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**Hartwell Street Landfill  
Site #915030  
Phase II  
Environmental Site Assessment  
Former Atlas Steel Site  
Buffalo, NY**

915030

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N.Y.S. DEPT. OF  
ENVIRONMENTAL CONSERVATION  
REGION 9

HARTWELL STREET  
LAND FILL

PHASE II  
ENVIRONMENTAL SITE ASSESSMENT  
FORMER ATLAS STEEL SITE  
BUFFALO, NY

Prepared for:

Benderson Development Company, Inc.  
570 Delaware Avenue  
Buffalo, NY 14202

Prepared for:

Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

December, 1992

## 1.0 INTRODUCTION

This report presents the findings and conclusions of a Phase II Environmental Site Assessment (ESA) completed by Dunn Corporation (DUNN) at the former Atlas Steel Site located in Buffalo, NY.

This investigation was performed for and authorized by Benderson Development Company Inc., pursuant to the findings of DUNN's Phase I ESA (September, 1992). The purpose of this investigation was to address the potential environmental concerns described in the Phase I ESA. These areas of concern included the former tank pit area, the former X-ray building area, the Hartwell Street Landfill Site, the area adjacent to the Gugino property, areas containing visible surface staining and areas containing visible waste material (i.e., drums, slag, foundry sand). The scope of services performed to address these concerns included the following:

- Excavation of test pits to characterize subsurface conditions;
- Installation of groundwater monitoring wells to facilitate groundwater sampling; and
- Collection and analysis of environmental samples (surface soils, subsurface soils, surface water, sediment, groundwater and waste) to ascertain the presence or absence of contaminants.

## 2.0 METHODOLOGIES

### 2.1 Test Pits

A total of thirty-nine (39) test pits, TP-1 through TP-39, were excavated on the project site from October 30 - November 3, 1992 (refer to Figure 2-1). Eleven of the test pits were excavated in the northeast corner of the site in the area referred to as the Hartwell Street Landfill. The remaining twenty-eight test pits were spread across the former plant site and targeted the areas of potential environmental concern previously mentioned.

The work was performed utilizing a rubber-tired backhoe operated by personnel from Advanced Drilling Investigations (ADI). An environmental geologist from DUNN directed and supervised all excavation activities.

Each test pit was advanced until native soils were encountered. Excavated soils were visually classified by the on-site geologist and screened with an HNu photoionization detection meter for volatile organic compounds (VOCs). Test Pit Logs were completed for each test pit location are presented in Appendix A.

Based on sensory observations and HNu screening results, a total of ten (10) soil samples were collected from discrete intervals within selected test pits for subsequent chemical analysis. The soil samples were collected utilizing a precleaned stainless steel trowel. Field Sampling Records describing the collection of each sample are presented in Appendix B.

Decontamination procedures consisted of pressure-washing of the backhoe bucket between sampling locations and washing the stainless steel trowel between sampling locations with a non-phosphate detergent wash and distilled water rinse.

## 2.2 Surface Sampling

A total of four (4) surface soil samples, SS-1 through SS-4, were collected during this investigation (refer to Figure 2-1 for sample locations). The samples were collected from areas determined to be of potential environmental concern including: an area adjacent to a waste pile (SS-1); an area where surficial staining was observed (SS-2); an area adjacent to an empty drum pile (SS-3); and an area adjacent to partially filled drums (SS-4).

One (1) sediment sample (SED-1) and one (1) surface water sample (SW-1) were also collected during this investigation. These samples were obtained from a catch basin located in the southwest portion of the site. In addition, one (1) waste sample (WS-1) was collected from a waste pile located along the southern border of the site. Refer to Figure 2-1 for the above-mentioned sampling locations.

All non-aqueous samples were collected with a stainless steel trowel, decontaminated between each sampling location. The aqueous sample was collected with a dedicated, pre-cleaned dipper jar. Field Sampling Records describing the collection of each sample are presented in Appendix B.

## 2.3 Installation of Monitoring Wells

DUNN originally proposed to install six (6) monitoring wells on the project site which were to be screened in the perched water zone located at the fill/native soil interface. However, the test pit program revealed that this interface zone was not uniformly saturated across the project site. Therefore, placement of monitoring wells was limited to areas where sufficient water was available.

Consequently, a total of three (3) shallow groundwater monitoring wells, MW-1 through MW-3, were installed on the project site on November 4 & 5, 1992 (refer to Figure 2-1). MW-1 was located adjacent to the Gugino property to assess potential subsurface contamination which may be associated with that site. MW-2 was located in the northern portion of the plant property. MW-3 was located in an area formerly occupied by large above-ground storage tanks (former tank pit area). All drilling operations were performed by ADI under the direction and supervision of DUNN's on-site geologist.

The monitoring wells were constructed within conventional exploratory test borings which were advanced through unconsolidated (overburden) soils, utilizing hollow stem augers. The use of hollow-stem augers served to stabilize the borehole walls from collapse and allow continuous split barrel sampling of soils, in accordance with ASTM Designation D-1586 *Standard Method of Penetration Testing and Split Barrel Sampling of Soils*.

All recovered soil samples were visually classified and logged by DUNN's on-site geologist. Test Boring Logs, prepared for each boring, are presented in Appendix C. A representative

portion of each sample was placed in a clean glass jar, sealed with aluminum foil and subsequently screened with a HNU photoionization detection meter. All split-spoons, drill rods and augers were steam-cleaned between each boring location to prevent cross-contamination.

Upon completion of each boring, a permanent monitoring well was constructed in the borehole. The monitoring wells were constructed of nominal two-inch diameter, PVC machine slotted well screen and solid riser pipe. The well components were flush threaded which allowed the well to be constructed without the use of any glues or solvents. The annulus between the borehole wall and the monitoring well casings was packed with clean silica sand to a level above the screened portion of the well, followed by a minimum one-foot thick bentonite seal to restrict the downward migration of surface run-off into the well. A metal protective curb box grouted in place, completed each well installation. Monitoring Well Diagrams showing construction details are presented in Appendix D.

#### 2.4 Monitoring Well Development/Sampling

Well development was performed by DUNN personnel on November 6, 1992, utilizing pre-cleaned PVC bailers and dedicated nylon string. The bailers were cleaned with a non-phosphated detergent wash and distilled water rinse. Development was terminated when a total of ten well volumes were evacuated from each well. Well Development Logs, completed for each well, are presented in Appendix E. The three monitoring wells were subsequently sampled on November 10, 1992. Prior to sampling, approximately two to four additional well volumes were purged from each well utilizing the procedure described above. The Well Sampling Logs, completed during the collection of each groundwater sample, are included in Appendix E.

#### 2.5 Chemical Analyses

All soil samples, sediment samples, groundwater and surface water samples collected during this investigation were analyzed for full TCL/TAL parameters. This analysis consists of the following: USEPA Method 8240 (Volatiles); USEPA Method 8270 (Semi-Volatiles); USEPA Method 8080 (Pesticides/PCBs); total metals (Target Analyte List) and total cyanide. The waste sample was analyzed for RCRA Waste Characteristics (ignitability, corrosivity and reactivity) and TCLP (Toxicity Characteristic Leaching Procedure) to determine if the material is a hazardous waste.

All samples collected during the investigation were analyzed by General Testing Corporation of Rochester, NY. The results of the analyses are presented in Appendix F.

### 3.0 FINDINGS OF INVESTIGATION

#### 3.1 Subsurface Conditions

##### 3.1.1 Hartwell Street Landfill

Miscellaneous fill material was encountered in each of the eleven test pits excavated in the Hartwell Street Landfill area (refer to Figure 2-1). With the exception of TP-10, which was located on a mounded area, fill depths across the landfill ranged from 1.5 - 6.0 feet below ground surface (refer to Test Pit Logs in Appendix A). The fill material consisted predominantly of sand and cinders with varying amounts of gravel, slag, bricks, glass and metal debris. Similar fill was encountered within the mounded area where TP-10 was excavated to a depth of 8.0 feet. Below this fill, native lacustrine (i.e., ancient lake) deposits consisting of silt and clay were observed throughout the landfill area.

HNu screening of the soils excavated from the landfill area did not indicate the presence of any VOCs. In addition, there was no soil staining, discoloration or odors noted during excavation activities.

Minor amounts of perched water were encountered at the fill/native soil interface at several test pit locations. These amounts of water were much less than anticipated, given the relative impermeability of the native lacustrine deposits. Therefore, it was determined that placement of a monitoring well in the landfill area would not be productive. The installation of deeper wells was not considered since it is known from previous studies that 60-80 feet of the very impermeable clay and silt deposits underlie the site over bedrock. It is extremely unlikely that, given the thickness of these deposits, surface contaminants would reach the bedrock aquifer.

##### 3.1.2 Former Plant Site

Test pits and soil borings completed within the former plant site revealed the presence of fill material at depths ranging from 2-10 feet below ground surface (refer to Test Pit Logs & Soil Boring Logs presented in Appendices A & C, respectively). The fill consisted predominantly of sand and gravel with varying mixtures of bricks, wood, concrete, cinders, slag, glass and metal debris. Below the fill, native lacustrine deposits consisting of silt and were encountered across the entire plant site. Previous studies have indicated these deposits to be 60 - 80 feet thick and overlie bedrock.

Stained and discolored fill exhibiting strong petroleum odors was encountered during the excavation of TP-33, which is located in the southeast portion of the former plant site (refer to Figure 2-1). The location of TP-33 corresponds to the approximate location of the former tank pit which was identified in a 1989 survey map of the site. A large quantity of perched water containing a heavy sheen poured into the open test pit during the excavation.

Additional test pits were subsequently excavated in the former tank pit area in an effort to delineate the horizontal extent of the contamination. The approximate areal extent of the

contaminated zone is presented in Figure 3-1 and encompasses an area approximately 70 ft. long x 70 ft. wide. It should be noted that delineation of the contaminated zone was limited by the presence of old building foundations which inhibited excavation activities. The vertical extent of the contamination was determined during the installation of Monitoring Well MW-3. It ranged from 3 to 10 feet below ground surface, at which depth the low permeability native soils were encountered (refer to Test Boring Logs in Appendix C).

HNU screening of the soils recovered from the contaminated zone indicated VOC concentrations ranging from 3 to 20 parts per million. There were no elevated VOC concentrations detected within the subsurface soils recovered from any other portion of the former plant site; nor were staining, discoloration or odors noted.

Excluding the former tank pit area, there were few areas within the plant site where sufficient quantities of perched water were available to justify the installation of monitoring wells. Therefore, a total of only three monitoring wells were installed on the plant site.

### 3.2 Hydrology

Water level measurements in the three monitoring wells indicate the depth to the perched water zone ranged from 2.5 feet in MW-3 to 5.0 feet in MW-1. However, as previously discussed, the perched water zone is not continuous across the site and, therefore, flow direction cannot be determined. The sporadic existence of the perched water zone is most likely related to the topography of the top of the native lacustrine deposit. Specifically, precipitation which infiltrates the permeable fill material migrates along the surface of the low permeability native soils to areas of lower elevation or depressions.

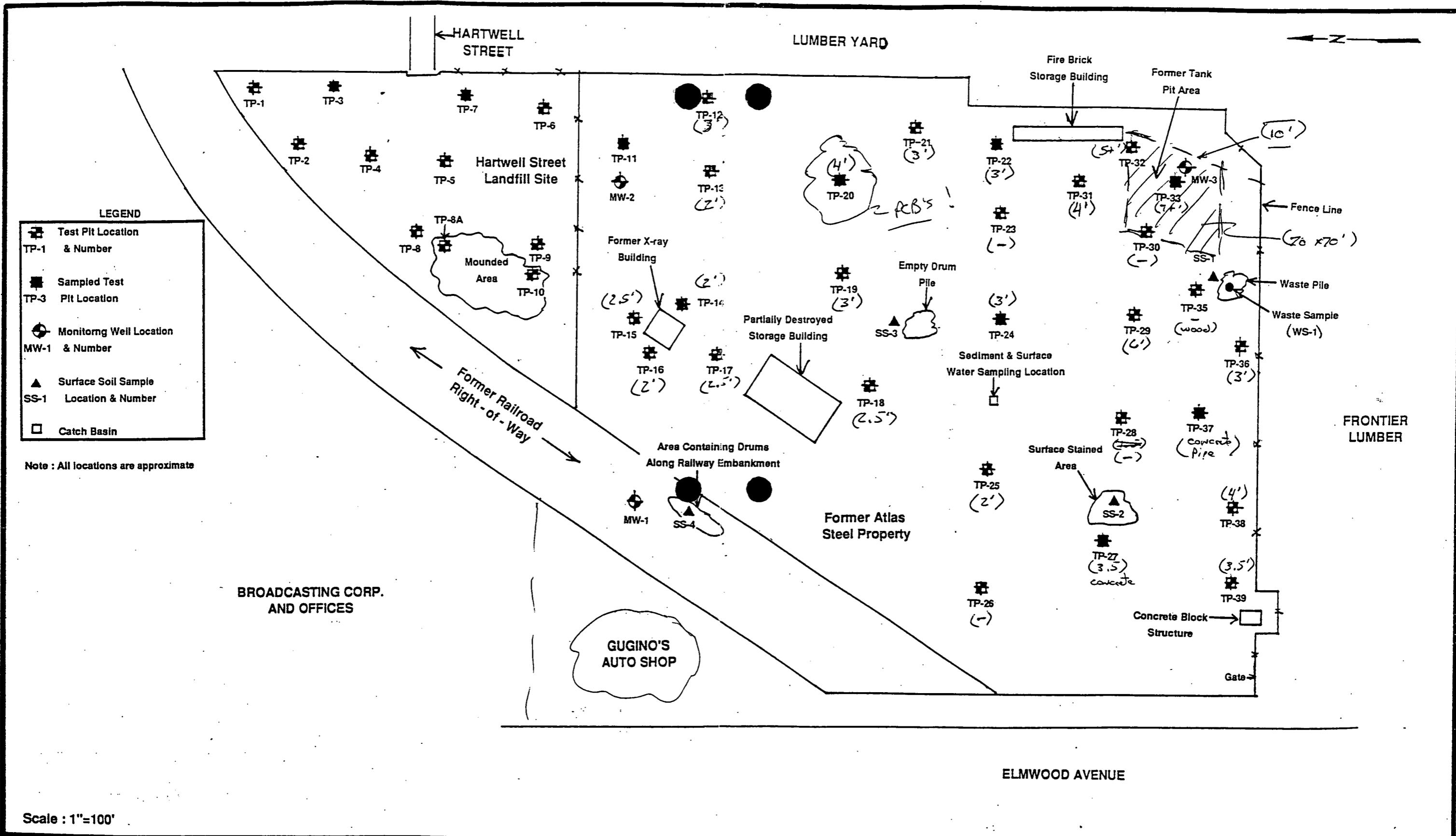
### 3.3 Analytical Results

#### 3.3.1 Subsurface Soil - Hartwell Street Landfill Site

Soil Samples were collected from two of the eleven test pits excavated on the Hartwell Street Landfill Site (TP-3 & TP-7). Locations of the sampled test pits are presented on Figure 2-1.

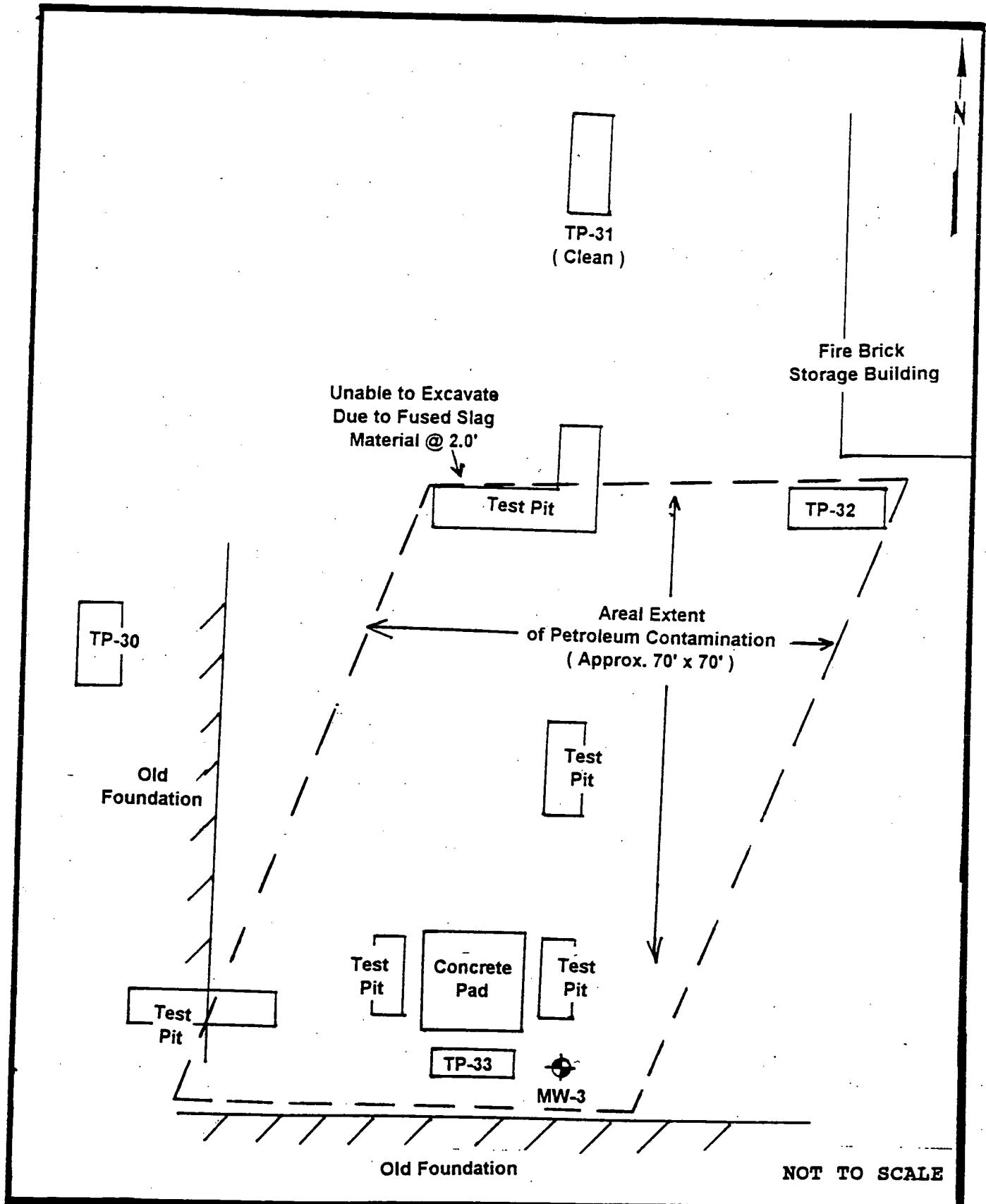
Chemical analysis of the two soil samples indicated the presence of several volatile organic compounds (refer to Table 3-1). Three of the compounds detected (methylene chloride, acetone and chloroform) are common laboratory contaminants. Trichlorethene and cis 1, 2-dichlorethene were detected in the sample collected from TP-3 at estimated concentrations of 11 parts per billion (ppb) and 8.7 ppb, respectively. In addition, one semi-volatile organic parameter, benzo(b)fluoranthene, was detected in the sample collected from TP-7 at a concentration of 770 ppb. The relatively low concentrations of volatile and semi-volatile parameters detected are not considered to be an environmental concern for the landfill site.

Results of the metals analysis for the two test pit samples did not indicate metal concentrations which exceed normal ranges for uncontaminated soils (refer to Table 3-2). In addition, there were no pesticides or polychlorinated biphenyls (PCBs) detected above the analytical method detection limits (refer to Table 3-3).



**FIGURE 2-1  
SOD MAP  
FORMER ATLAS STEEL SITE  
BUFFALO, NEW YORK**





**FIGURE 3-1**  
**AREAL EXTENT OF CONTAMINATION**  
**FORMER TANK PIT AREA**  
**FORMER ATLAS STEEL SITE**  
**BUFFALO, N.Y.**



Sample Results  
(Semi-Vol. →  
Metals)

TABLE 3-1

Tc.

**FORMER ATLAS STEEL SITE**  
**Summary Table of Volatile and Semi-Volatile Organic Parameters**  
**Test Pit Soil Samples**  
**(Concentration Values in ug/kg-ppb)**

HARTWALL

Analytes	SOIL SAMPLE LOCATION AND DEPTH										NYSDEC Soil Guidance Values
	TP-3 3'	TP-7 5-6'	TP-11 4-5'	TP-14 1-2'	TP-20 2-3'	TP-22 2-3'	TP-24 1-2'	TP-27 2-3'	TP-33 4-6'	TP-37 3-4'	
<b>Volatile Organic Parameters</b>											
Methylene Chloride	17 J	8.7 J	ND	ND	ND	ND	ND	ND	ND*	ND	100
Acetone	43 J	48 J	18	ND	50	16	24	24	ND*	63	200
cis 1,2-Dichloroethene	8.7 J	ND	ND	ND	ND	ND	ND	ND	ND*	ND	45 100
Chloroform	8.0 J	ND	ND	ND	ND	ND	ND	ND	ND*	ND	5.4 300
Trichloroethene	11 J	ND	ND	6.6	ND	ND	6.6	ND	ND*	ND	15.75 100
Tetrachloroethene	ND	ND	ND	ND	ND	140	6.0	ND	ND*	ND	45.5 140
1,1,1 - Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND*	15	19 800 A
<b>Semi-Volatile Organic Parameters</b>											
Fluorene	ND	ND	ND	ND	550	ND	ND	580	ND*	ND*	9125 50000
Phenanthrene	ND	ND	ND	1700	3400	500	1500	3900	5100	ND*	10000 50000
Anthracene	ND	ND	ND	ND	740	ND	ND	920	ND*	ND*	10000 50000
Fluoranthene	ND	ND	580	1900	5000	1000	2500	4500	ND*	ND*	10000 50000
Pyrene	ND	ND	470	1400	3600	770	1900	2900	ND*	ND*	10000 50000
Benzo(a)anthracene	ND	ND	ND	760	2300	550	1400	1900	ND*	ND*	69 100
Chrysene	ND	ND	ND	770	2000	630	1600	1900	ND*	ND*	10000 400
Benzo(b)fluoranthene	ND	770	600	690	2700	690	2900	1900	ND*	ND*	10000 400
Benzo(k)fluoranthene	ND	ND	480	720	2500	630	1200	1900	ND*	ND*	275 1100
Benzo(a)pyrene	ND	ND	500	740	2300	600	1600	1900	ND*	ND*	27.5 1100
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	980	ND	980	ND	ND*	ND*	61 600
Dibenzo(a,h)anthracene	ND	ND	ND	ND	430	ND	ND	ND	ND*	ND*	80 500
Benzo(g,h,i)perylene	ND	ND	ND	ND	890	ND	1100	1100	ND*	ND*	14 400
<b>TOTAL PAH</b>	770	2630	8680	27390	5370	16630	23400	5100			500,000

\* Matrix interference encountered during analyses resulted in increased detection limits.

J - Indicates estimated value.

ND = Not Detected

Note : Shaded values exceed NYS Guidance Values.

