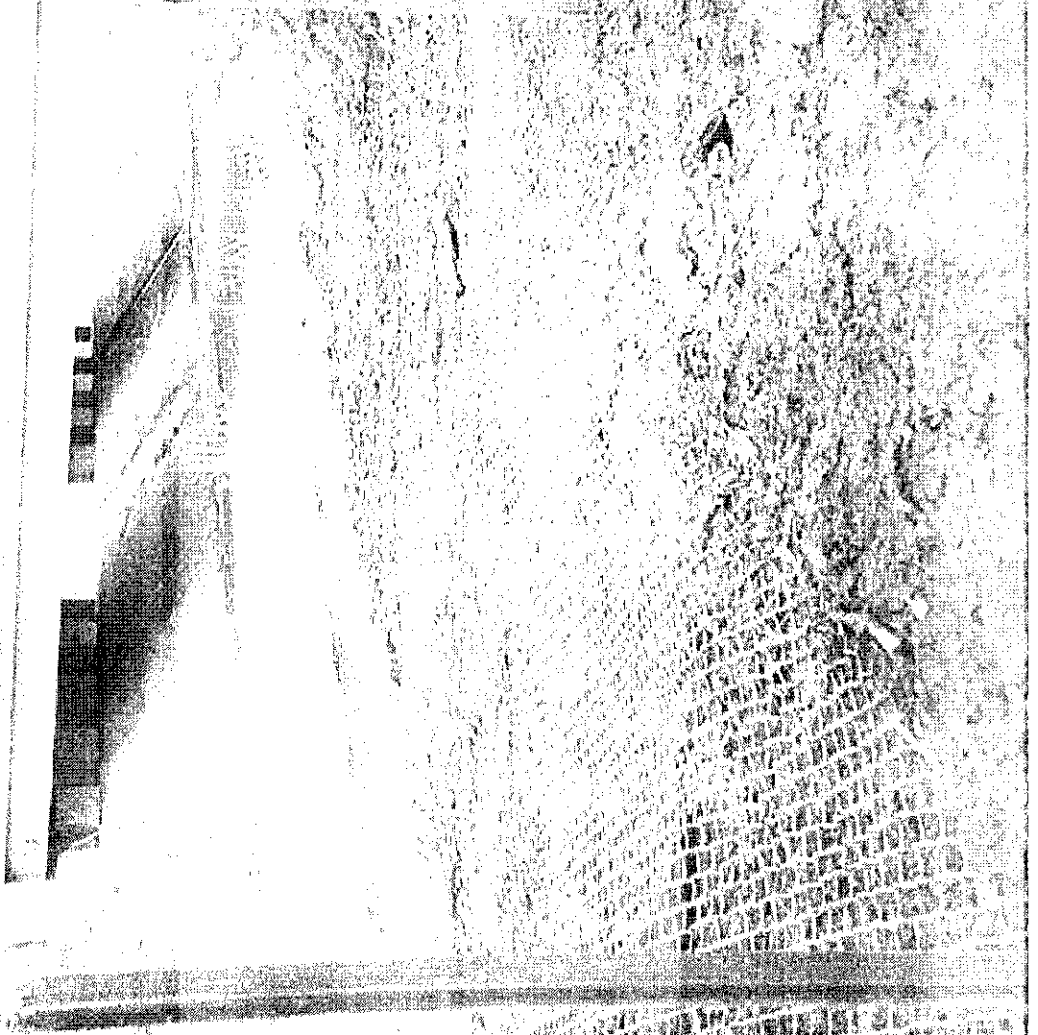
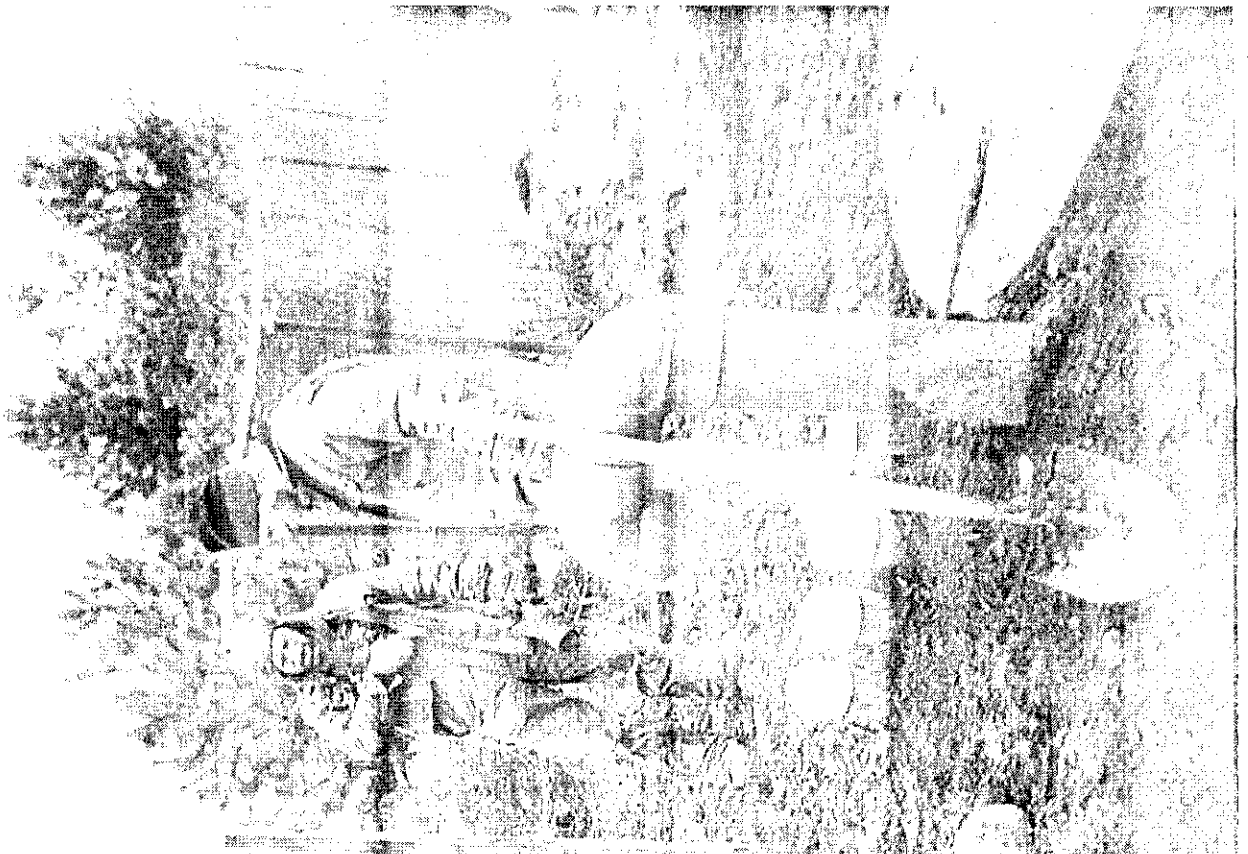








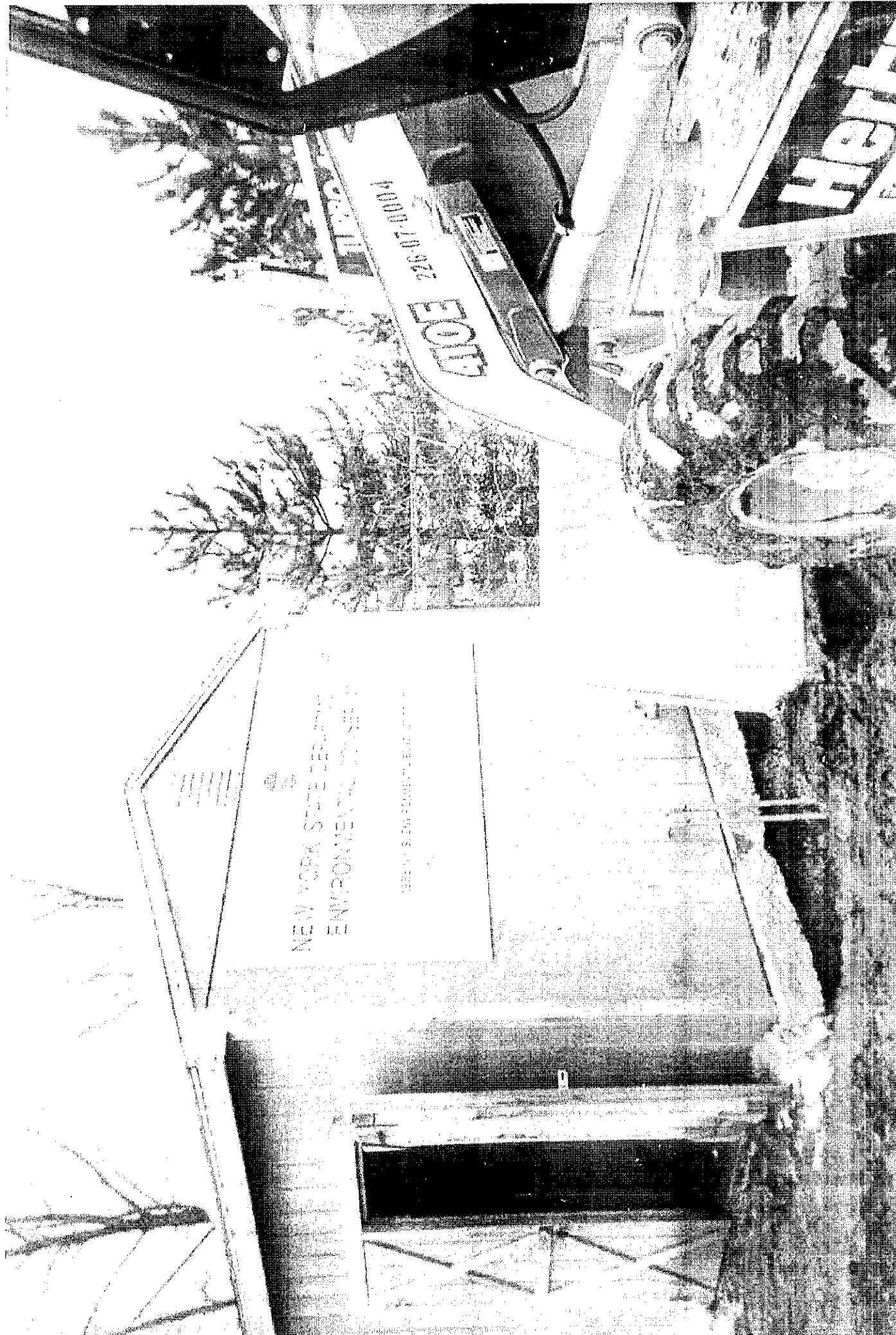












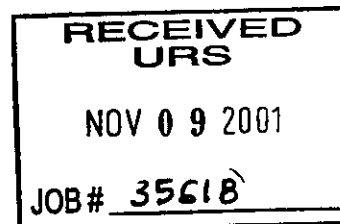


**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation**  
**Bureau of Construction Services, 12<sup>th</sup> Floor**  
625 Broadway, Albany, New York 12233-7013  
**Phone:** (518) 402-9814 • **FAX:** (518) 402-9819  
**Website:** www.dec.state.ny.us



NOV - 6 2001

Mr. Robert McPeak  
Department Manager  
SCIENTECH NES, Inc.  
44 Shelter Rock Road  
Danbury, Connecticut 06810



Dear Mr. McPeak:

cc: D. McCall  
file (c-s)

Re: Site No. 6-33-045  
Northeast Alloys & Metals  
Contract No. D004178

The New York State Department of Environmental Conservation (NYSDEC) hereby forwards the executed Change Order No. 1 to the referenced contract between SCIENTECH NES, Inc. and the NYSDEC. The original contract was for the amount of \$250,061.03. This change order increases the contract amount by \$27,466.42, increasing the contract amount to \$277,527.45. The contract time is increased in the change order from 120 days to 270 days.

If you have any questions, please contact me or Mr. Gerard Burke, Project Engineer, at (518) 402-9814.

Sincerely,



Robert C. Knizek, P.E.  
Chief, Eastern Field Services Section  
Bureau of Construction Services  
Division of Environmental Remediation

Enclosure

cc: R. Lupe - NYSDEC, BPM  
P. Ouderkirk - NYSDEC, Region 6  
D. McCall - URS Greiner Woodward Clyde

Northeast Alloys & Metals  
Site No. 6-33-045  
State Contract No. D004178  
Change Order No. 1

Change Order Amount: \$27,466.42

Date of Issue:

Contractor's Name: SCIENTECH NES

Engineer's Name: URS Corporation

---

Change Order Items: This Change Order comprises eight (8) items as discussed below

---

**I. CHANGE ORDER ITEMS:**

**A. Description of Change:**

This change to the original contract is for *new* Item LS-8 – Snow Delays. The Contractor will be compensated for time lost due to delays caused by snow removal and reduced productivity due to snow, cold, and wintry weather conditions.

**Drawing Reference:**

Not Applicable

**Specification Reference:**

Not Applicable

**Contract Pay Items:**

*New Pay Item No. LS-8 – “Snow Delay”*

**Reason for Change:**

This change order item was originally discussed and approved by the Department at the Pre-Construction Meeting with the Contractor. It was determined that a delay of several months by the Department would move the construction phase of the project into the winter months. This item compensates the contractor for the lost time and productivity due to the delay of the project by snow and cold weather.

**Cost:**

The Department and the Contractor negotiated an average daily cost of \$2,500 for construction based on actual time and materials. The units for this pay item (81 hours total) were based on the daily reports of time lost for snow delays as determined by the construction oversight. The total cost increase for this item is  $\$2,500 \text{ per day} \times (81 \text{ hours} / 8 \text{ hours per day}) = \$25,312.50$ . Attachment A includes additional information and backup for this change order item.

Add new pay item LS-8 - "Snow Delays," Lump Sum cost \$25,312.50

Total **INCREASE** in Pay Item Cost = \$25,312.50

**B. Description of Change:**

This change to the original contract is to increase the unit cost for construction of the groundwater collection trench, existing pay item UC-3.

**Drawing Reference:**

Contract Drawing No. 4 – Cross Sections

**Specification Reference:**

Section 02221 – Groundwater Collection Trench

**Contract Pay Items:**

Pay Item UC-3 – "Groundwater Collection Trench"

**Reason for Change:**

The actual quantity for trench construction (4,058 ft<sup>2</sup>) is only 78% of the original bid estimate quantity (5,180 ft<sup>2</sup>). Additionally, the site conditions and the smaller quantity made installation of the trench more difficult than anticipated. Therefore, in accordance with the Contract Documents, Section VIII, Article 11, the unit price for trench construction was renegotiated.

**Cost:**

The Department and the Contractor negotiated the unit price for construction of the trench based on an estimate of the actual time and materials required during construction. The unit cost for item UC-3 will be increased to \$20.50 per square



foot. The actual quantity for this pay item will be reduced to 4,058 ft<sup>2</sup>. The total for this pay item will increase to  $\$20.50/\text{ft}^2 \times 4058 \text{ ft}^2 = \$83,189$ . The net increase to the contract price is then  $\$83,189 - \$69,049.40 = \$14,139.60$ . Attachment B includes additional information and backup for this change order item.

Increase unit cost for Pay Item UC-3 - "Groundwater Collection Trench" to \$20.50 per square foot.

Decrease quantity for Pay Item UC-3 - "Groundwater Collection Trench" to 4,058 square feet.

Total **INCREASE** in the Pay Item cost = \$14,139.60

C. Description of Change:

This change to the original contract is to increase the unit cost for construction of the fence around the treatment system, existing pay item UC-5.

Drawing Reference:

Contract Drawing No. 3 – Proposed Site Construction

Specification Reference:

Section 01040, Article 1.6 – Fencing

Contract Pay Items:

Pay Item UC-5 – "Fencing"

New Pay Item No. UC-8 "Additional Fencing"

Reason for Change:

The location of the treatment building was moved due to site conditions. Based on the new location of the building, and at the request of the Department, a longer fence was installed than originally was intended. The actual length of fence (135 ft) is 211% of the original bid estimate quantity (64 ft). Therefore, the Contractor requested that the unit price of the fence be renegotiated in accordance with the Contract Documents, Section VIII, Article 11.

**Cost:**

The Department and the Contractor negotiated a unit price of \$44.06 as a reasonable unit cost for the additional length of fence over and above 115% of the original bid quantity.

Based on the renegotiated unit cost, and the additional quantity at the original unit price, the total change order amount was determined as follows:

Additional 15% at original price: 9.6 feet @ \$24.98 = \$239.81

Additional length at revised unit price: 61.4 feet @ \$44.06 = \$2,705.84

Attachment C includes additional information and backup for this change order item.

Increase quantity for Pay Item UC-5 - "Fencing," to 73.6 feet.

Add new Pay Item UC-8 - "Additional Fencing," with a unit cost of \$44.06 per foot, and a total quantity of 61.4 feet.

Total **INCREASE** in Pay Item cost = \$2,945.65

**D. Description of Change:**

This change to the original contract is to increase the quantity for handling of the East Gate Area Soil, existing pay item UC-1.

**Drawing Reference:**

Contract Drawing No. 3 - Proposed Site Construction

**Specification Reference:**

Section 02220 - Earthwork

Section 02230 - Contaminated Materials

**Contract Pay Items:**

Pay Item UC-1 - "East Gate Area - Soil Excavation, Handling, and On-site Backfill of Soil"

**Reason for Change:**

The actual quantity of soil excavated and handled at the east gate area (427.5 cubic yards) is significantly more than the original bid estimate of 234 cubic yards. However, the additional quantity of soil did not significantly increase the cost to the Contractor. Therefore, the Contractor and the Department agreed that the additional cost for this item would be limited to the additional 15% at the original unit cost in accordance with the Contract Documents, Section VIII, Article 11.

**Cost:**

The additional quantity for this item is 15% of the original quantity; 234 cubic yards x 0.15 = 35.1 cubic yards @ \$59.87 per cubic yard = \$2,101.44.

Increase quantity for Pay Item UC-1 - "East Gate Area - Soil Excavation, Handling, and Onsite Backfill of Soil" to 269.1 cubic yards.

Total **INCREASE** in the Pay Item cost = \$2,101.44

**E. Description of Change:**

This change to the original contract is to modify the quantity for construction of the gravity discharge line to reflect the actual number of units.

**Drawing Reference:**

Contract Drawing No. 3 – Proposed Site Construction  
Contract Drawing No. 4 – Cross-Sections  
Contract Drawing No. 5 – Miscellaneous Details Sheet 1 of 3

**Specification Reference:**

Section 02220 – Earthwork

**Contract Pay Items:**

Pay Item UC-4 – "Treated Groundwater Gravity Discharge"

**Reason for Change:**

The actual quantity for construction of the gravity discharge line (124 linear feet) is more than the original bid estimate of 110 linear feet. Therefore, in accordance with the Contract Documents, Section VIII, Article 11, the additional quantity for construction of the gravity discharge line will be paid at the original unit price.

**Cost:**

The additional quantity of discharge line constructed was 14 linear feet [124 – 110 lf]. Therefore, the total increase in cost is 14 linear feet @ \$80.92 per linear foot = \$1,132.88.

Increase quantity for Pay Item UC-4 - "Treated Groundwater Gravity Discharge" to 124 linear feet.

Total **INCREASE** in Pay Item cost = \$1,132.88

**F. Description of Change:**

This change to the original contract is to modify the quantity of soil disposal to the actual quantity.

**Drawing Reference:**

Contract Drawing No. 3 – Proposed Site Construction

**Specification Reference:**

Section 02220 – Earthwork  
Section 02230 – Contaminated Materials

**Contract Pay Items:**

Pay Item UC-2 – "East Gate Area – Offsite Disposal of Contaminated Soil"

**Reason for Change:**

Analysis of the excavated soil indicated that the contaminant concentrations were low enough to allow for onsite disposal of the soil. Therefore, no offsite disposal of soil was required.

**Cost:**

Based on the original pay item costs: 100 ton @ \$174.58 per ton = \$17,458.

Delete Pay Item UC-2 - "East Gate Area - Offsite Disposal of Contaminated Soil"

Total **DECREASE** in Pay Item cost = \$17,458.00

**G. Description of Change:**

This change to the original contract is to modify the quantity for payment of Health and Safety to the actual quantity.

**Drawing Reference:**

Not Applicable

**Specification Reference:**

Section 01030 – Health and Safety

**Contract Pay Items:**

Pay Item UC-7 – "Health and Safety"

**Reason for Change:**

Based on the shortened duration of activities in the area of contaminated soil, it was not necessary to conduct health and safety activities for as long as originally estimated.

**Cost:**

The actual quantity for Health and Safety as determined by URS and the Contractor was 57 mandays. The quantity of Health and Safety in the original contract was 104 mandays, for a difference of 47 mandays that were not used. At the contract price of \$59.95 per manday, the net decrease in the contract price is then 47 days @ \$59.95 per day = \$2,817.65.

Decrease quantity for Pay Item UC-7 - "Health and Safety" to 57 mandays.

Total **DECREASE** in the Pay Item cost = \$2,817.65



H. Description of Change:

This change to the original contract is for *new* Item LS-9 – Additional Paving. The Contractor will be compensated for additional paving costs associated with the delay of the project until the winter months.

Drawing Reference:

Contract Drawing No. 5 – Miscellaneous Details, Sheet 1 of 3

Specification Reference:

Not Applicable

Contract Pay Items:

*New* Pay Item No. LS-9 – “Additional Paving”

Reason for Change:

A delay of the project for several months by the Department moved the construction phase of the project into the winter months. Because the equipment and materials required to repair the cut across Pitcher Street were not available during the winter months, the Contractor was required to repair the street temporarily, and then return to the site the following year to permanently repair the street. This item compensates the Contractor for the additional costs associated with repairing Pitcher Street.

Cost:

The Department and the Contractor negotiated a lump sum price of \$2,110 for additional expenses associated with paving. Attachment D includes additional information and backup for this change order item.

Add new pay item LS-9 – “Additional Paving,” Lump Sum cost \$2,110.

Total **INCREASE** in Pay Item Cost = \$2,110.

**II. CHANGE ORDER NO. 1 SUMMARY**

|    |                                                           |                    |
|----|-----------------------------------------------------------|--------------------|
| A. | New Pay Item LS-8 – Snow Delay                            | \$ 25,312.50       |
| B. | Pay Item UC-3 – Groundwater Collection Trench             | \$ 14,139.60       |
| C. | Pay Item UC-5 – Fencing                                   | \$ 239.81          |
|    | New Pay Item UC-8 - Additional Fencing                    | \$ 2,705.84        |
| D. | Pay Item UC-1 – East Gate Area – Soil Excavation          | \$ 2,101.44        |
| E. | Pay Item UC-4 – Treated Groundwater Gravity Discharge     | \$ 1,132.88        |
| F. | Pay Item UC-2 – East Gate Area – Offsite Disposal of Soil | -\$ 17,458.00      |
| G. | Pay Item UC-7 – Health and Safety                         | -\$ 2,817.65       |
| H. | New Pay Item LS-9 – Additional Paving                     | <u>\$ 2,110.00</u> |
|    | TOTAL                                                     | \$27,466.42        |

**III. CHANGE IN CONTRACT PRICE**

|                                                       |              |
|-------------------------------------------------------|--------------|
| Original Contract Price:                              | \$250,061.03 |
| Contract Price after previous approved Change Orders: | \$250,061.03 |
| Net Increase due to this Change Order:                | \$ 27,466.42 |
| New Contract Price including this Change Order:       | \$277,527.45 |

**IV. CHANGE IN CONTRACT TIME**

|                                                | <u>CALENDAR DAYS</u> | <u>COMPLETION DATE</u> |
|------------------------------------------------|----------------------|------------------------|
| Original Contract Time:                        | 120                  | April 3, 2001          |
| Contract Time after previous Change Order:     | 120                  | April 3, 2001          |
| Net due to this Change Order:                  | 150                  |                        |
| New Contract Time including this Change Order: | 270                  | August 31, 2001        |

Contract No. D004178

Change Order No. 1

Page 10

It is understood and agreed that, unless expressly so stated above, the work herein authorized will not extend the time for the completion of the contract.

It is understood and agreed that this change order represents full and complete compensation for all work described herein.

This work is to be performed in accordance with the terms of the contract and original plans and specifications, except as herein modified. It is understood and agreed that this order shall be deemed executory only to the extent of moneys available and no liability shall be incurred by the State beyond the moneys available for the purpose.

CONTRACT NUMBER D004178

IN WITNESS WHEREOF, representatives of the Department and the Contractor have executed this Contract on the day and year written beneath their respective signatures. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

Recommended:

By: Michael J. WalshTitle: DVR DERDate: 9/13/01

FOR ENGINEER

By: Robert C. Krueger P.E.Title: EE-3Date: SEP 10 2001

Approved as to Form

By: OCT 04 2001

Attorney General

Date: PETER FAVRETTO  
ASSOCIATE ATTORNEY

FOR DEPARTMENT

By: Dorothy PrackbeckTitle: Asset Budget AnalystDate: 9/24/01

FOR CONTRACTOR

By: Robert E. McPheeTitle: Dept. Mgr.Date: 9/4/01

Approved:

By: OCT 18 2001

State Comptroller

Date: Thomas R. Yammone

Contract No. D004178

Change Order No. 1

Page 11

) SS:

COUNTY OF )

STATE OF )

) SS:

COUNTY OF )

On the \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, before me personally came \_\_\_\_\_, to me known, who duly sworn, did depose and say that (s)he resides in \_\_\_\_\_, New York: that (s)he is \_\_\_\_\_ of \_\_\_\_\_, the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the Board of Directors of said corporation and that (s)he signed his/her name thereto by the same authority.

\_\_\_\_\_  
Notary Public

STATE OF )

) SS:

COUNTY OF )

On the \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, before me personally came \_\_\_\_\_, to me known, who duly sworn, stated that (s)he is a member of employee of \_\_\_\_\_, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed his/her name thereto on behalf of said firm.

\_\_\_\_\_  
Notary PublicSTATE OF *Connecticut* )COUNTY OF *Fairfield* ) SS:

On the *4<sup>th</sup>* day of *September* *2001*, before me personally came *Robert E. McPeak, Jr.*, to me known, who duly sworn, stated that (s)he is a member of employee of *Sciencetech Inc.*, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed his/her name thereto on behalf of said firm.

*Verdina Bureau*  
\_\_\_\_\_  
Notary Public

My Commission Expires

*7/31/05*

**ATTACHMENT A**

**BACKUP AND COST JUSTIFICATION FOR  
SNOW DELAYS**



April 19, 2001

Mr. Robert E. McPeak, Jr., P.E., LEP  
SCIENTECH, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810

**RE: Northeast Alloys and Metals Site  
Change Order for Snow Delays**

Dear Mr. McPeak:

URS and the Department have reviewed your letters dated November 21, 2000 and March 26, 2001, regarding a change order for time lost due to snow delays. The concept of the change order for snow delays was discussed and approved by the Department both at the project pre-construction meeting, and in a letter dated December 5, 2000.

Table 1 (attached) shows the daily cost that originally was requested in your November 21 letter. Based on that letter, and our construction oversight, URS has revised the quantities to reflect a reasonable estimate of your actual use at the site during construction. Secondly, URS compared your unit costs to published construction costs and our past experience. Considering the items that were not included in the table (e.g., dewatering pumps), your revised cost proposal of \$2,500 per day appears to be fair and reasonable.

Based on the total project snow delay of 81 hours, the total amount of this change order item will be  $(81 \text{ hours} / 8 \text{ hours per day}) (\$2500 \text{ per day}) = \$25,312.50$ . Based on URS' recommendation, the Department has approved this item, and it will be included on the change order currently being prepared by URS.

If you have any questions or require any additional information, please contact us.

Sincerely,

**URS Corporation**

Donald A. McCall, P.E.  
Project Engineer

cc: P. Ouderkirk, P.E., NYSDEC – Region 6  
D. Rothman, P.E., URS  
File: 35618 (C-1)



**Table 1 - Daily Rate for Snow Delays  
Northeast Alloys and Metals Site**

| Item                        | Scientech Requested <sup>1</sup> |                     |     |          |                  | Approved |                 |
|-----------------------------|----------------------------------|---------------------|-----|----------|------------------|----------|-----------------|
|                             | Monthly Cost                     | Daily Cost per Unit | Fee | Quantity | Total Daily Cost | Quantity | Daily Cost      |
| Trailers                    | \$ 495                           | \$ 16.50            | 10% | 2        | \$ 36            | 2        | \$ 36           |
| Portolet                    | \$ 75                            | \$ 2.50             | 10% | 1        | \$ 3             | 1        | \$ 3            |
| Potable Water               | \$ 75                            | \$ 2.50             | 10% | 1        | \$ 3             | -        | \$ -            |
| Trash Pickup                | \$ 75                            | \$ 2.50             | 10% | 1        | \$ 3             | -        | \$ -            |
| Water Truck                 | \$ 4,000                         | \$ 133.33           | 10% | 1        | \$ 147           | -        | \$ -            |
| Phone, fax, copier          | \$ 400                           | \$ 13.33            | 10% | 2        | \$ 29            | 1        | \$ 15           |
| Trailer Electricity         | \$ 125                           | \$ 4.17             | 10% | 2        | \$ 9             | 2        | \$ 9            |
| Snow Removal                | \$ 400                           | \$ 13.33            | 10% | 1        | \$ 15            | -        | \$ -            |
| Travel Costs                | \$ 1,500                         | \$ 50.00            | 10% | 2        | \$ 110           | 2        | \$ 110          |
| Excavator (incl. operation) | \$ 6,450                         | \$ 215.00           | 10% | 1        | \$ 237           | 2        | \$ 473          |
| Roller (incl. operation)    | \$ 5,940                         | \$ 198.00           | 10% | 1        | \$ 218           | -        | \$ -            |
| Loader (incl. operation)    | \$ 6,150                         | \$ 205.00           | 10% | 1        | \$ 226           | 1        | \$ 226          |
| Security                    | \$ 4,110                         | \$ 137.00           | 5%  | 1        | \$ 144           | -        | \$ -            |
| Shoring                     | \$ 16,760                        | \$ 1,117.33         | 10% | 1        | \$ 1,229         | -        | \$ -            |
| per diem                    | \$ 3,000                         | \$ 100.00           | 10% | 2        | \$ 220           | 2        | \$ 220          |
| Site Super (Gauss)          | \$ 4,432                         | \$ 221.60           | 15% | 1        | \$ 255           | 1        | \$ 255          |
| Site Technician (Glista)    | \$ 4,198                         | \$ 209.90           | 15% | 1        | \$ 241           | 1        | \$ 241          |
| Operators                   | \$ 5,984                         | \$ 299.20           | 15% | 3        | \$ 1,032         | -        | \$ -            |
| Laborers                    | \$ 3,581                         | \$ 179.05           | 15% | 2        | \$ 412           | 3        | \$ 618          |
| Site Vehicles               | \$ 900                           | \$ 45.00            | 10% | 2        | \$ 99            | 2        | \$ 99           |
| Tank                        | \$ 1,050                         | \$ 35.00            | 10% | 1        | \$ 39            | -        | \$ -            |
| Stripper                    | \$ 2,000                         | \$ 66.67            | 10% | 1        | \$ 73            | -        | \$ -            |
| Project Management          | \$ 390                           | \$ 19.50            | 15% | 1        | \$ 22            | 1        | \$ 22           |
| Health and Safety           | \$ 6,234                         | \$ 207.80           | 10% | 1        | \$ 229           | -        | \$ -            |
| <b>Total</b>                |                                  |                     |     |          | <b>\$ 5,029</b>  |          | <b>\$ 2,327</b> |

1. These unit costs were originally submitted in Scientech's November 21, 2000 letter. The total daily cost was revised down to \$2,500 per day in their March 26, 2001 letter.

J:\35618.04\Excel\Snow costs.xls\snow

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Snow Delays

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Problem: Justify the reasonableness of the change order request submitted by the Contractor (NES), for additional costs associated with snow delays. This is the cost to the Contractor for being at the site when unable to work due to the weather conditions and/or the increased cost of doing work in inclement weather.

---

References:

1. R.S. Means Co., Inc., *Site Work and Landscape Cost Data*, 15<sup>th</sup> Annual Edition, 2001.
  2. URS-NYSDEC Standby Contract Rates
- 

1. Determine the Items Associated with the Snow Delays:

The letter submitted by Scientech dated November 21, 2000 included an itemized list of all items and equipment at the site that would be associated with the cost delay. This list included monthly costs, daily costs, and quantities, for the determination of a daily unit cost of \$5,029 as shown on Table 1.

Based on URS' oversight of the actual construction activities, Scientech's table was revised to include only those items that actually were used for construction during the time of the snow delay. This also is shown on Table 1 under the "Approved" column. Based on these quantities, a total daily cost of \$2,327 per day was determined.

2. Determine Reasonableness of Unit Costs

For each of the items included in the snow delay, URS used Means and other sources to justify the individual unit costs. All of the costs

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Snow Delays

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submitted by Sciencetech were within 15% of the published costs, and therefore were determined to be fair and reasonable.

### 3. Daily Cost

Sciencetech's letter dated March 26, 2001 requested a revised daily cost of \$2,500 for snow delays.

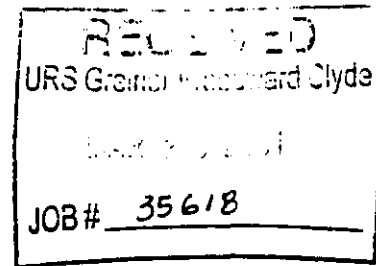
Based on the \$2,327 cost determined by URS, and considering the items actually used at the site that were not included on the list (e.g., dewatering pumps), the proposed cost of \$2,500 per day was determined to be fair and reasonable.



March 26, 2001  
ES-2385

Mr. Donald McCall  
URS Greiner Woodward Clyde  
282 Delaware Avenue  
Buffalo, NY 14202-1805

Subject: Project Change Order Request No. 4  
Former Northeast Metals and Alloys  
Utica, NY



cc: D. Rothman  
D. McCall  
file (c-1)

Dear Don:

SCIENTECH is submitting the following information to request a Change Order for the subject project. This change is intended to provide additional compensation to cover difficult conditions and project schedule extensions caused by cold weather and snow encountered during the course of the work. These conditions were unexpected and encountered as a result of delays in obtaining project funding internally within the NYDEC.

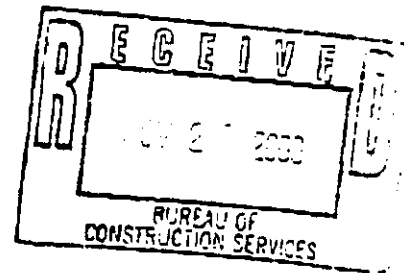
Following our review of actual additional expenditures related to these cold weather delays, we are hereby requesting a change order amount of \$2500.00 for each day of delay. Our current records indicate that Mr. Wagner has authorized a total of 81 hours (or 10.125 days) of delay time. At the suggested rate, this would generate a total Change Order amount of \$ 25,312.50.

Please feel free to call me if you have any questions or require any additional information.

Sincerely,  
SCIENTECH, Inc.

Robert E. McPeak, Jr., P.E., LEP  
Department Manager  
Environmental Services

cc P. Ouderkirk  
K. Cyr



November 21, 2000  
Refer to: ES-2280

Mr. Gerard Burke, P.E.  
New York State Department of Environmental Conservation  
Bureau of Construction Services - Room 267  
50 Wolf Road  
Albany, NY 12233

Subject: Former Northeast Alloys and Metals Site, Utica, NY  
Contract Number D-004178  
Change Order No. 1

Reference: Letter from R. McPeak to G. Burke dated November 2, 2000

Dear Mr. Burke:

As requested during our telephone conversations on November 7, and November 14, 2000, we are providing additional information regarding the costs discussed in the referenced letter for Change Order 1 on the subject project. It is our understanding that the material and labor costs related to providing and installing the heat trace tape and insulation will be paid on a cost plus fee basis as permitted in the contract documents.

We have also provided additional detail regarding daily site operational costs that will be incurred during delays caused by working in the colder winter months. The referenced letter estimated 3.75 days of delay time; we understand that the actual delay days will be determined at a later date. Once determined, the number of actual delay days would be multiplied by the daily total operational cost (\$5,029) to calculate the total delay cost.

Costs are detailed in the attached Microsoft Excel spread sheets. You will note that the sheets provide detailed material and installation costs for the heat trace and insulation as well as detail for the cost of daily delays. Total values are slightly lower than those in the referenced letter because the fee percentages have been adjusted and are now in compliance with those allowed in the contract documents.

|                   |                |      |          |                |   |
|-------------------|----------------|------|----------|----------------|---|
| Post-it® Fax Note | 7671           | Date | 12/11/00 | # of pages     | 5 |
| To                | Dan Rothman    |      | From     | Gerard Burke   |   |
| Co./Dept.         |                |      | Co.      | NYSDEC         |   |
| Phone #           |                |      | Phone #  | (518) 457-4285 |   |
| Fax #             | (716) 856-2545 |      | Fax #    |                |   |

Please feel free to call me if you have any questions or require any additional information.

Sincerely,

**SCIENTECH NES, INC.**

A handwritten signature in black ink, appearing to read "Robert E. McPeak, Jr.", with a large, sweeping flourish extending to the right.

Robert E. McPeak, Jr., P.E., LEP  
Senior Department Manager  
Environmental Services

Enclosure

cc: P. Ouderkirk  
K. Cyr



**Daily Delay Costs**  
**For Change Order 1**  
**Northeast Alloys & Metals, Utica, NY**

| Item                        | Monthly cost | Daily cost | Fee % | Number | Days delay | Extended Cost |
|-----------------------------|--------------|------------|-------|--------|------------|---------------|
| Trailers                    | 495          | \$16.50    | 10%   | 2      | 1          | \$36          |
| Portolet                    | 75           | \$2.50     | 10%   | 1      | 1          | \$3           |
| Potable water               | 75           | \$2.50     | 10%   | 1      | 1          | \$3           |
| Trash pickup                | 75           | \$2.50     | 10%   | 1      | 1          | \$3           |
| Water truck                 | 4000         | \$133.33   | 10%   | 1      | 1          | \$147         |
| Phone, fax, copier etc.     | 400          | \$13.33    | 10%   | 2      | 1          | \$29          |
| Trailer electricity         | 125          | \$4.17     | 10%   | 2      | 1          | \$9           |
| Snow removal                | 400          | \$13.33    | 10%   | 1      | 1          | \$15          |
| Travel costs                | 1500         | \$50.00    | 10%   | 2      | 1          | \$110         |
| Excavator (incl. operation) | 6450         | \$215.00   | 10%   | 1      | 1          | \$237         |
| Roller (incl. operation)    | 5940         | \$198.00   | 10%   | 1      | 1          | \$218         |
| Loader (incl. operation)    | 6150         | \$205.00   | 10%   | 1      | 1          | \$226         |
| Security                    | 4110         | \$137.00   | 5%    | 1      | 1          | \$144         |
| Shoring                     | 16760        | \$1,117.36 | 10%   | 1      | 1          | \$1,229       |
| per diem                    | 3000         | \$100.00   | 10%   | 2      | 1          | \$220         |
| Gauss (Site Super)          | 4432         | \$221.60   | 15%   | 1      | 1          | \$255         |
| Glista (Site Technician)    | 4198         | \$209.92   | 15%   | 1      | 1          | \$241         |
| operators                   | 5984         | \$299.20   | 15%   | 3      | 1          | \$1,032       |
| laborers                    | 3581         | \$179.04   | 15%   | 2      | 1          | \$412         |
| Site vehicles               | 900          | \$45.00    | 10%   | 2      | 1          | \$99          |
| Tank                        | 1050         | \$35.00    | 10%   | 1      | 1          | \$39          |
| Stripper                    | 2000         | \$66.67    | 10%   | 1      | 1          | \$73          |
| Project Management          | 390          | \$19.50    | 15%   | 1      | 1          | \$22          |
| Health and Safety           | 6234         | \$207.80   | 10%   | 1      | 1          | \$229         |
| Total Delay cost per day    |              |            |       |        |            | \$5,029       |
| Days Delay                  | 1            |            |       |        |            |               |

**Heat Trace Materials Costs  
for Change Order 1  
Northeast Alloys and Metals, Utica, NY**

| Item                                                                             | unit | number | unit cost | fee    | Total      |
|----------------------------------------------------------------------------------|------|--------|-----------|--------|------------|
| Heat trace                                                                       | LF   | 600    | \$5.00    | 10.00% | \$3,300.00 |
| Insulation                                                                       | LF   | 400    | \$1.00    | 10.00% | \$440.00   |
| Tank Heaters                                                                     | EA   | 3      | \$100.00  | 10.00% | \$330.00   |
| Stripper Heater                                                                  | LF   | 50     | \$5.00    | 10.00% | \$275.00   |
| Subcontractor panel (incl.<br>Wiring stripper heater, panel<br>and tank heaters) | LS   | 1      | 2000      | 5.00%  | \$2,100.00 |
| Total                                                                            |      |        |           |        | \$6,445.00 |

**Heat Trace Labor Costs  
for Change Order 1  
Northeast Alloys and Metals, Utica, NY**

| Personnel | Labor cost | Labor fee | Labor rate | hours | Total      |
|-----------|------------|-----------|------------|-------|------------|
| Glista    | 26.24      | 15.00%    | \$30.16    | 32    | \$965.63   |
| Laborer   | 22.38      | 15.00%    | \$25.74    | 32    | \$823.58   |
| Total     |            |           |            |       | \$1,789.22 |

## **ATTACHMENT B**

### **BACKUP AND COST JUSTIFICATION FOR GROUNDWATER COLLECTION TRENCH**



April 23, 2001

Mr. Robert E. McPeak, Jr., P.E., LEP  
SCIENTECH, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810

**RE: Northeast Alloys and Metals Site  
Change Order for Groundwater Collection Trench**

Dear Mr. McPeak:

URS and the Department have reviewed your letter dated April 5, 2001 regarding a change order for construction of the groundwater collection trench. Because the actual quantity of trench construction (4058 ft<sup>2</sup>) is only 78% of the original bid estimate (5180 ft<sup>2</sup>), the unit cost can be re-negotiated in accordance with the contract documents.

URS reviewed the costs submitted in your request, and compared these costs to both published construction costs and our past experience. Based on our review, the change order request appears to be fair and reasonable. The unit price for construction of the trench will be increased from \$13.33 to \$20.50 per square foot. This change order will result in a \$14,140 increase to the contract cost.

Based on URS' recommendation, the Department has approved this item, and it will be included on the change order currently being prepared by URS.

If you have any questions or require any additional information, please contact us.

Sincerely,

**URS Corporation**

Donald A. McCall, P.E.  
Project Engineer

cc: P. Ouderkirk, P.E., NYSDEC - Region 6  
D. Rothman, P.E., URS  
File: 35618 (C-1)

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Additional Trench Installation Cost

---

Problem: Justify the reasonableness of the change order request submitted by the Contractor (NES), for additional costs associated with installation of the groundwater collection trench.

---

References:

1. R.S. Means Co., Inc., *Site Work and Landscape Cost Data*, 15<sup>th</sup> Annual Edition, 2001.
  2. URS-NYSDEC Standby Contract Rates
- 

1. Determine the Items Associated with the Trench Installation:

The letter submitted by Sciencetech dated April 5, 2001 requested a change order amount of \$14,140 to cover 6 additional days of work. Based on our oversight of the construction activities, URS agreed that the 6 additional days was reasonable.

To justify the cost requested, URS went back to the table that Sciencetech submitted for the snow delay. This table included an itemized list of all items and equipment at the site that would be associated with the cost delay. Based on the equipment used in the construction of the trench, URS determined a daily rate of \$3,350 for trench construction. These costs are shown on Table 1. Items included in the trench construction are indicated under the "Approved" column.

2. Determine Reasonableness of Unit Costs

For each of the items included in the trench construction cost, URS used Means and other sources to justify the individual unit costs. All of the costs submitted by Sciencetech were within 15% of the published costs, and therefore were determined to be fair and reasonable.

URS Corp

Page 2 of 2

JOB NO.: 05.35618.06

MADE BY: D. McCall

Date: 04/18/01

PROJECT: Northeast Alloys and Metals Site

SUBJECT: Cost Estimate for Additional Trench Installation Cost

---

### 3. Daily Cost

Scientech's letter dated March 26, 2001 requested a \$14,140 cost increase.

Based upon the daily rate of \$3,350 as determined above, URS determined a cost of  $(\$3,350 \times 6 \text{ days}) = \$20,100$ . Therefore, the request submitted by Scientech appears to be fair and reasonable.



**Table 1 - Daily Rate for Trench Construction  
Northeast Alloys and Metals Site**

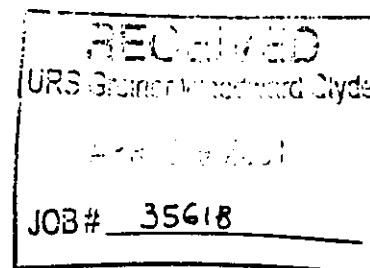
| Item                        | Sciencetech Requested |                     |     |          |                  | Approved |            |
|-----------------------------|-----------------------|---------------------|-----|----------|------------------|----------|------------|
|                             | Monthly Cost          | Daily Cost per Unit | Fee | Quantity | Total Daily Cost | Quantity | Daily Cost |
| Trailers                    | \$ 495                | \$ 16.50            | 10% | 2        | \$ 36            | 2        | \$ 36      |
| Portolet                    | \$ 75                 | \$ 2.50             | 10% | 1        | \$ 3             | 1        | \$ 3       |
| Potable Water               | \$ 75                 | \$ 2.50             | 10% | 1        | \$ 3             | -        | \$ -       |
| Trash Pickup                | \$ 75                 | \$ 2.50             | 10% | 1        | \$ 3             | -        | \$ -       |
| Water Truck                 | \$ 4,000              | \$ 133.33           | 10% | 1        | \$ 147           | -        | \$ -       |
| Phone, fax, copier          | \$ 400                | \$ 13.33            | 10% | 2        | \$ 29            | -        | \$ -       |
| Trailer Electricity         | \$ 125                | \$ 4.17             | 10% | 2        | \$ 9             | -        | \$ -       |
| Snow Removal                | \$ 400                | \$ 13.33            | 10% | 1        | \$ 15            | -        | \$ -       |
| Travel Costs                | \$ 1,500              | \$ 50.00            | 10% | 2        | \$ 110           | -        | \$ -       |
| Excavator (incl. operation) | \$ 6,450              | \$ 215.00           | 10% | 1        | \$ 237           | 2        | \$ 473     |
| Roller (incl. operation)    | \$ 5,940              | \$ 198.00           | 10% | 1        | \$ 218           | -        | \$ -       |
| Loader (incl. operation)    | \$ 6,150              | \$ 205.00           | 10% | 1        | \$ 226           | 1        | \$ 226     |
| Security                    | \$ 4,110              | \$ 137.00           | 5%  | 1        | \$ 144           | -        | \$ -       |
| Shoring                     | \$ 16,760             | \$ 1,117.33         | 10% | 1        | \$ 1,229         | 1        | \$ 1,229   |
| per diem                    | \$ 3,000              | \$ 100.00           | 10% | 2        | \$ 220           | 2        | \$ 220     |
| Site Super (Gauss)          | \$ 4,432              | \$ 221.60           | 15% | 1        | \$ 255           | 1        | \$ 255     |
| Site Technician (Glista)    | \$ 4,198              | \$ 209.90           | 15% | 1        | \$ 241           | 1        | \$ 241     |
| Operators                   | \$ 5,984              | \$ 299.20           | 15% | 3        | \$ 1,032         | -        | \$ -       |
| Laborers                    | \$ 3,581              | \$ 179.05           | 15% | 2        | \$ 412           | 3        | \$ 618     |
| Site Vehicles               | \$ 900                | \$ 45.00            | 10% | 2        | \$ 99            | 1        | \$ 50      |
| Tank                        | \$ 1,050              | \$ 35.00            | 10% | 1        | \$ 39            | -        | \$ -       |
| Stripper                    | \$ 2,000              | \$ 66.67            | 10% | 1        | \$ 73            | -        | \$ -       |
| Project Management          | \$ 390                | \$ 19.50            | 15% | 1        | \$ 22            | -        | \$ -       |
| Health and Safety           | \$ 6,234              | \$ 207.80           | 10% | 1        | \$ 229           | -        | \$ -       |
| <b>Total</b>                |                       |                     |     |          | \$ 5,029         |          | \$ 3,350   |

J:\35618.04\Excel\[Snow costs.xls]trench



April 5, 2001  
ES-2393

Mr. Donald McCall  
URS Greiner Woodward Clyde  
282 Delaware Avenue  
Buffalo, NY 14202-1805



cc: D. Rothman  
D. McCall  
file (c-1)

Subject: Project Change Order Request  
Former Northeast Metals and Alloys  
Utica, NY  
Reference: Letter to D. McCall from R. McPeak dated March 15, 2001 (ES-2373)

Dear Don:

SCIENTECH is submitting the following details in response to your requests for more information regarding the Change Order for trenching contract item (UC-3).