Pet. Limit

4,800

TCL  
TAR

TABLE 3-2

**FORMER ATLAS STEEL SITE**  
**Summary Table of Inorganic Parameters**  
**Test Pit Soil Samples**  
**(Concentration Values in mg/kg-ppm)**

Analytes	SOIL SAMPLE LOCATION AND DEPTH										Conc. Range of Element in Uncont. Soils**
	TP-3 3'	TP-7 5-6'	TP-11 4-5'	TP-14 1-2'	TP-20 2-3'	TP-22 2-3'	TP-24 1-2'	TP-27 2-3'	TP-33 4-6'	TP-37 3-4'	
TAL Metals											
Aluminum	5910	7140	4960	7090	14200	3560	3190	4700	3570	5300	10000-300000
Arsenic	4.52	8.19	9.96	9.36	10.10	14.40	5.64	4.03	1.88	4.66	3.0-12.0
Barium	21.2	29.5	38.5	46.1	80.8	64.2	20.2	22.1	15.2	15.6	15-35000
Calcium	885 *	2570 *	2000	891	39200	1920	730	724	411 *	262	130-35000
Chromium	10.5	12.8	102	22.8	41.9	60.4	5.40	11.3	5.35	9.59	1.5-40
Cobalt	ND	ND	8.92	ND	11.1	11.6	ND	ND	ND	ND	2.5-60
Copper	24.6 *N	19.2 *N	47.2	103.0	59.3	138	13.4	23.5	8.84 *N	31.8	2.0-100
Iron	20200 *	18900 *	83100	21500	38000	74000	9960	12400	17100 *	10700	2000-550000
Lead	28.8	20.8	15.5	1940	37.0	168	27.7	26.1	10.7	12.0	4.0-61
Magnesium	241	956	730	395	13400	594	260	285	185	235	400-9000
Manganese	217 *N	422 *N	8000	2060	1500	594	260	285	271 *N	152	100-4000
Mercury	ND	ND	0.431	ND	0.298	0.087	ND	ND	ND	ND	0.001 - 0.2
Nickel	11.7	11.4	34.9	10.0	29.5	58.0	5.06	10.2	ND	6.0	0.5-60
Potassium	524	779	78.4	1000	2560	413	517	607	64.4	899	100-37000
Sodium	99.4	130	102	110	482	169	68.1	124	83.3	118	150-15000
Vanadium	6.19 *	8.93 *	26.9	13.8	22.5	11.1	5.98	6.81	ND	9.69	1.3-300
Zinc	20.5	29.6	93.6	77.4	107	136	26.2	21.8	10.0	18.8	10-300
Misc. Compounds											
Total Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-

ND = Not Detected

N = Spiked sample recovery not within control limits.

\* = Duplicate analysis not within control limits.

\*\* = Published concentrations from various sources.

Note : Shaded values exceed concentration range.

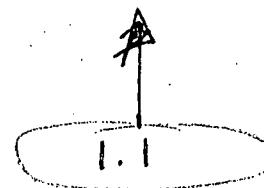
TABLE 3-3

FORMER ATLAS STEEL SITE  
Summary Table of Pesticide and PCB Parameters  
Test Pit Soil Samples  
(Concentration Values in ug/kg-ppb)

Analytes	SOIL SAMPLE LOCATION AND DEPTH										NYSDEC Soil Guidance Values
	TP-3	TP-7	TP-11	TP-14	TP-20	TP-22	TP-24	TP-27	TP-33	TP-37	
	3'	5-6'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'	4-6'	3-4'	
Pesticides (all)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
PCB'S											
PCB - 1260	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	13.25

ND = Not Detected

Note : Shaded values exceed NYS Guidance Values



### 3.3.2 Subsurface Soil - Former Atlas Steel Property

A total of eight soil samples were collected at discrete intervals from test pits located throughout the former plant site (refer to Figure 2-1 for sample locations).

Chemical analysis of the eight soil samples revealed the presence of several volatile organic parameters (refer to Table 3-1). Relatively low concentrations of trichlorethene, tetrachloroethene and 1,1,1-trichloroethane were detected at several test pit locations. The presence of these contaminants does not appear to be widespread or to present an environmental concern for the site.

It should be noted that there were no volatile organic compounds detected in the sample obtained from TP-33, which exhibited staining and strong petroleum odors. Matrix interference was encountered during analysis of TP-33 which resulted in elevated detection limits.

Numerous semi-volatile organic compounds were detected within the test pit samples, excluding TP-33 and TP-37 (refer to Table 3-1). Matrix interference was responsible for elevated detection limits in TP-33 and TP-37. The types of semi-volatile compounds found at the site are typical for industrial fill material. Several of the compounds were detected at levels which exceed NYSDEC Guidance Values. However, given the industrial history and proposed commercial development of the site, the concentrations and types of semi-volatile compounds detected do not appear to be a significant environmental concern.

Results of the metals analysis indicated the presence of several metals (arsenic, chromium, copper, lead, manganese, magnesium and mercury) at slightly elevated concentrations in four test pit samples (refer to Table 3-2). In most cases, where recorded levels exceeded published levels for uncontaminated soils, the exceedence is less than twice the published value. The only value to exceed the published value for uncontaminated soils by several orders of magnitude is lead at 1940 ppm from TP-14 at a depth of 1-2 feet.

While elevated levels of metals were found at several test pit locations, it may be said that the concentrations detected are not extreme and limited to isolated pockets. Therefore, it is DUNN's opinion that the metal concentrations detected at the site should not be considered a significant environmental concern.

There were no pesticides detected in any of the test pit samples above the detection limit of the analytical methodology (refer to Table 3-3). Polychlorinated biphenyls (PCBs) were detected at one test pit location (TP-20). PCB-1260 was detected within the soil collected from TP-20 at a concentration of 1100 ppb. The concentration detected is not of significant environmental concern and its presence appears to be limited to a localized area.

### 3.3.3 Surface Soil - Former Plant Site

Four surface soil samples (SS-1 through SS-4) were collected from various locations across the former plant site (refer to Figure 2-1). Chemical analysis of the samples did not indicate the presence of any significant concentrations of volatile organic compounds (refer to Table

3-4). Numerous semi-volatile organic compounds were detected in the surface soil samples with the exception of SS-1. Concentrations of semi-volatile organics exceeding NYS Guidance Values were detected in SS-2, located within a visibly stained area. The compounds detected are common constituents of fuel oil, which may be the cause of the surficial staining.

Results of the metals analysis for each sample location indicated the presence of several metals at concentrations above normal ranges for uncontaminated soils (refer to Table 3-5). As in the case of the test pit samples, most metals concentrations that exceeded published background levels were within two to three times the background level. There were several instances where observed levels were greater than ten times the background levels including arsenic (143 ppm) at SS-4; chromium at SS-2 (3820 ppm) and SS-3 (1040 ppm); lead at SS-2 (5550 ppm) and SS-3 (813 ppm); nickel at SS-1 (835 ppm) and zinc at SS-2 (8500 ppm).

The levels of total metals and semi-volatile organics in SS-2 may be a potential environmental concern for the site. However, given the relatively small localized area of surficial staining and the proposed commercial use of the property, the environmental significance of the contaminant levels is diminished.

There were no pesticides detected within any of the surface soil samples above the detection limit of the analytical methodology (refer to Table 3-6). PCBs were detected at only one sample location, SS-3, at a relatively low concentration.

### 3.3.4 Groundwater - Former Plant Site

Chemical analysis of the three perched groundwater samples did not indicate the presence of any volatile organic compounds above the detection limit of the analytical methodology (refer to Table 3-7). Several semi-volatile compounds were detected in the perched groundwater collected from MW-3 at levels above NYS Groundwater Guidance Values. MW-3 is located in the former tank pit area and the compounds detected are typical fuel oil constituents. In addition, several metals were detected at levels exceeding NYS Groundwater Standards in all three perched groundwater samples (refer to Table 3-8). These included arsenic, chromium, iron, lead, manganese and zinc. There were no pesticides or PCBs detected in any of the perched groundwater samples above the detection limits of the respective analytical methodologies.

Overall, the levels of metals and semi-volatile organics detected in the perched groundwater on-site do not appear to be of significant environmental concern given the industrial / commercial use of the project area. In addition, a municipal water supply is utilized in the City of Buffalo. However, the presence of a sheen on the water recovered from MW-3 does present a potential environmental concern and should be addressed.

### 3.3.5 Surface Water and Sediment - Former Plant Site

Chemical analysis of the surface water sample (SW-1) collected from a catch basin on-site indicated the presence of several semi-volatile organic compounds at levels exceeding NYS Surface Water Guidance Values(refer to Table 3-7). In addition, several metals were

**TABLE 3-4**  
**FORMER ATLAS STEEL SITE**  
**Summary Table of Volatile and Semi-Volatile Organic Parameters**  
**Surface Soil and Sediment Samples**  
**(Concentration Values in ug/kg-ppb)**

Analytes	SAMPLE LOCATION					NYSDEC Soil Guidance Values
	SS-1	SS-2	SS-3	SS-4	SED-1	
<b>Volatile Organic Parameters</b>						
Methylene Chloride	9.2	19	ND	ND	ND	--
Acetone	14	15	ND	ND	ND	--
<b>Semi-Volatile Organic Parameters</b>						
2 - Methylphenol	ND	ND	ND	13000	ND	62.5
2 - Methyl Naphthalene	ND	ND	ND	2700	8300	10000
Naphthalene	ND	ND	ND	1000	51000	325
Acenaphthylene	ND	ND	ND	1200	ND	3125
Acenaphthene	ND	6200	ND	ND	39000	2300
Fluorene	ND	11000	ND	ND	57000	9125
Phenanthrene	ND	62000	7400	3100	410000	10000
Anthracene	ND	18000	ND	970	66000	10000
Fluoranthene	ND	73000	17000	9700	460000	10000
Pyrene	ND	51000	14000	8200	380000	10000
Benzo(a)anthracene	ND	34000	8200	4900	160000	69
Chrysene	ND	30000	7300	4500	190000	10000
Benzo(b)fluoranthene	ND	32000	16000	7000	350000	275
Benzo(k)fluoranthene	ND	28000	4500	4400	120000	27.5
Benzo(a)pyrene	ND	33000	11000	4600	230000	61
Indeno(1,2,3-cd)pyrene	ND	12000	6200	1600	45000	80
Dibenzo(a,h)anthracene	ND	ND	ND	850	15000	14
Dibenzofuran	ND	ND	ND	ND	17000	-
Benzo(g,h,i)perylene	ND	11000	6700	1400	48000	80

ND = Not Detected

Note : Shaded values exceed NYS Guidance Values.

101200

X

**TABLE 3-5**  
**FORMER ATLAS STEEL SITE**  
**Summary Table of Inorganic Parameters**  
**Surface Soil and Sediment Samples**  
**(Concentration Values in mg/l -ppm)**

Analytes	SAMPLE LOCATION					Conc. Range of Element in Uncont. Soils**
	SS-1	SS-2	SS-3	SS-4	SED-1	
<b>TAL Metals</b>						
Antimony	6.37 N	14.2 N	ND	ND	ND	0.2-150
Aluminum	1940	3210	3900	5140	4230	10000-30000
Arsenic	23.6	47.3	22	143	0.669	3.0-12.0
Barium	13.2	25	97.6	144	38.9	15-35000
Beryllium	4.78	3.27	2.34	1.61	1.10 *	0-1.75
Cadmium	ND	70.1	13.8	1.76	2.85	0-7.0
Calcium	780 *	3530 *	22400	6020	13000	130-35000
Chromium	38.1	3820	1040	35.2	45.4	1.5-40
Cobalt	34.4	17.3	12	11.1	ND	2.5-60
Copper	934 *N	890 *N	214	126	71.5 *	2.0-100
Iron	352000 *	273000 *	10600	48700	32800	2000-550000
Lead	ND	5550	813	281	117 N	4.0-61
Magnesium	1220	1180	8270	973	2620 N	400-9000
Manganese	3410 *N	29300	7350	286	620 *	100-4000
Mercury	ND	0.985	0.396	0.195	0.169	0.001-0.2
Nickel	835	325	104	45.8	30.0 *	0.5-60
Potassium	64.4	944	2530	1130	353	100-37000
Selenium	ND	4.07	1.27	2.21	ND	0.01-12.0
Sodium	654	812	471	166	232	150-15000
Vanadium	39.1 *	85.8 *	43.5	32.1	7.08	1.3-300
Zinc	57.0	8500	1980	295	383	10-300
<b>Misc. Compounds</b>						
Total Cyanide	ND	ND	ND	ND	ND	—

ND = Not Detected

N = Spiked sample recovery not within control limits.

\* = Duplicate analysis not within control limits.

\*\* = Published concentrations from various sources..

Note : Shade values exceed concentration range.

**TABLE 3-6**  
**FORMER ATLAS STEEL SITE**  
**Summary Table of Pesticide and PCB Parameters**  
**Surface Soil and Sediment Samples**  
**(Concentration Values in ug/kg-ppb)**

Analytes	SAMPLE LOCATION					NYSDEC Soil Guidance Values
	SS-1	SS-2	SS-3	SS-4	SED-1	
Pesticides (all)	ND	ND	ND	ND	ND	--
PCB'S						
PCB - 1260	ND	ND	670	ND	ND	13.25

ND = Not Detected

Note : Shaded values exceed NYS Guidance Values.

TABLE 3-7

**FORMER ATLAS STEEL SITE**  
**Summary Table of Groundwater and Surface Water Results**  
**for Volatile Organics, Semi-Volatile Organics, Pesticides & PCB's**  
**(Concentration Values in ug/l-ppb)**

Analytes	Groundwater Monitoring Well Sample			NYS* Groundwater Guidance Value or Standard	Surface Water Sample SW-1	NYS* Surface Water Guidance Value or Standard
	MW-1	MW-2	MW-3			
Volatile Organic Parameters (All)	ND	ND	ND	-	ND	--
Semi-Volatile Organic Parameters						
Naphthalene	ND	ND	25	10	ND	10
Acenaphthene	ND	ND	9.4	20	ND	20
Fluorene	ND	ND	13	50	ND	50
Phenanthrene	ND	ND	36	50	26	50
Anthracene	ND	ND	10	50	ND	50
Fluoranthene	ND	ND	27	50	38	50
Pyrene	ND	ND	20	50	27	50
Butylbenzylphthalate	ND	ND	ND	50	5.6	50
Benzo(a)anthracene	ND	ND	11	0.002	15	0.002
Bis(2-ethylhexyl)phthalate	9.5	7.7	8.1	50	ND	4.0
Chrysene	ND	ND	10	0.002	16	0.002
Benzo(b)fluoranthene	ND	ND	11	0.002	13	0.002
Benzo(k)fluoranthene	ND	ND	8.0	0.002	15	0.002
Benzo(a)pyrene	ND	ND	9.6	ND	15	0.002
Indeno(1,2,3-cd)pyrene	ND	ND	ND	0.002	8.0	0.002
Benzo(g,h,i)perylene	ND	ND	ND	-	8.3	--
Pesticides/PCB's						
All Parameters	ND	ND	ND	--	ND	--

ND = Not Detected

\*6NYCRR PART 703

Note : Shaded values exceed NYS Guidance Values or Standards

TABLE 3-8

**FORMER ATLAS STEEL SITE**  
**Summary Table of Groundwater and Surface Water Results**  
**for Total Metals Analysis**  
**(Concentration Values in mg/l-ppm)**

Analytes	Groundwater Monitoring Well Sample			NYS* Groundwater Guidance Value or Standard	Surface Water Sample SW-1	NYS* Surface Water Guidance Value or Standard
	MW-1	MW-2	MW-3			
<b>TAL Metals</b>						
Aluminum	142	129	262	--	90	--
Arsenic	0.052	0.0448	0.0469	0.025	0.130	0.050
Barium	0.743	0.638	0.992	1.0	0.681	1.0
Cadmium	ND	ND	ND	0.010	0.037	0.010
Calcium	314	294	73	--	539	--
Chromium	0.158	0.225	0.254	0.050	0.409	0.050
Cobalt	0.0589	0.0533	0.0759	--	0.0618	--
Copper	0.176	0.187	0.428	0.20	0.857	0.20
Iron	142	153	364	0.30	177	0.30
Lead	134	0.323	0.312	0.025	1.53	0.050
Magnesium	94.2	125	19.3	35	109	35
Manganese	2.48	11.3	8.50	0.30	6.98	0.30
Mercury	0.00021	0.00034	ND	0.002	0.00137	0.002
Nickel	0.142	0.18	0.131	--	0.307	--
Potassium	28.6 N	30.5 N	57.4 N	--	39.6 N	--
Selenium	0.0062	ND	0.0051	0.010	0.0075	0.010
Silver	ND	ND	ND	0.050	0.012	0.050
Sodium	11.0	92.4	92.3	20.0	73.6	--
Vanadium	.201	0.182	0.303	--	0.165	--
Zinc	0.412	0.565	0.747	0.30	6.85	0.30
<b>Misc. Compounds</b>						
Total Cyanide	ND	ND	ND	0.10	ND	0.10

N = Spiked sample recovery out of control limits.

ND = Not Detected

\*6NYCRR PART 703

Note : Shaded values exceed NYS Guidance Values or Standards

detected in SW-1 at levels exceeding NYS Surface Water Standards (refer to Table 3-8). There were no volatile organic compounds, pesticides or PCBs detected in SW-1 above the detection limits of the respective analytical methodologies.

Chemical analysis of the sediment sample (SED-1) collected from a catch basin on-site indicated the presence of numerous semi-volatile organic compounds at levels exceeding NYS Soil Guidance Values (refer to Table 3-4). In addition, elevated levels of lead, zinc and chromium were detected (refer to Table 3-5). There were no volatile organic compounds, pesticides or PCBs detected in SED-1 above the detection limits of the respective analytical methodologies.

The elevated semi-volatile organic compounds detected within catch basin sediments are a potential environmental concern. The catch basin and associated storm sewer system may act as a conduit for contaminant migration off-site. The storm sewer system should either be sealed up and closed in place or cleaned out.

### 3.3.6 Waste Pile - Former Plant Site

A waste sample (WS-1) was collected from a pile of black foundry sand located along the southern border of the former plant site. Chemical analysis of WS-1 for toxicity, reactivity, corrosivity and ignitability indicated that the waste pile is not a hazardous waste (refer to Table 3-9), and does not appear to pose an environmental concern to the project site.

## 4.0 CONCLUSIONS

- The fill material disposed in the Hartwell Street Landfill consists predominantly of sand and cinders and ranges in depth from 1.5-6.0 feet below ground surface. Chemical analysis of the fill indicated that it does not appear to present an environmental concern for the property.
- Subsurface contamination was documented to exist in the former tank pit area. Strong petroleum odors were detected in the subsurface soils and a heavy sheen was observed on the perched groundwater zone in an area approximately 70 ft. long x 70 ft. wide. Chemical analysis of the perched groundwater sample collected from Monitoring Well MW-3, revealed the presence of semi-volatile organic compounds commonly associated with fuel oil. This area is considered to be an environmental concern for the property.  
*need to be remediated*
- Several metals were detected within the perched groundwater samples collected from Monitoring Wells MW-1, 2, & 3 at levels above NYS Groundwater Standards. However, given the former industrial use and proposed commercial development of the property, and the fact that 60-80 feet of very impermeable clay and silt separate the perched water from the bedrock aquifer, the slightly elevated metals concentrations within the perched groundwater zone are not considered to be a significant environmental concern.
- Chemical analysis of subsurface and surficial soils collected from across the former

**TABLE 3-9**  
**FORMER ATLAS STEEL SITE**  
**Summary Table of RCRA Waste Characteristics & TCLP**  
**Waste Pile Sample (WS-1)**

Analysis	Result	Maximum Allowable Level
Corrosivity, mm/yr	7.74	63.5
Ignitability, F	> 212	< 140
Reactivity		
Total Cyanide	ND	--
Total Sulfide	6.14	--
TCLP Metals	ND	Not Applicable
TCLP Pesticides	ND	Not Applicable
TCLP Volatiles	ND	Not Applicable
TCLP Semi-Volatiles	ND	Not Applicable

- Atlas Steel Site indicated the presence of several semi-volatile compounds and total metals at levels exceeding NYS Guidance Values. However, the concentrations and types of analytes detected are common in industrial areas; not extreme; and not widespread and are not considered to be an environmental concern.
- The waste pile located along the southern border of the former Atlas Steel Site was determined to be non-hazardous, and therefore not an environmental concern for the property.

- Chemical analysis of the sediment sample collected from an on-site catch basin indicated the presence of numerous semi-volatile organic compounds. Some of these compounds were also detected in lesser concentrations in the associated surface water sample. In addition, metals were detected in the surface water sample at levels exceeding NYS Surface Water Standards. The storm sewer system is, therefore, a potential environmental concern as it may serve as a conduit for off-site contaminant migration.

## 5.0 RECOMMENDATIONS

- Remediation of the former tank pit area should be implemented. Remedial activities would entail the excavation and removal of contaminated subsurface soils from the project site for disposal at a permitted landfill. The estimated volume of contaminated soil ranges from 600-1200 cubic yards. In addition, contaminated water encountered during the excavation activities would have to be addressed by either on-site or off-site treatment.
- The existing storm sewer network on the former Atlas Steel site should be either cleaned out or permanently sealed to ensure against possible future liabilities associated with potential off-site contaminant migration.
- The partially filled drums located along the former railway embankment adjacent to Gugino's property should be removed from the project site.
- There is a potential health concern associated with the contaminants detected in the surficial soils on site due to the site's proximity to residential homes. Therefore, any construction work performed on the project site should be completed utilizing appropriate engineering practices with regard to dust control.