The referenced letter indicated that significant delays were encountered during installation of the system trench. Our original schedule included approximately 14 business days to install the trench and the collection system. The actual installation began on January 17, and ended on about February 14 bringing the duration of the installation work to a total of 20 business days. SCIENTECH incurred the following additional expenses:

|                  |                                                               |
|------------------|---------------------------------------------------------------|
| Labor            | \$6,260.00 (2 Operators, 1 Superintendent, 2 Laborers)        |
| Equipment Rental | \$6,830.00 (1 Truck, 2 Excavators, Trenching System, Loader)  |
| Travel/Perdiem   | \$ 750.00 (2 men, 6 days)                                     |
| Utilities        | <u>\$ 300.00</u> (Trailers, Power, Telephone, Portolet, etc.) |
|                  | \$14,140.00                                                   |

This would bring the total additional amount to \$14,140.00. When added to the original Line Item UC-3 amount of \$69,049.40, this brings the new total of the line item to \$83,189.40. You will note that my total price of \$82,783.20 for Item UC-3 was incorrect in the Referenced letter. This new total agrees correctly with the revised unit price of \$20.50 per square foot (i.e., \$83,189.40/4058 sf = \$20.50/sf).

We anticipate this will provide the additional detail needed to proceed with the processing of the project Change Order. If you have any questions or need any additional information, please feel free to call me at 203-796-5229.

Sincerely,  
SCIENTECH, Inc.

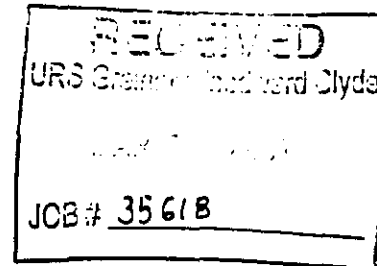
Robert E. McPeak, Jr., P.E., LEP  
Department Manager  
Environmental Services

cc P. Ouderkirk  
K. Cyr



March 15, 2001  
ES-2373

Mr. Donald McCall  
URS Greiner Woodward Clyde  
282 Delaware Avenue  
Buffalo, NY 14202-1805



Subject: Project Change Order Request  
Former Northeast Metals and Alloys  
Utica, NY

cc: D. Rothman  
D. McCall  
File (c-1)

Dear Don:

Based on our conversations during the weekly project status meeting held on February 21, 2001 SCIENTECH is submitting the following information to request a Change Order for the subject project based on field changes and unforeseen field conditions which extended the project schedule and created additional project expense.

First, we are requesting a revised unit price for the trench work as permitted in the contract documents in Section VIII, Article 11 paragraph 11.2.5. The final quantity of trenching installed varied more than 15% from the original estimated quantity. The original bid estimate included 5,180 SF of trench and the actual final quantity was 4,058 SF. This reduction in actual quantities created a higher final unit price for the work item by reducing the advantages realized with economy of scale.

In addition, significant delays were encountered while installing the trench resulting from the need to deal with a variety of waste materials in the area of the excavation as well as the presence of groundwater at a higher elevation and in much greater quantities than expected (based on information provided in the Limited Site Data portion of the bid documents). We encountered significant difficulty removing this water from the excavation and in many cases delayed work activities while water was removed from the work trench. These wet conditions also made it extremely difficult to work with the ICON portable trench shoring system, a situation which also extended the completion time.

Based on the reduction in quantity and the described difficulties, we request a revision of the item unit price from \$13.33 per SF as bid to a final unit price of \$20.50 per SF. This unit price revision would adjust the total price of Item UC-3 to \$82,783.20.

Please consider this correspondence as our initial request for a project Change Order. If you have any questions or need any additional information please feel free to call me at 203-796-5229.

Sincerely,  
SCIENTECH, Inc.

Robert E. McPeak, Jr., P.E., LEP  
Department Manager  
Environmental Services

cc P. Ouderkirk  
K. Cyr

**ATTACHMENT C**

**BACKUP AND COST JUSTIFICATION FOR  
ADDITIONAL FENCING**



April 23, 2001

Mr. Robert E. McPeak, Jr., P.E., LEP  
SCIENTECH, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810

**RE: Northeast Alloys and Metals Site  
Change Order for Fencing**

Dear Mr. McPeak:

URS and the Department have reviewed your letter dated April 5, 2001 regarding a change order for the additional length of fence installation. While we agree that the additional quantity of fence justifies a change order and a re-evaluation of the unit price, we cannot approve the entire amount of \$4,269.59 as requested in your letter.

As per the Contract Documents, Section VIII, Articles 11.2.5 and 11.2.6, the renegotiated unit price only applies to the quantity above 115% of the originally estimated quantity. Therefore, the original 64 feet of fence, plus 9.6 feet (15%), must be paid at the original bid price of \$24.98 per linear foot (/LF). The renegotiated price only applies to the remaining 61.4 feet of fence.

Based on the quote submitted with your letter, the unit price for the fence would be  $(\$5,665 / 135 \text{ feet}) = \$41.96/\text{LF}$ . Based on published construction costs, the price for this type of fence would be approximately \$20/LF. However, based on our past experience, for the relatively small quantity of fence and the fact that the work is located at a hazardous waste site, the price of \$41.96/LF appears to be fair and reasonable.

In regards to the additional time requested for supervision and coordination of the work, we do not believe the additional quantity significantly affects the time required by your personnel.

Based on these modifications, we are willing to approve a total change order amount of \$2,944.97 for this item as follows:

- Additional length at original price: 9.6 feet @ \$24.98/LF = \$239.81
- Additional length at new unit price: 61.4 feet @ \$41.96/LF = \$2,576.34
- Allowable 5% fee on subcontractors: \$2,576.34 @ 5% = \$128.82

With your concurrence, the Department will approve this item, and it will be included on the change order currently being prepared by URS.



Mr. Robert E. McPeak, Jr., P.E., LEP  
April 23, 2001  
Page Two

If you have any questions or require any additional information, please contact us.

Sincerely,

**URS Corporation**

A handwritten signature in black ink, appearing to read "Donald A. McCall".

Donald A. McCall, P.E.  
Project Engineer

cc: P. Ouderkirk, P.E., NYSDEC – Region 6  
D. Rothman, P.E., URS  
File: 35618 (C-1)

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Fence Installation

---

Problem: To back up the change order costs submitted by the Contractor (NES), estimate the cost for installation of a longer fence around the treatment facilities. Although the actual amount of the change order will be limited by the contract requirements, this estimate will show that the quote submitted by NES is reasonable.

---

References:

1. New York State Department of Labor - Prevailing Wage Rate Schedule
  2. R.S. Means Co., Inc., *Environmental Remediation Cost Data - Unit Price*, 7<sup>th</sup> Annual Edition, 2001.
- 

Scope of Work Summary:

Install 135 linear feet of galvanized steel, chain link fence, including a mangate, and a double-swing gate.

---

1. Mobilization

Assume a lump sum total of \$500 to mobilize all personnel and required equipment to the site.

2. Fence Installation (Labor)

Per Means (Ref 2: Item 18-04-0107, the cost for installation of a chain-link fence is \$20.95 per linear foot. The crew used in Means, ULABC, consists of 3 semi-skilled laborers @ \$22.85 per hour and  $\frac{1}{2}$  of a foreman @ \$24.85 per hour. However, looking at the NYS Department of Labor Wage Rates for Onondaga County (Ref. 1), the

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Fence Installation

---

rate for fence installation is significantly higher at \$30.59 per hour.  
For this small job, assume only three laborers, for one 8 hour day of  
work:

3 laborers @ \$30.59 per hour x 8 hours = \$734.16

### 3. Fence Materials

Per Means Item 18-04-0107, material costs for installation of the fence  
are \$19.66 per linear foot.

135 LF @ \$19.66 per linear foot = \$2,654.10

### 4. Gates

Per Means 18-04-0117, the material cost for installation of a 6-foot high  
swing gate is \$558.98.

Assume that the single personnel gate is approximately  $\frac{1}{2}$  the cost of the  
swing gate =  $0.5 \times \$558.98 = \$279.49$ .

Subtotal for gates =  $\$559 + 279 =$  \$838.

### 5. Miscellaneous Equipment and Materials

This item includes all costs for the fence contractor's trucks, equipment  
and handtools, concrete for setting posts miscellaneous other items, say  
\$500.



URS Corp

Page 3 of 3  
JOB NO.: 05.35618.06  
MADE BY: D. McCall  
Date: 04/20/01

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Fence Installation

---

6. Total

|                      |              |
|----------------------|--------------|
| Mobilization         | \$500        |
| Labor                | \$734        |
| Materials            | \$2,654      |
| Gates                | \$838        |
| <u>Miscellaneous</u> | <u>\$500</u> |

|       |          |
|-------|----------|
| Total | \$5,226. |
|-------|----------|

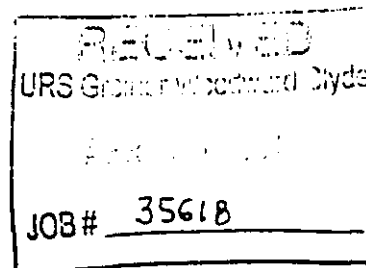
The bid submitted by NES showed a total cost of \$5,665 for installation of the fence.

The estimate by URS is only 8% less than the quote, therefore the price appears to be fair and reasonable.



April 5, 2001  
ES-2384

Mr. Donald McCall  
URS Greiner Woodward Clyde  
282 Delaware Avenue  
Buffalo, NY 14202-1805



Subject: Project Change Order Request No. 3  
Former Northeast Metals and Alloys  
Utica, NY

cc: D. Rothman  
D. McCall  
file (c-1)

Dear Don:

Based on our recent discussions, SCIENTECH is submitting the following information to request a Change Order for the subject project based on field changes regarding the location and length of the fencing surrounding the treatment system at the site.

The original bid included a quantity of 64 linear feet of chain link fencing to surround the treatment system. Recent measurement have indicated that the area to be enclosed is much larger than anticipated and onsite DEC representatives are now requesting that we install a configuration which includes approximately 135 linear feet of fencing.

In order to justify the additional costs associated with this change, we have enclosed a quote from the fence installer that provided the lowest price for the original 64-foot long configuration. You will note that the price for the requested configuration (shown as #2 enclosure on the quote) is \$5,665.00, which is \$4,066.28 higher than the original bid amount of \$1,598.72. We are requesting a Change Order amount of \$4,269.59 which will cover this additional cost of \$4,066.28 plus the allowable 5% fee.

In addition, we anticipate that we will spend an additional 8 hours of labor to supervise and coordinate the installation. Additional time will be required due to the additional size and the scheduling difficulties that will be encountered now that we have completed the system installation and are no longer present at the site on a full time basis. These additional labor charges, including cost plus the allowable fee of 15% will be \$239.20, bringing the total value of the Change Order to \$4,471.99.

Please consider this correspondence as our request for a project Change Order. If you have any questions or need any additional information, please feel free to call me at 203-796-5229.

Sincerely,  
SCIENTECH, Inc.

Robert E. McPeak, Jr., P.E., LEP  
Department Manager  
Environmental Services

enclosure

cc P. Ouderkirk  
K. Cyr

**FAX COVER SHEET**  
from  
**Mid York Fence**

DATE: 3-19-01

TIME:

TO: Bob McPeak

FAX #: 203 792 3168

FROM: Lee

RE: Revised quotations Northeast Alley Fence Enclosure

COMMENTS: #1 - 25' x 45' x 25' enclosure with lockable door  
installed on manhole cover outside of enclosure \$4324.00  
#2 - 35' x 48' x 52' enclosure 5665.00  
Work to be completed as per site conditions allow specifications  
as per original quotation. Please advise, THANK YOU.

Number of pages (including cover sheet): 1

If you have any problems receiving the transmission of this  
fax, please call (315) 736-9302 Thank You!!!

## **ATTACHMENT D**

### **BACKUP AND COST JUSTIFICATION FOR ADDITIONAL PAVING**



June 18, 2001

Mr. Robert E. McPeak, Jr., P.E., LEP  
SCIENTECH, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810

**RE: Northeast Alloys and Metals Site  
Change Order for Paving Costs**

Dear Mr. McPeak:

URS and the Department have reviewed your letter dated May 24, 2001, regarding a change order for additional costs associated with paving Pitcher Street. The basis of this change order is that the delay of the project until the winter months required that the patching of the street be conducted in two separate stages.

URS reviewed the costs submitted in your letter, and compared these costs to published construction costs and our experience. Your proposed lump sum change order of \$2,110 appears to be fair and reasonable.

Based on URS' recommendation, the Department has approved this item, and it will be included on the change order being prepared by URS.

If you have any questions or require any additional information, please contact us.

Sincerely,

**URS Corporation**

Donald A. McCall, P.E.  
Project Engineer

cc: P. Ouderkirk, NYSDEC - Region 6  
G. Burke, NYSDEC - Albany  
D. Rothman, URS  
File: 35618 (C-1)

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Paving Repair

---

Problem: Determine the reasonableness of the change order request submitted by the Contractor (NES), for additional costs associated with pavement restoration. Because the work was done during the winter months, it was necessary to temporarily maintain the street until it could be restored in the springtime.

---

References:

1. R.S. Means Co., Inc., *Heavy Construction Cost Data*, 15<sup>th</sup> Annual Edition, 2001.
  2. URS-NYSDEC Standby Contract Rates
- 

Scope of Work Summary:

Restore the pavement on Pitcher Street that was cut for the installation of the discharge line to the local sewer. The pavement cut has dimensions of 3' x 30' or 90 SF (10 SY).

---

NOTE: this cost estimate follows the general outline of the bid from North Paving Company, submitted by NES with their letter dated May 24, 2001.

1. Estimate the cost for the actual, two-phase restoration performed by NES:

Temporary Patch:

- A. Remove Subbase to a depth of 10-inches: say \$200.
- B. Install 7-inches of reinforced concrete: Per Means (02750-100-0030), the cost for 7-inch concrete is \$24.50 per SY. For steel reinforcement (Means 02750-100-0610) add \$6.80

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Paving Repair

---

per SY, for a total unit cost of  $(\$24.50 + \$6.80) = \$31.30$  per SY. 10 SY @  $\$31.30$  per SY =  $\$313$ .

- C. Install plastic and 3-inch temporary cap: Per Means 02740-400-0100, assume a cost of  $\$6.75$  per SY. 10 SY @  $\$6.75$  per SY =  $\$67.50$ , say  $\$70$ .
- D. Total Temp Patch:  
 $\$200 + \$313 + \$70 = \$583$ .

Springtime Replacement:

- A. Remove Temporary Cap: say  $\$200$ .
- B. Tack coat: Per Means (02785-500-3280), the cost for tack-coat is  $\$1.19$  per SY. 10 SY @  $\$1.19 = \$11.90$ , say  $\$15$ .
- C. Install 2-inch Binder: Per Means (02740-300-0120), the cost for binder course =  $\$3.73$  per SY. 10 SY @  $\$3.73 = \$37.30$ , say  $\$40$ .
- D. Install 1-inch Wear Course: Per Means (02470-300-0300), the cost is  $\$2.25$ . 10 SY @  $\$2.25 = \$22.50$ , say  $\$25$ .
- E. Total Replacement:  
 $\$200 + \$40 + \$25 = \$265$ .

Subtotal cost =  $\$583 + \$265 = \$848$ . However, this cost is based on Means, which assumes large quantities of pavement (i.e., roadways and parking lots). Because the work involved is a very small quantity, because two mobilizations will be required, and because several people will be required for traffic control, etc. the costs estimated by Means are not realistic. Per Means 02720-200-8900, 50% is added to costs just for small quantities. To account for traffic control, assume an additional 50%. Another 50% each is also included to account for the two

PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Paving Repair

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mobilizations and the increased costs for winter work, for a total markup of 200%.

Total cost =  $\$848 \times 3 = \$2,544$ .

2. Estimate the cost for normal pavement restoration:

- A. Sawcut neat edges: Per Means (02225-760-0010) the cost for sawcutting is \$1.17 per LF. 60 LF of cutting @ \$1.17 = \$70.
- B. Remove subbase to a depth of 9-inches: say \$200.
- C. Install 7-inches reinforced concrete: as per Item #1 = \$313.
- D. Tack Coat: as per Item #1 = \$15.
- E. Install 2-inch Wear Course: Per Means (02740-300-0380) the cost = \$4.39 per SY. 10 SY @ \$4.39 = \$43.90 say \$45.
- F. Subtotal Cost:  
 $\$70 + \$200 + \$313 + \$15 + \$45 = \$643$ .

Subtotal cost = \$643. As outlined above, 50% is added to costs just for small quantities. To account for traffic control, assume an additional 50%. Another 50% is included to account for the two mobilizations. The total markup for this work is assumed to be 150%.

Total cost =  $\$643 \times 2.5 = \$1,608$ .

3. Cost Difference:

The difference in cost between the two methods =  $\$2,544 - \$1,608 = \$936$ . The cost proposed by NES = \$1,010.



PROJECT: Northeast Alloys and Metals Site  
SUBJECT: Cost Estimate for Paving Repair

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This estimated cost is within 15% of the cost proposed by NES, which therefore is assumed to be fair and reasonable.

#### 4. Additional Scientech Costs

##### Labor Costs:

- A. Glista - the hours submitted appear to be reasonable for the scope of work. Based on his responsibility, Joe would be a NYSDEC Level 4 or 5 person. URS rates (Ref. 2) for Level 4-5 are \$22.70 to \$27.16. The submitted rate of \$25 per hour is therefore fair and reasonable.
- B. McPeak - the hours submitted appear to be reasonable for the scope of work. Based on being a project manager, Bob would equate to a NYSDEC Level 8 person. Based on URS rates (Ref. 2), a Level 8 person is \$48.73 per hour. The submitted rate of \$45 per hour is therefore fair and reasonable.

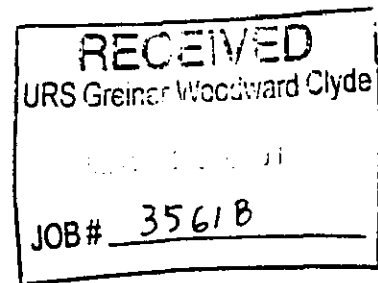
##### Travel / Per Diem:

Considering the distance and cost of travel, the costs submitted appear to be fair and reasonable.



May 24, 2001  
ES-2435

Mr. Donald McCall  
URS Greiner Woodward Clyde  
282 Delaware Avenue  
Buffalo, NY 14202-1805



cc: D. McCall  
file C-1

Subject: Project Change Order Request No. 6  
Former Northeast Metals and Alloys  
Utica, NY

Reference: Letter from R. McPeak to G. Burke dated November 2, 2000

Dear Don:

SCIENTECH is submitting the following information to request a Change Order for the subject project. This change is intended to provide additional compensation to cover changes in the work scope as specified below.

As indicated in the referenced letter, the unforeseen delays in generating the project contract forced us to perform a partial pavement repair in December of 2000 because when the road was ready for repaving, local asphalt plants were no longer open. The paving contractor must now return in the Spring to complete the job. This two-phased approach will cost \$2,110 more than our original plan to perform the entire operation in the fall of 2000 due to the need for the contractor and SCIENTECH personnel to return to the site in the Spring. As a result, we are requesting a change order in the amount of \$2,110 to cover these additional expenses. Information regarding pricing detail is included.

Please feel free to call me if you have any questions or require any additional information.

Sincerely,  
SCIENTECH, Inc.

A handwritten signature in black ink, appearing to read "Bob McPeak".

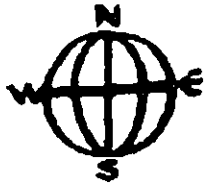
Robert E. McPeak, Jr., P.E., LEP  
Department Manager  
Environmental Services

cc: F. Ouderkirk  
K. Cyr

Cost Detail for Paving Change Order  
Northeast Metals and Alloys, Utica, NY

| Cost Item                | Cost    | Fee    | Total     |
|--------------------------|---------|--------|-----------|
| Contractor differential* | \$1,010 | \$50.5 | \$1,060.5 |
| <b>SCIENTECH labor</b>   |         |        |           |
| Glista (14 hours @ 25)   | 350     | 52.5   | 402.5     |
| McPeak (6 hours @ 45)    | 180     | 27     | 207       |
| <b>Travel /perdiem</b>   |         |        |           |
| travel                   | 300     | 30     | 330       |
| perdiem                  | 100     | 10     | 110       |
| Totals                   | \$1,940 | \$170  | \$2,110   |

\*Proposal enclosed

**NORTH PAVING CO., INC.**

PAVING CONTRACTORS

643 Elizabeth Street • Union, New York 10980

Telephone 315-724-4219 • FAX 315-724-4972

FRANK J. FEMIA, President

October 31, 2000

Dear Mr. McPeak:

We are pleased to quote on the restoration of pavement for Pitcher Street. The following is our quote for the 3 x 30 patch or 90 sq. ft. only.

**Late Fall: (No Frost in Ground)**

1. Remove subbase and cold provia to a depth of 10".
2. Install 7" of reinforced concrete.
3. Install plastic and 3" temporary cap.

**Spring:**

4. Remove 3" temporary cap.
5. Tack-coat with AC-20.
6. Install 2" Binder.
7. Install 1" Top.

Price: \$2,900.00

**Spring restoration only:**

If you decide to maintain the cut with cold provia for the winter, the following quote is applicable:

1. Cut neat edges.
2. Excavate cold provia and subbase to a depth of 9".
3. Install 7" reinforced concrete.
4. Tack coat with AC-20
5. Install 2" of Type 7 Top.

Price: \$1,890.00

Thank you,

Frank Femia, Pres.

Frank N. Femia, President

North Paving Company, Inc.

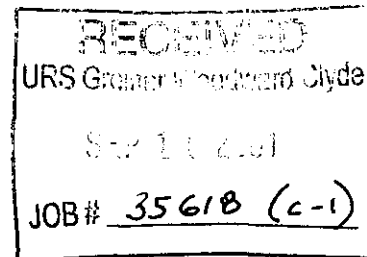
## **APPENDIX D**

### **CERTIFICATES OF COMPLETION**



September 5, 2001  
ES-2533

Mr. Peter Ouderkirk, P.E.  
Project Manager  
NYSDEC - Region 6  
317 Washington Street  
Watertown, NY 13601



cc: D. Rothman  
D. McCall  
file

Subject: Former Northeast Alloys and Metals Site, Utica, NY  
Substantial Completion

Dear Mr. Ouderkirk:

As per our discussion on September 4, 2001, the subject project was substantially complete as of August 24, 2001 when Central Paving completed the final element of the project by installing the asphalt repair on Pitcher Street.

Please feel free to call me if you have any questions or need additional information in order to proceed with project closeout and final invoicing.

Sincerely,

**SCIENTECH, INC.**

A handwritten signature in cursive script, appearing to read "Bob McPeak".

Robert E. McPeak, Jr., P.E., LEP  
Senior Department Manager  
Environmental Services

cc G. Burke  
D. McCall  
K. Cyr

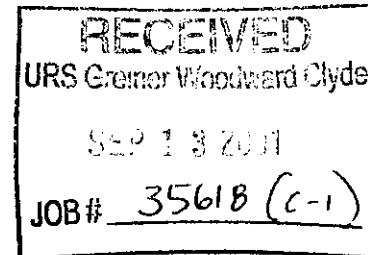
**New York State Department of Environmental Conservation**

**Division of Environmental Remediation, Region 6**

Dulles State Office Building, 317 Washington Street, Watertown, New York 13601-3787

Phone: (315) 785-2513 • FAX: (315) 785-2422

Website: [www.dec.state.ny.us](http://www.dec.state.ny.us)



September 10, 2001

Mr. Robert E. McPeak, Jr.,  
SCIENTECH  
44 Shelter Rock Road  
Danbury, CT 06810

cc: D. Rothman  
D. McCall  
file

RE: NORTHEAST ALLOYS AND METALS, SITE NO. 6-33-045  
SUBSTANTIAL COMPLETION  
CONTRACT NO. D-004178

Dear Mr. McPeak:

The New York State Department of Environmental Conservation (DEC) has received your letter dated September 5, 2001 stating that the referenced project had reached substantial completion on August 24, 2001. Based on the Department's inspection of the site and a review of the work plans, the DEC concurs that a substantial completion has been achieved.

Please proceed with final payment requests and documentation in order to conclude this contract. If you have any questions, please feel free to contact me or Donald McCall of URS.

Sincerely,



Peter S. Ouderkirk, P.E.  
Project Manager

cc: Darrell M. Sweredoski  
Jack Marsch  
Gerard Burke  
Greg Rys  
Donald McCall - URS

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NW-1

Lab Name: H2M LABS, INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: URS011

Matrix: (soil/water) SOIL

Lab Sample ID: 0101278-002A

Sample wt/vol: 5.0 (g/ml) G

Lab File ID: F5152.D

Level: (low/med) LOW

Date Received: 01/11/01

% Moisture: not dec. 11

Date Analyzed: 01/11/01

GC Column: RTX502 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

|            |                           |         |    |
|------------|---------------------------|---------|----|
| 74-87-3    | Chloromethane             | 11      | U  |
| 74-83-9    | Bromomethane              | 11      | U  |
| 75-01-4    | Vinyl Chloride            | 11      | U  |
| 75-00-3    | Chloroethane              | 11      | U  |
| 75-09-2    | Methylene Chloride        | // -2   | JB |
| 67-64-1    | Acetone                   | 3       | J  |
| 75-15-0    | Carbon Disulfide          | 11      | U  |
| 75-35-4    | 1,1-Dichloroethene        | 11      | U  |
| 75-34-4    | 1,1-Dichloroethane        | 11      | U  |
| 540-59-0   | 1,2-Dichloroethene(total) | 11      | U  |
| 78-93-3    | 2-Butanone                | 11      | U  |
| 67-66-3    | Chloroform                | 11      | U  |
| 107-06-2   | 1,2-Dichloroethane        | 11      | U  |
| 71-55-6    | 1,1,1-Trichloroethane     | 11      | U  |
| 56-23-5    | Carbon Tetrachloride      | 11      | U  |
| 75-27-4    | Bromodichloromethane      | 11      | U  |
| 78-87-5    | 1,2-Dichloropropane       | 11      | U  |
| 10061-01-5 | cis-1,3-Dichloropropene   | 11      | U  |
| 79-01-6    | Trichloroethene           | 240 230 | E  |
| 71-43-2    | Benzene                   | 11      | U  |
| 124-48-1   | Dibromochloromethane      | 11      | U  |
| 10061-02-6 | trans-1,3-Dichloropropene | 11      | U  |
| 79-00-5    | 1,1,2-Trichloroethane     | 11      | U  |
| 75-25-2    | Bromoform                 | 11      | U  |
| 108-10-1   | 4-Methyl-2-Pentanone      | 11      | U  |
| 591-78-6   | 2-Hexanone                | 11      | U  |
| 127-18-4   | Tetrachloroethene         | 11      | U  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 11      | U  |
| 108-88-3   | Toluene                   | 140     |    |
| 108-90-7   | Chlorobenzene             | 11      | U  |
| 100-41-4   | Ethylbenzene              | 11      | U  |
| 100-42-5   | Styrene                   | 11      | U  |
| 1330-20-7  | Xylene(total)             | 11      | U  |

11/11/01  
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Preliminary

Results

FORM I VOA

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: H2M LABS, INC

Contract: \_\_\_\_\_

Lab Code: 10470

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: URS011

Matrix: (soil/water) SOIL

Lab Sample ID: 0101278-003A

Sample wt/vol: 5.0 (g/ml) G

Lab File ID: F5153.D

Level: (low/med) LOW

Date Received: 01/11/01

% Moisture: not dec. 7

Date Analyzed: 01/11/01

GC Column: RTX502, ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                  | (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-----------------|-------|---|
| 74-87-3    | Chloromethane             | 11              | U     |   |
| 74-83-9    | Bromomethane              | 11              | U     |   |
| 75-01-4    | Vinyl Chloride            | 11              | U     |   |
| 75-00-3    | Chloroethane              | 11              | U     |   |
| 75-09-2    | Methylene Chloride        | 11              | 2 JB  | U |
| 67-64-1    | Acetone                   | 3               | J     |   |
| 75-15-0    | Carbon Disulfide          | 11              | U     |   |
| 75-35-1    | 1,1-Dichloroethene        | 11              | U     |   |
| 75-34-4    | 1,1-Dichloroethane        | 11              | U     |   |
| 540 59 0   | 1,2-Dichloroethene(total) | 11              | U     |   |
| 78-93-3    | 2-Butanone                | 11              | U     |   |
| 67-66-3    | Chloroform                | 11              | U     |   |
| 107-06-2   | 1,2-Dichloroethane        | 11              | U     |   |
| 71-55-6    | 1,1,1-Trichloroethane     | 11              | U     |   |
| 56-23-5    | Carbon Tetrachloride      | 11              | U     |   |
| 75-27-4    | Bromodichloromethane      | 11              | U     |   |
| 78-87-5    | 1,2-Dichloropropane       | 11              | U     |   |
| 10061-01-5 | cis-1,3-Dichloropropene   | 11              | U     |   |
| 79-01-6    | Trichloroethene           | 600 580         | E     | D |
| 71-43-2    | Benzene                   | 11              | U     |   |
| 124-48-1   | Dibromochloromethane      | 11              | U     |   |
| 10061-02-6 | trans-1,3-Dichloropropene | 11              | U     |   |
| 79-00-5    | 1,1,2-Trichloroethane     | 11              | U     |   |
| 75-25-2    | Bromoforn                 | 11              | U     |   |
| 108-10-1   | 4-Methyl-2-Pentanone      | 11              | U     |   |
| 591-78-6   | 2-Hexanone                | 11              | U     |   |
| 127-18-4   | Tetrachloroethene         | 11              | U     |   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 11              | U     |   |
| 108-88-3   | Toluene                   | 110             |       |   |
| 108-90-7   | Chlorobenzene             | 11              | U     |   |
| 100-41-4   | Ethylbenzene              | 11              | U     |   |
| 100-42-5   | Styrene                   | 11              | U     |   |
| 1330-20-7  | Xylene(total)             | 11              | U     |   |

Preliminary  
Results  
Pending QC Review

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EW-1

Lab Name: H2M LABS, INC Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: URS011

Matrix: (soil/water) SOIL Lab Sample ID: 0101278-004A

Sample wt/vol: 5.0 (g/ml) G Lab File ID: F5154.D

Level: (low/med) LOW Date Received: 01/11/01

% Moisture: not dec. 19 Date Analyzed: 01/11/01

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                  | (ug/L or ug/Kg) | UG/KG | Q |
|------------|---------------------------|-----------------|-------|---|
| 74-87-3    | Chloromethane             | 12              | U     |   |
| 74-83-9    | Bromomethane              | 12              | U     |   |
| 75-01-4    | Vinyl Chloride            | 12              | U     |   |
| 75-00-3    | Chloroethane              | 12              | U     |   |
| 75-09-2    | Methylene Chloride        | 12              | JB    | U |
| 67-64-1    | Acetone                   | 3               | J     |   |
| 75-15-0    | Carbon Disulfide          | 12              | U     |   |
| 75-35-4    | 1,1-Dichloroethene        | 12              | U     |   |
| 75-34-4    | 1,1-Dichloroethane        | 12              | U     |   |
| 540-59-0   | 1,2-Dichloroethene(total) | 12              | U     |   |
| 78-93-3    | 2-Butanone                | 12              | U     |   |
| 67-66-3    | Chloroform                | 12              | U     |   |
| 107-06-2   | 1,2-Dichloroethane        | 12              | U     |   |
| 71-55-6    | 1,1,1-Trichloroethane     | 12              | U     |   |
| 56-23-5    | Carbon Tetrachloride      | 12              | U     |   |
| 75-27-4    | Bromodichloromethane      | 12              | U     |   |
| 78-87-5    | 1,2-Dichloropropane       | 12              | U     |   |
| 10061-01-5 | cis-1,3-Dichloropropene   | 12              | U     |   |
| 79-01-6    | Trichloroethene           | 12              | U     |   |
| 71-43-2    | Benzene                   | 12              | U     |   |
| 124-48-1   | Dibromochloromethane      | 12              | U     |   |
| 10061-02-6 | trans-1,3-Dichloropropene | 12              | U     |   |
| 79-00-5    | 1,1,2-Trichloroethane     | 12              | U     |   |
| 75-25-2    | Bromoform                 | 12              | U     |   |
| 108-10-1   | 4-Methyl-2-Pentanone      | 12              | U     |   |
| 591-78-6   | 2-Hexanone                | 12              | U     |   |
| 127-18-4   | Tetrachloroethene         | 12              | U     |   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 12              | U     |   |
| 108-88-3   | Toluene                   | 75              |       |   |
| 108-90-7   | Chlorobenzene             | 12              | U     |   |
| 100-41-4   | Ethylbenzene              | 12              | U     |   |
| 100-42-5   | Styrene                   | 12              | U     |   |
| 1330-20-7  | Xylene(total)             | 12              | U     |   |

Preliminary  
Results  
Pending QC Review

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WW-1

Lab Name: H2M LABS, INC Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: URS011

Matrix: (soil/water) SOIL Lab Sample ID: 0101278-005A

Sample wt/vol: 5.0 (g/ml) G Lab File ID: F5155.D

Level: (low/med) LOW Date Received: 01/11/01

% Moisture: not dec. 5 Date Analyzed: 01/11/01

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

|            |                           |          |                 |
|------------|---------------------------|----------|-----------------|
| 74-87-3    | Chloromethane             | 11       | U               |
| 74-83-9    | Bromomethane              | 11       | U               |
| 75-01-4    | Vinyl Chloride            | 11       | U               |
| 75-00-3    | Chloroethane              | 11       | U               |
| 75-09-2    | Methylene Chloride        | // 2     | <del>JB</del> U |
| 67-64-1    | Acetone                   | 2        | J               |
| 75-15-0    | Carbon Disulfide          | 11       | U               |
| 75-35-4    | 1,1-Dichloroethene        | 11       | U               |
| 75-34-4    | 1,1-Dichloroethane        | 11       | U               |
| 540-59-0   | 1,2-Dichloroethene(total) | 11       | U               |
| 78-93-3    | 2-Butanone                | 11       | U               |
| 67-66-3    | Chloroform                | 11       | U               |
| 107-06-2   | 1,2-Dichloroethane        | 11       | U               |
| 71-55-6    | 1,1,1-Trichloroethane     | 11       | U               |
| 56-23-5    | Carbon Tetrachloride      | 11       | U               |
| 75-27-4    | Bromodichloromethane      | 11       | U               |
| 78-87-5    | 1,2-Dichloropropane       | 2        | J               |
| 10061-01-5 | cis-1,3-Dichloropropene   | 11       | U               |
| 79-01-6    | Trichloroethene           | 510 -750 | <del>E</del> U  |
| 71-43-2    | Benzene                   | 11       | U               |
| 124-48-1   | Dibromochloromethane      | 11       | U               |
| 10061-02-6 | trans-1,3-Dichloropropene | 11       | U               |
| 79-00-5    | 1,1,2-Trichloroethane     | 11       | U               |
| 75-25-2    | Bromoform                 | 11       | U               |
| 108-10-1   | 4-Methyl-2-Pentanone      | 11       | U               |
| 591-78-6   | 2-Hexanone                | 11       | U               |
| 127-18-4   | Tetrachloroethene         | 11       | U               |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 11       | U               |
| 108-88-3   | Toluene                   | 50       |                 |
| 108-90-7   | Chlorobenzene             | 11       | U               |
| 100-41-4   | Ethylbenzene              | 11       | U               |
| 100-42-5   | Styrene                   | 11       | U               |
| 1330-20-7  | Xylene(total)             | 11       | U               |

1/12/01  
JW

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Preliminary  
Results  
Pending QC Review

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOT-1

Lab Name: H2M LABS, INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: URS011

Matrix: (soil/water) SOIL

Lab Sample ID: 0101278-006A

Sample wt/vol: 5.0 (g/ml) G

Lab File ID: F5156.D

Level: (low/med) LOW

Date Received: 01/11/01

% Moisture: not dec. 21

Date Analyzed: 01/11/01

GC Column: RTX502, ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                  | (ug/L or ug/Kg) | UG/KG | Q  |
|------------|---------------------------|-----------------|-------|----|
| 74-87-3    | Chloromethane             | 13              | U     |    |
| 74-83-9    | Bromomethane              | 13              | U     |    |
| 75-01-4    | Vinyl Chloride            | 13              | U     |    |
| 75-00-3    | Chloroethane              | 13              | U     |    |
| 75-09-2    | Methylene Chloride        | 12              | 2     | JB |
| 67-64-1    | Acetone                   | 11              | J     |    |
| 75-15-0    | Carbon Disulfide          | 13              | U     |    |
| 75-35-4    | 1,1-Dichloroethene        | 13              | U     |    |
| 75-34-4    | 1,1-Dichloroethane        | 13              | U     |    |
| 540-59-0   | 1,2-Dichloroethene(total) | 13              | U     |    |
| 78-93-3    | 2-Butanone                | 4               | J     |    |
| 67-66-3    | Chloroform                | 13              | U     |    |
| 107-06-2   | 1,2-Dichloroethane        | 13              | U     |    |
| 71-55-6    | 1,1,1-Trichloroethane     | 13              | U     |    |
| 56-23-5    | Carbon Tetrachloride      | 13              | U     |    |
| 75-27-4    | Bromodichloromethane      | 13              | U     |    |
| 78-87-5    | 1,2-Dichloropropane       | 13              | U     |    |
| 10061-01-5 | cis-1,3-Dichloropropene   | 13              | U     |    |
| 79-01-6    | Trichloroethene           | 13              | U     |    |
| 71-43-2    | Benzene                   | 13              | U     |    |
| 124-48-1   | Dibromochloromethane      | 13              | U     |    |
| 10061-02-6 | trans-1,3-Dichloropropene | 13              | U     |    |
| 79-00-5    | 1,1,2-Trichloroethane     | 13              | U     |    |
| 75-25-2    | Bromoform                 | 13              | U     |    |
| 108-10-1   | 4-Methyl-2-Pentanone      | 13              | U     |    |
| 591-78-6   | 2-Hexanone                | 13              | U     |    |
| 127-18-4   | Tetrachloroethene         | 13              | U     |    |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 13              | U     |    |
| 108-88-3   | Toluene                   | 2               | J     |    |
| 108-90-7   | Chlorobenzene             | 13              | U     |    |
| 100-41-4   | Ethylbenzene              | 13              | U     |    |
| 100-12-5   | Styrene                   | 13              | U     |    |
| 1330-20-7  | Xylene(total)             | 13              | U     |    |

Preliminary  
Results  
Pending QC Review

FORM I VOA

3/90

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: H2M LABS, INC

Contract: \_\_\_\_\_

**SP-1**Lab Code: 10478

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: URS011Matrix: (soil/water) SOILLab Sample ID: 0101278-001ASample wt/vol: 5.0 (g/ml) GLab File ID: F5160.DLevel: (low/med) LOWDate Received: 01/11/01% Moisture: not dec. 21Date Analyzed: 01/11/01GC Column: RTX502 ID: 0.53 (mm)Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

|            |                           |    |   |
|------------|---------------------------|----|---|
| 74-87-3    | Chloromethane             | 13 | U |
| 74-83-9    | Bromomethane              | 13 | U |
| 75-01-4    | Vinyl Chloride            | 13 | U |
| 75-00-3    | Chloroethane              | 13 | U |
| 75-09-2    | Methylene Chloride        | 13 | U |
| 67-64-1    | Acetone                   | 6  | J |
| 75-15-0    | Carbon Disulfide          | 13 | U |
| 75-35-4    | 1,1-Dichloroethene        | 13 | U |
| 75-34-4    | 1,1-Dichloroethane        | 13 | U |
| 540-59-0   | 1,2-Dichloroethene(total) | 13 | U |
| 78-93-3    | 2-Butanone                | 13 | U |
| 67-66-3    | Chloroform                | 13 | U |
| 107-06-2   | 1,2-Dichloroethane        | 13 | U |
| 71-55-6    | 1,1,1-Trichloroethane     | 13 | U |
| 56-23-5    | Carbon Tetrachloride      | 13 | U |
| 75-27-4    | Bromodichloromethane      | 13 | U |
| 78-87-5    | 1,2-Dichloropropane       | 13 | U |
| 10061-01-5 | cis-1,3-Dichloropropene   | 13 | U |
| 79-01-6    | Trichloroethene           | 57 |   |
| 71-43-2    | Benzene                   | 13 | U |
| 124-48-1   | Dibromochloromethane      | 13 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 13 | U |
| 79-00-5    | 1,1,2-Trichloroethane     | 13 | U |
| 75-25-2    | Bromoform                 | 13 | U |
| 108-10-1   | 4-Methyl-2-Pentanone      | 13 | U |
| 591-78-6   | 2-Hexanone                | 13 | U |
| 127-18-4   | Tetrachloroethene         | 13 | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane | 13 | U |
| 108-88-3   | Toluene                   | 7  | J |
| 108-90-7   | Chlorobenzene             | 13 | U |
| 100-41-4   | Ethylbenzene              | 13 | U |
| 100-42-5   | Styrene                   | 13 | U |
| 1330-20-7  | Xylene(total)             | 13 | U |

1/12/01  
JW

**Preliminary  
Results  
Pending QC Review**



April 24, 2001

Refer to ES - 2410

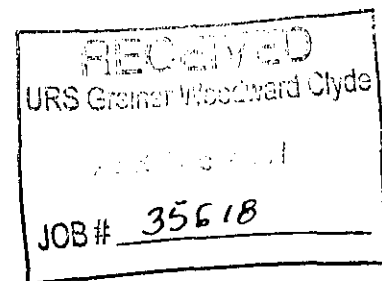
Mr. Donald McCall, P.E.

Project Manager

URS Corporation

282 Delaware Ave.

Buffalo, New York 14202



cc: D. McCall  
file

Subject: Weekly Sampling Status Report (March 28, 2001 and April 4, 2001)  
Former Northeast Alloys & Metals Site; Utica, NY  
Contract Number D-004178

#### **System Sampling performed on 3/28/01 and 4/04/01**

SCIENTECH employees arrived at the former Northeast Alloys and Metals site on 03/28/01 and 04/04/01 to obtain the first two rounds of samples in accordance with the obligations set forth in the NYSDEC contract for the former Northeast Alloys and Metals Site in Utica, NY.

The samples were collected in accordance with the SCIENTECH Sampling and Analysis Plan provided to NYSDEC in the deliverables package.

Both influent and effluent samples from the treatment system were collected and analyzed for the following:

- TCL VOCs via EPA Method 624
- TAL Metals via EPA Method 200.7 and 245.1
- pH via EPA Method 150.1
- Total dissolved Solids via EPA Method 160.1
- Total Suspended Solids via EPA Method 160.2
- Total Hardness via Vial EPA Method 130.1

The influent samples designated GTSI 032801 and GTSI 040401 in accordance with the sampling and analysis plan were collected from the treatment system sump via a sampling tube connected to dewatering pump 1.

The effluent samples designated GTSE 032801 and GTSE 040401 in accordance with the sampling and analysis plan were collected from inside the last baffle of the discharge manhole, prior to the gravity line to the City of Utica sanitary sewer.

The samples were collected in laboratory-supplied glassware, packaged on ice and sent to Mitkem Corporation, Warwick, RI for laboratory analysis.

### **Results of the Data Generated**

Attached are the analytical data from first two weekly sampling events. The data indicates the following:

- The treatment system is successful in reducing the level of VOCs present in the collected groundwater, and
- The levels of contaminants in the treated groundwater are well below the discharge criteria set forth in the City of Utica discharge permit for discharge to the sanitary sewer.

### **Scheduled Actions**

SCIENTECH performed two additional sampling rounds on 4/11/01 and 4/18/01. SCIENTECH will report the results of this data as it becomes available.

Sincerely,

**SCIENTECH, Inc.**



Joseph Glista  
Environmental Geologist  
Environmental Services

### **Enclosures**

cc: P. Ouderkirk  
K. Cyr  
R. McPeak

April 19, 2001

Scientech, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810  
Attn: Mr. Bob Peak

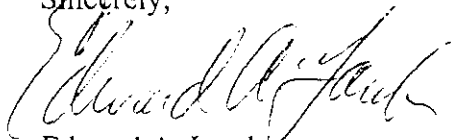
RE: Client Project: NE ALLOYS & METALS, UTICA, NY  
Lab Project #: 80575

Dear Mr. Peak:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,



Edward A. Lawler  
Laboratory Operations Manager





**Client: Scientech, Inc.**

**Client Project: NE ALLOYS & METALS UTICA, NY**

**Lab Project: 80575**

**Date samples received: 3/30/01**

**Project Narrative**

This data report includes the analysis results for two (2) aqueous samples that were received from Scientech, Inc. on March 30, 2001. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below:

A handwritten signature in black ink, appearing to read "Edward A. Lawler", is written over a faint, larger signature that is partially obscured.

Edward A. Lawler  
Laboratory Operations Manager

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSI032801

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Matrix: (soil/water) WATER

Lab Sample ID: 80575001

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2D9367

Level: (low/med) LOW

Date Received: 03/30/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/05/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

| CAS NO.    | COMPOUND                       | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|------------|--------------------------------|----------------------------------------------|---|
| 74-87-3    | -----Chloromethane             | 5                                            | U |
| 75-01-4    | -----Vinyl Chloride            | 35                                           | U |
| 74-83-9    | -----Bromomethane              | 5                                            | U |
| 75-00-3    | -----Chloroethane              | 5                                            | U |
| 75-69-4    | -----Trichlorofluoromethane    | 5                                            | U |
| 75-35-4    | -----1,1-Dichloroethene        | 1                                            | J |
| 75-09-2    | -----Methylene Chloride        | 5                                            | U |
| 156-60-5   | -----trans-1,2-Dichloroethene  | 5                                            | U |
| 75-34-3    | -----1,1-Dichloroethane        | 5                                            | U |
| 156-59-2   | -----cis-1,2-Dichloroethene    | 200                                          | U |
| 67-66-3    | -----Chloroform                | 5                                            | U |
| 71-55-6    | -----1,1,1-Trichloroethane     | 5                                            | U |
| 56-23-5    | -----Carbon Tetrachloride      | 5                                            | U |
| 107-06-2   | -----1,2-Dichloroethane        | 5                                            | U |
| 71-43-2    | -----Benzene                   | 2                                            | J |
| 79-01-6    | -----Trichloroethene           | 3                                            | J |
| 78-87-5    | -----1,2-Dichloropropane       | 5                                            | U |
| 75-27-4    | -----Bromodichloromethane      | 5                                            | U |
| 110-75-8   | -----2-Chloroethyl vinyl ether | 5                                            | U |
| 10061-01-5 | -----cis-1,3-Dichloropropene   | 5                                            | U |
| 108-88-3   | -----Toluene                   | 16                                           | U |
| 10061-02-6 | -----trans-1,3-Dichloropropene | 5                                            | U |
| 79-00-5    | -----1,1,2-Trichloroethane     | 5                                            | U |
| 127-18-4   | -----Tetrachloroethene         | 5                                            | U |
| 124-48-1   | -----Dibromochloromethane      | 5                                            | U |
| 108-90-7   | -----Chlorobenzene             | 2                                            | J |
| 100-41-4   | -----Ethylbenzene              | 5                                            | U |
| 1330-20-7  | -----Xylene (Total)            | 55                                           | U |
| 75-25-2    | -----Bromoform                 | 5                                            | U |
| 79-34-5    | -----1,1,2,2-Tetrachloroethane | 5                                            | U |
| 541-73-1   | -----1,3-Dichlorobenzene       | 5                                            | U |
| 106-46-7   | -----1,4-Dichlorobenzene       | 5                                            | U |
| 95-50-1    | -----1,2-Dichlorobenzene       | 2                                            | J |

LA  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSE032801

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Matrix: (soil/water) WATER

Lab Sample ID: 80575002

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2D9368

Level: (low/med) LOW

Date Received: 03/30/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/05/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|
|---------|----------|----------------------------------------------|---|

|                 |                           |    |   |
|-----------------|---------------------------|----|---|
| 74-87-3-----    | Chloromethane             | 5  | U |
| 75-01-4-----    | Vinyl Chloride            | 2  | J |
| 74-83-9-----    | Bromomethane              | 5  | U |
| 75-00-3-----    | Chloroethane              | 5  | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5  | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5  | U |
| 75-09-2-----    | Methylene Chloride        | 5  | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5  | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5  | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 20 | U |
| 67-66-3-----    | Chloroform                | 5  | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5  | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5  | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5  | U |
| 71-43-2-----    | Benzene                   | 5  | U |
| 79-01-6-----    | Trichloroethene           | 5  | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5  | U |
| 75-27-4-----    | Bromodichloromethane      | 5  | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5  | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5  | U |
| 108-88-3-----   | Toluene                   | 1  | J |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5  | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5  | U |
| 127-18-4-----   | Tetrachloroethene         | 5  | U |
| 124-48-1-----   | Dibromochloromethane      | 5  | U |
| 108-90-7-----   | Chlorobenzene             | 5  | U |
| 100-41-4-----   | Ethylbenzene              | 5  | U |
| 1330-20-7-----  | Xylene (Total)            | 3  | J |
| 75-25-2-----    | Bromoform                 | 5  | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5  | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5  | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5  | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5  | U |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2W

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Matrix: (soil/water) WATER

Lab Sample ID: V2B0404A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2D9342