Proj3/atlas.rpt  
40093-00174

## Impacts & Recommendations

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 10-30-92  
 PROJECT NO.: 40093-00174 TIME: 10:30A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
Excavation / Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon / Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z BOTTLES

List ID # ATL-TP3-3'

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Gr-br fine to medium SAND, No odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Cloudy - 45°F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 10-30-92  
 PROJECT NO.: 40093-00174 TIME: 11:50 A  
 CLIENT: BENEDSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT cf DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
Excavation Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Sperry Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID

Field (wash) Blank ID

Containers Filled (primary) # 5-40Z BOTTLES

List ID #s ATL-TP7-5-6'

Containers Filled (replicates) #

List ID #s

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Ok br to dk fine to coarse SAND & CINDERs - No odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Cloudy - 45°F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 10-30-92  
 PROJECT NO.: 40093-0017A TIME: 3:10 P  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuffail / Drum /  
Excavation Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z BOTTLES

List ID #s ATL-TP33-4-6'

Containers Filled (replicates) # \_\_\_\_\_

List ID #s \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Gry-blk fine SAND, strong petroleum odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Cloudy -45°F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-2-92  
 PROJECT NO.: 40093-0017A TIME: 2:40 P  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
Excavation / Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon / Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40z BOTTLES

List ID # ATL-TP37-3-4'

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Gry fine to coarse SAND, pine odor

## Field Tests:

Meter ID # \_\_\_\_\_

Test Value \_\_\_\_\_

Temperature (C / F) \_\_\_\_\_

pH \_\_\_\_\_

Spec. Conductivity (umhos/cm) \_\_\_\_\_

Dissolved Oxygen (mg/l) \_\_\_\_\_

Other: \_\_\_\_\_

Units \_\_\_\_\_

Weather: Rain - 40°F

Comments: \_\_\_\_\_

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-0017A TIME: 8:20 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT cf DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
Excavation / Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z BOTTLES

List ID # ATL-TP11-4-5'

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Brown fine to med SAND, Some fine to coarse gravel, no odor

## Field Tests:

## Meter ID #

## Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Sunny - 50° F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 10:45 A  
 CLIENT: BENSONSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
Excavation Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Sailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_ Field (wash) Blank ID \_\_\_\_\_  
 Containers Filled (primary) # 5-40Z BOTTLES List ID #s ATL-TP22-2-3  
 Containers Filled (replicates) # \_\_\_\_\_ List ID #s \_\_\_\_\_  
 Test for TCL + TAL Parameters + Cyanide  
 Physical Appearance and Odor Okgr to blk fine to medium SAND + CINDERs - No odors

Field Tests:	Meter ID #	Test Value
Temperature (C / F)	_____	_____
pH	_____	_____
Spec. Conductivity (umhos/cm)	_____	_____
Dissolved Oxygen (mg/l)	_____	_____
Other:	_____	_____ Units _____

Weather: Sunny - 50°F  
 Comments: \_\_\_\_\_

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 9:00 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
Excavation / Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z BOTTLES

List ID # ATL-TPI4-1-2

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL & TAL Parameters + Cyanide

Physical Appearance and Odor Brown fine to coarse SAND, Some fine to coarse Gravel - No odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Sunny - 50°F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 10:10 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
Excavation Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-4oz BOTTLES

List ID # ATL-TP20-2-3

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Gr-br fine to coarse SAND, concrete, bricks, slag - No odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather: Sunny - 50°F

Comments: \_\_\_\_\_

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 11:10 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
Excavation Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Cora Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-4oz BOTTLES

List ID # ATL-TP24-1-2'

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL & TAL Parameters + Cyanide

Physical Appearance and Odor Gr-br iron stained Sand & Gravel, cinders & slag - No odors

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

\_\_\_\_\_

Units \_\_\_\_\_

Weather: Sunny 50°F

Comments: \_\_\_\_\_

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 11:50  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: JOEL TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
Excavation / Boring / Embankment /

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z BOTTLES

List ID #: ATL-TP27-2-3

Containers Filled (replicates) # \_\_\_\_\_

List ID #: \_\_\_\_\_

Test for TCL + TAL Parameters + Cyanide

Physical Appearance and Odor Ok gr-br fine to med SAND, metal, slag, concrete - No odors

## Field Tests:

## Meter ID #

## Test Value

Temperature (C / F)

\_\_\_\_\_

\_\_\_\_\_

pH

\_\_\_\_\_

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

\_\_\_\_\_

Other:

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Sunny - 50°F

Comments:

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-2-92  
 PROJECT NO.: 40093-00174 TIME: 8:45 A  
 CLIENT: RENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: R. RALL of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil Waste / Other  
Surficial Sample

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
 Excavation / Boring / Embankment /

Surface: Residential / Industrial Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Sailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon / Crowel

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-402 GLASS

List ID # ATL-55-1

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL & TAL Parameters + Cyanide

Physical Appearance and Odor Black fine sand - No odor

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

pH

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

Other:

\_\_\_\_\_

Units \_\_\_\_\_

Weather: Rain -40°F

Comments: Sample collected from black sand pile

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-2-92  
 PROJECT NO.: 40093-00174 TIME: 9:00 A  
 CLIENT: RENOFSON DEVELOPMENT SITE ID:  
 SAMPLERS: R. RALL of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil Waste / Other  
Surficial Sample

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
 Excavation / Boring / Embankment /

Surface: Residential / Industrial Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Soil Spoon/ Hand Auger /  
 Stainless Spoon / Rowel /

Sample Type: Point / Grab Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-402 Glass

List ID # ATL-55-2

Containers Filled (replicates) # \_\_\_\_\_

List ID # \_\_\_\_\_

Test for TCL & TAL Parameters + Cyanide

Physical Appearance and Odor No Odor - Fil material

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

pH

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

Other:

\_\_\_\_\_

Units \_\_\_\_\_

Weather:

Rain -40°F

Comments:

Sample Collected from dark colored stain area

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 9:30 A  
 CLIENT: REDFERSON DEVELOPMENT SITE ID:  
 SAMPLERS: R. RALL cf DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil / Waste / Other  
Surficial Sample

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
 Excavation / Boring / Embankment /

Surface: Residential / Industrial Commercial / Other

Sampling Methods: Sampling Bottle / Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Drill /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_ Field (wash) Blank ID \_\_\_\_\_  
 Containers Filled (primary) # 5-40Z Glass List ID # ATL-SS-3  
 Containers Filled (replicates) # \_\_\_\_\_ List ID # \_\_\_\_\_  
 Test for TCL + TAL Parameters + Cyanide  
 Physical Appearance and Odor FILL material - No odor

Field Tests:	Meter ID #	Test Value
Temperature (C / F)	_____	_____
pH	_____	_____
Spec. Conductivity (umhos/cm)	_____	_____
Dissolved Oxygen (mg/l)	_____	_____
Other:	_____	_____
		Units _____

Weather: Sunny - 50°F  
 Comments: Sample collected adjacent to drum pile, in middle of property

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-3-92  
 PROJECT NO.: 40093-00174 TIME: 9:45 A  
 CLIENT: RENFERSON DEVELOPMENT SITE ID:  
 SAMPLERS: R. RALL of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment Soil Waste / Other  
Surficial Sample

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
 Excavation / Boring / Embankment /

Surface: Residential / Industrial Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point / Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5-40Z GLASS

List ID #s ATL-55-4

Containers Filled (replicates) # \_\_\_\_\_

List ID #s \_\_\_\_\_

Test for TCL & TAL Parameters + Cyanide

Physical Appearance and Odor Fill/RR cinders - No odor

## Field Tests:

## Meter ID #

## Test Value

Temperature (C / F)

pH

Spec. Conductivity (umhos/cm)

Dissolved Oxygen (mg/l)

Other:

Units \_\_\_\_\_

Weather: Sunny - 50°F

Comments: Collected Sample adjacent to 55-gallon drums on RR right of way

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEELSITE DATE: 11-10-92  
 PROJECT NO.: 40093-00174 TIME: 10120A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID: \_\_\_\_\_  
 SAMPLERS: J. TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuttail / Drum /  
 Excavation / Boring / Embankment / Waste Pile

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Soil Spoon/ Hand Auger /  
 Stainless Spoon/Trowel

Sample Type: Point Grab Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 2-QT GLASS

List ID #: ATL-W51

Containers Filled (replicates) # \_\_\_\_\_

List ID #: \_\_\_\_\_

Test for RCRA Waste Characteristics + TCLP

Physical Appearance and Odor Black fine to medium SAND

## Field Tests:

Meter ID #

Test Value

Temperature (C / F)

\_\_\_\_\_

pH

\_\_\_\_\_

Spec. Conductivity (umhos/cm)

\_\_\_\_\_

Dissolved Oxygen (mg/l)

\_\_\_\_\_

Other:

\_\_\_\_\_

Units \_\_\_\_\_

Weather: Cloudy - 50°F

Comments: \_\_\_\_\_

**APPENDIX C**

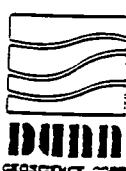
**Test Boring Logs**

## **APPENDIX D**

### **Monitoring Well Diagrams**

# MONITORING WELL COMPLETION LOG

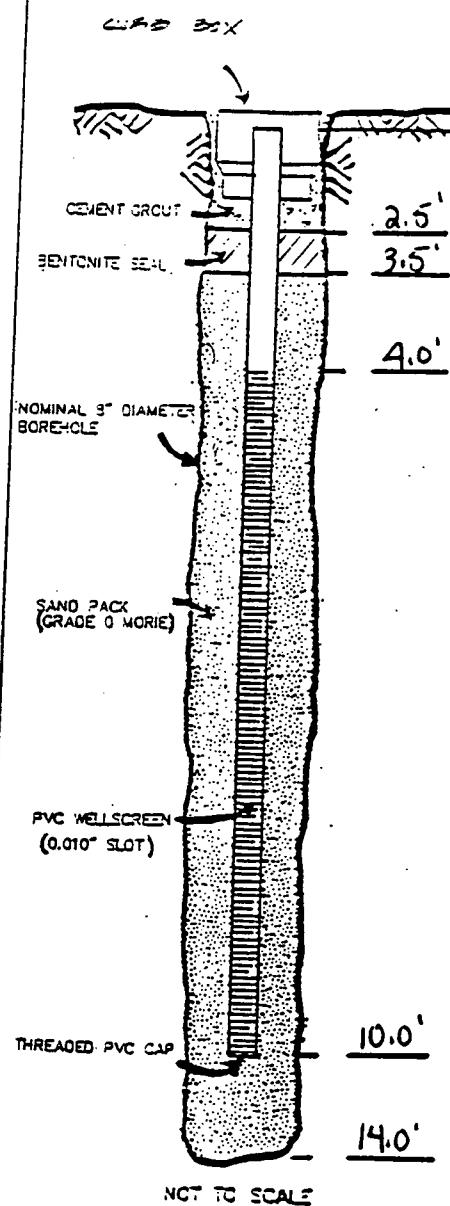
WELL NO. MW-1



DUNN GEOSCIENCE CORPORATION  
495 COMMERCE DRIVE  
AMHERST, NEW YORK 14260  
(716) 691-3866  
FAX (716) 691-3884

Project Atlas Steel  
Client Benderson Development Co.  
Location \_\_\_\_\_  
Project No. 40093-00179  
Date Drilled 11-4-92  
Date Developed 11-6-92

## CONSTRUCTION DETAIL



Inspector J. Taft  
Drilling Contractor Advanced Drilling Investigations

Type of Well 2.0" PVC Monitoring Well  
Static Water Level 5.00' Date 11-0-92  
Measuring Point (M.P.) TOP PVC  
Total Depth of Well 9.68'

Drilling Method  
Type Hollow Stem Auger Diameter 4 1/4" I.O.  
Casing \_\_\_\_\_

Sampling Method  
Type Split Spoon Diameter 2.0"  
Weight 140 lbs Fall 30"  
Interval 2 feet

Setting Tube  
Material \_\_\_\_\_ Diameter \_\_\_\_\_  
Length \_\_\_\_\_ Joint Type \_\_\_\_\_

Riser Pipe Left in Place  
Material PVC Diameter 2.0"  
Length 4.0' Joint Type Flush Thread

Screen  
Material PVC Diameter 2.0"  
Slot Size 0.010" Length 6.0'  
Stratigraphic Unit Screened SILT+CLAY / ALL

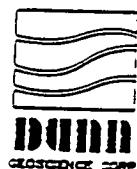
Filter Pack  
Sand X Gravel \_\_\_\_\_ Natural \_\_\_\_\_  
Grade 0 Morie Amount \_\_\_\_\_ Interval 14.0' > 3.5'

Seal(s)  
Type Bentonite Interval 3.5' > 2.5'  
Type Cement Interval 2.5' > Surface  
Type \_\_\_\_\_ Interval \_\_\_\_\_

Locking Casing  Yes  No  
Notes:

# MONITORING WELL COMPLETION LOG

WELL NO. MW-2



DUNN GEOSCIENCE CORPORATION  
495 COMMERCE DRIVE  
AMHERST, NEW YORK 14260  
(716) 691-3866  
FAX (716) 691-3884

Project Atlas Steel  
Client Benderson Development Co.  
Location   
Project No. 40093-00174  
Date Drilled 11-5-92  
Date Developed 11-6-92

<p><b>CONSTRUCTION DETAIL</b></p> <p>The diagram illustrates the well bore with the following layers and dimensions from top to bottom:</p> <ul style="list-style-type: none"> <li>CROWN BOX</li> <li>CEMENT GROUT</li> <li>PENTONITE SEAL</li> <li>NOMINAL 8" DIAMETER BOREHOLE</li> <li>SAND PACK (GRADE 0 MORIE)</li> <li>PVC WELLSCREEN (0.010" SLOT)</li> <li>THREADED PVC CAP</li> </ul> <p>Depth markings on the right side of the borehole diagram:</p> <ul style="list-style-type: none"> <li>2.5'</li> <li>3.5'</li> <li>4.0'</li> <li>9.5'</li> <li>10.0'</li> </ul> <p>NOT TO SCALE</p>	<p>Inspector <u>J. Tagt</u> Drilling Contractor <u>Advanced Drilling Investigations</u></p> <p>Type of Well <u>2.0" PVC Monitoring Well</u> Static Water Level <u>2.99'</u> Date <u>11-10-92</u> Measuring Point (M.P.) <u>TOP PVC</u> Total Depth of Well <u>9.47'</u></p> <p>Drilling Method Type <u>Hollow Stem Auger</u> Diameter <u>4 1/4" I.D.</u> Casing _____</p> <p>Sampling Method Type <u>Split Spoon</u> Diameter <u>2.0"</u> Weight <u>140 lbs.</u> Fall <u>30"</u> Interval <u>2 feet</u></p> <p>Setting Tube Material _____ Diameter _____ Length _____ Joint Type _____</p> <p>Riser Pipe Left in Place Material <u>PVC</u> Diameter <u>2.0"</u> Length <u>4.5'</u> Joint Type <u>Flush-Thread</u></p> <p>Screen Material <u>PVC</u> Diameter <u>2.0"</u> Slot Size <u>0.010"</u> Length <u>5.5'</u> Stratigraphic Unit Screened <u>SILT+CLAY/FILL</u></p> <p>Filter Pack Sand <u>X</u> Gravel _____ Natural _____ Grade <u>0 Morie</u> Amount _____ Interval <u>10.0 &gt; 3.5'</u></p> <p>Seal(s) Type <u>Bentonite</u> Interval <u>3.5' &gt; 2.5'</u> Type <u>Grout</u> Interval <u>2.5' &gt; surface</u> Type _____ Interval _____</p> <p>Locking Casing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Notes:</p>
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# MONITORING WELL COMPLETION LOG

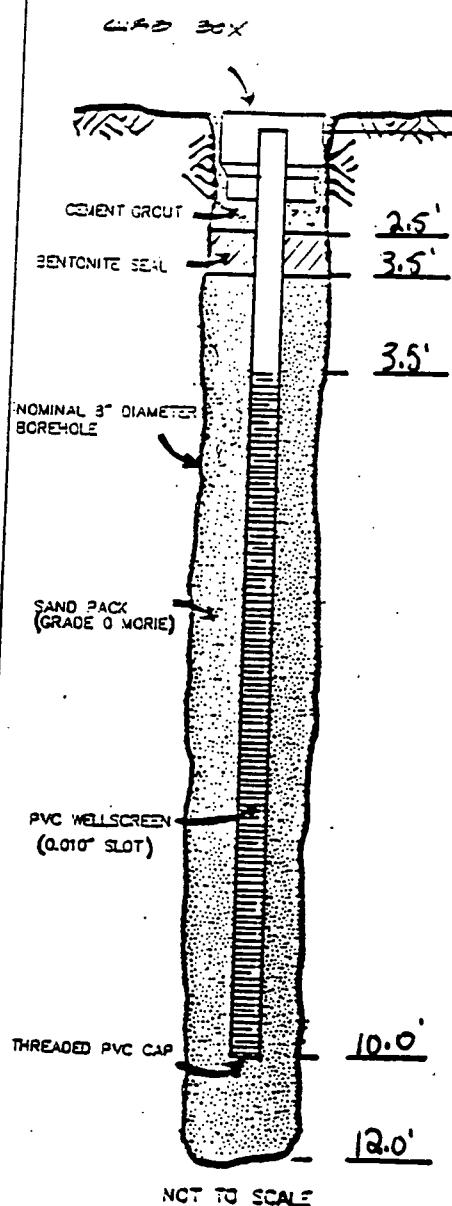
WELL NO. MW-3



DUNN GEOSCIENCE CORPORATION  
495 COMMERCE DRIVE  
AMHERST, NEW YORK 14210  
(716) 691-3866  
FAX (716) 691-3884

Project Atlas Steel  
Client Renderson Development Co.  
Location \_\_\_\_\_  
• Project No. 40093-00174  
Date Drilled 11-5-92  
Date Developed 11-6-92

## CONSTRUCTION DETAIL



Inspector J. Taft  
Drilling Contractor Advanced Drilling Investigations

Type of Well 2.0" PVC Monitoring Well  
Static Water Level 2.40' Date 11-10-92  
Measuring Point (M.P.) TOP PVC  
Total Depth of Well 9.0'

Drilling Method  
Type Hollow Stem Auger Diameter 4 1/4"  
Casing \_\_\_\_\_

Sampling Method  
Type Split Spoon Diameter 2.0"  
Weight 140 lbs. Fall 30"  
Interval 2 feet

Settling Tube  
Material \_\_\_\_\_ Diameter \_\_\_\_\_  
Length \_\_\_\_\_ Joint Type \_\_\_\_\_

Riser Pipe Left in Place  
Material PVC Diameter 2.0"  
Length 3.5' Joint Type Flush Thread

Screen  
Material PVC Diameter 2.0"  
Slot Size 0.010" Length 6.5'  
Stratigraphic Unit Screened FILL

Filter Pack  
Sand x Gravel \_\_\_\_\_ Natural \_\_\_\_\_  
Grade O-morie Amount \_\_\_\_\_ Interval 12.0' > 3.5'

Sedi(s)  
Type Bentonite Interval 3.5' > 2.5'  
Type Grout Interval 2.5' > Surface  
Type \_\_\_\_\_ Interval \_\_\_\_\_

Locking Casing  Yes  No  
Notes:

**APPENDIX E**

**Well Development/Sampling Logs**



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 30 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:	-001	-002	-003	-004
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-
Date Collected:	3-4'	4-5'	1-2'	2-3'
Time Collected:	PQL	11/02/92	11/03/92	11/03/92
		14:40	08:20	09:00
				10:10
Cyanide, Total		1.10	U	1.12
Solids, %		90.3	74.0	85.4
Aluminum	10.0	5300	4960	7090
Antimony	5.00	5.54	U	5.86
Arsenic	0.500	4.66	9.96	9.36
Barium	0.500	15.6	38.5	46.1
Beryllium	0.500	0.554	U	1.38
Cadmium	0.500	0.554	U	0.676
Calcium	50.0	262	2000	891
Chromium	1.00	9.59	102	22.8
Cobalt	5.00	5.54	U	8.92
Copper	1.00	31.8	47.2	103
Iron	5.00	10700	83100	21500
Lead	5.00	12	15.5	1940
Magnesium	50.0	235	730	395
Manganese	0.500	152	8000	2060
Mercury	0.100	0.111	U	0.431
Nickel	4.00	6.	34.9	10.0
Potassium	50.0	899	78.4	1000
Selenium	0.500	0.554	U	0.924
Silver	1.00	1.11	U	1.35
Sodium	50.0	118	102	110
Thallium	5.00	5.54	U	6.76
Vanadium	5.00	9.69	26.9	13.8
Zinc	1.00	18.8	93.6	77.4
				107

Laboratory Director

3



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 30 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:	-005	-006	-007	-008
Location:	ATL-TP22-	ATL-TP24-	ATL-TP27-	ATL-SS-4
Date Collected:	11/03/92	11/03/92	11/03/92	11/03/92
Time Collected:	10:45	11:15	11:50	09:45
Cyanide, Total	1.23	1.02	1.07	1.32
Solids, %	79.7	88.0	86.3	62.0
Aluminum	3560	3190	4700	5140
Antimony	6.27	5.68	5.79	8.06
Arsenic	0.500	14.4	5.64	4.03
Barium	0.500	64.2	20.2	22.1
Beryllium	0.500	1.40	0.568	0.579
Cadmium	0.500	0.627	0.568	0.579
Calcium	50.0	1920	730	724
Chromium	1.00	60.4	5.40	11.3
Cobalt	5.00	11.6	5.68	5.79
Copper	1.00	138	13.4	23.5
Iron	5.00	74000	9960	12400
Lead	5.00	166	27.7	26.1
Magnesium	50.0	594	260	285
Manganese	0.500	1040	65.2	394
Mercury	0.100	0.807	0.114	0.116
Nickel	4.00	58.0	5.06	10.2
Potassium	50.0	413	517	607
Selenium	0.500	1.19	0.568	0.579
Silver	1.00	1.26	1.14	1.16
Sodium	50.0	169	68.1	124
Thallium	5.00	6.27	5.68	5.79
Vanadium	5.00	11.1	5.98	6.81
Zinc	1.00	136	26.2	21.8

Laboratory Director

A



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 30 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:		-009			
Location:		ATL-SS-3			
Date Collected:	PQL	11/03/92			
Time Collected:		09:30			
Cyanide, Total		1.28	U		
Solids, %		78.2			
Aluminum	10.0	3900			
Antimony	5.00	6.39	U		
Arsenic	0.500	22.0			
Barium	0.500	97.6			
Beryllium	0.500	2.34			
Cadmium	0.500	13.8			
Calcium	50.0	22400			
Chromium	1.00	1040			
Cobalt	5.00	12.0			
Copper	1.00	214			
Iron	5.00	10600			
Lead	5.00	813			
Magnesium	50.0	8270			
Manganese	0.500	7350			
Mercury	0.100	0.396			
Nickel	4.00	104			
Potassium	50.0	2530			
Selenium	0.500	1.27			
Silver	1.00	4.35			
Sodium	50.0	471			
Thallium	5.00	6.39	U		
Vanadium	5.00	43.5			
Zinc	1.00	1980			

*Michael F. Perry*

Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

## TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005	-006	-007
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
Date Collected:	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Time Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
Time Collected:	PQL	14:40	08:20	09:00	10:10	10:45	11:15
Date Analyzed:	11/12/92	11/12/92	11/12/92	11/12/92	11/12/92	11/12/92	11/12/92
Dilution:	2.5	1	1	1	1	1	1
Chloromethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Bromomethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Vinyl Chloride	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Chloroethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Methylene Chloride	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Acetone	10	63	18	12 U	50	16	24
Carbon Disulfide	10	28 U	14 U	12 U	12 U	13 U	11 U
Vinyl Acetate	10	28 U	14 U	12 U	12 U	13 U	12 U
1,1-Dichloroethene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,1-Dichloroethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
trans-1,2-Dichloroethene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
cis-1,2-Dichloroethene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Chloroform	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
2-Butanone (MEK)	10	28 U	14 U	12 U	12 U	13 U	11 U
1,2-Dichloroethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,1,1-Trichloroethane	5.0	15	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Carbon Tetrachloride	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Bromodichloromethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,2-Dichloropropane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,3-Dichloropropene-Trans	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Trichloroethene	5.0	14 U	6.8 U	6.6	6.1 U	6.3 U	6.6
Dibromochloromethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,1,2-Trichloroethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Benzene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
1,3-Dichloropropene(Cis)	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Bromoform	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
4-Methyl-2-pentanone(MIBK)	10	28 U	14 U	12 U	12 U	13 U	11 U
2-Hexanone	10	28 U	14 U	12 U	12 U	13 U	11 U
Tetrachloroethene	5.0	14 U	6.8 U	5.9 U	6.1 U	140	6.0
1,1,2,2-Tetrachloroethane	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Toluene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U
Chlorobenzene	5.0	14 U	6.8 U	5.9 U	6.1 U	6.3 U	5.7 U



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

**Client:**

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

**Sample(s) Reference**

Atlas Steel

Received

: 11/04/92

TCL \* BY GC METHOD 8080

ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005	-006	-007
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Date Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
Time Collected:	PQL	14:40	08:20	09:00	10:10	10:45	11:15
Date Extracted:	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92	11/06/9	11/06/92
Date Analyzed:	11/18/92	11/18/92	11/18/92	11/18/92	11/18/92	11/18/9	11/18/92
Dilution:	100	10	10	10	10	10	10
alpha-BHC	2.0	220 U	27 U	23 U	25 U	23 U	23 U
beta-BHC	2.0	220 U	27 U	23 U	25 U	23 U	23 U
gamma-BHC (Lindane)	2.0	220 U	27 U	23 U	25 U	23 U	23 U
Heptachlor	2.0	220 U	27 U	23 U	25 U	23 U	23 U
delta-BHC	2.0	220 U	27 U	23 U	25 U	23 U	23 U
Aldrin	2.0	220 U	27 U	23 U	25 U	23 U	23 U
Heptachlor epoxide	2.0	220 U	27 U	23 U	25 U	23 U	23 U
alpha-Endosulfan	2.0	220 U	27 U	23 U	25 U	23 U	23 U
4,4'-DDE	2.0	220 U	27 U	23 U	25 U	23 U	23 U
Dieldrin	2.0	220 U	27 U	23 U	25 U	23 U	23 U
Endrin	2.0	220 U	27 U	23 U	25 U	23 U	23 U
4,4'-TDE (DDD)	2.0	220 U	27 U	23 U	25 U	23 U	23 U
beta-Endosulfan	4.0	440 U	54 U	47 U	49 U	50 U	45 U
4,4'-DDT	4.0	440 U	54 U	47 U	49 U	50 U	45 U
Endrin Aldehyde	4.0	440 U	54 U	47 U	49 U	50 U	46 U
Endosulfan Sulfate	4.0	440 U	54 U	47 U	49 U	50 U	46 U
Methoxychlor	8.0	890 U	110 U	94 U	98 U	100 U	91 U
Endrin Ketone	4.0	440 U	54 U	47 U	49 U	50 U	46 U
Chlordane	8.0	890 U	110 U	94 U	98 U	100 U	91 U
Toxaphene	40	4400 U	540 U	470 U	490 U	500 U	460 U
PCB 1016	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1221	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1232	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1242	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1248	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1254	20	2200 U	270 U	230 U	240 U	250 U	230 U
PCB 1260	20	2200 U	270 U	230 U	1100	250 U	230 U