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/04/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |   |   |
|-----------------|---------------------------|---|---|
| 74-87-3-----    | Chloromethane             | 5 | U |
| 75-01-4-----    | Vinyl Chloride            | 5 | U |
| 74-83-9-----    | Bromomethane              | 5 | U |
| 75-00-3-----    | Chloroethane              | 5 | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5 | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5 | U |
| 75-09-2-----    | Methylene Chloride        | 5 | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5 | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5 | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 5 | U |
| 67-66-3-----    | Chloroform                | 5 | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5 | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5 | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5 | U |
| 71-43-2-----    | Benzene                   | 5 | U |
| 79-01-6-----    | Trichloroethene           | 5 | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5 | U |
| 75-27-4-----    | Bromodichloromethane      | 5 | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5 | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5 | U |
| 108-88-3-----   | Toluene                   | 5 | U |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5 | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5 | U |
| 127-18-4-----   | Tetrachloroethene         | 5 | U |
| 124-48-1-----   | Dibromochloromethane      | 5 | U |
| 108-90-7-----   | Chlorobenzene             | 5 | U |
| 100-41-4-----   | Ethylbenzene              | 5 | U |
| 1330-20-7-----  | Xylene (Total)            | 5 | U |
| 75-25-2-----    | Bromoform                 | 5 | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5 | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5 | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5 | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5 | U |

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

|    | EPA<br>SAMPLE NO. | SMC1<br># | SMC2<br>(DCE) # | SMC3<br>(TOL) # | OTHER<br>(BFB) # | TOT<br>OUT |
|----|-------------------|-----------|-----------------|-----------------|------------------|------------|
|    | =====             | =====     | =====           | =====           | =====            | =====      |
| 01 | VBLK2W            | 104       | 95              | 96              | 86               | 0          |
| 02 | VBLK2WLCS         | 103       | 97              | 99              | 100              | 0          |
| 03 | GTSI032801        | 102       | 98              | 95              | 103              | 0          |
| 04 | GTSE032801        | 101       | 93              | 95              | 99               | 0          |
| 05 |                   |           |                 |                 |                  |            |
| 06 |                   |           |                 |                 |                  |            |
| 07 |                   |           |                 |                 |                  |            |
| 08 |                   |           |                 |                 |                  |            |
| 09 |                   |           |                 |                 |                  |            |
| 10 |                   |           |                 |                 |                  |            |
| 11 |                   |           |                 |                 |                  |            |
| 12 |                   |           |                 |                 |                  |            |
| 13 |                   |           |                 |                 |                  |            |
| 14 |                   |           |                 |                 |                  |            |
| 15 |                   |           |                 |                 |                  |            |
| 16 |                   |           |                 |                 |                  |            |
| 17 |                   |           |                 |                 |                  |            |
| 18 |                   |           |                 |                 |                  |            |
| 19 |                   |           |                 |                 |                  |            |
| 20 |                   |           |                 |                 |                  |            |
| 21 |                   |           |                 |                 |                  |            |
| 22 |                   |           |                 |                 |                  |            |
| 23 |                   |           |                 |                 |                  |            |
| 24 |                   |           |                 |                 |                  |            |
| 25 |                   |           |                 |                 |                  |            |
| 26 |                   |           |                 |                 |                  |            |
| 27 |                   |           |                 |                 |                  |            |
| 28 |                   |           |                 |                 |                  |            |
| 29 |                   |           |                 |                 |                  |            |
| 30 |                   |           |                 |                 |                  |            |

QC LIMITS

SMC1 = Dibromofluoromethane (79-122)  
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (76-121)  
 SMC3 (TOL) = Toluene-d8 (82-118)  
 OTHER (BFB) = Bromofluorobenzene (85-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Matrix Spike - Sample No.: VBLK2W

| COMPOUND                | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|-------------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| =====                   | =====                    | =====                             | =====                          | =====             | =====                 |
| Chloromethane           | 50                       | 0.0                               | 43                             | 86                | 0-204                 |
| Vinyl Chloride          | 50                       | 0.0                               | 51                             | 102               | 4-196                 |
| Bromomethane            | 50                       | 0.0                               | 57                             | 114               | 14-186                |
| Chloroethane            | 50                       | 0.0                               | 55                             | 110               | 38-162                |
| Trichlorofluoromethane  | 50                       | 0.0                               | 67                             | 134               | 48-152                |
| 1,1-Dichloroethene      | 50                       | 0.0                               | 56                             | 112               | 51-150                |
| Methylene Chloride      | 50                       | 0.0                               | 44                             | 88                | 61-140                |
| trans-1,2-Dichloroethen | 50                       | 0.0                               | 52                             | 104               | 70-131                |
| 1,1-Dichloroethane      | 50                       | 0.0                               | 52                             | 104               | 73-128                |
| Chloroform              | 50                       | 0.0                               | 56                             | 112               | 68-133                |
| 1,1,1-Trichloroethane   | 50                       | 0.0                               | 58                             | 116               | 75-125                |
| Carbon Tetrachloride    | 50                       | 0.0                               | 60                             | 120               | 73-127                |
| 1,2-Dichloroethane      | 50                       | 0.0                               | 55                             | 110               | 68-132                |
| Benzene                 | 50                       | 0.0                               | 52                             | 104               | 64-136                |
| Trichloroethene         | 50                       | 0.0                               | 55                             | 110               | 67-134                |
| 1,2-Dichloropropane     | 50                       | 0.0                               | 49                             | 98                | 34-166                |
| Bromodichloromethane    | 50                       | 0.0                               | 54                             | 108               | 66-135                |
| cis-1,3-Dichloropropene | 50                       | 0.0                               | 50                             | 100               | 24-176                |
| Toluene                 | 50                       | 0.0                               | 55                             | 110               | 75-126                |
| trans-1,3-Dichloroprope | 50                       | 0.0                               | 50                             | 100               | 50-150                |
| 1,1,2-Trichloroethane   | 50                       | 0.0                               | 54                             | 108               | 71-129                |
| Tetrachloroethene       | 50                       | 0.0                               | 53                             | 106               | 74-127                |
| Dibromochloromethane    | 50                       | 0.0                               | 53                             | 106               | 68-133                |
| Chlorobenzene           | 50                       | 0.0                               | 54                             | 108               | 66-134                |
| Ethylbenzene            | 50                       | 0.0                               | 55                             | 110               | 59-141                |
| Bromoform               | 50                       | 0.0                               | 54                             | 108               | 71-129                |
| 1,1,2,2-Tetrachloroetha | 50                       | 0.0                               | 47                             | 94                | 61-140                |
| 1,3-Dichlorobenzene     | 50                       | 0.0                               | 50                             | 100               | 73-127                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS:

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Matrix Spike - Sample No.: VBLK2W

| COMPOUND            | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|---------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| =====               | =====                    | =====                             | =====                          | =====             | =====                 |
| 1,4-Dichlorobenzene | 50                       | 0.0                               | 50                             | 100               | 63-137                |
| 1,2-Dichlorobenzene | 50                       | 0.0                               | 50                             | 100               | 63-137                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 30 outside limits

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBK2W

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80575

Lab File ID: V2D9342

Lab Sample ID: V2B0404A

Date Analyzed: 04/04/01

Time Analyzed: 1417

GC Column: DB-624 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: V2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

|    | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | TIME<br>ANALYZED |
|----|-------------------|------------------|----------------|------------------|
| 01 | VBK2WLCS          | V2L0404A         | V2D9343        | 1529             |
| 02 | GTSI032801        | 80575001         | V2D9367        | 0248             |
| 03 | GTSE032801        | 80575002         | V2D9368        | 0316             |
| 04 |                   |                  |                |                  |
| 05 |                   |                  |                |                  |
| 06 |                   |                  |                |                  |
| 07 |                   |                  |                |                  |
| 08 |                   |                  |                |                  |
| 09 |                   |                  |                |                  |
| 10 |                   |                  |                |                  |
| 11 |                   |                  |                |                  |
| 12 |                   |                  |                |                  |
| 13 |                   |                  |                |                  |
| 14 |                   |                  |                |                  |
| 15 |                   |                  |                |                  |
| 16 |                   |                  |                |                  |
| 17 |                   |                  |                |                  |
| 18 |                   |                  |                |                  |
| 19 |                   |                  |                |                  |
| 20 |                   |                  |                |                  |
| 21 |                   |                  |                |                  |
| 22 |                   |                  |                |                  |
| 23 |                   |                  |                |                  |
| 24 |                   |                  |                |                  |
| 25 |                   |                  |                |                  |
| 26 |                   |                  |                |                  |
| 27 |                   |                  |                |                  |
| 28 |                   |                  |                |                  |
| 29 |                   |                  |                |                  |
| 30 |                   |                  |                |                  |

COMMENTS:





## Analysis Report: Total Metals

Client: Scientech, Inc.  
Client ID: GTSI032801  
Lab ID: 80575001  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/5, 4/6/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | 0.4            | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | 110            | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | ND             | 0.03                       |
| Iron           | 6.8            | 0.3                        |
| Lead           | 0.04           | 0.01                       |
| Magnesium      | 19             | 0.5                        |
| Manganese      | 0.90           | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | 8              | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | ND             | 0.03                       |
| Sodium         | 27             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | ND             | 0.05                       |

QC Batch: 0404PBW1

ND = Not Detected



# Analysis Report: Total Metals

Client: Scientech, Inc.  
Client ID: GTSE032801  
Lab ID: 80575002  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/5, 4/6/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | 0.3            | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | 0.5            | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | 110            | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | 0.04           | 0.03                   |
| Iron           | 17             | 0.3                    |
| Lead           | 0.13           | 0.01                   |
| Magnesium      | 19             | 0.5                    |
| Manganese      | 0.91           | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | 9              | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | 32             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0404PBW1

ND = Not Detected



# Analysis Report: Total Metals

|            |                      |                   |                |
|------------|----------------------|-------------------|----------------|
| Client:    | Sciencetech, Inc.    | Concentration in: | mg/L           |
| Client ID: |                      | Analysis Date:    | 4/5, 4/6/01    |
| Lab ID:    | Prep Blank, 0404PBW1 | Analysis Method:  | 245.1(Mercury) |
| Matrix:    | Aqueous              |                   | 200.7(Others)  |

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | ND             | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | ND             | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | ND             | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | ND             | 0.3                    |
| Lead           | ND             | 0.01                   |
| Magnesium      | ND             | 0.5                    |
| Manganese      | ND             | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | ND             | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | ND             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0404PBW1

ND = Not Detected



## Analysis Report: Total Metals

|            |                               |                   |                |
|------------|-------------------------------|-------------------|----------------|
| Client:    | Sciencetech, Inc.             | Concentration in: | mg/L           |
| Client ID: |                               | Analysis Date:    | 4/5, 4/6/01    |
| Lab ID:    | Lab Control Sample, 0404LCSW1 | Analysis Method:  | 245.1(Mercury) |
| Matrix:    | Aqueous                       |                   | 200.7(Others)  |

| <u>Analyte</u> | <u>% Recovery</u> |
|----------------|-------------------|
| Aluminum       | 101               |
| Antimony       | 120               |
| Arsenic        | 103               |
| Barium         | 102               |
| Beryllium      | 101               |
| Cadmium        | 102               |
| Calcium        | 103               |
| Chromium       | 101               |
| Cobalt         | 102               |
| Copper         | 101               |
| Iron           | 101               |
| Lead           | 103               |
| Magnesium      | 101               |
| Manganese      | 100               |
| Mercury        | 114               |
| Nickel         | 101               |
| Potassium      | 108               |
| Selenium       | 102               |
| Silver         | 103               |
| Sodium         | 102               |
| Thallium       | 103               |
| Vanadium       | 101               |
| Zinc           | 99                |

QC Batch: 0404PBW1



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSI032801  
Lab ID: 80575001

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness               | 690            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/5/01                   |
| pH                     | 7.1            |                            | S.U.                          | SM 4500-H+                 | 3/30/01                  |
| Total Dissolved Solids | 490            | 10                         | mg/L                          | SM 2540-C                  | 3/30/01                  |
| Total Suspended Solids | 18             | 10                         | mg/L                          | SM 2540-D                  | 3/30/01                  |



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSE032801  
Lab ID: 80575002

Matrix: Aqueous

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|----------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness       | 690            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/5/01                   |



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Prep Blank

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting Limit</u> | <u>Units</u>                  | <u>Analysis Method</u> | <u>Analysis Date</u> |
|------------------------|----------------|------------------------|-------------------------------|------------------------|----------------------|
| Hardness               | ND             | 4                      | mg equiv CaCO <sub>3</sub> /L | SM2340 B               | 4/5/01               |
| Total Dissolved Solids | ND             | 10                     | mg/L                          | SM 2540-C              | 3/30/01              |
| Total Suspended Solids | ND             | 10                     | mg/L                          | SM 2540-D              | 3/30/01              |

ND = Not Detected



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Lab Control Sample

Matrix: Aqueous

| <u>Analyte</u>         | <u>% Recovery</u> | <u>Analysis Method</u> | <u>Analysis Date</u> |
|------------------------|-------------------|------------------------|----------------------|
| Total Dissolved Solids | 102               | SM 2540-C              | 3/30/01              |
| Total Suspended Solids | 99                | SM 2540-D              | 3/30/01              |



# MITKEM CORPORATION

03/30/01 04:13 PM

Page 1 of 1

Original

Lab Workorder #: 80575

Lab Workorder :

**80575**

**R0**

Client: **Scientech, Inc.**  
Lab Workorder ID: **NE Alloys & Metals Utica, NY**  
Client Proj ID:  
Client PO #:  
Project / Profile Name: **Routine**  
Date Due: **04/13/01**  
Customer Service:  
Del Req'd: **Commercial Reports**  
Completed?:  
Project Notes: **TALMETW by 200.7/245.1**

Logged In By:

Reviewed By:

Date Opened: **03/30/01 14:55**

Date Closed: **03/30/01 16:13**

Project Status: **WP**

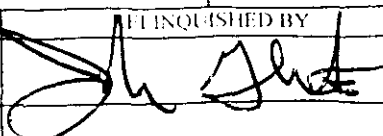
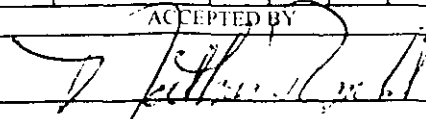
| <u>Lab ID</u> | <u>Client ID</u> | <u>Matrix</u> | <u>Type</u> | <u>Analysis Code</u>                                                   | <u>Collected</u> | <u>Received</u> | <u>Due</u> | <u>Notes</u> |
|---------------|------------------|---------------|-------------|------------------------------------------------------------------------|------------------|-----------------|------------|--------------|
| 80575001      | GTSE032801       | W             | SAMPLE      | 160.1W TDS<br>160.2W TSS<br>624<br>S2340WHarB<br>S4500BW pH<br>TALMETW | 03/28/01 14:05   | 03/30/01        | 04/13/01   |              |
| 80575002      | GTSE032801       | W             | SAMPLE      | 624<br>S2340WHarB<br>TALMETW                                           | 03/28/01 14:10   | 03/30/01        | 04/13/01   |              |

## INVOICE AND REPORT GO TO:

Bob Peak  
Scientech, Inc.  
44 Shelter Rock Road  
Danbury, CT, 06810  
W : (203)796-5000  
F : (203)792-3168

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

| REPORT TO                                                                     |                   |                                                                                    |      |                               |      |                                                                                      |        | INVOICE TO                                                                                                                                                                                                                                                                       |   |                    |   | LAB PROJECT #   |   |                 |          |              |  |  |  |  |
|-------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------|------|-------------------------------|------|--------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------|---|-----------------|---|-----------------|----------|--------------|--|--|--|--|
| COMPANY <u>SCIENTECH INC.</u>                                                 |                   |                                                                                    |      | PHONE <u>(203) 796-5000</u>   |      |                                                                                      |        | COMPANY <u>SAME</u>                                                                                                                                                                                                                                                              |   |                    |   | PHONE           |   |                 |          |              |  |  |  |  |
| NAME <u>Bob. McPeak</u>                                                       |                   |                                                                                    |      | FAX <u>(203) 792-3168</u>     |      |                                                                                      |        | NAME                                                                                                                                                                                                                                                                             |   |                    |   | FAX             |   |                 |          |              |  |  |  |  |
| ADDRESS <u>44 Shelter Rock Rd.</u>                                            |                   |                                                                                    |      |                               |      |                                                                                      |        | ADDRESS                                                                                                                                                                                                                                                                          |   |                    |   | TURNAROUND TIME |   |                 |          |              |  |  |  |  |
| CITY/ST/ZIP <u>DANBURY CT. 06810</u>                                          |                   |                                                                                    |      |                               |      |                                                                                      |        | CITY/ST/ZIP                                                                                                                                                                                                                                                                      |   |                    |   |                 |   |                 |          |              |  |  |  |  |
| CLIENT PROJECT NAME <u>FORMER NORTHEAST ALLOYS &amp; METALS, UTICA, NY.</u>   |                   |                                                                                    |      | CLIENT PROJECT # <u>31104</u> |      | CLIENT P.O. #                                                                        |        | <div style="text-align: center;">REQUESTED ANALYSES</div> <div style="display: flex; justify-content: space-around;"> <div>TCL VOLs 624</div> <div>TOTAL METALS 200.7/245.1</div> <div>PH 150.1</div> <div>IDS 160.1</div> <div>TSS 160.2</div> <div>HARDNESS 130.1</div> </div> |   |                    |   |                 |   |                 |          |              |  |  |  |  |
| SAMPLE IDENTIFICATION                                                         | DATE/TIME SAMPLED | COMPOSITE                                                                          | GRAB | WATER                         | SOIL | OTHER                                                                                | LAB ID |                                                                                                                                                                                                                                                                                  |   |                    |   |                 |   | # OF CONTAINERS | COMMENTS |              |  |  |  |  |
| GTSE032801                                                                    | 3/28/01 1405      |                                                                                    |      | X                             |      |                                                                                      | 01     | 6                                                                                                                                                                                                                                                                                | X | X                  | X | X               | X |                 |          |              |  |  |  |  |
| GTSE032801                                                                    | 3/28/01 1410      |                                                                                    |      | X                             |      |                                                                                      | 02     | 4                                                                                                                                                                                                                                                                                | X | X                  | X | X               | X |                 |          |              |  |  |  |  |
| <div style="font-size: 4em; transform: rotate(-45deg); opacity: 0.5;">X</div> |                   |                                                                                    |      |                               |      |                                                                                      |        |                                                                                                                                                                                                                                                                                  |   |                    |   |                 |   |                 |          |              |  |  |  |  |
| TSR                                                                           |                   | RELINQUISHED BY                                                                    |      | DATE/TIME                     |      | ACCEPTED BY                                                                          |        | DATE/TIME                                                                                                                                                                                                                                                                        |   | ADDITIONAL REMARKS |   |                 |   |                 |          | COUNTER TEMP |  |  |  |  |
| 1                                                                             |                   |  |      | 3/28/01 16:22                 |      |  |        | 3/30/01 09:00                                                                                                                                                                                                                                                                    |   |                    |   |                 |   |                 |          |              |  |  |  |  |
| 2                                                                             |                   |                                                                                    |      |                               |      |                                                                                      |        |                                                                                                                                                                                                                                                                                  |   |                    |   |                 |   |                 |          |              |  |  |  |  |
| 3                                                                             |                   |                                                                                    |      |                               |      |                                                                                      |        |                                                                                                                                                                                                                                                                                  |   |                    |   |                 |   |                 |          |              |  |  |  |  |

**MITKEM CORPORATION**  
Sample Condition Form

Page      of     

|                             |                          |                     |                               |
|-----------------------------|--------------------------|---------------------|-------------------------------|
| Received By: <u>    </u>    | Reviewed By: <u>    </u> | Date: <u>    </u>   | MITKEM Project #: <u>    </u> |
| Client Project: <u>    </u> |                          | Client: <u>    </u> |                               |

| Condition:                                | Lab Sample ID | Preservation (pH) |                                |     |      | VOA Matrix | Comments/Remarks/<br>Corrective Action* |
|-------------------------------------------|---------------|-------------------|--------------------------------|-----|------|------------|-----------------------------------------|
|                                           |               | HNO <sub>3</sub>  | H <sub>2</sub> SO <sub>4</sub> | HCl | NaOH |            |                                         |
| 1) Custody Seal(s)      Present / Absent  |               |                   |                                |     |      |            |                                         |
| Coolers / Bottles                         |               |                   |                                |     |      |            |                                         |
| Intact / Broken                           |               |                   |                                |     |      |            |                                         |
| 2) Custody Seal Number(s)                 |               |                   |                                |     |      |            |                                         |
|                                           |               |                   |                                |     |      |            |                                         |
|                                           |               |                   |                                |     |      |            |                                         |
| 3) Chain-of-Custody      Present / Absent |               |                   |                                |     |      |            |                                         |
| Cooler Temperature                        |               |                   |                                |     |      |            |                                         |
| Coolant Condition                         |               |                   |                                |     |      |            |                                         |
| 5) Airbill(s)                             |               |                   |                                |     |      |            |                                         |
| Airbill Number(s)                         |               |                   |                                |     |      |            |                                         |
|                                           |               |                   |                                |     |      |            |                                         |
|                                           |               |                   |                                |     |      |            |                                         |
| 1) Sample Bottles      Intact             |               |                   |                                |     |      |            |                                         |
| Broken                                    |               |                   |                                |     |      |            |                                         |
| Leaking                                   |               |                   |                                |     |      |            |                                         |
| 7) Date Received                          |               |                   |                                |     |      |            |                                         |
| 8) Time Received                          |               |                   |                                |     |      |            |                                         |
| VOA Matrix Key:                           |               |                   |                                |     |      |            |                                         |
| S = Unpreserved Soil                      |               |                   |                                |     |      |            |                                         |
| A = Unpreserved Aqueous                   |               |                   |                                |     |      |            |                                         |
| B = Both MeOH & NaHSO <sub>4</sub>        |               |                   |                                |     |      |            |                                         |
| I = NaHSO <sub>4</sub>                    |               |                   |                                |     |      |            |                                         |
| M = MeOH                                  |               |                   |                                |     |      |            |                                         |
| E = Encore                                |               |                   |                                |     |      |            |                                         |
| H = HCl                                   |               |                   |                                |     |      |            |                                         |
| A = AIR                                   |               |                   |                                |     |      |            |                                         |

See Sample Notification Form    yes / no

Last Page of Data Report

April 19, 2001

Scientech, Inc.  
44 Shelter Rock Road  
Danbury, CT 06810  
Attn: Mr. Bob Peak

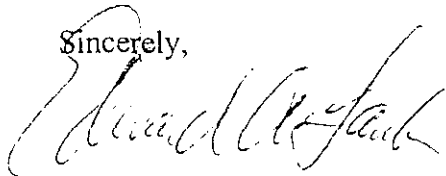
RE: Client Project: NE ALLOYS UTICA NY, 3110Y  
Lab Project #: 80610

Dear Mr. Peak:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,



Edward A. Lawler  
Laboratory Operations Manager



**Client: Scientech, Inc.**

**Client Project: NE ALLOYS, UTICA NY, 3110Y**

**Lab Project: 80610**

**Date samples received: 4/5/01**

### **Project Narrative**

This data report includes the analysis results for two (2) aqueous samples that were received from Scientech, Inc. on April 5, 2001. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. The volatile organic analysis of sample GTSI040401 was performed at a 2X dilution due to concentrations of compounds above the upper calibration range of the instrument.

No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in black ink, which appears to read "Edward A. Lawler". The signature is written in a cursive, flowing style.

Edward A. Lawler  
Laboratory Operations Manager

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSI040401

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80610

Matrix: (soil/water) WATER

Lab Sample ID: 80610001

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8397

Level: (low/med) LOW

Date Received: 04/05/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/11/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.