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

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A Full Service Environmental Laborator

LABORATORY REPORT

Job Number: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009						
Location:	ATL-SS-4	ATL-SS-3						
Date Collected:	11/03/92	11/03/92						
Time Collected:	PQL	09:45	09:30					
-----	-----	-----	-----	-----	-----	-----	-----	-----
Date Extracted:	11/06/92	11/06/92						
Date Analyzed:	11/17/92	11/18/92						
Dilution:	1	10						
Butyl benzyl phthalate	330	540 U	4300 U					
3,3'-Dichlorobenzidine	330	540 U	4300 U					
Benzo(a)anthracene	330	4900	8200					
Bis(2-ethylhexyl)phthalate	330	540 U	4300 U					
Chrysene	330	4500	7300					
Di-n-octyl phthalate	330	540 U	4300 U					
Benzo(b)Fluoranthene	330	7000	16000					
Benzo(k)fluoranthene	330	4400	4500					
Benzo(a)pyrene	330	4600	11000					
Indeno(1,2,3-cd)pyrene	330	1600	6200					
Dibenzo(a,h)anthracene	330	850	4300 U					
Benzo(g,h,i)perylene	330	1400	6700					
Benzyl Alcohol	330	540 U	4300 U					
4-Chloroaniline	330	540 U	4300 U					
2-Methyl Naphthalene	330	2700	4300 U					
2-Nitroaniline	330	540 U	4300 U					
3-Nitroaniline	330	540 U	4300 U					
Dibenzofuran	330	540 U	4300 U					
4-Nitroaniline	330	540 U	4300 U					
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	23-120%	81	68					
2-Fluorobiphenyl	30-115%	94	94					
Terphenyl-d14	18-137%	99	101					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

client:

**Sample(s) Reference**

Mr. Rick Rall

## Dunn Corporation

495 Commerce Dr.

Amherst, New York 14428

Received

: 11/04/92

P.O. 11

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009					
Location:	ATL-SS-4	ATL-SS-3					
Date Collected:		11/03/92	11/03/92				
Time Collected:	PQL	09:45	09:30				
===== Date Analyzed:		11/14/92	11/14/92				
Dilution:	1	1					
Chloromethane	5.0	8.1 UJ	6.4 U				
Bromomethane	5.0	8.1 UJ	6.4 U				
Vinyl Chloride	5.0	8.1 UJ	6.4 U				
Chloroethane	5.0	8.1 UJ	6.4 U				
Methylene Chloride	5.0	8.1 UJ	6.4 U				
Acetone	10	16 UJ	13 U				
Carbon Disulfide	10	16 UJ	13 U				
Vinyl Acetate	10	16 UJ	13 U				
1,1-Dichloroethene	5.0	8.1 UJ	6.4 U				
1,1-Dichloroethane	5.0	8.1 UJ	6.4 U				
trans-1,2-Dichloroethene	5.0	8.1 UJ	6.4 U				
cis-1,2-Dichloroethene	5.0	8.1 UJ	6.4 U				
Chloroform	5.0	8.1 UJ	6.4 U				
2-Butanone (MEK)	10	16 UJ	13 U				
1,2-Dichloroethane	5.0	8.1 UJ	6.4 U				
1,1,1-Trichloroethane	5.0	8.1 UJ	6.4 U				
Carbon Tetrachloride	5.0	8.1 UJ	6.4 U				
Bromodichloromethane	5.0	8.1 UJ	6.4 U				
1,2-Dichloropropane	5.0	8.1 UJ	6.4 U				
1,3-Dichloropropene-Trans	5.0	8.1 UJ	6.4 U				
Trichloroethene	5.0	8.1 UJ	6.4 U				
Dibromochloromethane	5.0	8.1 UJ	6.4 U				
1,1,2-Trichloroethane	5.0	8.1 UJ	6.4 U				
Benzene	5.0	8.1 UJ	6.4 U				
1,3-Dichloropropene(Cis)	5.0	8.1 UJ	6.4 U				
Bromoform	5.0	8.1 UJ	6.4 U				
4-Methyl-2-pentanone(MIBK)	10	16 UJ	13 U				
2-Hexanone	10	16 UJ	13 U				
Tetrachloroethene	5.0	8.1 UJ	6.4 U				
1,1,2,2-Tetrachloroethane	5.0	8.1 UJ	6.4 U				
Toluene	5.0	8.1 UJ	6.4 U				
Chlorobenzene	5.0	8.1 UJ	6.4 U				



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\*

ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009						
Location:	ATL-SS-4	ATL-SS-3						
Date Collected:	11/03/92	11/03/92						
Time Collected:	PQL	09:45	09:30					
Date Analyzed:	11/14/92	11/14/92						
Dilution:	1	1						
Ethylbenzene	5.0	8.1 UJ	6.4 U					
Styrene	5.0	8.1 UJ	6.4 U					
Total Xylene (o,m,p)	5.0	8.1 UJ	6.4 U					
Surrogate Standard Recoveries								
1,2-Dichloroethane-d4	70-121	101	104					
Toluene d8	81-117	129 *	114					
4-Bromofluorobenzene	74-121	83	89					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laborator

## LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

## TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005	-006	-007
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
Date Collected:	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Time Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
	PQL	14:40	08:20	09:00	10:10	10:45	11:15
Date Extracted:		11/06/92	11/06/92	11/06/92	11/06/92	11/06/92	11/17/92
Date Analyzed:		11/18/92	11/17/92	11/17/92	11/17/92	11/17/92	11/18/92
Dilution:		10	11	1	1	1	1
Phenol	670	7400 U	900 U	780 U	810 U	830 U	760 U
2-Chlorophenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
2-Nitrophenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
2,4-Dimethylphenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
2,4-Dichlorophenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
4-Chloro-3-methylphenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
2,4,6-Trichlorophenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
2,4-Dinitrophenol	1300	15000 U	1800 U	1600 U	1600 U	1700 U	1500 U
4-Nitrophenol	1300	15000 U	1800 U	1600 U	1600 U	1700 U	1500 U
2-Methyl-4,6-dinitrophenol	1300	15000 U	1800 U	1600 U	1600 U	1700 U	1500 U
Pentachlorophenol	1300	15000 U	1800 U	1600 U	1600 U	1700 U	1500 U
2-Methylphenol	670	7400 U	900 U	780 U	810 U	830 U	760 U
4-Methylphenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
Benzoic Acid	3300	37000 U	4500 U	3900 U	4100 U	4200 U	3800 U
2,4,5-Trichlorophenol	670	7400 U	900 U	780 U	810 U	830 U	780 U
SURROGATE STANDARD RECOVERIES							
2-Fluorophenol	25-121%	80	87	88	88	88	86
Phenol-d6	24-113%	87	93	96	97	97	93
2,4,6-Tribromophenol	19-122%	84	112	109	110	107	101

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 &amp; #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801



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Laboratory Director

**General  
Testing  
Corporation**

A Full Service Environmental Laboratory

**LABORATORY REPORT**

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

**TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.**

Sample:	-001	-002	-003	-004	-005	-006	-007
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Date Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
Time Collected:	PQL	14:40	08:20	09:00	10:1Q	10:45	11:15
Date Extracted:		11/06/92	11/06/92	11/06/92	11/06/92	11/06/92	11/17/92
Date Analyzed:		11/18/92	11/17/92	11/17/92	11/17/92	11/17/92	11/18/92
Dilution:		10	1	1	1	1	1
N-Nitrosodimethylamine	330	3700 U	450 U	390 U	410 U	420 U	380 U
Bis(2-chloroethyl) ether	330	3700 U	450 U	390 U	410 U	420 U	380 U
1,3 Dichlorobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
1,4 Dichlorobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
1,2 Dichlorobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
bis(-2-chloroisopropyl)ether	330	3700 U	450 U	390 U	410 U	420 U	380 U
N-Nitroso-Di-n-propylamine	330	3700 U	450 U	390 U	410 U	420 U	380 U
Hexachloroethane	330	3700 U	450 U	390 U	410 U	420 U	380 U
Nitrobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Isophorone	330	3700 U	450 U	390 U	410 U	420 U	380 U
bis(-2-chloroethoxy)methane	330	3700 U	450 U	390 U	410 U	420 U	380 U
1,2,4-Trichlorobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Naphthalene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Hexachlorobutadiene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Hexachlorocyclopentadiene	330	3700 U	450 U	390 U	410 U	420 U	380 U
2-Chloronaphthalene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Dimethyl phthalate	330	3700 U	450 U	390 U	410 U	420 U	380 U
Acenaphthylene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Acenaphthene	330	3700 U	450 U	390 U	410 U	420 U	380 U
2,4-Dinitrotoluene	330	3700 U	450 U	390 U	410 U	420 U	380 U
2,6-Dinitrotoluene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Diethyl phthalate	330	3700 U	450 U	390 U	410 U	420 U	380 U
4-Chlorophenyl-phenyl-ether	330	3700 U	450 U	390 U	410 U	420 U	380 U
Fluorene	330	3700 U	450 U	390 U	550	420 U	380 U
1,2-Diphenylhydrazine	330	3700 U	450 U	390 U	410 U	420 U	380 U
N-Nitrosodiphenylamine	330	3700 U	450 U	390 U	410 U	420 U	380 U
4-Bromophenyl-phenylether	330	3700 U	450 U	390 U	410 U	420 U	380 U
Hexachlorobenzene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Phenanthrene	330	3700 U	450 U	390 U	410 U	420 U	380 U
Anthracene	330	3700 U	450 U	1700	3400	500	1500
Di-n-butyl phthalate	330	3700 U	450 U	390 U	740	420 U	380 U
Benzidine	3300	37000 U	4500 U	3900 U	4100 U	4200 U	3800 U
Fluoranthene	330	3700 U	580	1900	5000	1000	2500
Pyrene	330	3700 U	470	1400	3600	770	1900



A Full Service Environmental Laborator

**LABORATORY REPORT**

Job Number: R92/04809

Date: NOV. 27 1992

**Client:**

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

**Sample(s) Reference**

Atlas Steel

Received

: 11/04/92

P.O. #:

**TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.**

Sample: Location:	-001	-002	-003	-004	-005	-006	-007
	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
Date Collected:	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Time Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
	PQL	14:40	08:20	09:00	10:10	10:45	11:15
Date Extracted:		11/06/92	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92
Date Analyzed:		11/18/92	11/17/92	11/17/92	11/17/92	11/17/92	11/17/92
Dilution:		10	1	1	1	1	1
Butyl benzyl phthalate	330	3700 U	450 U	390 U	410 U	420 U	380 U
3,3'-Dichlorobenzidine	330	3700 U	450 U	390 U	410 U	420 U	380 U
Benzo(a)anthracene	330	3700 U	450 U	760	2300	550	1400
Bis(2-ethylhexyl)phthalate	330	3700 U	450 U	390 U	410 U	420 U	380 U
Chrysene	330	3700 U	450 U	770	2000	630	1600
Di-n-octyl phthalate	330	3700 U	450 U	390 U	410 U	420 U	380 U
Benzo(b)Fluoranthene	330	3700 U	600	690	2700	690	2900
Benzo(k)fluoranthene	330	3700 U	480	720	2500	630	1200
Benzo(a)pyrene	330	3700 U	500	740	2300	600	1600
Indeno(1,2,3-cd)pyrene	330	3700 U	450 U	390 U	980	420 U	980
Dibenzo(a,h)anthracene	330	3700 U	450 U	390 U	430	420 U	380 U
Benzo(g,h,i)perylene	330	3700 U	450 U	390 U	890	420 U	1100
Benzyl Alcohol	330	3700 U	450 U	390 U	410 U	420 U	380 U
4-Chloroaniline	330	3700 U	450 U	390 U	410 U	420 U	390 U
2-Methyl Naphthalene	330	3700 U	450 U	390 U	410 U	420 U	380 U
2-Nitroaniline	330	3700 U	450 U	390 U	410 U	420 U	380 U
3-Nitroaniline	330	3700 U	450 U	390 U	410 U	420 U	380 U
Dibenzofuran	330	3700 U	450 U	390 U	410 U	420 U	380 U
4-Nitroaniline	330	3700 U	450 U	390 U	410 U	420 U	390 U
SURROGATE STANDARD RECOVERIES							
Nitrobenzene-d5	23-120%	67	81	83	82	85	82
2-Fluorobiphenyl	30-115%	101	98	99	96	97	91
Terphenyl-d14	18-137%	97	88	87	92	87	87
							90

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

Laboratory Director



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009						
Location:	ATL-SS-4	ATL-SS-3						
Date Collected:	11/03/92	11/03/92						
Time Collected:	PQL	09:45	09:30					
-----	-----	-----	-----	-----	-----	-----	-----	-----
Date Extracted:	11/06/92	11/06/92						
Date Analyzed:	11/17/92	11/18/92						
Dilution:	1	10						
Phenol	670	1100 U	8600 U					
2-Chlorophenol	670	1100 U	8600 U					
2-Nitrophenol	670	1100 U	8600 U					
2,4-Dimethylphenol	670	1100 U	8600 U					
2,4-Dichlorophenol	670	1100 U	8600 U					
4-Chloro-3-methylphenol	670	1100 U	8600 U					
2,4,6-Trichlorophenol	670	1100 U	8600 U					
2,4-Dinitrophenol	1300	2200 U	17000 U					
4-Nitrophenol	1300	2200 U	17000 U					
2-Methyl-4,6-dinitrophenol	1300	2200 U	17000 U					
Pentachlorophenol	1300	2200 U	17000 U					
2-Methylphenol	670	13000	8600 U					
4-Methylphenol	670	1100 U	8600 U					
Benzoic Acid	3300	5400 U	43000 U					
2,4,5-Trichlorophenol	670	1100 U	8600 U					
SURROGATE STANDARD RECOVERIES								
2-Fluorophenol	25-121%	85	89					
Phenol-d6	24-113%	91	93					
2,4,6-Tribromophenol	19-122%	109	71					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director

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A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009					
Location:	ATL-SS-4	ATL-SS-3					
Date Collected:	11/03/92	11/03/92					
Time Collected:	PQL	09:45	09:30				
<hr/>							
Date Extracted:		11/06/92	11/06/92				
Date Analyzed:		11/17/92	11/18/92				
Dilution:		1	10				
N-Nitrosodimethylamine	330	540 U	4300 U				
Bis(2-chloroethyl) ether	330	540 U	4300 U				
1,3 Dichlorobenzene	330	540 U	4300 U				
1,4 Dichlorobenzene	330	540 U	4300 U				
1,2 Dichlorobenzene	330	540 U	4300 U				
bis(-2-chloroisopropyl)ether	330	540 U	4300 U				
N-Nitroso-Di-n-propylamine	330	540 U	4300 U				
Hexachloroethane	330	540 U	4300 U				
Nitrobenzene	330	540 U	4300 U				
Isophorone	330	540 U	4300 U				
bis(-2-chloroethoxy)methane	330	540 U	4300 U				
1,2,4-Trichlorobenzene	330	540 U	4300 U				
Naphthalene	330	1000	4300 U				
Hexachlorobutadiene	330	540 U	4300 U				
Hexachlorocyclopentadiene	330	540 U	4300 U				
2-Chloronaphthalene	330	540 U	4300 U				
Dimethyl phthalate	330	540 U	4300 U				
Acenaphthylene	330	1200	4300 U				
Acenaphthene	330	540 U	4300 U				
2,4-Dinitrotoluene	330	540 U	4300 U				
2,6-Dinitrotoluene	330	540 U	4300 U				
Diethyl phthalate	330	540 U	4300 U				
4-Chlorophenyl-phenyl-ether	330	540 U	4300 U				
Fluorene	330	540 U	4300 U				
1,2-Diphenylhydrazine	330	540 U	4300 U				
N-Nitrosodiphenylamine	330	540 U	4300 U				
4-Bromophenyl-phenylether	330	540 U	4300 U				
Hexachlorobenzene	330	540 U	4300 U				
Phenanthrene	330	3100	7400				
Anthracene	330	970	4300 U				
Di-n-butyl phthalate	330	540 U	4300 U				
Benzidine	3300	5400 U	43000 U				
Fluoranthene	330	9700	17000				
Pyrene	330	8200	14000	14			



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference:

Atlas Steel

Received : 11/04/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample:	-001	-002	-003	-004	-005	-006	-007
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-
	3-4'	4-5'	1-2'	2-3'	2-3'	1-2'	2-3'
Date Collected:	11/02/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92	11/03/92
Time Collected:	LIMITS	14:40	08:20	09:00	10:10	10:45	11:15

SURROGATE STANDARD RECOVERY

% Recovery

Dibutylchloroendate	24-150%	D	*	105	80	133	106	*
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Tetrachloro-meta-xylene	60-150%	D	107	107	103	114	110	114
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\*SW 846 Manual, Test Methods for Evaluating Solid Waste, 3rd Edition, 11/86.

NY LABORATORY CERTIFICATION ID#: 10145

NJ ID#: 73331 in Rochester;

NJ ID#: 02317 in Hackensack

Laboratory Director



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

TCL \* BY GC METHOD 8080

ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-008	-009						
Location:	ATL-SS-4	ATL-SS-3						
Date Collected:		11/03/92	11/03/92					
Time Collected:	PQL	09:45	09:30					
Date Extracted:		11/06/92	11/06/92					
Date Analyzed:		11/18/92	11/18/92					
Dilution:		10	10					
alpha-BHC	2.0	32 U	26 U					
beta-BHC	2.0	32 U	26 U					
gamma-BHC (Lindane)	2.0	32 U	26 U					
Heptachlor	2.0	32 U	26 U					
delta-BHC	2.0	32 U	26 U					
Aldrin	2.0	32 U	26 U					
Heptachlor epoxide	2.0	32 U	26 U					
alpha-Endosulfan	2.0	32 U	26 U					
4,4'-DDE	2.0	32 U	26 U					
Dieldrin	2.0	32 U	26 U					
Endrin	2.0	32 U	26 U					
4,4'-TDE (DDD)	2.0	32 U	26 U					
beta-Endosulfan	4.0	65 U	51 U					
4,4'-DDT	4.0	65 U	51 U					
Endrin Aldehyde	4.0	65 U	51 U					
Endosulfan Sulfate	4.0	65 U	51 U					
Methoxychlor	8.0	130 U	100 U					
Endrin Ketone	4.0	65 U	51 U					
Chlordane	8.0	130 U	100 U					
Toxaphene	40	640 U	510 U					
PCB 1016	20	320 U	260 U					
PCB 1221	20	320 U	260 U					
PCB 1232	20	320 U	260 U					
PCB 1242	20	320 U	260 U					
PCB 1248	20	320 U	260 U					
PCB 1254	20	320 U	260 U					
PCB 1260	20	320 U	670					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference:

Atlas Steel

Received

: 11/04/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample:	-008	-009					
Location:	ATL-SS-4	ATL-SS-3					
Date Collected:	11/03/92	11/03/92					
Time Collected:	LIMITS	09:45	09:30				
-----	-----	-----	-----	-----	-----	-----	-----

SURROGATE STANDARD RECOVERY

% Recovery

Dibutylchloroendate	24-150%	*	*				
Tetrachloro-meta-xylene	60-150%	107	103				

\*SW 846 Manual, Test Methods for Evaluating Solid Waste, 3rd Edition, 11/86.

NY LABORATORY CERTIFICATION ID#: 10145

NJ ID#: 73331 in Rochester;

NJ ID#: 02317 in Hackensack

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Laboratory Director



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-010	-011	-012	-013	-014		
Location:	LAB METH						
Date Collected:	--	--	--	--	--		
Time Collected:	PQL	--	--	--	--		
===== Date Analyzed:	11/12/92	11/13/92	11/13/92	11/14/92	11/16/92		
Dilution:	1	1	1	1	1		
Chloromethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromomethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Vinyl Chloride	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Methylene Chloride	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Acetone	10	10 U	10 U	10 U	10 U	10 U	
Carbon Disulfide	10	10 U	10 U	10 U	10 U	10 U	
Vinyl Acetate	10	10 U	10 U	10 U	10 U	10 U	
1,1-Dichloroethene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,2-Dichloroethene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
cis-1,2-Dichloroethene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroform	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
2-Butanone (MEK)	10	10 U	10 U	10 U	10 U	10 U	
1,2-Dichloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,1-Trichloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Carbon Tetrachloride	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromodichloromethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dichloropropane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,3-Dichloropropene-Trans	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Trichloroethene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Dibromochloromethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,2-Trichloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Benzene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,3-Dichloropropene(Cis)	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromoform	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
4-Methyl-2-pentanone(MIBK)	10	10 U	10 U	10 U	10 U	10 U	
2-Hexanone	10	10 U	10 U	10 U	10 U	10 U	
Tetrachloroethene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,2,2-Tetrachloroethane	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chlorobenzene	5.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	

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A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-010	-011	-012	-013	-014		
Location:	LAB METH						
	BLANK	BLANK	BLANK	BLANK	BLANK		
Date Collected:	--	--	--	--	--		
Time Collected:	PQL	--	--	--	--		
-----	-----	-----	-----	-----	-----	-----	-----
Date Analyzed:		11/12/92	11/13/92	11/13/92	11/14/92	11/16/92	
Dilution:		1	1	1	1	1	
Ethylbenzene	5.0	5.0 U					
Styrene	5.0	5.0 U					
Total Xylene (o,m,p)	5.0	5.0 U					
Surrogate Standard Recoveries							
-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dichloroethane-d4	70-121	104	106	104	100	101	
Toluene d8	81-117	98	97	98	96	97	
4-Bromofluorobenzene	74-121	104	102	105	102	116	

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

*[Signature]*  
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Laboratory Director



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt

Sample:	-010	-011						
Location:	LAB METH	LAB METH						
	BLANK	BLANK						
Date Collected:	--	--						
Time Collected:	PQL	--	--					
<hr/>								
Date Extracted:		11/06/92	11/17/92					
Date Analyzed:		11/17/92	11/18/92					
Dilution:		1	1					
Phenol	670	670 U	670 U					
2-Chlorophenol	670	670 U	670 U					
2-Nitrophenol	670	670 U	670 U					
2,4-Dimethylphenol	670	670 U	670 U					
2,4-Dichlorophenol	670	670 U	670 U					
4-Chloro-3-methylphenol	670	670 U	670 U					
2,4,6-Trichlorophenol	670	670 U	670 U					
2,4-Dinitrophenol	1300	1300 U	1300 U					
4-Nitrophenol	1300	1300 U	1300 U					
2-Methyl-4,6-dinitrophenol	1300	1300 U	1300 U					
Pentachlorophenol	1300	1300 U	1300 U					
2-Methylphenol	670	670 U	670 U					
4-Methylphenol	670	670 U	670 U					
Benzoic Acid	3300	3300 U	3300 U					
2,4,5-Trichlorophenol	670	670 U	670 U					
<hr/>								
SURROGATE STANDARD RECOVERIES								
2-Fluorophenol	25-121%	75	84					
Phenol-d6	24-113%	83	92					
2,4,6-Tribromophenol	19-122%	82	97					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

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Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-010	-011						
Location:	LAB METH	LAB METH						
	BLANK	BLANK						
Date Collected:	--	--						
Time Collected:	PQL	--	--		.			
<hr/>								
Date Extracted:		11/06/92	11/17/92					
Date Analyzed:		11/17/92	11/18/92					
Dilution:		1	1					
N-Nitrosodimethylamine	330	330 U	330 U					
Bis(2-chloroethyl) ether	330	330 U	330 U					
1,3 Dichlorobenzene	330	330 U	330 U					
1,4 Dichlorobenzene	330	330 U	330 U					
1,2 Dichlorobenzene	330	330 U	330 U					
bis(-2-chloroisopropyl)ether	330	330 U	330 U					
N-Nitroso-Di-n-propylamine	330	330 U	330 U					
Hexachloroethane	330	330 U	330 U					
Nitrobenzene	330	330 U	330 U					
Isophorone	330	330 U	330 U					
bis(-2-chloroethoxy)methane	330	330 U	330 U					
1,2,4-Trichlorobenzene	330	330 U	330 U					
Naphthalene	330	330 U	330 U					
Hexachlorobutadiene	330	330 U	330 U					
Hexachlorocyclopentadiene	330	330 U	330 U					
2-Chloronaphthalene	330	330 U	330 U					
Dimethyl phthalate	330	330 U	330 U					
Acenaphthylene	330	330 U	330 U					
Acenaphthene	330	330 U	330 U					
2,4-Dinitrotoluene	330	330 U	330 U					
2,6-Dinitrotoluene	330	330 U	330 U					
Diethyl phthalate	330	330 U	330 U					
4-Chlorophenyl-phenyl-ether	330	330 U	330 U					
Fluorene	330	330 U	330 U					
1,2-Diphenylhydrazine	330	330 U	330 U					
N-Nitrosodiphenylamine	330	330 U	330 U					
4-Bromophenyl-phenylether	330	330 U	330 U					
Hexachlorobenzene	330	330 U	330 U					
Phenanthrene	330	330 U	330 U					
Anthracene	330	330 U	330 U					
Di-n-butyl phthalate	330	330 U	330 U					
Benzidine	3300	3300 U	3300 U					
Fluoranthene	330	330 U	330 U					
Pyrene	330	330 U	330 U					

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A Full Service Environmental Laborator

## LABORATORY REPORT

Job Number: R92/04809

Date: NOV. 27 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

Received

: 11/04/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-010	-011						
Location:	LAB METH	LAB METH						
	BLANK	BLANK						
Date Collected:	--	--						
Time Collected:	PQL	--	--		.			
<hr/>								
Date Extracted:		11/06/92	11/17/92					
Date Analyzed:		11/17/92	11/18/92					
Dilution:		1	1					
Butyl benzyl phthalate	330	330 U	330 U					
3,3'-Dichlorobenzidine	330	330 U	330 U					
Benzo(a)anthracene	330	330 U	330 U					
Bis(2-ethylhexyl)phthalate	330	330 U	330 U					
Chrysene	330	330 U	330 U					
Di-n-octyl phthalate	330	330 U	330 U					
Benzo(b)Fluoranthene	330	330 U	330 U					
Benzo(k)fluoranthene	330	330 U	330 U					
Benzo(a)pyrene	330	330 U	330 U					
Indeno(1,2,3-cd)pyrene	330	330 U	330 U					
Dibenzo(a,h)anthracene	330	330 U	330 U					
Benzo(g,h,i)perylene	330	330 U	330 U					
Benzyl Alcohol	330	330 U	330 U					
4-Chloroaniline	330	330 U	330 U					
2-Methyl Naphthalene	330	330 U	330 U					
2-Nitroaniline	330	330 U	330 U					
3-Nitroaniline	330	330 U	330 U					
Dibenzofuran	330	330 U	330 U					
4-Nitroaniline	330	330 U	330 U					
<hr/>								
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	23-120%	70	82					
2-Fluorobiphenyl	30-115%	80	93					
Terphenyl-d14	18-137%	78	87					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR parts #136 &amp; #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: DEC. 1 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received : 11/04/92

TCL \* BY GC METHOD 8080

ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:		-010						
Location:		LAB METH						
		BLANK						
Date Collected:		--						
Time Collected:		PQL	--					
Date Extracted:			11/06/92					
Date Analyzed:			11/18/92					
Dilution:			10					
alpha-BHC		2.0	20 U					
beta-BHC		2.0	20 U					
gamma-BHC (Lindane)		2.0	20 U					
Heptachlor		2.0	20 U					
delta-BHC		2.0	20 U					
Aldrin		2.0	20 U					
Heptachlor epoxide		2.0	20 U					
alpha-Endosulfan		2.0	20 U					
4,4'-DDE		2.0	20 U					
Dieldrin		2.0	20 U					
Endrin		2.0	20 U					
4,4'-TDE (DDD)		2.0	20 U					
beta-Endosulfan		4.0	40 U					
4,4'-DDT		4.0	40 U					
Endrin Aldehyde		4.0	40 U					
Endosulfan Sulfate		4.0	40 U					
Methoxychlor		8.0	80 U					
Endrin Ketone		4.0	40 U					
Chlordane		8.0	80 U					
Toxaphene		40	400 U					
PCB 1016		20	200 U					
PCB 1221		20	200 U					
PCB 1232		20	200 U					
PCB 1242		20	200 U					
PCB 1248		20	200 U					
PCB 1254		20	200 U					
PCB 1260		20	200 U					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

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A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference:

Atlas Steel

Received : 11/04/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample:	-010							
Location:	LAB METH							
	BLANK							
Date Collected:	--							
Time Collected:	LIMITS	--						

SURROGATE STANDARD RECOVERY

% Recovery

Dibutylchloroendate	24-150%	*						
---------------------	---------	---	--	--	--	--	--	--

Tetrachloro-meta-xylene	60-150%	109						
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\*SW 846 Manual, Test Methods for Evaluating Solid Waste, 3rd Edition, 11/86.

NY LABORATORY CERTIFICATION ID#: 10145

NJ ID#: 73331 in Rochester;

NJ ID#: 02317 in Hackensack

*Michael F. Perrone*  
Laboratory Director

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A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Dunn Corporation

Sample(s) Reference

Atlas Steel

Date Received: 11/04/92

Date Sample Taken: 11/02&03/92

LABORATORY CHRONICLE  
DATE ANALYZED

Sample:	-001	-002	-003	-004	-005	-006	-007	-008
Location:	ATL-TP37-	ATL-TP11-	ATL-TP14-	ATL-TP20-	ATL-TP22-	ATL-TP24-	ATL-TP27-	ATL-SS-4
Cyanide, Total	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Solids, %	11/05/92	11/05/92	11/05/92	11/05/92	11/05/92	11/05/92	11/05/92	11/05/92
Aluminum	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Antimony	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Arsenic	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Barium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Beryllium	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Cadmium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Calcium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Chromium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Cobalt	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Copper	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Iron	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Lead	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Magnesium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Manganese	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Mercury	11/13/92	11/13/92	11/13/92	11/13/92	11/13/92	11/13/92	11/13/92	11/13/92
Nickel	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Potassium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Selenium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Silver	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92
Sodium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Thallium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92
Vanadium	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92
Zinc	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92

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A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04809

Date: NOV. 27 1992

Client:

Sample(s) Reference

Dunn Corporation

Atlas Steel

Date Received: 11/04/92

Date Sample Taken: 11/02&03/92

LABORATORY CHRONICLE  
DATE ANALYZED

Sample:	-009							
Location:	ATL-SS-3							
Cyanide, Total	11/11/92							
Solids, %	11/05/92							
Aluminum	11/11/92							
Antimony	11/10/92							
Arsenic	11/10/92							
Barium	11/11/92							
Beryllium	11/10/92							
Cadmium	11/09/92							
Calcium	11/11/92							
Chromium	11/09/92							
Cobalt	11/10/92							
Copper	11/09/92							
Iron	11/10/92							
Lead	11/09/92							
Magnesium	11/11/92							
Manganese	11/09/92							
Mercury	11/13/92							
Nickel	11/09/92							
Potassium	11/11/92							
Selenium	11/09/92							
Silver	11/09/92							
Sodium	11/11/92							
Thallium	11/11/92							
Vanadium	11/10/92							
Zinc	11/09/92							

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# General Testing Corporation



A Full Service Environmental Laboratory

P E O P L E  
D E S I G N E D  
12/10/99

NOV. 25 1992

BUFFALO OFFICE  
DUNN CORPORATION

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Re: Atlas Steel

Dear Mr. Rick Rall

Enclosed are the results of the analysis requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger  
Customer Service Representative

Enc.

# General Testing Corporation

Effective 10/1/91

## GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range and reanalysis could not be performed.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.  
(Flag the entire batch - Inorganic analytes only)
- \* - Duplicate analysis not within control limits.  
(Flag the entire batch - Inorganic analysis only)
- Also used to qualify Organics QC data outside limits.  
(Only used on the QC summary sheets)
- M - Duplication injection precision not met (GFA only).
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.



COMPANY: DUNN CORPORATION  
Atlas Steel  
JOB #: R92/04781

#### VOLATILE ORGANICS

Dunn soil samples were analyzed for Target Compound List (TCL) volatile organics using SW-846 method 8240.

All the initial and continuing calibration criteria were met for all analytes.

The surrogate standard recoveries for Toluene-d8 and the internal standard area recoveries for Chlorobenzene-d5 on samples R92/04781-001 and 002 were outside QC limits. Subsequent reanalysis confirmed these problems and the data has been flagged "J" as being estimated. All other samples were within QC acceptance limits.

Due to matrix interferences, sample R92/04781-003 was analyzed as a medium level (a 1/125 dilution) thus raising the detection limits reported.

All QC data associated with these samples was acceptable.

#### SEMOVOLATILE ORGANICS

Dunn soil samples were analyzed for TCL semivolatile organics using SW-846 method 8270.

All the initial and continuing calibration criteria were met for this method.

All surrogate standard recoveries were within acceptance limits.

All QC data associated with these samples was acceptable.

Samples R92/04781-003 and 005 were analyzed at 1/10 dilutions due to matrix interferences in the extracts that the GPC cleanup did not remove.

#### PESTICIDES/PCBS

Dunn soil samples were analyzed for TCL Pesticides and PCBs using method 8080 from SW-846.

The recoveries for the surrogate standard Dibutylchloroendate could not be determined on sample R92/04781-005 and was outside QC limits on sample R92/04781-003 due to matrix interferences and both have been flagged with a "\*". However, the recoveries for the second surrogate, Tetrachloro-m-xylene, were acceptable.

# General Testing Corporation

DUNN - ATLAS R92/04781

Due to matrix interferences, all samples were analyzed at 1/10 dilutions or in the case of sample R92/04781-005 some analytes had to be quantitated from a 1/100 dilution.

No other analytical or QC problems were encountered with this analysis.

## INORGANIC ANALYSIS

Dunn soil samples were analyzed for the Target Analyte List of metals and Total Cyanide using approved SW-846 methodologies.

The Antimony, Copper and Manganese results for all samples have been flagged with a "N" because the matrix spike recovery performed on sample R92/04781-001 was outside QC acceptance limits. The Calcium, Copper, Iron, Manganese, and Zinc results have been flagged with an "\*" because the % relative error from the duplicate analysis performed on sample R92/04781-001 was outside QC limits.

No other analytical or QC problems were encountered with these analyses.



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 25 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:	-001	-002	-003	-004
Location:	ATL-TP3-3'	ATL-TP7-	ATL-TP33-	ATL-SS-1
	5-6'	4-6'		
Date Collected:	POL	10/30/92	10/30/92	10/30/92
Time Collected:		10:30	11:50	15:10
				08:45
Solids, %		84.8	76.6	76.8
Antimony	5.00	5.90	UN  6.53	UN  6.51
Aluminum	10.0	5910	7140	3570
Arsenic	0.500	4.52	8.19	1.88
Barium	0.500	21.2	29.5	15.2
Beryllium	0.500	0.590	U  0.653	U  0.651
Cadmium	0.500	0.590	U  0.653	U  0.651
Calcium	50.0	885	* 2570	* 411
Chromium	1.00	10.5	12.8	5.35
Cobalt	5.00	5.90	U  6.53	U  6.51
Copper	1.00	24.6	*N  19.2	*N  8.84
Iron	5.00	20200	* 18900	* 17100
Lead	5.00	28.8	20.8	10.7
Magnesium	50.0	241	956	185
Manganese	0.500	217	*N  422	*N  271
Mercury	0.100	0.118	U  0.131	U  0.130
Nickel	4.00	11.7	11.4	5.21
Potassium	50.0	524	779	514
Selenium	0.500	0.590	U  0.653	U  0.651
Silver	1.00	1.18	U  1.30	U  1.30
Sodium	50.0	99.4	130	83.3
Thallium	5.00	5.90	U  6.53	U  6.51
Vanadium	5.00	6.19	* 8.93	* 6.51
Zinc	1.00	20.5	29.6	10.0
Cyanide, Total		1.11	U  1.31	U  1.29
				U  1.20

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LABORATORY REPORT

Job No: R92/04781

Date: NOV. 25 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #: \_\_\_\_\_

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:		-005				
Location:		ATL-SS-2				
Date Collected:	PQL	11/02/92				
Time Collected:		09:00				
-----	-----	-----	-----	-----	-----	-----
Solids, %		81.6				
Antimony	5.00	14.2	N			
Aluminum	10.0	3210				
Arsenic	0.500	47.3				
Barium	0.500	25.0				
Beryllium	0.500	3.27				
Cadmium	0.500	70.1				
Calcium	50.0	3530	*			
Chromium	1.00	3820				
Cobalt	5.00	17.3				
Copper	1.00	890	*N			
Iron	5.00	273000	*			
Lead	5.00	5550				
Magnesium	50.0	1180				
Manganese	0.500	29300				
Mercury	0.100	0.985				
Nickel	4.00	325				
Potassium	50.0	944				
Selenium	0.500	4.07				
Silver	1.00	15.3				
Sodium	50.0	812				
Thallium	5.00	6.13	U			
Vanadium	5.00	85.8	*			
Zinc	1.00	8500				
Cyanide, Total		1.22	U			



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

## Received

: 11/03/92

P.O. #:

## TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3'	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
<hr/>								
Date Analyzed:	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92			
Dilution:	1	1	125	1	1			
Chloromethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Bromomethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Vinyl Chloride	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Chloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Methylene Chloride	17 J	8.7 J	810 U	9.2	19			
Acetone	43 J	48 J	1600 U	14	15			
Carbon Disulfide	12 UJ	13 UJ	1600 U	13 U	12 U			
Vinyl Acetate	12 UJ	13 UJ	1600 U	13 U	12 U			
1,1-Dichloroethene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,1-Dichloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
trans-1,2-Dichloroethene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
cis-1,2-Dichloroethene	8.7 J	6.5 UJ	810 U	6.4 U	6.1 U			
Chloroform	8.0 J	6.5 UJ	810 U	6.4 U	6.1 U			
2-Butanone (MEK)	12 UJ	13 UJ	1600 U	13 U	12 U			
1,2-Dichloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,1,1-Trichloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Carbon Tetrachloride	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Bromodichloromethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,2-Dichloropropane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,3-Dichloropropene-Trans	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Trichloroethene	11 J	6.5 UJ	810 U	6.4 U	6.1 U			
Dibromochloromethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,1,2-Trichloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Benzene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,3-Dichloropropene(Cis)	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Bromoform	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
4-Methyl-2-pentanone(MIBK)	12 UJ	13 UJ	1600 U	13 U	12 U			
2-Hexanone	12 UJ	13 UJ	1600 U	13 U	12 U			
Tetrachloroethene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
1,1,2-Tetrachloroethane	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Toluene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Chlorobenzene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			

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A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
=====								
Date Analyzed:	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92			
Dilution:	1	1	125	1	1			
Ethylbenzene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Styrene	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Total Xylene (o,m,p)	5.9 UJ	6.5 UJ	810 U	6.4 U	6.1 U			
Surrogate Standard Recoveries								
1,2-Dichloroethane-d4 (Acceptance limits: 70-121%)	95	98	106	101	98			
Toluene d8 (Acceptance limits 81-117%)	131 *	131 *	101	105	105			
4-Bromofluorobenzene (Acceptance limits 74-121%)	77	74	111	93	96			

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
=====								
Date Extracted:	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92			
Date Analyzed:	11/17/92	11/17/92	11/18/92	11/17/92	11/17/92			
Dilution:	1	1	10	1	10			
Phenol	780 U	870 U	8700 U	860 U	8100 U			
2-Chlorophenol	780 U	870 U	8700 U	860 U	8100 U			
2-Nitrophenol	780 U	870 U	8700 U	860 U	8100 U			
2,4-Dimethylphenol	780 U	870 U	8700 U	860 U	8100 U			
2,4-Dichlorophenol	780 U	870 U	8700 U	860 U	8100 U			
4-Chloro-3-methylphenol	780 U	870 U	8700 U	860 U	8100 U			
2,4,6-Trichlorophenol	780 U	870 U	8700 U	860 U	8100 U			
2,4-Dinitrophenol	1600 U	1700 U	17000 U	1700 U	16000 U			
4-Nitrophenol	1600 U	1700 U	17000 U	1700 U	16000 U			
2-Methyl-4,6-dinitrophenol	1600 U	1700 U	17000 U	1700 U	16000 U			
Pentachlorophenol	1600 U	1700 U	17000 U	1700 U	16000 U			
2-Methylphenol	780 U	870 U	8700 U	860 U	8100 U			
4-Methylphenol	780 U	870 U	8700 U	860 U	8100 U			
Benzoic Acid	3900 U	4300 U	43000 U	4300 U	41000 U			
2,4,5-Trichlorophenol	780 U	870 U	8700 U	860 U	8100 U			
SURROGATE STANDARD RECOVERIES								
	-----	-----	-----	-----	-----			
2-Fluorophenol	90	83	77	82	66			
(Acceptance Limits: 21-100%)								
Phenol-d6	97	92	84	91	72			
(Acceptance Limits: 10-94%)								
2,4,6-TriBromophenol	97	109	78	84	50			
(Acceptance Limits: 10-123%)								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3'	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
<hr/>								
Date Extracted:	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92			
Date Analyzed:	11/17/92	11/17/92	11/18/92	11/17/92	11/17/92			
Dilution:	1	1	10	1	10			
N-Nitrosodimethylamine	390 U	430 U	4300 U	430 U	4100 U			
Bis(2-chloroethyl) ether	390 U	430 U	4300 U	430 U	4:00 U			
1,3 Dichlorobenzene	390 U	430 U	4300 U	430 U	4100 U			
1,4 Dichlorobenzene	390 U	430 U	4300 U	430 U	4100 U			
1,2 Dichlorobenzene	390 U	430 U	4300 U	430 U	4100 U			
bis(-2-chloroisopropyl)ether	390 U	430 U	4300 U	430 U	4100 U			
N-Nitroso-Di-n-propylamine	390 U	430 U	4300 U	430 U	4100 U			
Hexachloroethane	390 U	430 U	4300 U	430 U	4100 U			
Nitrobenzene	390 U	430 U	4300 U	430 U	4100 U			
Isophorone	390 U	430 U	4300 U	430 U	4100 U			
bis(-2-chloroethoxy)methane	390 U	430 U	4300 U	430 U	4100 U			
1,2,4-Trichlorobenzene	390 U	430 U	4300 U	430 U	4100 U			
Naphthalene	390 U	430 U	4300 U	430 U	4100 U			
Hexachlorobutadiene	390 U	430 U	4300 U	430 U	4100 U			
Hexachlorocyclopentadiene	390 U	430 U	4300 U	430 U	4100 U			
2-Chloronaphthalene	390 U	430 U	4300 U	430 U	4100 U			
Dimethyl phthalate	390 U	430 U	4300 U	430 U	4100 U			
Acenaphthylene	390 U	430 U	4300 U	430 U	4100 U			
Acenaphthene	390 U	430 U	4300 U	430 U	6200			
2,4-Dinitrotoluene	390 U	430 U	4300 U	430 U	4100 U			
2,6-Dinitrotoluene	390 U	430 U	4300 U	430 U	4100 U			
Diethyl phthalate	390 U	430 U	4300 U	430 U	4100 U			
4-Chlorophenyl-phenyl-ether	390 U	430 U	4300 U	430 U	4100 U			
Fluorene	390 U	430 U	4300 U	430 U	11000			
1,2-Diphenylhydrazine	390 U	430 U	4300 U	430 U	4100 U			
N-Nitrosodiphenylamine	390 U	430 U	4300 U	430 U	4100 U			
4-Bromophenyl-phenylether	390 U	430 U	4300 U	430 U	4100 U			
Hexachlorobenzene	390 U	430 U	4300 U	430 U	4100 U			
Phenanthrene	390 U	430 U	5100	430 U	62000			
Anthracene	390 U	430 U	4300 U	430 U	18000			
Di-n-butyl phthalate	390 U	430 U	4300 U	430 U	4100 U			
Benzidine	3900 U	4300 U	43000 U	4300 U	41000 U			
Fluoranthene	390 U	430 U	4300 U	430 U	73000			
Pyrene	390 U	430 U	4300 U	430 U	51000			



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job Number: R92/04781

Date: NOV. 23 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
===== Date Extracted:	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92			
Date Analyzed:	11/17/92	11/17/92	11/18/92	11/17/92	11/17/92			
Dilution:	1	1	10	1	10			
Butyl benzyl phthalate	390 U	430 U	4300 U	430 U	4100 U			
3,3'-Dichlorobenzidine	390 U	430 U	4300 U	430 U	4100 U			
Benzo(a)anthracene	390 U	430 U	4300 U	430 U	34000			
Bis(2-ethylhexyl)phthalate	390 U	430 U	4300 U	430 U	4100 U			
Chrysene	390 U	430 U	4300 U	430 U	30000			
Di-n-octyl phthalate	390 U	430 U	4300 U	430 U	4100 U			
Benzo(b)Fluoranthene	390 U	770	4300 U	430 U	32000			
Benzo(k)fluoranthene	390 U	430 U	4300 U	430 U	28000			
Benzo(a)pyrene	390 U	430 U	4300 U	430 U	33000			
Indeno(1,2,3-cd)pyrene	390 U	430 U	4300 U	430 U	12000			
Dibenzo(a,h)anthracene	390 U	430 U	4300 U	430 U	4100 U			
Benzo(g,h,i)perylene	390 U	430 U	4300 U	430 U	11000			
Benzyl Alcohol	390 U	430 U	4300 U	430 U	4100 U			
4-Chloroaniline	390 U	430 U	4300 U	430 U	4100 U			
2-Methyl Naphthalene	390 U	430 U	4300 U	430 U	4100 U			
2-Nitroaniline	390 U	430 U	4300 U	430 U	4100 U			
3-Nitroaniline	390 U	430 U	4300 U	430 U	4100 U			
Dibenzofuran	390 U	430 U	4300 U	430 U	4100 U			
4-Nitroaniline	390 U	430 U	4300 U	430 U	4100 U			
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	82	76	81	76	51			
(Acceptance Limits: 23-120%)								
2-Fluorobiphenyl	93	92	96	89	77			
(Acceptance Limits: 30-115%)								
Terphenyl-d14	101	105	99	93	71			
(Acceptance Limits: 18-137%)								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR parts #136 &amp; #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

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Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3'	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
	5-6'	4-6'						
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
<hr/>								
Date Extracted:	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92			
Date Analyzed:	11/18/92	11/18/92	11/18/92	11/18/92	11/18/92			
Dilution:	10	10	10	10	10, 100			
alpha-BHC	24 U	26 U	26 U	26 U	25 U			
beta-BHC	24 U	26 U	26 U	26 U	25 U			
gamma-BHC (Lindane)	24 U	26 U	26 U	26 U	240 U			
Heptachlor	24 U	26 U	26 U	26 U	240 U			
delta-BHC	24 U	26 U	26 U	26 U	25 U			
Aldrin	24 U	26 U	26 U	26 U	25 U			
Heptachlor epoxide	24 U	26 U	26 U	26 U	240 U			
alpha-Endosulfan	24 U	26 U	26 U	26 U	25 U			
4,4'-DDE	24 U	26 U	26 U	26 U	25 U			
Dieldrin	24 U	26 U	26 U	26 U	240 U			
Endrin	24 U	26 U	26 U	26 U	240 U			
4,4'-TDE (DDD)	24 U	26 U	26 U	26 U	240 U			
beta-Endosulfan	47 U	52 U	52 U	51 U	490 U			
4,4'-DDT	47 U	52 U	52 U	51 U	49 U			
Endrin Aldehyde	47 U	52 U	52 U	51 U	49 U			
Endosulfan Sulfate	47 U	52 U	52 U	51 U	49 U			
Methoxychlor	94 U	100 U	100 U	100 U	980 U			
Endrin Ketone	47 U	52 U	52 U	51 U	490 U			
Chlordane	94 U	100 U	100 U	100 U	98 U			
Toxaphene	470 U	520 U	520 U	510 U	490 U			
PCB 1016	240 U	260 U	260 U	260 U	240 U			
PCB 1221	240 U	260 U	260 U	260 U	240 U			
PCB 1232	240 U	260 U	260 U	260 U	240 U			
PCB 1242	240 U	260 U	260 U	260 U	240 U			
PCB 1248	240 U	260 U	260 U	260 U	240 U			
PCB 1254	240 U	260 U	260 U	260 U	240 U			
PCB 1260	240 U	260 U	260 U	260 U	240 U			