COMPOUND

Q

|                 |                           |     |   |
|-----------------|---------------------------|-----|---|
| 74-87-3-----    | Chloromethane             | 3   | J |
| 75-01-4-----    | Vinyl Chloride            | 19  |   |
| 74-83-9-----    | Bromomethane              | 10  | U |
| 75-00-3-----    | Chloroethane              | 10  | U |
| 75-69-4-----    | Trichlorofluoromethane    | 10  | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 10  | U |
| 75-09-2-----    | Methylene Chloride        | 10  | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 10  | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 10  | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 230 |   |
| 67-66-3-----    | Chloroform                | 10  | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 10  | U |
| 56-23-5-----    | Carbon Tetrachloride      | 10  | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 10  | U |
| 71-43-2-----    | Benzene                   | 2   | J |
| 79-01-6-----    | Trichloroethene           | 4   | J |
| 78-87-5-----    | 1,2-Dichloropropane       | 10  | U |
| 75-27-4-----    | Bromodichloromethane      | 10  | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 10  | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 10  | U |
| 108-88-3-----   | Toluene                   | 13  |   |
| 10061-02-6----- | trans-1,3-Dichloropropene | 10  | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 10  | U |
| 127-18-4-----   | Tetrachloroethene         | 10  | U |
| 124-48-1-----   | Dibromochloromethane      | 10  | U |
| 108-90-7-----   | Chlorobenzene             | 2   | J |
| 100-41-4-----   | Ethylbenzene              | 5   | J |
| 1330-20-7-----  | Xylene (Total)            | 48  |   |
| 75-25-2-----    | Bromoform                 | 10  | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 10  | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 10  | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 10  | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 3   | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSE040401

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: 80610

Matrix: (soil/water) WATER

Lab Sample ID: 80610002

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8398

Level: (low/med) LOW

Date Received: 04/05/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/11/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |   |   |
|-----------------|---------------------------|---|---|
| 74-87-3-----    | Chloromethane             | 5 | U |
| 75-01-4-----    | Vinyl Chloride            | 5 | U |
| 74-83-9-----    | Bromomethane              | 5 | U |
| 75-00-3-----    | Chloroethane              | 5 | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5 | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5 | U |
| 75-09-2-----    | Methylene Chloride        | 5 | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5 | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5 | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 5 | U |
| 67-66-3-----    | Chloroform                | 5 | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5 | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5 | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5 | U |
| 71-43-2-----    | Benzene                   | 5 | U |
| 79-01-6-----    | Trichloroethene           | 5 | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5 | U |
| 75-27-4-----    | Bromodichloromethane      | 5 | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5 | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5 | U |
| 108-88-3-----   | Toluene                   | 5 | U |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5 | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5 | U |
| 127-18-4-----   | Tetrachloroethene         | 5 | U |
| 124-48-1-----   | Dibromochloromethane      | 5 | U |
| 108-90-7-----   | Chlorobenzene             | 5 | U |
| 100-41-4-----   | Ethylbenzene              | 5 | U |
| 1330-20-7-----  | Xylene (Total)            | 5 | U |
| 75-25-2-----    | Bromoform                 | 5 | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5 | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5 | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5 | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5 | U |



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK5M

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80610

Matrix: (soil/water) WATER

Lab Sample ID: V5B0410A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8378

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/10/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |   |   |
|-----------------|---------------------------|---|---|
| 74-87-3-----    | Chloromethane             | 5 | U |
| 75-01-4-----    | Vinyl Chloride            | 5 | U |
| 74-83-9-----    | Bromomethane              | 5 | U |
| 75-00-3-----    | Chloroethane              | 5 | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5 | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5 | U |
| 75-09-2-----    | Methylene Chloride        | 5 | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5 | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5 | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 5 | U |
| 67-66-3-----    | Chloroform                | 5 | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5 | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5 | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5 | U |
| 71-43-2-----    | Benzene                   | 5 | U |
| 79-01-6-----    | Trichloroethene           | 5 | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5 | U |
| 75-27-4-----    | Bromodichloromethane      | 5 | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5 | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5 | U |
| 108-88-3-----   | Toluene                   | 5 | U |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5 | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5 | U |
| 127-18-4-----   | Tetrachloroethene         | 5 | U |
| 124-48-1-----   | Dibromochloromethane      | 5 | U |
| 108-90-7-----   | Chlorobenzene             | 5 | U |
| 100-41-4-----   | Ethylbenzene              | 5 | U |
| 1330-20-7-----  | Xylene (Total)            | 5 | U |
| 75-25-2-----    | Bromoform                 | 5 | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5 | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5 | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5 | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5 | U |

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80610

|    | EPA<br>SAMPLE NO. | SMC1<br># | SMC2<br>(DCE) # | SMC3<br>(TOL) # | OTHER<br>(BFB) # | TOT<br>OUT |
|----|-------------------|-----------|-----------------|-----------------|------------------|------------|
|    | =====             | =====     | =====           | =====           | =====            | =====      |
| 01 | VBLK5M            | 97        | 92              | 98              | 100              | 0          |
| 02 | VBLK5MLCS         | 101       | 104             | 100             | 100              | 0          |
| 03 | GTSI040401        | 103       | 86              | 96              | 99               | 0          |
| 04 | GTSE040401        | 112       | 97              | 100             | 112              | 0          |
| 05 |                   |           |                 |                 |                  |            |
| 06 |                   |           |                 |                 |                  |            |
| 07 |                   |           |                 |                 |                  |            |
| 08 |                   |           |                 |                 |                  |            |
| 09 |                   |           |                 |                 |                  |            |
| 10 |                   |           |                 |                 |                  |            |
| 11 |                   |           |                 |                 |                  |            |
| 12 |                   |           |                 |                 |                  |            |
| 13 |                   |           |                 |                 |                  |            |
| 14 |                   |           |                 |                 |                  |            |
| 15 |                   |           |                 |                 |                  |            |
| 16 |                   |           |                 |                 |                  |            |
| 17 |                   |           |                 |                 |                  |            |
| 18 |                   |           |                 |                 |                  |            |
| 19 |                   |           |                 |                 |                  |            |
| 20 |                   |           |                 |                 |                  |            |
| 21 |                   |           |                 |                 |                  |            |
| 22 |                   |           |                 |                 |                  |            |
| 23 |                   |           |                 |                 |                  |            |
| 24 |                   |           |                 |                 |                  |            |
| 25 |                   |           |                 |                 |                  |            |
| 26 |                   |           |                 |                 |                  |            |
| 27 |                   |           |                 |                 |                  |            |
| 28 |                   |           |                 |                 |                  |            |
| 29 |                   |           |                 |                 |                  |            |
| 30 |                   |           |                 |                 |                  |            |

QC LIMITS

SMC1 = Dibromofluoromethane (79-122)  
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (76-121)  
 SMC3 (TOL) = Toluene-d8 (82-118)  
 OTHER (BFB) = Bromofluorobenzene (85-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80610

Matrix Spike - Sample No.: VBLK5M

| COMPOUND                | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|-------------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| Chloromethane           | 50                       | 0.0                               | 37                             | 74                | 54-135                |
| Vinyl Chloride          | 50                       | 0.0                               | 45                             | 90                | 63-131                |
| Bromomethane            | 50                       | 0.0                               | 52                             | 104               | 58-132                |
| Chloroethane            | 50                       | 0.0                               | 48                             | 96                | 69-127                |
| Trichlorofluoromethane  | 50                       | 0.0                               | 51                             | 102               | 58-140                |
| 1,1-Dichloroethene      | 50                       | 0.0                               | 46                             | 92                | 75-122                |
| Methylene Chloride      | 50                       | 0.0                               | 36                             | 72                | 65-128                |
| trans-1,2-Dichloroethen | 50                       | 0.0                               | 39                             | 78                | 73-125                |
| 1,1-Dichloroethane      | 50                       | 0.0                               | 53                             | 106               | 75-123                |
| cis-1,2-Dichloroethene  | 50                       | 0.0                               | 53                             | 106               | 77-122                |
| Chloroform              | 50                       | 0.0                               | 55                             | 110               | 75-122                |
| 1,1,1-Trichloroethane   | 50                       | 0.0                               | 56                             | 112               | 74-126                |
| Carbon Tetrachloride    | 50                       | 0.0                               | 56                             | 112               | 74-127                |
| 1,2-Dichloroethane      | 50                       | 0.0                               | 56                             | 112               | 76-123                |
| Benzene                 | 50                       | 0.0                               | 52                             | 104               | 78-121                |
| Trichloroethene         | 50                       | 0.0                               | 54                             | 108               | 77-123                |
| 1,2-Dichloropropane     | 50                       | 0.0                               | 52                             | 104               | 77-122                |
| Bromodichloromethane    | 50                       | 0.0                               | 55                             | 110               | 78-121                |
| cis-1,3-Dichloropropene | 50                       | 0.0                               | 54                             | 108               | 77-121                |
| Toluene                 | 50                       | 0.0                               | 54                             | 108               | 77-122                |
| trans-1,3-Dichloroprope | 50                       | 0.0                               | 59                             | 118               | 76-123                |
| 1,1,2-Trichloroethane   | 50                       | 0.0                               | 57                             | 114               | 76-124                |
| Tetrachloroethene       | 50                       | 0.0                               | 54                             | 108               | 77-121                |
| Dibromochloromethane    | 50                       | 0.0                               | 55                             | 110               | 77-121                |
| Chlorobenzene           | 50                       | 0.0                               | 53                             | 106               | 77-120                |
| Ethylbenzene            | 50                       | 0.0                               | 54                             | 108               | 76-120                |
| Xylene (Total)          | 150                      | 0.0                               | 160                            | 107               | 76-121                |
| Bromoform               | 50                       | 0.0                               | 60                             | 120               | 73-126                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS:

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80610

Matrix Spike - Sample No.: VBLK5M

| COMPOUND                | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|-------------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| =====                   | =====                    | =====                             | =====                          | =====             | =====                 |
| 1,1,2,2-Tetrachloroetha | 50                       | 0.0                               | 54                             | 108               | 66-128                |
| 1,3-Dichlorobenzene     | 50                       | 0.0                               | 51                             | 102               | 74-120                |
| 1,4-Dichlorobenzene     | 50                       | 0.0                               | 50                             | 100               | 75-120                |
| 1,2-Dichlorobenzene     | 50                       | 0.0                               | 51                             | 102               | 75-119                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBK5M

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: 80610

Lab File ID: V5C8378

Lab Sample ID: V5B0410A

Date Analyzed: 04/10/01

Time Analyzed: 1915

GC Column: DB-624 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: V5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

|    | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | TIME<br>ANALYZED |
|----|-------------------|------------------|----------------|------------------|
| 01 | VBK5MLCS          | V5L0410A         | V5C8379        | 1944             |
| 02 | GTSI040401        | 80610001         | V5C8397        | 0420             |
| 03 | GTSE040401        | 80610002         | V5C8398        | 0449             |
| 04 |                   |                  |                |                  |
| 05 |                   |                  |                |                  |
| 06 |                   |                  |                |                  |
| 07 |                   |                  |                |                  |
| 08 |                   |                  |                |                  |
| 09 |                   |                  |                |                  |
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| 27 |                   |                  |                |                  |
| 28 |                   |                  |                |                  |
| 29 |                   |                  |                |                  |
| 30 |                   |                  |                |                  |

COMMENTS:



## Analysis Report: Total Metals

Client: Sciencetech, Inc.  
Client ID: GTSI040401  
Lab ID: 80610001  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/9/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | 0.4            | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | 110            | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | 0.03           | 0.03                       |
| Iron           | 84             | 0.3                        |
| Lead           | 0.07           | 0.01                       |
| Magnesium      | 21             | 0.5                        |
| Manganese      | 0.94           | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | 9              | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | ND             | 0.03                       |
| Sodium         | 28             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | 0.05           | 0.05                       |

QC Batch: 0407PBW1

ND = Not Detected



# Analysis Report: Total Metals

Client: Sciencetech, Inc.  
Client ID: GTSE040401  
Lab ID: 80610002  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/9/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | 0.3            | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | 0.5            | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | 100            | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | 16             | 0.3                    |
| Lead           | 0.05           | 0.01                   |
| Magnesium      | 20             | 0.5                    |
| Manganese      | 0.95           | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | 7              | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | 27             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0407PBW1

ND = Not Detected



## Analysis Report: Total Metals

|            |                      |                   |                |
|------------|----------------------|-------------------|----------------|
| Client:    | Sciencetech, Inc.    | Concentration in: | mg/L           |
| Client ID: |                      | Analysis Date:    | 4/9/01         |
| Lab ID:    | Prep Blank, 0407PBW1 | Analysis Method:  | 7470A(Mercury) |
| Matrix:    | Aqueous              |                   | 6010B (Others) |

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | ND             | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | ND             | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | ND             | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | ND             | 0.3                    |
| Lead           | ND             | 0.01                   |
| Magnesium      | ND             | 0.5                    |
| Manganese      | ND             | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | ND             | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | ND             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0407PBW1

ND = Not Detected





## Analysis Report: Total Metals

Client: Sciencetech, Inc.  
Client ID:  
Lab ID: Lab Control, 0407LCSW1  
Matrix: Aqueous

Analysis Date: 4/9/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>% Recovery</u> |
|----------------|-------------------|
| Aluminum       | 98                |
| Antimony       | 123               |
| Arsenic        | 108               |
| Barium         | 103               |
| Beryllium      | 101               |
| Cadmium        | 109               |
| Calcium        | 100               |
| Chromium       | 101               |
| Cobalt         | 104               |
| Copper         | 100               |
| Iron           | 102               |
| Lead           | 109               |
| Magnesium      | 101               |
| Manganese      | 104               |
| Mercury        | 101               |
| Nickel         | 105               |
| Potassium      | 95                |
| Selenium       | 107               |
| Silver         | 102               |
| Sodium         | 96                |
| Thallium       | 110               |
| Vanadium       | 99                |
| Zinc           | 101               |

QC Batch: 0407PBW1



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSI040401  
Lab ID: 80610001

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness               | 370            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/9/01                   |
| pH                     | 6.8            |                            | S.U.                          | SM 4500-H+                 | 4/5/01                   |
| Total Dissolved Solids | 540            | 10                         | mg/L                          | SM 2540-C                  | 4/5/01                   |
| Total Suspended Solids | 120            | 10                         | mg/L                          | SM 2540-D                  | 4/5/01                   |



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSE040401  
Lab ID: 80610002

Matrix: Aqueous

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|----------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness       | 340            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/9/01                   |



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Prep Blank

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness               | ND             | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/9/01                   |
| Total Dissolved Solids | ND             | 10                         | mg/L                          | SM 2540-C                  | 4/5/01                   |
| Total Suspended Solids | ND             | 10                         | mg/L                          | SM 2540-D                  | 4/5/01                   |

ND = Not Detected



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.

Matrix: Aqueous

Client ID:

Lab ID: Lab Control Sample

| <u>Analyte</u>         | <u>% Recovery</u> | <u>Analysis Method</u> | <u>Analysis Date</u> |
|------------------------|-------------------|------------------------|----------------------|
| Total Dissolved Solids | 95                | SM 2540-C              | 4/5/01               |
| Total Suspended Solids | 100               | SM 2540-D              | 4/5/01               |

# MITKEM CORPORATION

Lab Workorder #: 80610

Page 1 of 1

04/06/01 11:13 AM

Revision #1

Lab Workorder

80610

R1

Client: Sciencetech, Inc.

Lab Workorder ID: NE ALLOYS UTICA NY 3110Y

Client Proj ID:

Client PO #:

Project / Profile Name: Routine

Date Due: 04/19/01

Customer Service:

Del Req'd: Commercial Reports

Completed?:

Project Notes: R1: Change Workorder ID.

Logged In By:

Reviewed By:

Date Opened: 04/05/01 12:35

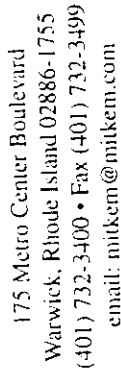
Date Closed: 04/05/01 13:42

Project Status: WP

| Lab ID   | Client ID  | Matrix | Type   | Analysis Code                                                          | Collected      | Received | Due      | Notes |
|----------|------------|--------|--------|------------------------------------------------------------------------|----------------|----------|----------|-------|
| 80610001 | GTSI040401 | W      | SAMPLE | 624<br>TALMETW<br>S4500BW pH<br>160.1W TDS<br>160.2W TSS<br>S2340WHarB | 04/04/01 09:45 | 04/05/01 | 04/19/01 |       |
| 80610002 | GTSE040401 | W      | SAMPLE | 624<br>TALMETW<br>S2340WHarB                                           | 04/04/01 10:15 | 04/05/01 | 04/19/01 |       |

## INVOICE AND REPORT GO TO:

Bob Peak  
Sciencetech, Inc.  
44 Shelter Rock Road  
Danbury, CT, 06810  
W : (203)796-5000  
F : (203)792-3168



## Page 1 of 1

**WHITE: LABORATORY COPY**

**YELLOW: REPORT COPY**

**PINK: CLIENT'S COPY**

**MITKEM CORPORATION**  
Sample Condition Form

Page      of     

Received By: TH Reviewed By: 16 Date: 4/5/01 MITKEM Project #: RC610

Client Project: 100% Alkyd - methis (31104) Client: Scientific Services Tech

| Condition:                | Lab Sample ID  | Preservation (pH) |                                |     |      | VOA Matrix | Comments/Remarks/<br>Corrective Action* |
|---------------------------|----------------|-------------------|--------------------------------|-----|------|------------|-----------------------------------------|
|                           |                | HNO <sub>3</sub>  | H <sub>2</sub> SO <sub>4</sub> | HCl | NaOH |            |                                         |
| 1) Custody Seal(s)        | RC610-001      | 22                |                                |     |      |            |                                         |
| Present / Absent          | RC610-002      | 22                |                                |     |      |            |                                         |
| Coolers / Bottles         |                |                   |                                |     |      |            |                                         |
| Intact / Broken           |                |                   |                                |     |      |            |                                         |
| 2) Custody Seal Number(s) | N/A            |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
| 3) Chain-of-Custody       |                |                   |                                |     |      |            |                                         |
| Present / Absent          |                |                   |                                |     |      |            |                                         |
| 4) Cooler Temperature     | 4°C            |                   |                                |     |      |            |                                         |
| Coolant Condition         | 102            |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
| 5) Airbill(s)             | Fed Ex         |                   |                                |     |      |            |                                         |
| Airbill Number(s)         | 8796 6346 1094 |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
|                           |                |                   |                                |     |      |            |                                         |
| Sample Bottles            |                |                   |                                |     |      |            |                                         |
| Intact                    |                |                   |                                |     |      |            |                                         |
| Broken                    |                |                   |                                |     |      |            |                                         |
| Leaking                   |                |                   |                                |     |      |            |                                         |
| Date Received             | 4/5/01         |                   |                                |     |      |            |                                         |
| Time Received             | 08:45          |                   |                                |     |      |            |                                         |

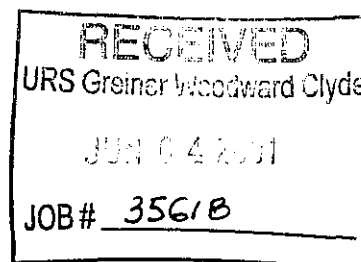
VOA Matrix Key:

|                                    |            |
|------------------------------------|------------|
| U = Unpreserved Soil               | M = MeOH   |
| JA = Unpreserved Aqueous           | E = Encore |
| B = Both MeOH & NaHSO <sub>4</sub> | H = HCl    |
| A = NaHSO <sub>4</sub>             | A = AIR    |

See Sample Notification Form    yes / no



Last Page of Data Report



May 30, 2001

Refer to ES - 2440

Mr. Donald McCall, P.E.

Project Manager

URS Corporation

282 Delaware Ave.

Buffalo, New York 14202

cc: D. McCall  
file (AD-1)

Subject: Weekly Sampling Status Report (April 11, 2001 and April 18, 2001)  
Former Northeast Alloys & Metals Site; Utica, NY  
Contract Number D-004178

#### **System Sampling performed on 4/11/01 and 4/18/01**

SCIENTECH employees arrived at the former Northeast Alloys and Metals site on 04/11/01 and 04/18/01 to obtain the final rounds of samples in accordance with the obligations set forth in the NYSDEC contract for the former Northeast Alloys and Metals Site in Utica, NY.

The samples were collected in accordance with the SCIENTECH Sampling and Analysis Plan provided to NYSDEC in the deliverables package.

Both influent and effluent samples from the treatment system were collected and analyzed for the following:

- TCL VOCs via EPA Method 624
- TAL Metals via EPA Method 200.7 and 245.1
- pH via EPA Method 150.1
- Total dissolved Solids via EPA Method 160.1
- Total Suspended Solids via EPA Method 160.2
- Total Hardness via Vial EPA Method 130.1

The influent samples designated GTSI 041101 and GTSI 041801 in accordance with the sampling and analysis plan were collected from the treatment system sump via a sampling tube connected to dewatering pump 1.

The effluent samples designated GTSE 041101 and GTSE 041801 in accordance with the sampling and analysis plan were collected from inside the last baffle of the discharge manhole, prior to the gravity line to the City of Utica sanitary sewer.

---

FADEPT020\3729 - Northeast Alloys Utica, NY\NES Deliverables Design Documents\Sampling 041101&041801.doc

The samples were collected in laboratory-supplied glassware, packaged on ice and sent to Mitkem Corporation, Warwick, RI for laboratory analysis.

### **Results of the Data Generated**

Attached are the analytical data from the final two weekly sampling events. The data indicates the following:

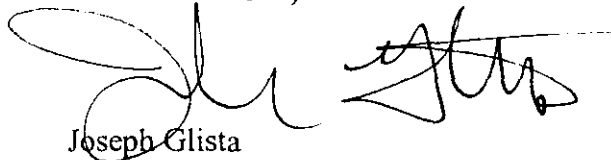
- The treatment system is successful in reducing the level of VOCs present in the collected groundwater, and
- The levels of contaminants in the treated groundwater are well below the discharge criteria set forth in the City of Utica discharge permit for discharge to the sanitary sewer.

### **Scheduled Actions**

Sciencetech Inc. will begin the process of relinquishing the operation, testing and maintenance of the treatment system to the NY State DEC.

Sincerely,

**SCIENCETECH, Inc.**



Joseph Glista  
Environmental Geologist  
Environmental Services

Enclosures

cc: P. Ouderkirk  
K. Cyr  
R. McPeak



*"Environmental Testing For The New Millennium"*

---

April 24, 2001

Scientech, Inc.  
44 Shelter Rock Rd  
Danbury, CT 06810  
Attn: Mr. Bob Peak

RE: Client Project: FORMER NE ALLOYS + METALS, UTICA, NY  
Lab Project #: 80661

Dear Mr. Peak:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

A handwritten signature in cursive script, which appears to read "Edward A. Lawler".

Edward A. Lawler  
Laboratory Operations Manager



**Client: Scientech, Inc.**

**Client Project: Former NE Alloys + Metals, Utica, NY**

**Lab Project: 80661**

**Date samples received: 4/12/01**

### **Project Narrative**

This data report includes the analysis results for two (2) aqueous samples that were received from Scientech, Inc. on April 12, 2001. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. The volatile organics analysis of sample GTSI was analyzed at a 2X dilution due to concentrations exceeding the calibration range of the instrument.

No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in cursive script, appearing to read "Edward A. Lawler", written in dark ink.