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

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A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference:

Atlas Steel

Received

: 11/03/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample:	-001	-002	-003	-004	-005			
Location:	ATL-TP3-3'	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2			
		5-6'	4-6'					
Date Collected:	10/30/92	10/30/92	10/30/92	11/02/92	11/02/92			
Time Collected:	10:30	11:50	15:10	08:45	09:00			
<hr/>								
SURROGATE STANDARD RECOVERY								
% Recovery								
Dibutylchlorendate (Acceptance Limits: 24-150%)	126	140	151 *	118	*			
Tetrachloro-meta-xylene (Acceptance Limits: 60-150%)	116	120	115	114	114			

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-006	-007									
Location:	LAB METH	LAB METH									
	BLANK	BLANK									
Date Collected:	--	--									
Time Collected:	--	--									
=====											
Date Analyzed:	11/11/92	11/11/92									
Dilution:	1	125									
Chloromethane	5.0 u	630 u									
Bromomethane	5.0 u	630 u									
Vinyl Chloride	5.0 u	630 u									
Chloroethane	5.0 u	630 u									
Methylene Chloride	5.0 u	630 u									
Acetone	10 u	1300 u									
Carbon Disulfide	10 u	1300 u									
Vinyl Acetate	10 u	1300 u									
1,1-Dichloroethene	5.0 u	630 u									
1,1-Dichloroethane	5.0 u	630 u									
trans-1,2-Dichloroethene	5.0 u	630 u									
cis-1,2-Dichloroethene	5.0 u	630 u									
Chloroform	5.0 u	630 u									
2-Butanone (MEK)	10 u	1300 u									
1,2-Dichloroethane	5.0 u	630 u									
1,1,1-Trichloroethane	5.0 u	630 u									
Carbon Tetrachloride	5.0 u	630 u									
Bromodichloromethane	5.0 u	630 u									
1,2-Dichloropropane	5.0 u	630 u									
1,3-Dichloropropene-Trans	5.0 u	630 u									
Trichloroethene	5.0 u	630 u									
Dibromochloromethane	5.0 u	630 u									
1,1,2-Trichloroethane	5.0 u	630 u									
Benzene	5.0 u	630 u									
1,3-Dichloropropene(Cis)	5.0 u	630 u									
Bromoform	5.0 u	630 u									
4-Methyl-2-pentanone(MIBK)	10 u	1300 u									
2-Hexanone	10 u	1300 u									
Tetrachloroethene	5.0 u	630 u									
1,1,2-Tetrachloroethane	5.0 u	630 u									
Toluene	5.0 u	630 u									
Chlorobenzene	5.0 u	630 u									

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A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04781

Date: NOV: 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-006	-007									
Location:	LAB METH	LAB METH									
	BLANK	BLANK									
Date Collected:	--	--									
Time Collected:	--	--									
<hr/>											
Date Analyzed:	11/11/92	11/11/92									
Dilution:	1	125									
Ethylbenzene	5.0 U	630 U									
Styrene	5.0 U	630 U									
Total Xylene (o,m,p)	5.0 U	630 U									
<hr/>											
Surrogate Standard Recoveries											
1,2-Dichloroethane-d4	100	104									
(Acceptance Limits: 70-121%)											
Toluene d8	99	98									
(Acceptance limits 81-117%)											
4-Bromofluorobenzene	104	105									
(Acceptance limits 74-121%)											

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801



A handwritten signature in black ink, appearing to read "Michael K. Pennington". The signature is written over a horizontal line.

Laboratory Director



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-006										
Location:	LAB METH										
	BLANK										
Date Collected:	--										
Time Collected:	--										
<hr/>											
Date Extracted:	11/06/92										
Date Analyzed:	11/17/92										
Dilution:	1										
Phenol	670 U										
2-Chlorophenol	670 U										
2-Nitrophenol	670 U										
2,4-Dimethylphenol	670 U										
2,4-Dichlorophenol	670 U										
4-Chloro-3-methylphenol	670 U										
2,4,6-Trichlorophenol	670 U										
2,4-Dinitrophenol	1300 U										
4-Nitrophenol	1300 U										
2-Methyl-4,6-dinitrophenol	1300 U										
Pentachlorophenol	1300 U										
2-Methylphenol	670 U										
4-Methylphenol	670 U										
Benzoic Acid	3300 U										
2,4,5-Trichlorophenol	670 U										
<hr/>											
SURROGATE STANDARD RECOVERIES											
2-Fluorophenol	74										
(Acceptance Limits: 21-100%)											
Phenol-d6	78										
(Acceptance Limits: 10-94%)											
2,4,6-Tribromophenol	81										
(Acceptance Limits: 10-123%)											

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-006								
Location:	LAB METH								
	BLANK								
Date Collected:	--								
Time Collected:	--								
=====									
Date Extracted:	11/06/92								
Date Analyzed:	11/17/92								
Dilution:	1								
N-Nitrosodimethylamine	330 U								
Bis(2-chloroethyl) ether	330 U								
1,3 Dichlorobenzene	330 U								
1,4 Dichlorobenzene	330 U								
1,2 Dichlorobenzene	330 U								
bis(-2-chloroisopropyl)ether	330 U								
N-Nitroso-Di-n-propylamine	330 U								
Hexachloroethane	330 U								
Nitrobenzene	330 U								
Isophorone	330 U								
bis(-2-chloroethoxy)methane	330 U								
1,2,4-Trichlorobenzene	330 U								
Naphthalene	330 U								
Hexachlorobutadiene	330 U								
Hexachlorocyclopentadiene	330 U								
2-Chloronaphthalene	330 U								
Dimethyl phthalate	330 U								
Acenaphthylene	330 U								
Acenaphthene	330 U								
2,4-Dinitrotoluene	330 U								
2,6-Dinitrotoluene	330 U								
Diethyl phthalate	330 U								
4-Chlorophenyl-phenyl-ether	330 U								
Fluorene	330 U								
1,2-Diphenylhydrazine	330 U								
N-Nitrosodiphenylamine	330 U								
4-Bromophenyl-phenylether	330 U								
Hexachlorobenzene	330 U								
Phenanthrene	330 U								
Anthracene	330 U								
Di-n-butyl phthalate	330 U								
Benzidine	3300 U								
Fluoranthene	330 U								
Pyrene	330 U								

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A Full Service Environmental Laboratory

## LABORATORY REPORT

Job Number: R92/04781

Date: NOV. 23 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

## Sample(s) Reference

Atlas Steel

Received

: 11/03/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Wet Wt.

Sample:	-006										
Location:	LAB METH										
	BLANK										
Date Collected:	--										
Time Collected:	--										
<hr/>											
Date Extracted:	11/06/92										
Date Analyzed:	11/17/92										
Dilution:	1										
Butyl benzyl phthalate	330 U										
3,3'-Dichlorobenzidine	330 U										
Benzo(a)anthracene	330 U										
Bis(2-ethylhexyl)phthalate	330 U										
Chrysene	330 U										
Di-n-octyl phthalate	330 U										
Benzo(b)Fluoranthene	330 U										
Benzo(k)fluoranthene	330 U										
Benzo(a)pyrene	330 U										
Indeno(1,2,3-cd)pyrene	330 U										
Dibenzo(a,h)anthracene	330 U										
Benzo(g,h,i)perylene	330 U										
Benzyl Alcohol	330 U										
4-Chloroaniline	330 U										
2-Methyl Naphthalene	330 U										
2-Nitroaniline	330 U										
3-Nitroaniline	330 U										
Dibenzofuran	330 U										
4-Nitroaniline	330 U										
<hr/>											
SURROGATE STANDARD RECOVERIES											
Nitrobenzene-d5	67										
(Acceptance Limits: 23-120%)											
2-Fluorobiphenyl	79										
(Acceptance Limits: 30-115%)											
Terphenyl-d14	92										
(Acceptance Limits: 18-137%)											

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 &amp; #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801.

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

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Michael F. Penn  
Laboratory Director

**General  
Testing  
Corporation**



A Full Service Environmental Laboratory

**LABORATORY REPORT**

Job No: R92/04781

Date: NOV. 23 1992

**Client:**

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

**Sample(s) Reference**

Atlas Steel

Received : 11/03/92

P.O. #:

**ANALYSIS \* BY GC METHOD 8080**

**ANALYTICAL RESULTS - ug/kg Wet Wt.**

Sample:	-006								
Location:	LAB METH								
	BLANK								
Date Collected:	--								
Time Collected:	--								
<hr/>									
Date Extracted:	11/06/92								
Date Analyzed:	11/18/92								
Dilution:	10								
alpha-BHC	20 u								
beta-BHC	20 u								
gamma-BHC (Lindane)	20 u								
Heptachlor	20 u								
delta-BHC	20 u								
Aldrin	20 u								
Heptachlor epoxide	20 u								
alpha-Endosulfan	20 u								
4,4'-DDE	20 u								
Dieldrin	20 u								
Endrin	20 u								
4,4'-TDE (DDD)	20 u								
beta-Endosulfan	40 u								
4,4'-DDT	40 u								
Endrin Aldehyde	40 u								
Endosulfan Sulfate	40 u								
Methoxychlor	80 u								
Endrin Ketone	40 u								
Chlordane	80 u								
Toxaphene	400 u								
PCB 1016	200 u								
PCB 1221	200 u								
PCB 1232	200 u								
PCB 1242	200 u								
PCB 1248	200 u								
PCB 1254	200 u								
PCB 1260	200 u								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

Sample(s) Reference:

Atlas Steel

Received

: 11/03/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample: | -006 | | | | | | |  
Location: | LAB METH | | | | | | |  
| BLANK | | | | | | |  
Date Collected: | -- | | | | | | |  
Time Collected: | -- | | | | | | |

SURROGATE STANDARD RECOVERY

% Recovery

Dibutylchloroendate | 148  
(Acceptance Limits: 24-150%)

Tetrachloro-meta-xylene | 127  
(Acceptance Limits: 60-150%)

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

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Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04781

Date: NOV. 23 1992

Client:

Dunn Corporation

Sample(s) Reference

Atlas Steel

Date Received: 11/03/92

Date Sample Taken: 10/30, 11/02/92

LABORATORY CHRONICLE  
DATE ANALYZED

Sample:	-001	-002	-003	-004	-005						
Location:	ATL-TP3-3	ATL-TP7-	ATL-TP33-	ATL-SS-1	ATL-SS-2						
	5-6'	4-6'									
Solids, %	11/04/92	11/04/92	11/04/92	11/04/92	11/04/92						
Aluminum	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Antimony	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Arsenic	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Barium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Beryllium	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Cadmium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Calcium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Chromium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Cobalt	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Copper	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Iron	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Lead	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Magnesium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Manganese	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Mercury	11/06/92	11/06/92	11/06/92	11/06/92	11/06/92						
Nickel	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Potassium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Selenium	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Silver	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Sodium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Thallium	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						
Vanadium	11/10/92	11/10/92	11/10/92	11/10/92	11/10/92						
Zinc	11/09/92	11/09/92	11/09/92	11/09/92	11/09/92						
Cyanide, Total	11/11/92	11/11/92	11/11/92	11/11/92	11/11/92						

101



# DUNN GEOSCIENCE CORPORATION

**495 COMMERCIAL DRIVE  
AMHERST, NEW YORK 14261  
(716) 891-3860**

R9.2 / 4781

**CHAIN OF CUSTODY RECORD**



# DUNN GEOSCIENCE CORPORATION

**495 COMMERCE DRIVE  
AMHERST, NEW YORK 14265  
(716) 691-3068**

**CHAIN OF CUSTODY RECORD**

R92/4781

RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
<i>Hall</i>	11/19/03 4:00	K. Nagy COMPANY GTC			
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	Method of Shipment	Special Handling Requirements	
COMPANY	11/3/03 0900	Tom Hastings COMPANY			

# WELL DEVELOPMENT LOG

DUNN GEOSCIENCE ENGINEERING CO. P.C.  
 12 Metro Park Rd.  
 Albany, N.Y. 12205 (518)458-1313

Well I.D.: MW-1  
 Project Name: ATLAS STEEL  
 Project No.: 40093-00174  
 Personnel: J. TAFT  
 Date: 11-6-92  
 Time Start: 10:30  
 Time Finish: 11:10

## WELL INFORMATION

Wellscreen Diameter: 2.0"  
 Borehole Diameter: 8.0"  
 Depth to Water: 4.80'  
 Total Well Depth: 9.68'  
 Well Volume: 0.8 Gals

Riser Diameter: 2.0"  
 Stratigraphic Unit Screened: SILT+CLAY/FILL  
 Development Method: Bailer (PVC)  
 Decon. Procedures: Alconox Wash + DI Rinse  
 Total Volume Removed: 8.0 Gals  
 Flow Rate: —

## DEVELOPMENT INFORMATION

Parameters	Gallons Evacuated			
	0	2.0	6.0	8.0
pH	—	—	—	—
Conductivity ( $\mu$ mhos/cm)	—	—	—	—
Temperature ( $^{\circ}$ C)	—	—	—	—
Turbidity (NTU)	>200	>200	>200	>200
Color	OK Br	OK Br	OK Br	OK Br
Odor	None	None	None	None

Comments: Good recharge noted - well highly turbid

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# WELL DEVELOPMENT LOG

DUNN GEOSCIENCE ENGINEERING CO. P.C.  
 12 Metro Park Rd.  
 Albany, N.Y. 12205 (518)458-1313

Well I.D.: MW-2  
 Project Name: ATLAS STEEL  
 Project No.: 40093-00174  
 Personnel: J. TAFT  
 Date: 11-6-92  
 Time Start: 11:20  
 Time Finish: 12:00

## WELL INFORMATION

Wellscreen Diameter: 2.0"  
 Borehole Diameter: 8.0"  
 Depth to Water: 2.64'  
 Total Well Depth: 9.47'  
 Well Volume: 1.1 Gals

Riser Diameter: 2.0"  
 Stratigraphic Unit Screened: SILT & CLAY / FILL  
 Development Method: Bailey (PVC)  
 Decon. Procedures: Alconox wash + DI Rinse  
 Total Volume Removed: 10 Gals  
 Flow Rate: —

## DEVELOPMENT INFORMATION

Parameters	Gallons Evacuated			
	0	2 Gals	6 Gals	10 gals
pH	—	—	—	—
Conductivity ( $\mu$ mhos/cm)	—	—	—	—
Temperature ( $^{\circ}$ C)	—	—	—	—
Turbidity (NTU)	>200	>200	>200	>200
Color	Br	Br	Br	Br
Odor	None	None	None	None

Comments: Moderate to slow recharge noted - Able to bail well dry

# WELL DEVELOPMENT LOG

DUNN GEOSCIENCE ENGINEERING CO. P.C.  
 12 Metro Park Rd.  
 Albany, N.Y. 12205 (518)458-1313

Well I.D.: MW-3  
 Project Name: ATLAS STEEL  
 Project No.: 40093-00174  
 Personnel: J. TAFT  
 Date: 11-6-92  
 Time Start: 12:15  
 Time Finish: 1:00

## WELL INFORMATION

Wellscreen Diameter: 2.0"  
 Borehole Diameter: 8.0"  
 Depth to Water: 2.2'  
 Total Well Depth: 9.0'  
 Well Volume: 1.1 Gals

Riser Diameter: 2.0"  
 Stratigraphic Unit Screened: FILL  
 Development Method: Bailer (PVC)  
 Decon. Procedures: Alconox Wash + DI Rinse  
 Total Volume Removed: 10.0 Gals  
 Flow Rate: —

## DEVELOPMENT INFORMATION

Parameters	Gallons Evacuated			
	0	2 Gals	6 Gals	10 Gals
pH	—	—	—	—
Conductivity ( $\mu$ mhos/cm)	—	—	—	—
Temperature ( $^{\circ}$ C)	—	—	—	—
Turbidity (NTU)	>200	>200	>200	>200
Color	Ok gr	Ok gr	Ok gr	Ok gr
Odor	Petroleum	Petroleum	Petroleum	Petroleum

Comments: Very good recharge noted - Heavy sheen on water surface but no free product

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DUNN GEOSCIENCE CORPORATION  
Field Sampling Record

Sample ID	<u>ATL-MWI</u>	Date	<u>11-10-92</u>
Location		Project	<u>ATLAS STEEL SITE</u>
Samplers	<u>J. TAFT</u>	Project #	<u>40093-00174</u>
Client	<u>BENDERSON DEVELOPMENT</u>	Well Size/Type	<u>2.0" PVC MONITORING WELL</u>

I. WATER LEVEL MEASUREMENTS (from top of casing) IN FEET:

Total Well Depth	<u>9.68'</u>	Gals to Purge	<u>2.4</u>
Depth to Water	<u>5.00'</u>	Gals Actually Purged	<u>2.5</u>
Height of Water Column	<u>4.68'</u>	Gals/ft: 2"ID=0.16    4"ID=0.65    6"ID=1.47	
Gals of Standing Water	<u>0.8</u>		

II. WELL PURGING: Start 11:15 Stop 11:25 Discharge Rate (GPM) —  
 Equipment: Pump \_\_\_\_\_ Bailer X  
 Well behavior during purging: Good to moderate recharge noted

III. SAMPLE COLLECTION: Time 11:30 ID# ATL-MWI  
 Method: Bailer X Other \_\_\_\_\_  
 Containers 2-40 ml septum vials ; 3 - 1 QT Amber Glass ; 2 - 1 QT PLASTIC  
 Sample Appearance and Odor \_\_\_\_\_

IV. FIELD MEASUREMENTS:

Temp	<u>12.6 °C</u>	_____	_____	_____
pH	<u>6.72</u>	_____	_____	_____
Conductivity	<u>820 micro/m</u>	_____	_____	_____
Turbidity	<u>&gt;200 NTU</u>	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Weather	<u>Cloudy - 55 °F</u>	_____
Comments	<u> </u>	
_____	_____	
_____	_____	

DUNN GEOSCIENCE CORPORATION  
Field Sampling Record

Sample ID	<u>ATL-MW2</u>	Date	<u>11-10-92</u>
Location		Project	<u>ATLAS STEEL SITE</u>
Samplers	<u>J. TAFT</u>	Project #	<u>40093-00174</u>
Cilent	<u>BENDERSON DEVELOPMENT</u>	Well Size/Type	<u>2.0" PVC MONITORING WELL</u>

**I. WATER LEVEL MEASUREMENTS (from top of casing) IN FEET:**

Total Well Depth	<u>9.47'</u>	Gals to Purge	<u>3.0</u>
Depth to Water	<u>2.99'</u>	Gals Actually Purged	<u>2.0</u>
Height of Water Column	<u>6.48'</u>	Gals/ft: 2"ID=0.16    4"ID=0.65    6"ID=1.47	
Gals of Standing Water	<u>60</u>		

**II. WELL PURGING:** Start 11:55 Stop 12:05 Discharge Rate (GPM) —  
 Equipment: Pump \_\_\_\_\_ Bailer   
 Well behavior during purging: Moderate recharge noted - bailed well dry after 2 gals

**III. SAMPLE COLLECTION:** Time 12:15 ID# ATL-MW2  
 Method: Bailer  Other \_\_\_\_\_  
 Containers 2-40 ml septum vials ; 3-1 QT Amber Glass ; 2-1 QT PLASTIC  
 Sample Appearance and Odor \_\_\_\_\_

**IV. FIELD MEASUREMENTS:**

Temp	<u>13.1°C</u>	_____	_____	_____
pH	<u>7.05</u>	_____	_____	_____
Conductivity	<u>1118 micro/m</u>	_____	_____	_____
Turbidity	<u>&gt;200 NTU</u>	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Weather Cloudy - 55°F  
 Comments \_\_\_\_\_

DUNN GEOSCIENCE CORPORATION  
Field Sampling Record

Sample ID	<u>ATL-MW3</u>	Date	<u>11-10-92</u>
Location		Project	<u>ATLAS STEEL SITE</u>
Samplers	<u>J. TAFT</u>	Project #	<u>40093-00174</u>
Client	<u>BENDERSON DEVELOPMENT</u>	Well Size/Type	<u>2.0" PVC MONITORING WELL</u>

I. WATER LEVEL MEASUREMENTS (from top of casing) IN FEET:

Total Well Depth	<u>9.0'</u>	Gals to Purge	<u>3.3</u>
Depth to Water	<u>2.40'</u>	Gals Actually Purged	<u>4.0</u>
Height of Water Column	<u>6.60'</u>	Gals/ft: 2"ID=0.16    4"ID=0.65    6"ID=1.47	
Gals of Standing Water	<u>1.1</u>		

II. WELL PURGING: Start 12:25 Stop 12:35 Discharge Rate (GPM) \_\_\_\_\_  
 Equipment: Pump \_\_\_\_\_ Bailer   
 Well behavior during purging: Excellent recharge noted - Petroleum odor & heavy  
sheen observed - No free product

III. SAMPLE COLLECTION: Time 12:45 ID# ATL-MW3  
 Method: Bailer  Other \_\_\_\_\_  
 Containers 2-40 ml septum vials ; 3-1 QT Amber Glass ; 2-1 QT PLASTIC  
 Sample Appearance and Odor \_\_\_\_\_

IV. FIELD MEASUREMENTS:

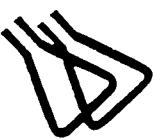
Temp	<u>12.5°C</u>	_____	_____	_____
pH	<u>7.32</u>	_____	_____	_____
Conductivity	<u>491 micro/m</u>	_____	_____	_____
Turbidity	<u>&gt;200</u>	_____	_____	_____

Weather Cloudy - 55°F  
 Comments \_\_\_\_\_

**APPENDIX F**

**Analytical Results**

General  
Testing  
Corporation



A Full Service Environmental Laboratory

DEC. 1 1992

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Dr.  
Amherst, New York 14428

R  
DECEMBER 1992  
E DUNN GEOSCIENCE

Re: Atlas Steel

Dear Mr. Rick Rall

Enclosed are the results of the analysis requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (716) 634-0454.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Kathy Wager

Kathy Wager  
Account Manager

Enc.

# General Testing Corporation

Effective 10/1/91

## GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range and reanalysis could not be performed.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.  
(Flag the entire batch - Inorganic analytes only)
- \* - Duplicate analysis not within control limits.  
(Flag the entire batch - Inorganic analysis only)
- Also used to qualify Organics QC data outside limits.  
(Only used on the QC summary sheets)
- M - Duplication injection precision not met (GFA only).
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

# General Testing Corporation

COMPANY: DUNN CORPORATION  
Atlas Project  
JOB #: R92/04908

## VOLATILE ORGANICS

Dunn soil samples were analyzed for Target Compound List (TCL) volatile organics using SW-846 method 8240 except or sample R92/04908-001 which was analyzed for TCLP volatiles following a Zero Headspace Extraction using method 8240.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within QC acceptance limits.

No analytical or QC problems were encountered with these samples.

## SEMOVOLATILE ORGANICS

Dunn soil samples were analyzed for TCL semivolatile organics using SW-846 method 8270 except for sample R92/04908-001 which was analyzed for TCLP semivolatile organics following a TCLP extraction by method 8270.

All the initial and continuing calibration criteria were met for this method.

The surrogate standard recoveries for 2-Fluorophenol and Phenol-d6 on sample R92/04908-005 were outside QC acceptance limits due to matrix interferences. The analysis was repeated and again the surrogates were outside limits. The recoveries have been flagged with a "\*" and the acid extractable data has been flagged with a "J" as being estimated.

All QC data associated with these samples was acceptable.

Samples R92/04908-003 was analyzed at 1/10 dilutions due to high level of organics which caused matrix interferences in the extracts that the GPC cleanup did not remove. These dilutions resulted in proportionately higher detection limits.

# General Testing Corporation

DUNN - ATLAS R92/04908

## PESTICIDES/PCBS/HERBICIDES

Dunn soil samples were analyzed for TCL Pesticides and PCBs using method 8080 from SW-846 except for sample R92/04908-001 which was analyzed for TCLP Pesticides and Herbicides using methods 8080 and 8150 following a TCLP extraction.

The recovery for the surrogate standard Dibutylchlorendate (DBC) could not be determined on sample R92/04908-003 due to dilutions needed because of matrix interferences and have been flagged with a "D". The recoveries for the surrogate standard Tetrachloro-m-xylene (TCMX) were outside QC limits on samples R92/04908-004 and 006 due to matrix interferences and have been flagged with a "\*". However, the recoveries for the second surrogate, DBC, were acceptable therefore the data was accepted.

Due to matrix interferences, all samples were analyzed at 1/10 dilutions or in the case of sample R92/04908-003, some analytes had to be quantitated from a 1/100 dilution.

No other analytical or QC problems were encountered with these analysis.

## INORGANIC ANALYSIS

Dunn soil samples were analyzed for the Target Analyte List of metals and Total Cyanide using approved SW-846 methodologies except for sample R92/04908-001 which was analyzed for the TCLP metals following the TCLP extraction.

The Antimony and Potassium results for samples R92/04908-002, 004, 005, and 006 have been flagged with a "N" because the matrix spike recovery performed on sample R92/04908-002 was outside QC limits. Also the Lead and Magnesium results for sample R92/04908-003 have been flagged with a "N" because the matrix spike performed on sample -003 was outside QC limits. Beryllium, Copper, Manganese, and Nickel results for sample R92/04908-003 have been flagged with an "\*" because the duplicate analysis performed on sample -003 was outside QC limits for %RE.

No other analytical or QC problems were encountered with these analyses.



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-003							
Location:	ATL-SED1							
Date Collected:	11/10/92							
Time Collected:	PQL	11:00						
Date Analyzed:	11/24/92							
Dilution:	1							
Chloromethane	5.0	6.5 U						
Bromomethane	5.0	6.5 U						
Vinyl Chloride	5.0	6.5 U						
Chloroethane	5.0	6.5 U						
Methylene Chloride	5.0	6.5 U						
Acetone	10	13 U						
Carbon Disulfide	10	13 U						
Vinyl Acetate	10	13 U						
1,1-Dichloroethene	5.0	6.5 U						
1,1-Dichloroethane	5.0	6.5 U						
trans-1,2-Dichloroethene	5.0	6.5 U						
cis-1,2-Dichloroethene	5.0	6.5 U						
Chloroform	5.0	6.5 U						
2-Butanone (MEK)	10	13 U						
1,2-Dichloroethane	5.0	6.5 U						
1,1,1-Trichloroethane	5.0	6.5 U						
Carbon Tetrachloride	5.0	6.5 U						
Bromodichloromethane	5.0	6.5 U						
1,2-Dichloropropane	5.0	6.5 U						
1,3-Dichloropropene-Trans	5.0	6.5 U						
Trichloroethene	5.0	6.5 U						
Dibromochloromethane	5.0	6.5 U						
1,1,2-Trichloroethane	5.0	6.5 U						
Benzene	5.0	6.5 U						
1,3-Dichloropropene(Cis)	5.0	6.5 U						
Bromoform	5.0	6.5 U						
4-Methyl-2-pentanone(MIBK)	10	13 U						
2-Hexanone	10	13 U						
Tetrachloroethene	5.0	6.5 U						
1,1,2,2-Tetrachloroethane	5.0	6.5 U						
Toluene	5.0	6.5 U						
Chlorobenzene	5.0	6.5 U						



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL VOLATILES BY EPA METHOD 8240\*

ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-003							
Location:	ATL-SED1							
Date Collected:	11/10/92							
Time Collected:	POL	11:00						
Date Analyzed:	11/24/92							
Dilution:	1							
Ethylbenzene	5.0	6.5 u						
Styrene	5.0	6.5 u						
Total Xylene (o,m,p)	5.0	6.5 u						
Surrogate Standard Recoveries								
1,2-Dichloroethane-d4	70-121	91						
Toluene d8	81-117	112						
4-Bromofluorobenzene	74-121	86						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

A handwritten signature in black ink, appearing to read "John F. Penny". The signature is fluid and cursive, with "John" and "F." being more formal initials-like strokes, while "Penny" is written more freely.

Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-003						
Location:	ATL-SED1						
Date Collected:	11/10/92						
Time Collected:	PQL	11:00					
Date Extracted:		11/16/92					
Date Analyzed:		11/30/92					
Dilution:		10					
Phenol	670	8700 u					
2-Chlorophenol	670	8700 u					
2-Nitrophenol	670	8700 u					
2,4-Dimethylphenol	670	8700 u					
2,4-Dichlorophenol	670	8700 u					
4-Chloro-3-methylphenol	670	8700 u					
2,4,6-Trichlorophenol	670	8700 u					
2,4-Dinitrophenol	1300	17000 u					
4-Nitrophenol	1300	17000 u					
2-Methyl-4,6-dinitrophenol	1300	17000 u					
Pentachlorophenol	1300	17000 u					
2-Methylphenol	670	8700 u					
4-Methylphenol	670	8700 u					
Benzoic Acid	3300	43000 u					
2,4,5-Trichlorophenol	670	8700 u					
SURROGATE STANDARD RECOVERIES							
2-Fluorophenol	25-121%	66					
Phenol-d6	24-113%	68					
2,4,6-TriBromophenol	19-122%	57					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

A handwritten signature in black ink, appearing to read "John F. Penn".

Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job Number: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-003							
Location:	ATL-SED1							
Date Collected:	11/10/92							
Time Collected:	PQL	11:00						
Date Extracted:	11/16/92							
Date Analyzed:	11/30/92							
Dilution:	10							
Butyl benzyl phthalate	330	4300 U						
3,3'-Dichlorobenzidine	330	4300 U						
Benzo(a)anthracene	330	160000						
Bis(2-ethylhexyl)phthalate	330	4300 U						
Chrysene	330	190000						
Di-n-octyl phthalate	330	4300 U						
Benzo(b)Fluoranthene	330	350000						
Benzo(k)fluoranthene	330	120000						
Benzo(a)pyrene	330	230000						
Indeno(1,2,3-cd)pyrene	330	45000						
Dibenzo(a,h)anthracene	330	15000						
Benzo(g,h,i)perylene	330	48000						
Benzyl Alcohol	330	4300 U						
4-Chloroaniline	330	4300 U						
2-Methyl Naphthalene	330	8300						
2-Nitroaniline	330	4300 U						
3-Nitroaniline	330	4300 U						
Dibenzofuran	330	17000						
4-Nitroaniline	330	4300 U						
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	23-120%	50						
2-Fluorobiphenyl	30-115%	78						
Terphenyl-d14	18-137%	134						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:	-003							
Location:	ATL-SED1							
Date Collected:	11/10/92							
Time Collected:	PQL	11:00						
-----	-----	-----	-----	-----	-----	-----	-----	-----
Date Extracted:	11/16/92							
Date Analyzed:	11/30/92							
Dilution:	10							
N-Nitrosodimethylamine	330	4300 U						
Bis(2-chloroethyl) ether	330	4300 U						
1,3 Dichlorobenzene	330	4300 U						
1,4 Dichlorobenzene	330	4300 U						
1,2 Dichlorobenzene	330	4300 U						
bis(-2-chloroisopropyl)ether	330	4300 U						
N-Nitroso-Di-n-propylamine	330	4300 U						
Hexachloroethane	330	4300 U						
Nitrobenzene	330	4300 U						
Isophorone	330	4300 U						
bis(-2-chloroethoxy)methane	330	4300 U						
1,2,4-Trichlorobenzene	330	4300 U						
Naphthalene	330	51000						
Hexachlorobutadiene	330	4300 U						
Hexachlorocyclopentadiene	330	4300 U						
2-Chloronaphthalene	330	4300 U						
Dimethyl phthalate	330	4300 U						
Acenaphthylene	330	4300 U						
Acenaphthene	330	39000						
2,4-Dinitrotoluene	330	43000 U						
2,6-Dinitrotoluene	330	4300 U						
Diethyl phthalate	330	4300 U						
4-Chlorophenyl-phenyl-ether	330	4300 U						
Fluorene	330	57000						
1,2-Diphenylhydrazine	330	4300 U						
N-Nitrosodiphenylamine	330	4300 U						
4-Bromophenyl-phenylether	330	4300 U						
Hexachlorobenzene	330	4300 U						
Phenanthrene	330	410000						
Anthracene	330	66000						
Di-n-butyl phthalate	330	4300 U						
Benzidine	3300	43000 U						
Fluoranthene	330	460000						
Pyrene	330	380000						



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

client:

**Sample(s) Reference**

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Atlas Project

Received : 11/10/92

TCL \* BY GC METHOD 8080

#### **ANALYTICAL RESULTS - ug/kg Dry Wt.**

Sample:		-003			
Location:		ATL-SED1			
Date Collected:		11/10/92			
Time Collected:	PQL	11:00			
Date Extracted:		11/16/92			
Date Analyzed:		11/26&12/1/92			
Dilution:		10, 100			
alpha-BHC	2.0	27 U			
beta-BHC	2.0	27 U			
gamma-BHC (Lindane)	2.0	270 U			
Heptachlor	2.0	27 U			
delta-BHC	2.0	27 U			
Aldrin	2.0	27 U			
Heptachlor epoxide	2.0	270 U			
alpha-Endosulfan	2.0	270 U			
4,4'-DDE	2.0	270 U			
Dieldrin	2.0	270 U			
Endrin	2.0	270 U			
4,4'-TDE (DDD)	2.0	270 U			
beta-Endosulfan	6.0	550 U			
4,4'-DDT	4.0	55 U			
Endrin Aldehyde	4.0	55 U			
Endosulfan Sulfate	4.0	55 U			
Methoxychlor	8.0	120 U			
Endrin Ketone	4.0	550 U			
Chlordane	8.0	120 U			
Toxaphene	40	590 U			
PCB 1016	20	300 U			
PCB 1221	20	300 U			
PCB 1232	20	300 U			
PCB 1242	20	300 U			
PCB 1248	20	300 U			
PCB 1254	20	300 U			
PCB 1260	20	300 U			

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY 10# in Rochester: 10145 NY 10# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:		-003			
Location:		ATL-SED1			
Date Collected:	PGL	11/10/92			
Time Collected:		11:00			
Cyanide, Total	1.0	1.30	U		
Solids, %		77.1			
Aluminum	10.0	4230			
Antimony	5.00	6.49	U		
Arsenic	0.500	0.669			
Barium	0.500	38.9			
Beryllium	2.50	1.10	*		
Cadmium	0.500	2.85			
Calcium	50.0	13000			
Chromium	1.00	45.4			
Cobalt	5.00	6.49	U		
Copper	1.00	71.5	*		
Iron	5.00	32800			
Lead	5.00	117	N		
Magnesium	50.0	2620	N		
Manganese	0.500	620	*		
Mercury	0.100	0.169			
Nickel	4.00	30.0	*		
Potassium	50.0	353			
Selenium	0.500	0.649	U		
Silver	1.00	1.30	U		
Sodium	50.0	232			
Thallium	5.00	6.49	U		
Vanadium	2.50	7.08			
Zinc	1.00	383			

  
Michael F. Penny  
Laboratory Director



## A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

### Client:

Mr. Rick Rail  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

**Sample(s) Reference**

Atlas Project

Received

: 11/10/92

P.O. #:

## ANALYTICAL RESULTS - ug/g Wet Wt

Sample:	-001						
Location:	ATL-WS1						
Date Collected:	11/10/92						
Time Collected:	10:20						
Corrosivity,mm/yr.	7.74						
Ignitability °C	>100						
Reactivity							
Total Available Cyanide	0.330 U						
Total Available Sulfide	6.14						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10165

NJ ID# in Rochester: 73331

N.J. ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

7.74 mm + 1.15 mm  
29 mm

9/24/20 237 mm

0.25 m +  
1 m

0.25 in / yr

Michael K. Pennsylvania  
Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCLP VOLATILES BY EPA METHOD 8240\*\*\* ANALYTICAL RESULTS - ug/l

Sample:	-001										
Location:	ATL-WS1										
Date Collected:	11/10/92										
Time Collected:	10:20										
	BIASED	UNBIASED	% RECOVERY								
Date Analyzed:	11/21/92										
Dilution:	1										
Benzene	50 U	50 U	102								
Carbon Tetrachloride	50 U	50 U	98								
Chlorobenzene	50 U	50 U	102								
Chloroform	50 U	50 U	102								
1,2-Dichloroethane	50 U	50 U	104								
1,1-Dichloroethene	50 U	50 U	112								
Methyl Ethyl Ketone	100 U	100 U	94								
Tetrachloroethene	50 U	50 U	102								
Trichloroethene	50 U	50 U	104								
Vinyl Chloride	50 U	50 U	104								
SURROGATE STANDARD RECOVERIES											
1,2-Dichloroethane-d4	97										
(Acceptance Limits: 76-114%)											
Toluene d8	98										
(Acceptance Limits: 88-110%)											
Bromofluorobenzene	99										
(Acceptance Limits: 86-115%)											

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

\*\*\*TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol. 55, No. 126,

June 29, 1990.

Data reported is biased on the above regulation.

Laboratory Director 



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCLP ACID EXTRACTABLES BY EPA METHOD 8270\*\*\* ANALYTICAL RESULTS - ug/l

Sample:	-001								
Location:	ATL-WS1								
Date Collected:	11/10/92								
Time Collected:	10:20								
	BIASED	UNBIASED	% RECOVERY						
Date Extracted:	11/18/92								
Date Analyzed:	11/19/92								
Dilution:	10								
m+p-cresol	100 U	100 U	30						
o-cresol	100 U	100 U	28						
Pentachlorophenol	200 U	200 U	110						
2,4,5-Trichlorophenol	100 U	100 U	39						
2,4,6-Trichlorophenol	100 U	100 U	83						
Surrogate Standard Recoveries:									
2-Fluorophenol	41								
(Acceptance Limits: 21-100%)									
Phenol-d6	28								
(Acceptance Limits: 10-94%)									
2,4,6-Tribromophenol	84								
(Acceptance Limits: 10-123%)									

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

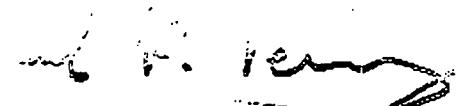
NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

\*\*\*TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol. 55, No. 126,  
June 29, 1990.

Data reported is biased on the above regulation.

  
Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCLP PESTICIDES-BY GC METHOD 8080 \*\*\* ANALYTICAL RESULTS - ug/l

Sample:	-001							
Location:	ATL-WS1							
Date Collected:	11/10/92							
Time Collected:	10:20							
	BIASED	UNBIASED	% RECOVERY					
Date Extracted:	11/18/92							
Date Analyzed:	11/21/92							
Dilution:	10							
Chlordane	20 U	20 U	97					
Endrin	5.0 U	5.0 U	83					
Heptachlor	5.0 U	5.0 U	81					
Heptachlor epoxide	5.0 U	5.0 U	84					
gamma-BHC (Lindane)	5.0 U	5.0 U	82					
Methoxychlor	20 U	20 U	88					
Toxaphene	--	100 U	--					
Surrogate Standard Recovery								
% Recovery								
Dibutylchloroendate	142							
(Acceptance Limits: 24-154)								
Tetrachloro-meta-xylene	91							
(Acceptance Limits: 60-150)								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

\*\*\*TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol. 55, No. 126,  
June 29, 1990.

Data reported is biased on the above regulation

  
J. Kenny  
Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCLP BASE NEUTRALS BY EPA METHOD 8270\*\*\* ANALYTICAL RESULTS - ug/l

Sample:	-001										
Location:	ATL-US1										
Date Collected:	11/10/92										
Time Collected:	10:20										
	BIASED	UNBIASED	% RECOVERY								
Date Extracted:	11/18/92										
Date Analyzed:	11/19/92										
Dilution:	10										
1,4-Dichlorobenzene	50 u	50 u	37								
2,4-Dinitrotoluene	50 u	50 u	42								
Hexachlorobenzene	50 u	50 u	50								
Hexachloroethane	50 u	50 u	32								
Nitrobenzene	50 u	50 u	40								
Pyridine	100 u	100 u	51								
Hexachloro-1,3-butadiene	50 u	50 u	38								
Surrogate Standard Recoveries:											
Nitrobenzene-d5	72										
(Acceptance Limits: 35-114%)											
2-Fluorobiphenyl	75										
(Acceptance Limits: 43-116%)											
Terphenyl-d14	87										
(Acceptance Limits: 33-141%)											

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

\*\*\*TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol. 55, No. 126,

June 29, 1990.

Data reported is biased on the above regulation.

Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference:

Atlas Project

Received

: 11/10/92

P.O. #:

ANALYSIS \* BY GC METHOD 8080

ANALYTICAL RESULTS - %

Sample:	-003						
Location:	ATL-SED1						
Date Collected:	11/10/92						
Time Collected:	LIMITS	11:00					

SURROGATE STANDARD RECOVERY

% Recovery

Dibutylchloroendate	24-150%	*					
Tetrachloro-meta-xylene	60-150%	95					

\*SW 846 Manual, Test Methods for Evaluating Solid Waste, 3rd Edition, 11/86.

NY LABORATORY CERTIFICATION ID#: 10145

NJ ID#: 73331 in Rochester;

NJ ID#: 02317 in Hackensack

A handwritten signature in black ink, appearing to read "R. Penn".

Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

**ANALYTICAL RESULTS - mg/l**

Sample:	-001										
Location:	ATL-WS1										
Date Collected:	11/10/92										
Time Collected:	10:20										
	BIASED	UNBIASED	% RECOVERY								
TCLP Extraction Metals ***											
Arsenic	0.500 U	0.500 U	90								
Barium	1.00 U	1.00 U	100								
Cadmium	0.100 U	0.100 U	91								
Chromium	0.100 U	0.100 U	100								
Lead	0.100 U	0.100 U	90								
Mercury	0.0020 U	0.0020 U	64								
Selenium	0.500 U	0.500 U	96								
Silver	0.100 U	0.100 U	95								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

\*\*\*TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol. 55, No. 126,  
June 29, 1990.

Data reported is biased on the above regulation.

Laboratory Director

## Dunn Geoscience Corp.

495 COMMERCE DRIVE  
AMHERST, NEW YORK 14150  
(716) 691-3866  
FAX (716) 691-3884

4908

Client Name: Henderson  
Project No.: 40093-0017A  
Site Location: Atlas Steel  
Sampler: Joe Taff

DGC Contact: Rick Rail  
Laboratory Contact:  
Lab Identification:  
Date Report Required:

Sample Identification	Date	Time	Sample Matrix	Collection Vessel	Lowering Device	# Sample Containers	Press	Comp. or Grab	Comment
TL-W51 (Set#1)	11-10-92	10:20	SOIL/WATER	-001		2 (QUARTS)	*	Grab	RCRA Waste Characteristics/TECP
TL-SW1 (Set#4)	"	10:45	Surface Water	-002	Glass Jar	7	*	Grab	TCL+TAL+CN
TL-SED1 (Set#1)	"	11:00	Sediment	-003	Trowel	5	*	Grab	" " "
TL-MW1 (Set#1)	"	11:30	Groundwater	-004	Bottle	7	*	Grab	" " "
TL-MW2 (Set#2)	"	12:15	"	-005	"	7	*	Grab	" " "
TL-MW3 (Set#3)	"	12:45	"	-006	"	7	*	Grab	" " "
<i>Strong petroleum odor - sheen</i>									
<i>10% HNO3 for Metals</i>									
<i>NaOH for Cyanide</i>									
<i>HCl for VOAs</i>									

Name	Affiliation	Date	Time	Name	Date	Time
Abandoned by:	<u>Paul Taff</u> DUNN	11-10-92		Received by Laboratory:		
Received by:	<u>K Wager</u> GTC	11-10-92	1:58	Samples Intact & Properly Preserved: Yes or No		
Abandoned by:				Laboratory Comments:		

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-10-92  
 PROJECT NO.: 40093-00174 TIME: 11:00 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID: \_\_\_\_\_  
 SAMPLERS: J. TAFT of DUNN

Sample classification: Surface Water / Infiltration Water / Leachate / Sediment / Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Outfall / Drum /  
 Excavation / Boring / Embankment / Catch Basin

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Dipper Jar/Can /  
 Peristaltic Pump / Bailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point Grab / Composite /

Atmospheric Trip Blank ID \_\_\_\_\_ Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 5 - 4 oz Glass List ID #s ATL-SE01

Containers Filled (replicates) # \_\_\_\_\_ List ID #s \_\_\_\_\_

Test for TCL & TAL PARAMETERS + CYANIDE

Physical Appearance and Odor Brown fine to coarse Sand & Gravel, No odor

Field Tests: \_\_\_\_\_ Meter ID # \_\_\_\_\_ Test Value \_\_\_\_\_

Temperature (C / F) \_\_\_\_\_

pH \_\_\_\_\_

Spec. Conductivity (umhos/cm) \_\_\_\_\_

Dissolved Oxygen (mg/l) \_\_\_\_\_

Other: \_\_\_\_\_ Units \_\_\_\_\_

Weather: Cloudy - 55°F

Comments: \_\_\_\_\_

## FIELD SAMPLING RECORD

PROJECT: ATLAS STEEL SITE DATE: 11-10-92  
 PROJECT NO.: 40093-00174 TIME: 10:45 A  
 CLIENT: BENDERSON DEVELOPMENT SITE ID:  
 SAMPLERS: J. TAFT of DUNN

Sample classification: Surface Water Infiltration Water / Leachate / Sediment / Soil / Waste / Other

Sample From: Stream / River / Lake / Pond / Seep / Lagoon / Tank / Pipe Cuffail / Drum /  
 Excavation / Boring / Embankment Catch Basin

Surface: Residential / Industrial / Commercial / Other

Sampling Methods: Sampling Bottle: Direct Fill Container / Remote Fill / Glass Jar/Can /  
 Peristaltic Pump / Sailer / Core Sampler / Standard Split Spoon/ Hand Auger /  
 Stainless Spoon/Trowel /

Sample Type: Point/Grab/Composite /

Atmospheric Trip Blank ID \_\_\_\_\_

Field (wash) Blank ID \_\_\_\_\_

Containers Filled (primary) # 7 containers

List ID #s ATL-SW1

Containers Filled (replicates) # \_\_\_\_\_

List ID #s \_\_\_\_\_

Test for TCL + TAL + Cyanide

Physical Appearance and Odor No odor - Turbid w/ organics

## Field Tests:

## Meter ID #

## Test Value

Temperature (C / F)

pH

Spec. Conductivity (umhos/cm)

Dissolved Oxygen (mg/l)

Other:

Units \_\_\_\_\_

Weather:

Cloudy - 50°F

Comments:

# General Testing Corporation

COMPANY: DUNN CORPORATION  
Atlas Project  
JOB #: R92/04908

## VOLATILE ORGANICS

Dunn soil samples were analyzed for Target Compound List (TCL) volatile organics using SW-846 method 8240 except or sample R92/04908-001 which was analyzed for TCLP volatiles following a Zero Headspace Extraction using method 8240.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within QC acceptance limits.

No analytical or QC problems were encountered with these samples.

## SEMIVOLATILE ORGANICS

Dunn soil samples were analyzed for TCL semivolatile organics using SW-846 method 8270 except for sample R92/04908-001 which was analyzed for TCLP semivolatile organics following a TCLP extraction by method 8270.

All the initial and continuing calibration criteria were met for this method.

The surrogate standard recoveries for 2-Fluorophenol and Phenol-d6 on sample R92/04908-005 were outside QC acceptance limits due to matrix interferences. The analysis was repeated and again the surrogates were outside limits. The recoveries have been flagged with a "\*" and the acid extractable data has been flagged with a "J" as being estimated.