Edward A. Lawler  
Laboratory Operations Manager

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSI

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

Matrix: (soil/water) WATER

Lab Sample ID: 80661001

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8460

Level: (low/med) LOW

Date Received: 04/12/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/18/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |     |   |
|-----------------|---------------------------|-----|---|
| 74-87-3-----    | Chloromethane             | 10  | U |
| 75-01-4-----    | Vinyl Chloride            | 27  |   |
| 74-83-9-----    | Bromomethane              | 10  | U |
| 75-00-3-----    | Chloroethane              | 10  | U |
| 75-69-4-----    | Trichlorofluoromethane    | 10  | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 10  | U |
| 75-09-2-----    | Methylene Chloride        | 10  | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 10  | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 10  | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 290 |   |
| 67-66-3-----    | Chloroform                | 10  | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 10  | U |
| 56-23-5-----    | Carbon Tetrachloride      | 10  | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 10  | U |
| 71-43-2-----    | Benzene                   | 10  | U |
| 79-01-6-----    | Trichloroethene           | 3   | J |
| 78-87-5-----    | 1,2-Dichloropropane       | 10  | U |
| 75-27-4-----    | Bromodichloromethane      | 10  | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 10  | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 10  | U |
| 108-88-3-----   | Toluene                   | 11  |   |
| 10061-02-6----- | trans-1,3-Dichloropropene | 10  | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 10  | U |
| 127-18-4-----   | Tetrachloroethene         | 10  | U |
| 124-48-1-----   | Dibromochloromethane      | 10  | U |
| 108-90-7-----   | Chlorobenzene             | 10  | U |
| 100-41-4-----   | Ethylbenzene              | 4   | J |
| 1330-20-7-----  | Xylene (Total)            | 42  |   |
| 75-25-2-----    | Bromoform                 | 10  | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 10  | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 10  | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 10  | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 10  | U |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GTSE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

Matrix: (soil/water) WATER

Lab Sample ID: 80661002

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8466

Level: (low/med) LOW

Date Received: 04/12/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/18/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

| CAS NO.    | COMPOUND                       | CONCENTRATION UNITS: |      | Q |
|------------|--------------------------------|----------------------|------|---|
|            |                                | (ug/L or ug/Kg)      | UG/L |   |
| 74-87-3    | -----Chloromethane             | 5                    | U    |   |
| 75-01-4    | -----Vinyl Chloride            | 5                    | U    |   |
| 74-83-9    | -----Bromomethane              | 5                    | U    |   |
| 75-00-3    | -----Chloroethane              | 5                    | U    |   |
| 75-69-4    | -----Trichlorofluoromethane    | 5                    | U    |   |
| 75-35-4    | -----1,1-Dichloroethene        | 5                    | U    |   |
| 75-09-2    | -----Methylene Chloride        | 5                    | U    |   |
| 156-60-5   | -----trans-1,2-Dichloroethene  | 5                    | U    |   |
| 75-34-3    | -----1,1-Dichloroethane        | 5                    | U    |   |
| 156-59-2   | -----cis-1,2-Dichloroethene    | 28                   |      |   |
| 67-66-3    | -----Chloroform                | 5                    | U    |   |
| 71-55-6    | -----1,1,1-Trichloroethane     | 5                    | U    |   |
| 56-23-5    | -----Carbon Tetrachloride      | 5                    | U    |   |
| 107-06-2   | -----1,2-Dichloroethane        | 5                    | U    |   |
| 71-43-2    | -----Benzene                   | 5                    | U    |   |
| 79-01-6    | -----Trichloroethene           | 5                    | U    |   |
| 78-87-5    | -----1,2-Dichloropropane       | 5                    | U    |   |
| 75-27-4    | -----Bromodichloromethane      | 5                    | U    |   |
| 110-75-8   | -----2-Chloroethyl vinyl ether | 5                    | U    |   |
| 10061-01-5 | -----cis-1,3-Dichloropropene   | 5                    | U    |   |
| 108-88-3   | -----Toluene                   | 5                    | U    |   |
| 10061-02-6 | -----trans-1,3-Dichloropropene | 5                    | U    |   |
| 79-00-5    | -----1,1,2-Trichloroethane     | 5                    | U    |   |
| 127-18-4   | -----Tetrachloroethene         | 5                    | U    |   |
| 124-48-1   | -----Dibromochloromethane      | 5                    | U    |   |
| 108-90-7   | -----Chlorobenzene             | 5                    | U    |   |
| 100-41-4   | -----Ethylbenzene              | 5                    | U    |   |
| 1330-20-7  | -----Xylene (Total)            | 4                    | J    |   |
| 75-25-2    | -----Bromoform                 | 5                    | U    |   |
| 79-34-5    | -----1,1,2,2-Tetrachloroethane | 5                    | U    |   |
| 541-73-1   | -----1,3-Dichlorobenzene       | 5                    | U    |   |
| 106-46-7   | -----1,4-Dichlorobenzene       | 5                    | U    |   |
| 95-50-1    | -----1,2-Dichlorobenzene       | 5                    | U    |   |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

Matrix: (soil/water) WATER

Lab Sample ID: V5B0418A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8442

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/18/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |   |   |
|-----------------|---------------------------|---|---|
| 74-87-3-----    | Chloromethane             | 2 | J |
| 75-01-4-----    | Vinyl Chloride            | 5 | U |
| 74-83-9-----    | Bromomethane              | 5 | U |
| 75-00-3-----    | Chloroethane              | 5 | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5 | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5 | U |
| 75-09-2-----    | Methylene Chloride        | 5 | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5 | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5 | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 5 | U |
| 67-66-3-----    | Chloroform                | 5 | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5 | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5 | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5 | U |
| 71-43-2-----    | Benzene                   | 5 | U |
| 79-01-6-----    | Trichloroethene           | 5 | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5 | U |
| 75-27-4-----    | Bromodichloromethane      | 5 | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5 | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5 | U |
| 108-88-3-----   | Toluene                   | 5 | U |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5 | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5 | U |
| 127-18-4-----   | Tetrachloroethene         | 5 | U |
| 124-48-1-----   | Dibromochloromethane      | 5 | U |
| 108-90-7-----   | Chlorobenzene             | 5 | U |
| 100-41-4-----   | Ethylbenzene              | 5 | U |
| 1330-20-7-----  | Xylene (Total)            | 5 | U |
| 75-25-2-----    | Bromoform                 | 5 | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5 | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5 | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5 | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5 | U |



2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

|    | EPA<br>SAMPLE NO. | SMC1<br># | SMC2<br>(DCE) # | SMC3<br>(TOL) # | OTHER<br>(BFB) # | TOT<br>OUT |
|----|-------------------|-----------|-----------------|-----------------|------------------|------------|
|    | =====             | =====     | =====           | =====           | =====            | =====      |
| 01 | VLK5Q             | 102       | 103             | 96              | 99               | 0          |
| 02 | VLK5QLCS          | 102       | 102             | 103             | 101              | 0          |
| 03 | GTSI              | 102       | 105             | 99              | 101              | 0          |
| 04 | GTSE              | 104       | 107             | 99              | 102              | 0          |
| 05 |                   |           |                 |                 |                  |            |
| 06 |                   |           |                 |                 |                  |            |
| 07 |                   |           |                 |                 |                  |            |
| 08 |                   |           |                 |                 |                  |            |
| 09 |                   |           |                 |                 |                  |            |
| 10 |                   |           |                 |                 |                  |            |
| 11 |                   |           |                 |                 |                  |            |
| 12 |                   |           |                 |                 |                  |            |
| 13 |                   |           |                 |                 |                  |            |
| 14 |                   |           |                 |                 |                  |            |
| 15 |                   |           |                 |                 |                  |            |
| 16 |                   |           |                 |                 |                  |            |
| 17 |                   |           |                 |                 |                  |            |
| 18 |                   |           |                 |                 |                  |            |
| 19 |                   |           |                 |                 |                  |            |
| 20 |                   |           |                 |                 |                  |            |
| 21 |                   |           |                 |                 |                  |            |
| 22 |                   |           |                 |                 |                  |            |
| 23 |                   |           |                 |                 |                  |            |
| 24 |                   |           |                 |                 |                  |            |
| 25 |                   |           |                 |                 |                  |            |
| 26 |                   |           |                 |                 |                  |            |
| 27 |                   |           |                 |                 |                  |            |
| 28 |                   |           |                 |                 |                  |            |
| 29 |                   |           |                 |                 |                  |            |
| 30 |                   |           |                 |                 |                  |            |

QC LIMITS

SMC1 = Dibromofluoromethane (79-122)  
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (76-121)  
 SMC3 (TOL) = Toluene-d8 (82-118)  
 OTHER (BFB) = Bromofluorobenzene (85-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

Matrix Spike - Sample No.: VBLK5Q

| COMPOUND                | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|-------------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| Chloromethane           | 50                       | 2                                 | 46                             | 88                | 54-135                |
| Vinyl Chloride          | 50                       | 0.0                               | 48                             | 96                | 63-131                |
| Bromomethane            | 50                       | 0.0                               | 51                             | 102               | 58-132                |
| Chloroethane            | 50                       | 0.0                               | 49                             | 98                | 69-127                |
| Trichlorofluoromethane  | 50                       | 0.0                               | 41                             | 82                | 58-140                |
| 1,1-Dichloroethene      | 50                       | 0.0                               | 44                             | 88                | 75-122                |
| Methylene Chloride      | 50                       | 0.0                               | 42                             | 84                | 65-128                |
| trans-1,2-Dichloroethen | 50                       | 0.0                               | 53                             | 106               | 73-125                |
| 1,1-Dichloroethane      | 50                       | 0.0                               | 51                             | 102               | 75-123                |
| cis-1,2-Dichloroethene  | 50                       | 0.0                               | 52                             | 104               | 77-122                |
| Chloroform              | 50                       | 0.0                               | 52                             | 104               | 75-122                |
| 1,1,1-Trichloroethane   | 50                       | 0.0                               | 51                             | 102               | 74-126                |
| Carbon Tetrachloride    | 50                       | 0.0                               | 52                             | 104               | 74-127                |
| 1,2-Dichloroethane      | 50                       | 0.0                               | 50                             | 100               | 76-123                |
| Benzene                 | 50                       | 0.0                               | 53                             | 106               | 78-121                |
| Trichloroethene         | 50                       | 0.0                               | 53                             | 106               | 77-123                |
| 1,2-Dichloropropane     | 50                       | 0.0                               | 52                             | 104               | 77-122                |
| Bromodichloromethane    | 50                       | 0.0                               | 52                             | 104               | 78-121                |
| cis-1,3-Dichloropropene | 50                       | 0.0                               | 54                             | 108               | 77-121                |
| Toluene                 | 50                       | 0.0                               | 52                             | 104               | 77-122                |
| trans-1,3-Dichloroprope | 50                       | 0.0                               | 54                             | 108               | 76-123                |
| 1,1,2-Trichloroethane   | 50                       | 0.0                               | 54                             | 108               | 76-124                |
| Tetrachloroethene       | 50                       | 0.0                               | 51                             | 102               | 77-121                |
| Dibromochloromethane    | 50                       | 0.0                               | 55                             | 110               | 77-121                |
| Chlorobenzene           | 50                       | 0.0                               | 51                             | 102               | 77-120                |
| Ethylbenzene            | 50                       | 0.0                               | 51                             | 102               | 76-120                |
| Xylene (Total)          | 150                      | 0.0                               | 150                            | 100               | 76-121                |
| Bromoform               | 50                       | 0.0                               | 56                             | 112               | 73-126                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS:

FORM 3  
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: 80661

Matrix Spike - Sample No.: VBLK5Q

| COMPOUND                | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC # | QC.<br>LIMITS<br>REC. |
|-------------------------|--------------------------|-----------------------------------|--------------------------------|-------------------|-----------------------|
| =====                   | =====                    | =====                             | =====                          | =====             | =====                 |
| 1,1,2,2-Tetrachloroetha | 50                       | 0.0                               | 55                             | 110               | 66-128                |
| 1,3-Dichlorobenzene     | 50                       | 0.0                               | 50                             | 100               | 74-120                |
| 1,4-Dichlorobenzene     | 50                       | 0.0                               | 50                             | 100               | 75-120                |
| 1,2-Dichlorobenzene     | 50                       | 0.0                               | 51                             | 102               | 75-119                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 32 outside limits

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80661

Lab File ID: V5C8442

Lab Sample ID: V5B0418A

Date Analyzed: 04/18/01

Time Analyzed: 1024

GC Column: DB-624 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: V5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

|    | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | TIME<br>ANALYZED |
|----|-------------------|------------------|----------------|------------------|
| 01 | VBLK5QLCS         | V5L0418A         | V5C8443        | 1055             |
| 02 | GTSI              | 80661001         | V5C8460        | 1928             |
| 03 | GTSE              | 80661002         | V5C8466        | 2222             |
| 04 |                   |                  |                |                  |
| 05 |                   |                  |                |                  |
| 06 |                   |                  |                |                  |
| 07 |                   |                  |                |                  |
| 08 |                   |                  |                |                  |
| 09 |                   |                  |                |                  |
| 10 |                   |                  |                |                  |
| 11 |                   |                  |                |                  |
| 12 |                   |                  |                |                  |
| 13 |                   |                  |                |                  |
| 14 |                   |                  |                |                  |
| 15 |                   |                  |                |                  |
| 16 |                   |                  |                |                  |
| 17 |                   |                  |                |                  |
| 18 |                   |                  |                |                  |
| 19 |                   |                  |                |                  |
| 20 |                   |                  |                |                  |
| 21 |                   |                  |                |                  |
| 22 |                   |                  |                |                  |
| 23 |                   |                  |                |                  |
| 24 |                   |                  |                |                  |
| 25 |                   |                  |                |                  |
| 26 |                   |                  |                |                  |
| 27 |                   |                  |                |                  |
| 28 |                   |                  |                |                  |
| 29 |                   |                  |                |                  |
| 30 |                   |                  |                |                  |

COMMENTS:



## Analysis Report: Total Metals

Client: Scientech, Inc.  
Client ID: GTSI  
Lab ID: 80661001  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/13/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | 0.4            | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | 110            | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | ND             | 0.03                       |
| Iron           | 8.3            | 0.3                        |
| Lead           | 0.02           | 0.01                       |
| Magnesium      | 22             | 0.5                        |
| Manganese      | 0.96           | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | 6              | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | 0.03           | 0.03                       |
| Sodium         | 23             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | ND             | 0.05                       |

QC Batch: 0412PBW1

ND = Not Detected



# Analysis Report: Total Metals

Client: Scientech, Inc.  
Client ID: GTSE  
Lab ID: 80661002  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/13/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | 0.4            | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | 110            | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | ND             | 0.03                       |
| Iron           | 8.8            | 0.3                        |
| Lead           | ND             | 0.01                       |
| Magnesium      | 21             | 0.5                        |
| Manganese      | 0.92           | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | 6              | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | ND             | 0.03                       |
| Sodium         | 23             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | ND             | 0.05                       |

QC Batch: 0412PBW1

ND = Not Detected



Analysis Report: Total Metals

Client: Sciencetech, Inc.  
Client ID:  
Lab ID: Prep Blank, 0412PBW1  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/13/01  
Analysis Method: 7470A(Mercury)  
6010B (Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | ND             | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | ND             | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | ND             | 0.03                       |
| Iron           | ND             | 0.3                        |
| Lead           | ND             | 0.01                       |
| Magnesium      | ND             | 0.5                        |
| Manganese      | ND             | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | ND             | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | ND             | 0.03                       |
| Sodium         | ND             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | ND             | 0.05                       |

QC Batch: 0412PBW1

ND = Not Detected



## Analysis Report: Total Metals

|            |                               |                  |                |
|------------|-------------------------------|------------------|----------------|
| Client:    | Scientech, Inc.               | Analysis Date:   | 4/13/01        |
| Client ID: |                               | Analysis Method: | 7470A(Mercury) |
| Lab ID:    | Lab Control Sample, 0412LCSW1 |                  | 6010B (Others) |
| Matrix:    | Aqueous                       |                  |                |

| <u>Analyte</u> | <u>% Recovery</u> |
|----------------|-------------------|
| Aluminum       | 98                |
| Antimony       | 121               |
| Arsenic        | 105               |
| Barium         | 104               |
| Beryllium      | 101               |
| Cadmium        | 108               |
| Calcium        | 100               |
| Chromium       | 100               |
| Cobalt         | 102               |
| Copper         | 102               |
| Iron           | 102               |
| Lead           | 92                |
| Magnesium      | 102               |
| Manganese      | 102               |
| Mercury        | 98                |
| Nickel         | 101               |
| Potassium      | 93                |
| Selenium       | 106               |
| Silver         | 89                |
| Sodium         | 95                |
| Thallium       | 112               |
| Vanadium       | 101               |
| Zinc           | 99                |

QC Batch: 0412PBW1





## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSI  
Lab ID: 80661001

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u> | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|--------------|----------------------------|--------------------------|
| pH                     | 7.2            |                            | S.U.         | SM 4500-H+                 | 4/12/01                  |
| Total Dissolved Solids | 390            | 10                         | mg/L         | SM 2540-C                  | 4/13/01                  |
| Total Suspended Solids | 20             | 10                         | mg/L         | SM 2540-D                  | 4/13/01                  |



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Prep Blank

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u> | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|--------------|----------------------------|--------------------------|
| Total Dissolved Solids | ND             | 10                         | mg/L         | SM 2540-C                  | 4/13/01                  |
| Total Suspended Solids | ND             | 10                         | mg/L         | SM 2540-D                  | 4/13/01                  |

ND = Not Detected



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Lab Control Sample

Matrix: Aqueous

| <u>Analyte</u>         | <u>% Recovery</u> | <u>Analysis Method</u> | <u>Analysis Date</u> |
|------------------------|-------------------|------------------------|----------------------|
| Total Dissolved Solids | 103               | SM 2540-C              | 4/13/01              |
| Total Suspended Solids | 97                | SM 2540-D              | 4/13/01              |

# MITKEM CORPORATION

Page 1 of 1

Lab Workorder #: 80661

04/12/01 02:06 PM

Lab Workorder

80661

R0

Client: Scientech, Inc.

Lab Workorder ID: FORMER NE ALLOYS+METALS

Client Proj ID:

Client PO #: NA

Project / Profile Name: Routine

Date Due: 04/26/01

Customer Service:

Del Req'd: Commercial Reports

Completed?:

Logged In By:

Reviewed By:

Date Opened: 04/12/01 14:04

Date Closed: 04/12/01 14:06

Project Status: WP

| Lab ID   | Client ID | Matrix | Type   | Analysis Code                                                                      | Collected      | Received | Due      | Notes      |
|----------|-----------|--------|--------|------------------------------------------------------------------------------------|----------------|----------|----------|------------|
| 80661001 | GTSI      | W      | SAMPLE | ~ 160.1W TDS<br>~ 160.2W TSS<br>~ 624<br>~ S2340WHarB<br>~ S4500BW pH<br>~ TALMETW | 04/11/01 09:30 | 04/12/01 | 04/26/01 | GTSI041101 |

|          |      |   |        |                                    |                |          |          |            |
|----------|------|---|--------|------------------------------------|----------------|----------|----------|------------|
| 80661002 | GTSE | W | SAMPLE | ~ 624<br>~ S2340WHarB<br>~ TALMETW | 04/11/01 10:00 | 04/12/01 | 04/26/01 | GTSE041101 |
|----------|------|---|--------|------------------------------------|----------------|----------|----------|------------|

## INVOICE AND REPORT GO TO:

Bob Peak  
Scientech, Inc.  
44 Shelter Rock Road  
Danbury, CT, 06810  
W : (203)796-5000  
F : (203)792-3168

PINK: CLIENT'S COPY

**MITKEM CORPORATION**  
Sample Condition Form

Page 1 of 1

Received By: MD Reviewed By: \_\_\_\_\_ Date: 4/12/01 MITKEM Project #: 80661

Client Project: FORMER NE ANALYST MET Client: SCI WTECH INC

| Condition:                           | Lab Sample ID   | Preservation (pH) |                                |     |      | VOA Matrix | Comments/Remarks/<br>Corrective Action* |
|--------------------------------------|-----------------|-------------------|--------------------------------|-----|------|------------|-----------------------------------------|
|                                      |                 | HNO <sub>3</sub>  | H <sub>2</sub> SO <sub>4</sub> | HCl | NaOH |            |                                         |
| 1) Custody Seal(s) Present / Absent  | <u>80661001</u> | <u>LZ</u>         |                                |     |      | <u>H</u>   |                                         |
| Coolers / Bottles                    | <u>P-002</u>    | <u>LZ</u>         |                                |     |      | <u>H</u>   |                                         |
| Intact / Broken                      |                 |                   |                                |     |      |            |                                         |
| 2) Custody Seal Number(s)            |                 |                   |                                |     |      |            |                                         |
|                                      |                 |                   |                                |     |      |            |                                         |
|                                      |                 |                   |                                |     |      |            |                                         |
| 3) Chain-of-Custody Present / Absent |                 |                   |                                |     |      |            |                                         |
| 4) Cooler Temperature                |                 |                   |                                |     |      |            |                                         |
| Coolant Condition                    |                 |                   |                                |     |      |            |                                         |
| 5) Airbill(s)                        |                 |                   |                                |     |      |            |                                         |
| Airbill Number(s)                    |                 |                   |                                |     |      |            |                                         |
|                                      |                 |                   |                                |     |      |            |                                         |
|                                      |                 |                   |                                |     |      |            |                                         |
| 6) Sample Bottles                    |                 |                   |                                |     |      |            |                                         |
| Intact                               |                 |                   |                                |     |      |            |                                         |
| Broken                               |                 |                   |                                |     |      |            |                                         |
| Leaking                              |                 |                   |                                |     |      |            |                                         |
| Date Received                        |                 |                   |                                |     |      |            |                                         |
| Time Received                        |                 |                   |                                |     |      |            |                                         |
| VOA Matrix Key:                      |                 |                   |                                |     |      |            |                                         |
| S = Unpreserved Soil                 |                 |                   |                                |     |      |            |                                         |
| JA = Unpreserved Aqueous             |                 |                   |                                |     |      |            |                                         |
| = Both MeOH & NaHSO <sub>4</sub>     |                 |                   |                                |     |      |            |                                         |
| la = NaHSO <sub>4</sub>              |                 |                   |                                |     |      |            |                                         |
| M = MeOH                             |                 |                   |                                |     |      |            |                                         |
| E = Encore                           |                 |                   |                                |     |      |            |                                         |
| H = HCl                              |                 |                   |                                |     |      |            |                                         |
| A = AIR                              |                 |                   |                                |     |      |            |                                         |

See Sample Notification Form yes no

Last Page of Data Report



*"Environmental Testing For The New Millennium"*

---

May 15, 2001

Sciencetech, Inc.  
44 Shelter Rock Rd  
Danbury, CT 06810  
Attn: Mr. Bob Peak

RE: Client Project: FORMER NE ALLOYS+METALS, 4/18/01 Samples  
Lab Project #: 80730

Dear Mr. Peak:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

A handwritten signature in dark ink, appearing to read "Edward A. Lawler", written in a cursive style.

Edward A. Lawler  
Laboratory Operations Manager





**Client: Sciencetech, Inc.**

**Client Project: FORMER NE ALLOYS+METALS**

**Lab Project: 80730**

**Date samples received: 4/20/01**

**Project Narrative**

This data report includes the analysis results for two (2) aqueous samples that were received from Sciencetech, Inc. on April 20, 2001. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in dark ink, appearing to read "Edward A. Lawler", is positioned above the printed name and title.

Edward A. Lawler  
Laboratory Operations Manager

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

I041801

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80730

Matrix: (soil/water) WATER

Lab Sample ID: 80730001

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8591

Level: (low/med) LOW

Date Received: 04/20/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/23/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

| CAS NO.    | COMPOUND                       | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|------------|--------------------------------|----------------------------------------------|---|
| 74-87-3    | -----Chloromethane             | 3                                            | J |
| 75-01-4    | -----Vinyl Chloride            | 22                                           |   |
| 74-83-9    | -----Bromomethane              | 10                                           | U |
| 75-00-3    | -----Chloroethane              | 10                                           | U |
| 75-69-4    | -----Trichlorofluoromethane    | 10                                           | U |
| 75-35-4    | -----1,1-Dichloroethene        | 10                                           | U |
| 75-09-2    | -----Methylene Chloride        | 10                                           | U |
| 156-60-5   | -----trans-1,2-Dichloroethene  | 10                                           | U |
| 75-34-3    | -----1,1-Dichloroethane        | 10                                           | U |
| 156-59-2   | -----cis-1,2-Dichloroethene    | 210                                          |   |
| 67-66-3    | -----Chloroform                | 10                                           | U |
| 71-55-6    | -----1,1,1-Trichloroethane     | 10                                           | U |
| 56-23-5    | -----Carbon Tetrachloride      | 10                                           | U |
| 107-06-2   | -----1,2-Dichloroethane        | 10                                           | U |
| 71-43-2    | -----Benzene                   | 10                                           | U |
| 79-01-6    | -----Trichloroethene           | 10                                           | U |
| 78-87-5    | -----1,2-Dichloropropane       | 10                                           | U |
| 75-27-4    | -----Bromodichloromethane      | 10                                           | U |
| 110-75-8   | -----2-Chloroethyl vinyl ether | 10                                           | U |
| 10061-01-5 | -----cis-1,3-Dichloropropene   | 10                                           | U |
| 108-88-3   | -----Toluene                   | 11                                           |   |
| 10061-02-6 | -----trans-1,3-Dichloropropene | 10                                           | U |
| 79-00-5    | -----1,1,2-Trichloroethane     | 10                                           | U |
| 127-18-4   | -----Tetrachloroethene         | 10                                           | U |
| 124-48-1   | -----Dibromochloromethane      | 10                                           | U |
| 108-90-7   | -----Chlorobenzene             | 10                                           | U |
| 100-41-4   | -----Ethylbenzene              | 4                                            | J |
| 1330-20-7  | -----Xylene (Total)            | 37                                           |   |
| 75-25-2    | -----Bromoform                 | 10                                           | U |
| 79-34-5    | -----1,1,2,2-Tetrachloroethane | 10                                           | U |
| 541-73-1   | -----1,3-Dichlorobenzene       | 10                                           | U |
| 106-46-7   | -----1,4-Dichlorobenzene       | 10                                           | U |
| 95-50-1    | -----1,2-Dichlorobenzene       | 10                                           | U |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E041801

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80730

Matrix: (soil/water) WATER

Lab Sample ID: 80730002

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8590

Level: (low/med) LOW

Date Received: 04/20/01

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/23/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

| CAS NO.    | COMPOUND                       | CONCENTRATION UNITS: |      | Q |
|------------|--------------------------------|----------------------|------|---|
|            |                                | (ug/L or ug/Kg)      | UG/L |   |
| 74-87-3    | -----Chloromethane             | 5                    | U    |   |
| 75-01-4    | -----Vinyl Chloride            | 1                    | J    |   |
| 74-83-9    | -----Bromomethane              | 5                    | U    |   |
| 75-00-3    | -----Chloroethane              | 5                    | U    |   |
| 75-69-4    | -----Trichlorofluoromethane    | 5                    | U    |   |
| 75-35-4    | -----1,1-Dichloroethene        | 5                    | U    |   |
| 75-09-2    | -----Methylene Chloride        | 5                    | U    |   |
| 156-60-5   | -----trans-1,2-Dichloroethene  | 5                    | U    |   |
| 75-34-3    | -----1,1-Dichloroethane        | 5                    | U    |   |
| 156-59-2   | -----cis-1,2-Dichloroethene    | 33                   |      |   |
| 67-66-3    | -----Chloroform                | 5                    | U    |   |
| 71-55-6    | -----1,1,1-Trichloroethane     | 5                    | U    |   |
| 56-23-5    | -----Carbon Tetrachloride      | 5                    | U    |   |
| 107-06-2   | -----1,2-Dichloroethane        | 5                    | U    |   |
| 71-43-2    | -----Benzene                   | 5                    | U    |   |
| 79-01-6    | -----Trichloroethene           | 5                    | U    |   |
| 78-87-5    | -----1,2-Dichloropropane       | 5                    | U    |   |
| 75-27-4    | -----Bromodichloromethane      | 5                    | U    |   |
| 110-75-8   | -----2-Chloroethyl vinyl ether | 5                    | U    |   |
| 10061-01-5 | -----cis-1,3-Dichloropropene   | 5                    | U    |   |
| 108-88-3   | -----Toluene                   | 2                    | J    |   |
| 10061-02-6 | -----trans-1,3-Dichloropropene | 5                    | U    |   |
| 79-00-5    | -----1,1,2-Trichloroethane     | 5                    | U    |   |
| 127-18-4   | -----Tetrachloroethene         | 5                    | U    |   |
| 124-48-1   | -----Dibromochloromethane      | 5                    | U    |   |
| 108-90-7   | -----Chlorobenzene             | 5                    | U    |   |
| 100-41-4   | -----Ethylbenzene              | 5                    | U    |   |
| 1330-20-7  | -----Xylene (Total)            | 6                    |      |   |
| 75-25-2    | -----Bromoform                 | 5                    | U    |   |
| 79-34-5    | -----1,1,2,2-Tetrachloroethane | 5                    | U    |   |
| 541-73-1   | -----1,3-Dichlorobenzene       | 5                    | U    |   |
| 106-46-7   | -----1,4-Dichlorobenzene       | 5                    | U    |   |
| 95-50-1    | -----1,2-Dichlorobenzene       | 5                    | U    |   |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80730

Matrix: (soil/water) WATER

Lab Sample ID: V5B0423A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V5C8577

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 04/23/01

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

|         |          |                                              |   |
|---------|----------|----------------------------------------------|---|
| CAS NO. | COMPOUND | CONCENTRATION UNITS:<br>(ug/L or ug/Kg) UG/L | Q |
|---------|----------|----------------------------------------------|---|

|                 |                           |   |   |
|-----------------|---------------------------|---|---|
| 74-87-3-----    | Chloromethane             | 5 | U |
| 75-01-4-----    | Vinyl Chloride            | 5 | U |
| 74-83-9-----    | Bromomethane              | 5 | U |
| 75-00-3-----    | Chloroethane              | 5 | U |
| 75-69-4-----    | Trichlorofluoromethane    | 5 | U |
| 75-35-4-----    | 1,1-Dichloroethene        | 5 | U |
| 75-09-2-----    | Methylene Chloride        | 5 | U |
| 156-60-5-----   | trans-1,2-Dichloroethene  | 5 | U |
| 75-34-3-----    | 1,1-Dichloroethane        | 5 | U |
| 156-59-2-----   | cis-1,2-Dichloroethene    | 5 | U |
| 67-66-3-----    | Chloroform                | 5 | U |
| 71-55-6-----    | 1,1,1-Trichloroethane     | 5 | U |
| 56-23-5-----    | Carbon Tetrachloride      | 5 | U |
| 107-06-2-----   | 1,2-Dichloroethane        | 5 | U |
| 71-43-2-----    | Benzene                   | 5 | U |
| 79-01-6-----    | Trichloroethene           | 5 | U |
| 78-87-5-----    | 1,2-Dichloropropane       | 5 | U |
| 75-27-4-----    | Bromodichloromethane      | 5 | U |
| 110-75-8-----   | 2-Chloroethyl vinyl ether | 5 | U |
| 10061-01-5----- | cis-1,3-Dichloropropene   | 5 | U |
| 108-88-3-----   | Toluene                   | 5 | U |
| 10061-02-6----- | trans-1,3-Dichloropropene | 5 | U |
| 79-00-5-----    | 1,1,2-Trichloroethane     | 5 | U |
| 127-18-4-----   | Tetrachloroethene         | 5 | U |
| 124-48-1-----   | Dibromochloromethane      | 5 | U |
| 108-90-7-----   | Chlorobenzene             | 5 | U |
| 100-41-4-----   | Ethylbenzene              | 5 | U |
| 1330-20-7-----  | Xylene (Total)            | 5 | U |
| 75-25-2-----    | Bromoform                 | 5 | U |
| 79-34-5-----    | 1,1,2,2-Tetrachloroethane | 5 | U |
| 541-73-1-----   | 1,3-Dichlorobenzene       | 5 | U |
| 106-46-7-----   | 1,4-Dichlorobenzene       | 5 | U |
| 95-50-1-----    | 1,2-Dichlorobenzene       | 5 | U |

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80730

|    | EPA<br>SAMPLE NO. | SMC1<br># | SMC2<br>(DCE) # | SMC3<br>(TOL) # | OTHER<br>(BFB) # | TOT<br>OUT |
|----|-------------------|-----------|-----------------|-----------------|------------------|------------|
|    | =====             | =====     | =====           | =====           | =====            | =====      |
| 01 | VBLK5U            | 103       | 106             | 99              | 103              | 0          |
| 02 | VBLK5ULCS         | 103       | 106             | 106             | 103              | 0          |
| 03 | E041801           | 105       | 105             | 100             | 102              | 0          |
| 04 | I041801           | 101       | 102             | 100             | 99               | 0          |
| 05 |                   |           |                 |                 |                  |            |
| 06 |                   |           |                 |                 |                  |            |
| 07 |                   |           |                 |                 |                  |            |
| 08 |                   |           |                 |                 |                  |            |
| 09 |                   |           |                 |                 |                  |            |
| 10 |                   |           |                 |                 |                  |            |
| 11 |                   |           |                 |                 |                  |            |
| 12 |                   |           |                 |                 |                  |            |
| 13 |                   |           |                 |                 |                  |            |
| 14 |                   |           |                 |                 |                  |            |
| 15 |                   |           |                 |                 |                  |            |
| 16 |                   |           |                 |                 |                  |            |
| 17 |                   |           |                 |                 |                  |            |
| 18 |                   |           |                 |                 |                  |            |
| 19 |                   |           |                 |                 |                  |            |
| 20 |                   |           |                 |                 |                  |            |
| 21 |                   |           |                 |                 |                  |            |
| 22 |                   |           |                 |                 |                  |            |
| 23 |                   |           |                 |                 |                  |            |
| 24 |                   |           |                 |                 |                  |            |
| 25 |                   |           |                 |                 |                  |            |
| 26 |                   |           |                 |                 |                  |            |
| 27 |                   |           |                 |                 |                  |            |
| 28 |                   |           |                 |                 |                  |            |
| 29 |                   |           |                 |                 |                  |            |
| 30 |                   |           |                 |                 |                  |            |

QC LIMITS

SMC1 = Dibromofluoromethane (79-122)  
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (76-121)  
 SMC3 (TOL) = Toluene-d8 (82-118)  
 OTHER (BFB) = Bromofluorobenzene (85-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: 80730

Lab File ID: V5C8577

Lab Sample ID: V5B0423A

Date Analyzed: 04/23/01

Time Analyzed: 1641

GC Column: DB-624 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: V5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

|    | EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | TIME<br>ANALYZED |
|----|-------------------|------------------|----------------|------------------|
| 01 | VBLK5ULCS         | V5L0423A         | V5C8578        | 1709             |
| 02 | E041801           | 80730002         | V5C8590        | 2242             |
| 03 | I041801           | 80730001         | V5C8591        | 2310             |
| 04 |                   |                  |                |                  |
| 05 |                   |                  |                |                  |
| 06 |                   |                  |                |                  |
| 07 |                   |                  |                |                  |
| 08 |                   |                  |                |                  |
| 09 |                   |                  |                |                  |
| 10 |                   |                  |                |                  |
| 11 |                   |                  |                |                  |
| 12 |                   |                  |                |                  |
| 13 |                   |                  |                |                  |
| 14 |                   |                  |                |                  |
| 15 |                   |                  |                |                  |
| 16 |                   |                  |                |                  |
| 17 |                   |                  |                |                  |
| 18 |                   |                  |                |                  |
| 19 |                   |                  |                |                  |
| 20 |                   |                  |                |                  |
| 21 |                   |                  |                |                  |
| 22 |                   |                  |                |                  |
| 23 |                   |                  |                |                  |
| 24 |                   |                  |                |                  |
| 25 |                   |                  |                |                  |
| 26 |                   |                  |                |                  |
| 27 |                   |                  |                |                  |
| 28 |                   |                  |                |                  |
| 29 |                   |                  |                |                  |
| 30 |                   |                  |                |                  |

COMMENTS:



## Analysis Report: Total Metals

Client: Scientech  
Client ID: 1041801  
Lab ID: 80730001  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/28/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> |
|----------------|----------------|----------------------------|
| Aluminum       | ND             | 0.3                        |
| Antimony       | ND             | 0.03                       |
| Arsenic        | ND             | 0.02                       |
| Barium         | 0.2            | 0.2                        |
| Beryllium      | ND             | 0.006                      |
| Cadmium        | ND             | 0.005                      |
| Calcium        | 100            | 0.8                        |
| Chromium       | ND             | 0.02                       |
| Cobalt         | ND             | 0.05                       |
| Copper         | 0.04           | 0.03                       |
| Iron           | 2.6            | 0.3                        |
| Lead           | 0.04           | 0.01                       |
| Magnesium      | 17             | 0.5                        |
| Manganese      | 1.2            | 0.05                       |
| Mercury        | ND             | 0.0008                     |
| Nickel         | ND             | 0.05                       |
| Potassium      | 7              | 2                          |
| Selenium       | ND             | 0.02                       |
| Silver         | ND             | 0.03                       |
| Sodium         | 24             | 1                          |
| Thallium       | ND             | 0.01                       |
| Vanadium       | ND             | 0.05                       |
| Zinc           | 0.11           | 0.05                       |

QC Batch: 0426PBW2

ND = Not Detected



# Analysis Report: Total Metals

Client: Scientech  
Client ID: E041801  
Lab ID: 80730002  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/28/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | ND             | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | 0.3            | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | 110            | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | 8.2            | 0.3                    |
| Lead           | 0.03           | 0.01                   |
| Magnesium      | 18             | 0.5                    |
| Manganese      | 1.6            | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | 8              | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | 27             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0426PBW2

ND = Not Detected





# Analysis Report: Total Metals

|            |                      |                   |                |
|------------|----------------------|-------------------|----------------|
| Client:    | Sciencetech          | Concentration in: | mg/L           |
| Client ID: |                      | Analysis Date:    | 4/28/01        |
| Lab ID:    | Prep Blank, 0426PBW2 | Analysis Method:  | 245.1(Mercury) |
| Matrix:    | Aqueous              |                   | 200.7(Others)  |

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | ND             | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | ND             | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | ND             | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | ND             | 0.3                    |
| Lead           | ND             | 0.01                   |
| Magnesium      | ND             | 0.5                    |
| Manganese      | ND             | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | ND             | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | ND             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0426PBW2

ND = Not Detected



## Analysis Report: Total Metals

|            |                               |                  |                |
|------------|-------------------------------|------------------|----------------|
| Client:    | Scientech                     | Analysis Date:   | 4/28/01        |
| Client ID: |                               | Analysis Method: | 245.1(Mercury) |
| Lab ID:    | Lab Control Sample, 0426LCSW2 |                  | 200.7(Others)  |
| Matrix:    | Aqueous                       |                  |                |

| <u>Analyte</u> | <u>% Recovery</u> |
|----------------|-------------------|
| Aluminum       | 95                |
| Antimony       | 112               |
| Arsenic        | 105               |
| Barium         | 96                |
| Beryllium      | 97                |
| Cadmium        | 114               |
| Calcium        | 97                |
| Chromium       | 98                |
| Cobalt         | 99                |
| Copper         | 103               |
| Iron           | 97                |
| Lead           | 113               |
| Magnesium      | 97                |
| Manganese      | 97                |
| Mercury        | 94                |
| Nickel         | 99                |
| Potassium      | 96                |
| Selenium       | 113               |
| Silver         | 102               |
| Sodium         | 100               |
| Thallium       | 114               |
| Vanadium       | 96                |
| Zinc           | 98                |

QC Batch: 0426PBW2

# Analysis Report: Total Metals

Client: Scientech  
Client ID: I041801  
Lab ID: 80730001  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/28/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| Analyte   | Results | Reporting Limit |
|-----------|---------|-----------------|
| Aluminum  | ND      | 0.3             |
| Antimony  | ND      | 0.03            |
| Arsenic   | ND      | 0.02            |
| Barium    | 0.2     | 0.2             |
| Beryllium | ND      | 0.006           |
| Cadmium   | ND      | 0.005           |
| Calcium   | 100     | 0.8             |
| Chromium  | ND      | 0.02            |
| Cobalt    | ND      | 0.05            |
| Copper    | 0.04    | 0.03            |
| Iron      | 2.6     | 0.3             |
| Lead      | 0.04    | 0.01            |
| Magnesium | 17      | 0.5             |
| Manganese | 1.2     | 0.05            |
| Mercury   | ND      | 0.0008          |
| Nickel    | ND      | 0.05            |
| Potassium | 7       | 2               |
| Selenium  | ND      | 0.02            |
| Silver    | ND      | 0.03            |
| Sodium    | 24      | 1               |
| Thallium  | ND      | 0.01            |
| Vanadium  | ND      | 0.05            |
| Zinc      | 0.11    | 0.05            |

QC Batch: 0426PBW2

ND = Not Detected

# Analysis Report: Total Metals

Client: Scientech  
Client ID: E041801  
Lab ID: 80730002  
Matrix: Aqueous

Concentration in: mg/L  
Analysis Date: 4/28/01  
Analysis Method: 245.1(Mercury)  
200.7(Others)

| Analyte   | Results | Reporting Limit |
|-----------|---------|-----------------|
| Aluminum  | ND      | 0.3             |
| Antimony  | ND      | 0.03            |
| Arsenic   | ND      | 0.02            |
| Barium    | 0.3     | 0.2             |
| Beryllium | ND      | 0.006           |
| Cadmium   | ND      | 0.005           |
| Calcium   | 110     | 0.8             |
| Chromium  | ND      | 0.02            |
| Cobalt    | ND      | 0.05            |
| Copper    | 0.04 ND | 0.03            |
| Iron      | 8.2     | 0.3             |
| Lead      | 0.03    | 0.01            |
| Magnesium | 18      | 0.5             |
| Manganese | 1.6     | 0.05            |
| Mercury   | ND      | 0.0008          |
| Nickel    | ND      | 0.05            |
| Potassium | 8       | 2               |
| Selenium  | ND      | 0.02            |
| Silver    | ND      | 0.03            |
| Sodium    | 27      | 1               |
| Thallium  | ND      | 0.01            |
| Vanadium  | ND      | 0.05            |
| Zinc      | ND      | 0.05            |

QC Batch: 0426PBW2

ND = Not Detected

## Analysis Report: Total Metals

|            |                      |                   |                |
|------------|----------------------|-------------------|----------------|
| Client:    | Scientech            | Concentration in: | mg/L           |
| Client ID: |                      | Analysis Date:    | 4/28/01        |
| Lab ID:    | Prep Blank, 0426PBW2 | Analysis Method:  | 245.1(Mercury) |
| Matrix:    | Aqueous              |                   | 200.7(Others)  |

| <u>Analyte</u> | <u>Results</u> | <u>Reporting Limit</u> |
|----------------|----------------|------------------------|
| Aluminum       | ND             | 0.3                    |
| Antimony       | ND             | 0.03                   |
| Arsenic        | ND             | 0.02                   |
| Barium         | ND             | 0.2                    |
| Beryllium      | ND             | 0.006                  |
| Cadmium        | ND             | 0.005                  |
| Calcium        | ND             | 0.8                    |
| Chromium       | ND             | 0.02                   |
| Cobalt         | ND             | 0.05                   |
| Copper         | ND             | 0.03                   |
| Iron           | ND             | 0.3                    |
| Lead           | ND             | 0.01                   |
| Magnesium      | ND             | 0.5                    |
| Manganese      | ND             | 0.05                   |
| Mercury        | ND             | 0.0008                 |
| Nickel         | ND             | 0.05                   |
| Potassium      | ND             | 2                      |
| Selenium       | ND             | 0.02                   |
| Silver         | ND             | 0.03                   |
| Sodium         | ND             | 1                      |
| Thallium       | ND             | 0.01                   |
| Vanadium       | ND             | 0.05                   |
| Zinc           | ND             | 0.05                   |

QC Batch: 0426PBW2

ND = Not Detected

## Analysis Report: Total Metals

|            |                               |                  |                |
|------------|-------------------------------|------------------|----------------|
| Client:    | Scientech                     | Analysis Date:   | 4/28/01        |
| Client ID: |                               | Analysis Method: | 245.1(Mercury) |
| Lab ID:    | Lab Control Sample, 0426LCSW2 |                  | 200.7(Others)  |
| Matrix:    | Aqueous                       |                  |                |

| <u>Analyte</u> | <u>% Recovery</u> |
|----------------|-------------------|
| Aluminum       | 95                |
| Antimony       | 112               |
| Arsenic        | 105               |
| Barium         | 96                |
| Beryllium      | 97                |
| Cadmium        | 114               |
| Calcium        | 97                |
| Chromium       | 98                |
| Cobalt         | 99                |
| Copper         | 103               |
| Iron           | 97                |
| Lead           | 113               |
| Magnesium      | 97                |
| Manganese      | 97                |
| Mercury        | 94                |
| Nickel         | 99                |
| Potassium      | 96                |
| Selenium       | 113               |
| Silver         | 102               |
| Sodium         | 100               |
| Thallium       | 114               |
| Vanadium       | 96                |
| Zinc           | 98                |

QC Batch: 0426PBW2



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: GTSI041801  
Lab ID: 80730001

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness               | 320            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/28/01                  |
| pH                     | 7.3            |                            | S.U.                          | SM 4500-H+                 | 4/20/01                  |
| Total Dissolved Solids | 480            | 10                         | mg/L                          | SM 2540-C                  | 4/20/01                  |
| Total Suspended Solids | ND             | 10                         | mg/L                          | SM 2540-D                  | 4/20/01                  |

ND = Not Detected



## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID: E041801  
Lab ID: 80730002

Matrix: Aqueous

| <u>Analyte</u> | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|----------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness       | 350            | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/28/01                  |





## Analysis Report: Wet Chemistry Parameters

Client: Scientech, Inc.  
Client ID:  
Lab ID: Prep Blank

Matrix: Aqueous

| <u>Analyte</u>         | <u>Results</u> | <u>Reporting<br/>Limit</u> | <u>Units</u>                  | <u>Analysis<br/>Method</u> | <u>Analysis<br/>Date</u> |
|------------------------|----------------|----------------------------|-------------------------------|----------------------------|--------------------------|
| Hardness               | ND             | 4                          | mg equiv CaCO <sub>3</sub> /L | SM2340 B                   | 4/28/01                  |
| Total Dissolved Solids | ND             | 10                         | mg/L                          | SM 2540-C                  | 4/20/01                  |
| Total Suspended Solids | ND             | 10                         | mg/L                          | SM 2540-D                  | 4/20/01                  |

ND = Not Detected



## Analysis Report: Wet Chemistry Parameters

Client: Sciencetech, Inc.

Matrix: Aqueous

Client ID:

Lab ID: Lab Control Sample

| <u>Analyte</u>         | <u>% Recovery</u> | <u>Analysis Method</u> | <u>Analysis Date</u> |
|------------------------|-------------------|------------------------|----------------------|
| Total Dissolved Solids | 90                | SM 2540-C              | 4/20/01              |
| Total Suspended Solids | 100               | SM 2540-D              | 4/20/01              |

# MITKEM CORPORATION

Lab Workorder #: 80730

Page 1 of 1

04/20/01 03:00 PM

80730 R0

Lab Workorder

Client: Scientech, Inc.

Lab Workorder ID: FORMER NE ALLOYS + METALS

Client Proj ID:

Client PO #:

Project / Profile Name: Routine

Date Due: 05/04/01

Customer Service:

Del Req'd: Commercial Reports

Completed?:

Total Price: \$525.00

Logged In By:

Reviewed By:

Date Opened: 04/20/01 14:58

Date Closed: 04/20/01 15:00

Project Status: WP

| Lab ID   | Client ID | Matrix | Type   | Analysis Code | Price    | Collected      | Received | Due      | Notes      |
|----------|-----------|--------|--------|---------------|----------|----------------|----------|----------|------------|
| 80730001 | 1041801   | W      | SAMPLE | 624           | \$110.00 | 04/18/01 13:45 | 04/20/01 | 05/04/01 | GTSE041801 |
|          |           |        |        | TALMETW       | \$115.00 |                |          |          |            |
|          |           |        |        | S4500BW pH    | \$5.00   |                |          |          |            |
|          |           |        |        | 160.1W TDS    | \$15.00  |                |          |          |            |
|          |           |        |        | 160.2W TSS    | \$15.00  |                |          |          |            |
|          |           |        |        | S2340WHarB    | \$20.00  |                |          |          |            |
| 80730002 | E041801   | W      | SAMPLE | 624           | \$110.00 | 04/18/01 14:00 | 04/20/01 | 05/04/01 | GTSE041801 |
|          |           |        |        | TALMETW       | \$115.00 |                |          |          |            |
|          |           |        |        | S2340WHarB    | \$20.00  |                |          |          |            |
|          |           |        |        | Total Price:  | \$525.00 |                |          |          |            |

## INVOICE AND REPORT GO TO:

Bob Peak  
Scientech, Inc.  
44 Shelter Rock Road  
Danbury, CT, 06810  
W : (203)796-5000  
F : (203)792-3168

## CHAIN-OF-CUSTODY RECORD

[illegible]

WHITE: LABORATORY COPY

YELLOW: REPORT COPY

**PINK; CLIENT'S COPY**

**MITKEM CORPORATION**  
Sample Condition Form

Page 1 of 1

Received By: [Signature] Reviewed By: \_\_\_\_\_ Date: 5/2/01 MITKEM Project #: 02-1

Client Project: 02-1 Client: 02-1

| Condition:                           | Lab Sample ID | Preservation (pH) |                                |     |      | VOA Matrix | Comments/Remarks/<br>Corrective Action* |
|--------------------------------------|---------------|-------------------|--------------------------------|-----|------|------------|-----------------------------------------|
|                                      |               | HNO <sub>3</sub>  | H <sub>2</sub> SO <sub>4</sub> | HCl | NaOH |            |                                         |
| 1) Custody Seal(s) Present / Absent  | <u>02-1</u>   |                   |                                |     |      |            |                                         |
| Coolers / Bottles Intact / Broken    | <u>02-1</u>   |                   |                                |     |      |            |                                         |
| 2) Custody Seal Number(s)            |               |                   |                                |     |      |            |                                         |
|                                      |               |                   |                                |     |      |            |                                         |
| 3) Chain-of-Custody Present / Absent |               |                   |                                |     |      |            |                                         |
| 4) Cooler Temperature                |               |                   |                                |     |      |            |                                         |
| Coolant Condition                    |               |                   |                                |     |      |            |                                         |
| Airbill(s)                           |               |                   |                                |     |      |            |                                         |
| Airbill Number(s)                    |               |                   |                                |     |      |            |                                         |
|                                      |               |                   |                                |     |      |            |                                         |
| 5) Sample Bottles Intact             |               |                   |                                |     |      |            |                                         |
| Broken                               |               |                   |                                |     |      |            |                                         |
| Leaking                              |               |                   |                                |     |      |            |                                         |
| Date Received                        |               |                   |                                |     |      |            |                                         |
| Time Received                        |               |                   |                                |     |      |            |                                         |
| Matrix Key:                          |               |                   |                                |     |      |            |                                         |
| U = Unpreserved Soil                 |               |                   |                                |     |      |            |                                         |
| A = Unpreserved Aqueous              |               |                   |                                |     |      |            |                                         |
| Bottle MeOH & NaHSO <sub>4</sub>     |               |                   |                                |     |      |            |                                         |
| S = NaHSO <sub>4</sub>               |               |                   |                                |     |      |            |                                         |
| M = MeOH                             |               |                   |                                |     |      |            |                                         |
| E = Encore                           |               |                   |                                |     |      |            |                                         |
| H = HCl                              |               |                   |                                |     |      |            |                                         |
| A = AIR                              |               |                   |                                |     |      |            |                                         |

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