All QC data associated with these samples was acceptable.

Samples R92/04908-003 was analyzed at 1/10 dilutions due to high level of organics which caused matrix interferences in the extracts that the GPC cleanup did not remove. These dilutions resulted in proportionately higher detection limits.

# General Testing Corporation

DUNN - ATLAS R92/04908

## PESTICIDES/PCBS/HERBICIDES

Dunn soil samples were analyzed for TCL Pesticides and PCBs using method 8080 from SW-846 except for sample R92/04908-001 which was analyzed for TCLP Pesticides and Herbicides using methods 8080 and 8150 following a TCLP extraction.

The recovery for the surrogate standard Dibutylchlorendate (DBC) could not be determined on sample R92/04908-003 due to dilutions needed because of matrix interferences and have been flagged with a "D". The recoveries for the surrogate standard Tetrachloro-m-xylene (TCMX) were outside QC limits on samples R92/04908-004 and 006 due to matrix interferences and have been flagged with a "\*". However, the recoveries for the second surrogate, DBC, were acceptable therefore the data was accepted.

Due to matrix interferences, all samples were analyzed at 1/10 dilutions or in the case of sample R92/04908-003, some analytes had to be quantitated from a 1/100 dilution.

No other analytical or QC problems were encountered with these analysis.

## INORGANIC ANALYSIS

Dunn soil samples were analyzed for the Target Analyte List of metals and Total Cyanide using approved SW-846 methodologies except for sample R92/4908-001 which was analyzed for the TCLP metals following the TCLP extraction.

The Antimony and Potassium results for samples R92/04908-002, 004, 005, and 006 have been flagged with a "N" because the matrix spike recovery performed on sample R92/04908-002 was outside QC limits. Also the Lead and Magnesium results for sample R92/4908-003 have been flagged with a "N" because the matrix spike performed on sample -003 was outside QC limits. Beryllium, Copper, Manganese, and Nickel results for sample R92/04908-003 have been flagged with an "\*" because the duplicate analysis performed on sample -003 was outside QC limits for %RE.

No other analytical or QC problems were encountered with these analyses.



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

**Client:**

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

**Sample(s) Reference**

Atlas Project

Received

: 11/10/92

P.O. #:

### TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
-----	-----	-----	-----	-----				
Date Analyzed:	11/21/92	11/21/92	11/21/92	11/21/92				
Dilution:	1	1	1	1				
Ethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U				
Styrene	5.0 U	5.0 U	5.0 U	5.0 U				
Total Xylene (o,m,p)	5.0 U	5.0 U	5.0 U	5.0 U				
-----	-----	-----	-----	-----				
Surrogate Standard Recoveries								
-----	-----	-----	-----	-----				
1,2-Dichloroethane-d4 (Acceptance Limits: 76-114%)	101	94	92	93				
Toluene d8 (Acceptance limits: 88-110%)	98	98	99	94				
4-Bromofluorobenzene (Acceptance limits: 86-115%)	98	101	100	108				
-----	-----	-----	-----	-----				

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10601

A handwritten signature in black ink, appearing to read "J. F. Penny".

Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

## Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

## TCL VOLATILES BY EPA METHOD 8240\* ANALYTICAL RESULTS - ug/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
Date Analyzed:	11/21/92	11/21/92	11/21/92	11/21/92				
Dilution:	1	1	1	1				
Chloromethane	5.0 u	5.0 u	5.0 u	5.0 u				
Bromomethane	5.0 u	5.0 u	5.0 u	5.0 u				
Vinyl Chloride	5.0 u	5.0 u	5.0 u	5.0 u				
Chloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
Methylene Chloride	5.0 u	5.0 u	5.0 u	5.0 u				
Acetone	10 u	10 u	10 u	10 u				
Carbon Disulfide	10 u	10 u	10 u	10 u				
Vinyl Acetate	10 u	10 u	10 u	10 u				
1,1-Dichloroethene	5.0 u	5.0 u	5.0 u	5.0 u				
1,1-Dichloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
trans-1,2-Dichloroethene	5.0 u	5.0 u	5.0 u	5.0 u				
cis-1,2-Dichloroethene	5.0 u	5.0 u	5.0 u	5.0 u				
Chloroform	5.0 u	5.0 u	5.0 u	5.0 u				
2-Butanone (MEK)	10 u	10 u	10 u	10 u				
1,2-Dichloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
1,1,1-Trichloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
Carbon Tetrachloride	5.0 u	5.0 u	5.0 u	5.0 u				
Bromodichloromethane	5.0 u	5.0 u	5.0 u	5.0 u				
1,2-Dichloropropane	5.0 u	5.0 u	5.0 u	5.0 u				
1,3-Dichloropropene-Trans	5.0 u	5.0 u	5.0 u	5.0 u				
Trichloroethene	5.0 u	5.0 u	5.0 u	5.0 u				
Dibromochloromethane	5.0 u	5.0 u	5.0 u	5.0 u				
1,1,2-Trichloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
Benzene	5.0 u	5.0 u	5.0 u	5.0 u				
1,3-Dichloropropene(Cis)	5.0 u	5.0 u	5.0 u	5.0 u				
Bromform	5.0 u	5.0 u	5.0 u	5.0 u				
4-Methyl-2-pentanone(MIBK)	10 u	10 u	10 u	10 u				
2-Hexanone	10 u	10 u	10 u	10 u				
Tetrachloroethene	5.0 u	5.0 u	5.0 u	5.0 u				
1,1,2,2-Tetrachloroethane	5.0 u	5.0 u	5.0 u	5.0 u				
Toluene	5.0 u	5.0 u	5.0 u	5.0 u				
Chlorobenzene	5.0 u	5.0 u	5.0 u	5.0 u				

**General  
Testing  
Corporation**

A Full Service Environmental Laboratory

**LABORATORY REPORT**

Job No: R92/04908

Date: DEC. 10 1992

client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

**TCL ACID EXTRACTABLES BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/l**

Sample:	-002	-004	-005	-006			
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3			
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92			
Time Collected:	10:45	11:30	12:15	12:45			
Date Extracted:	11/13/92	11/13/92	11/13/92	11/13/92			
Date Analyzed:	11/18/92	11/18/92	11/18/92	11/18/92			
Dilution:	1	1	1	1			
Phenol	10 u	10 u	10 uJ	10 u			
2-Chlorophenol	10 u	10 u	10 uJ	10 u			
2-Nitrophenol	10 u	10 u	10 uJ	10 u			
2,4-Dimethylphenol	10 u	10 u	10 uJ	10 u			
2,4-Dichlorophenol	10 u	10 u	10 uJ	10 u			
4-Chloro-3-methylphenol	10 u	10 u	10 uJ	10 u			
2,4,6-Trichlorophenol	10 u	10 u	10 uJ	10 u			
2,4-Dinitrophenol	20 u	20 u	20 uJ	20 u			
4-Nitrophenol	20 u	20 u	20 uJ	20 u			
2-Methyl-4,6-dinitrophenol	20 u	20 u	20 uJ	20 u			
Pentachlorophenol	20 u	20 u	20 uJ	20 u			
2-Methylphenol	10 u	10 u	10 uJ	10 u			
4-Methylphenol	10 u	10 u	10 uJ	10 u			
Benzoic Acid	50 u	50 u	50 uJ	50 u			
2,4,5-Trichlorophenol	10 u	10 u	10 uJ	10 u			
SURROGATE STANDARD RECOVERIES							
2-Fluorophenol	57	51	2 *	49			
(Acceptance Limits: 21-100%)							
Phenol-d6	46	39	1 *	41			
(Acceptance Limits: 10-94%)							
2,4,6-Tribromophenol	94	83	15	97			
(Acceptance Limits: 10-123%)							

unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #130 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

Laboratory Director



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

### TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
Date Extracted:	11/13/92	11/13/92	11/13/92	11/13/92				
Date Analyzed:	11/18/92	11/18/92	11/18/92	11/18/92				
Dilution:	1	1	1	1				
N-Nitrosodimethylamine	5.0 U	5.0 U	5.0 U	5.0 U				
Bis(2-chloroethyl) ether	5.0 U	5.0 U	5.0 U	5.0 U				
1,3 Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
1,4 Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
1,2 Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
bis(-2-chloroisopropyl)ether	5.0 U	5.0 U	5.0 U	5.0 U				
N-Nitroso-Di-n-propylamine	5.0 U	5.0 U	5.0 U	5.0 U				
Hexachloroethane	5.0 U	5.0 U	5.0 U	5.0 U				
Nitrobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
Isophorone	5.0 U	5.0 U	5.0 U	5.0 U				
bis(-2-chloroethoxy)methane	5.0 U	5.0 U	5.0 U	5.0 U				
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
Naphthalene	5.0 U	5.0 U	5.0 U	25				
Hexachlorobutadiene	5.0 U	5.0 U	5.0 U	5.0 U				
Hexachlorocyclopentadiene	5.0 U	5.0 U	5.0 U	5.0 U				
2-Chloronaphthalene	5.0 U	5.0 U	5.0 U	5.0 U				
Dimethyl phthalate	5.0 U	5.0 U	5.0 U	5.0 U				
Acenaphthylene	5.0 U	5.0 U	5.0 U	5.0 U				
Acenaphthene	5.0 U	5.0 U	5.0 U	9.4				
2,4-Dinitrotoluene	5.0 U	5.0 U	5.0 U	5.0 U				
2,6-Dinitrotoluene	5.0 U	5.0 U	5.0 U	5.0 U				
Diethyl phthalate	5.0 U	5.0 U	5.0 U	5.0 U				
4-Chlorophenyl-phenyl-ether	5.0 U	5.0 U	5.0 U	5.0 U				
Fluorene	5.0 U	5.0 U	5.0 U	13				
1,2-Diphenylhydrazine	5.0 U	5.0 U	5.0 U	5.0 U				
N-Nitrosodiphenylamine	5.0 U	5.0 U	5.0 U	5.0 U				
4-Bromophenyl-phenylether	5.0 U	5.0 U	5.0 U	5.0 U				
Hexachlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U				
Phenanthrene	26	5.0 U	5.0 U	36				
Anthracene	5.0 U	5.0 U	5.0 U	10				
Di-n-butyl phthalate	5.0 U	5.0 U	5.0 U	5.0 U				
Benzidine	50 U	50 U	50 U	50 U				
Fluoranthene	38	5.0 U	5.0 U	27				
Pyrene	127	5.0 U	5.0 U	20				



A Full Service Environmental Laboratory

## LABORATORY REPORT

Job Number: R92/04908

Date: DEC. 10 1992

## Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

## Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

## TCL BASE NEUTRALS BY EPA METHOD 8270\* ANALYTICAL RESULTS - ug/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
Date Extracted:	11/13/92	11/13/92	11/13/92	11/13/92				
Date Analyzed:	11/18/92	11/18/92	11/18/92	11/18/92				
Dilution:	1	1	1	1				
Butyl benzyl phthalate	5.6	5.0 u	5.0 u	5.0 u				
3,3'-Dichlorobenzidine	5.0 u	5.0 u	5.0 u	5.0 u				
Benzo(a)anthracene	15	5.0 u	5.0 u	11				
Bis(2-ethylhexyl)phthalate	5.0 u	9.5	7.7	8.1				
Chrysene	16	5.0 u	5.0 u	10				
Di-n-octyl phthalate	5.0 u	5.0 u	5.0 u	5.0 u				
Benzo(b)Fluoranthene	13	5.0 u	5.0 u	11				
Benzo(k)fluoranthene	15	5.0 u	5.0 u	8.0				
Benzo(a)pyrene	15	5.0 u	5.0 u	9.6				
Indeno(1,2,3-cd)pyrene	8.0	5.0 u	5.0 u	5.0 u				
Dibenzo(a,h)anthracene	5.0 u	5.0 u	5.0 u	5.0 u				
Benzo(g,h,i)perylene	8.3	5.0 u	5.0 u	5.0 u				
Benzyl Alcohol	5.0 u	5.0 u	5.0 u	5.0 u				
4-Chloroaniline	5.0 u	5.0 u	5.0 u	5.0 u				
2-Methyl Naphthalene	5.0 u	5.0 u	5.0 u	5.0 u				
2-Nitroaniline	5.0 u	5.0 u	5.0 u	5.0 u				
3-Nitroaniline	5.0 u	5.0 u	5.0 u	5.0 u				
Dibenzofuran	5.0 u	5.0 u	5.0 u	5.0 u				
4-Nitroaniline	5.0 u	5.0 u	5.0 u	5.0 u				
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	76	78	76	75				
(Acceptance Limits: 35-114%)								
2-Fluorobiphenyl	79	80	80	84				
(Acceptance Limits: 43-116%)								
Terphenyl-d14	77	70	70	70				
(Acceptance Limits: 33-141%)								

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 &amp; #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

  
Michael K. Penn  
Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

TCL \* BY GC METHOD 8080

ANALYTICAL RESULTS - ug/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
Date Extracted:	11/16/92	11/16/92	11/16/92	11/16/92				
Date Analyzed:	11/24/92	11/24/92	11/24/92	11/24/92				
Dilution:	10	1	10	10				
alpha-BHC	0.50 u	0.050 u	0.50 u	0.50 u				
beta-BHC	0.50 u	0.050 u	0.50 u	0.50 u				
gamma-BHC (Lindane)	0.50 u	0.050 u	0.50 u	0.50 u				
Heptachlor	0.50 u	0.050 u	0.50 u	0.50 u				
delta-BHC	0.50 u	0.050 u	0.50 u	0.50 u				
Aldrin	0.50 u	0.050 u	0.50 u	0.50 u				
Heptachlor epoxide	0.50 u	0.050 u	0.50 u	0.50 u				
alpha-Endosulfan	0.50 u	0.050 u	0.50 u	0.50 u				
4,4'-DDE	0.50 u	0.050 u	0.50 u	0.50 u				
Dieldrin	0.50 u	0.050 u	0.50 u	0.50 u				
Endrin	0.50 u	0.050 u	0.50 u	0.50 u				
4,4'-TDE (DDD)	0.50 u	0.050 u	0.50 u	0.50 u				
beta-Endosulfan	1.0 u	0.10 u	1.0 u	1.0 u				
4,4'-DDT	1.0 u	0.10 u	1.0 u	1.0 u				
Endrin Aldehyde	1.0 u	0.10 u	1.0 u	1.0 u				
Endosulfan Sulfate	1.0 u	0.10 u	1.0 u	1.0 u				
Methoxychlor	2.0 u	0.20 u	2.0 u	2.0 u				
Endrin Ketone	1.0 u	0.10 u	1.0 u	1.0 u				
Chlordane	2.0 u	0.20 u	2.0 u	2.0 u				
Toxaphene	10 u	1.0 u	10 u	10 u				
PCB 1016	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1221	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1232	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1242	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1248	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1254	5.0 u	0.50 u	5.0 u	5.0 u				
PCB 1260	5.0 u	0.50 u	5.0 u	5.0 u				

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317



A Full Service Environmental Laborator

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference:

Atlas Project

Received

: 11/10/92

P.O. #:

ANALYSIS * BY GC METHOD 8080					ANALYTICAL RESULTS - %				
Sample:	-002	-004	-005	-006					
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3					
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92					
Time Collected:	10:45	11:30	12:15	12:45					
<hr/>									
SURROGATE STANDARD RECOVERY									
<hr/>									
% Recovery									
Dibutylchloroendate (Acceptance Limits: 24-154%)	99	61	99	39					
Tetrachloro-meta-xylene (Acceptance Limits: 60-150%)	70	56*	70	41*					
<hr/>									

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

  
Laboratory Director



A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference

Atlas Project

Received

: 11/10/92

P.O. #:

METALS - TAL

ANALYTICAL RESULTS - mg/l

Sample:	-002	-004	-005	-006				
Location:	ATL-SW1	ATL-MW1	ATL-MW2	ATL-MW3				
Date Collected:	11/10/92	11/10/92	11/10/92	11/10/92				
Time Collected:	10:45	11:30	12:15	12:45				
Cyanide, Total	0.010 U	0.010 U	0.010 U	0.010 U				
Aluminum	90.0	142	129	262				
Antimony	0.050 UN	0.050 UN	0.050 UN	0.050 UN				
Arsenic	0.130	0.052	0.0446	0.0469				
Barium	0.681	0.743	0.638	0.922				
Beryllium	0.0050 U	0.0050 U	0.0050 U	0.0050 U				
Cadmium	0.037	0.010 U	0.010 U	0.010 U				
Calcium	539	314	294	73.0				
Chromium	0.409	0.158	0.225	0.254				
Cobalt	0.0618	0.0589	0.0533	0.0759				
Copper	0.857	0.176	0.187	0.428				
Iron	177	142	153	364				
Lead, Furnace	1.53	0.134	0.323	0.312				
Magnesium	109	94.2	125	19.3				
Manganese	6.98	2.48	11.3	8.50				
Mercury	0.000137	0.00021	0.00034	0.00020 U				
Nickel	0.307	0.142	0.180	0.131				
Potassium	39.6 N	28.6 N	30.5 N	57.4 N				
Selenium	0.0075	0.0062	0.0050 U	0.0051				
Silver	0.012	0.010 U	0.010 U	0.010 U				
Sodium	73.6	11.0	92.4	92.3				
Thallium	0.050 U	0.050 U	0.050 U	0.050 U				
Vanadium	0.165	0.201	0.182	0.303				
Zinc	6.85	0.412	0.565	0.747				

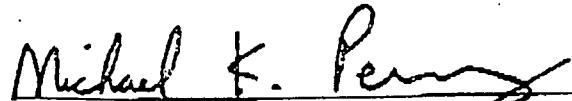
Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

  
Michael F. Penn  
Laboratory Director



A Full Service Environmental Laboratory  
LABORATORY REPORT

Job No: R92/04908

Date: DEC. 10 1992

Client:

Mr. Rick Rall  
Dunn Corporation  
495 Commerce Drive  
Amherst, NY 14228

Sample(s) Reference:

Atlas Project

Received

: 11/10/92

P.O. #:

TCLP HERBICIDES-ANALYSIS BY GC METHOD 8150 *** ANALYTICAL RESULTS - ug/l			
Sample:	-001		
Location:	ATL-W51		
Date Collected:	11/10/92		
Time Collected:	10:20		
	BIASED	UNBIASED	% RECOVERY
2,4-D	50 U	50 U	100
2,4,5-TP (Silvex)	50 U	50 U	89
SURROGATE STANDARD RECOVERIES			
-----			
% Recovery			
2,4-DB	79		
(Acceptance Limits 18-152)			

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145

NJ ID# in Rochester: 73331

NJ ID# in Hackensack: 02317

NY ID# in Hackensack: 10801

\*\*\* TCLP Toxicity Characteristic Leaching Procedure.

Federal Register, Part 261, Vol.55, No. 126,

June 29, 1990

Data reported is biased on the above regulation.

Laboratory Director

**APPENDIX A**

**Test Pit Logs**

DUNN GEOSCIENCE CORPORATION  
405 Commerce Drive, Amherst, New York 14260



Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-1

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 4.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Scale	Material Description <small>(Include in order: MATERIAL, FRESH, color, grain size, texture, bedding, moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
		FILL; OK gray to black CINDERs & fine to coarse SAND - becomes brown, slag & bricks noted @ ±1.0'	Water seeping in to open hole @ 3.5'.		
	2.0'	- becomes gray, cinders & slag noted @ ±2.0' (Damp to moist)	No elevated Hg/Hg readings were recorded during excavation.		
	4.0'	±3.5' Brown SILT & CLAY, trace roots (Moist) - little embedded rounded fine gravel noted			
	6.0'	TEST PIT TERMINATED @ 4.5'			
	8.0'				
	10.0'				

DUNN GEOSCIENCE CORPORATION

405 Commerce Drive, Amherst, New York 14260

Project: Atlas Steel SiteClient: Benderson Development Co.Purpose: Phase II - Environmental Site AssessmentSite Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

		TEST PIT / TRENCH LOG		Test Pit No.: TP-2	Job No: 40093-00174
				Sheet 1 of 1	Date Started: 10-30-92
					Date Finished: 10-30-92
		Excavation Contractor:	Advanced Drilling Investigations		Total Depth: 4.0'
		Operator Name:	—		Ground Elev.:
		Inspector:	Joel Taft		S.W.L.:
		General Description:			Container Size:
		Sample Equipment Used:	No. of Samples		Analysis Request
Graphic Log	Depth Sonic	Material Description <small>(Indicate in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; vibration)</small>	Remarks	Sample Number	
		FILL: Dark gray to black fine to coarse SAND + fine GRAVEL + CINDER (Damp to Moist) - Scrap metal noted	No elevated Hg/Hg readings were recorded during excavation.		
	2.0'	±1.5' Red-brown SILT + CLAY (Moist)			
		±2.15' grades to red-brown to gray mottled SILT + CLAY, little embedded rounded coarse sand + fine gravel			
	4.0'	TEST PIT TERMINATED @ 4.0'			
	6.0'				
	8.0'				
	10.0'				

DUNN GEOSCIENCE CORPORATION  
405 Commerce Drive, Amherst, New York 14260



Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-3

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 4.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL, texture, color, plasticity, texture, bedding, moisture &amp; mineral)</small>	Sample Equipment Used	No. of Samples	Remarks	Sample Number	Analysis Request
		FILL: Dark brown to black fine to coarse SAND + CINDERs (Damp to Moist)			Sample was obtained @ 3.0' (ATL-TP3-3').		TCL+TAL+CN
	2.0'	- ±1.5' - becomes dark gray to black fine to medium SAND			No elevated HAN readings were recorded during excavation.		
		- - grades gray-brown, becomes wet @ ±3.0'					
	4.0'	+3.5' - Brown-gray SILT, Some CLAY (Moist) - graded to red-brown SILT + CLAY					
	6.0'	TEST PIT TERMINATED @ 4.5'					
	8.0'						
	10.0'						

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405 Commerce Drive, Amherst, New York 14220



Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-4

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 4.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Scale	Material Description <small>(Include in order: MATERIAL, TYPE, color, consistency, texture, bonding, moisture &amp; mineral)</small>	Sample Equipment Used	No. of Samples	Remarks	Sample Number	Analysis Request
		FILL: Dark gray fine to coarse SAND; Cinders, slag + glass noted (Damp)					
		±0.5' - brown-gray reworked SILT+CLAY					
	2.0'	±1.5' - black to orange fine to medium SAND; brick + slag noted (Moist to wet)					
		±3.0'					
		Red-brown to light gray mottled SILT+CLAY (Moist)					
	4.0'	TEST PIT TERMINATED @ 4.0'					
	6.0'						
	8.0'						
	10.0'						

DUNN GEOSCIENCE CORPORATION  
405 Commerce Drive, Amherst, New York 14260



Project: **Atlas Steel Site**

Client: **Benderson Development Co.**

Purpose: **Phase II - Environmental Site Assessment**

Site Location: **Elmwood Ave - Buffalo, N.Y.**

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: **TP5**

Sheet 1 of 1

Job No: **40093-00174**

Date Started: **10-30-92**

Date Finished: **10-30-92**

Total Depth: **4.0'**

Ground Elev.:

S.W.L.:

Container Size:

**Analysis Request**

Graph Log	Depth Sect.	Material Description <small>(Include Inorder MATERIAL, type, color, grain size, texture, bedding, moisture &amp; vibration)</small>	No. of Samples	Sample Number	Remarks	Analysis Request
		FILL: Dark gray to black fine to coarse SAND (GRAVEL; metal, slag, cinders & glass noted (Damp to moist))			No elevated Hg/Hg reading were recorded during excavation.	
	2.0'	- becomes brown, some Silt noted				
	3.0'	Red-brown SILT+CLAY (moist)				
	4.0'	TEST PIT TERMINATED @ 4.0'				
	6.0'					
	8.0'					
	10.0'					

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Project: Atlgs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-6

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 4.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Indicate in order: MATERIAL, TEXTURE, color, plasticity, texture, bedding, moisture &amp; inclusions)</small>	No. of Samples	Remarks	Sample Number	Analysis Request
		FILL: Dark gray to black fine to medium SAND; cylinders, bricks & glass noted (Damp to moist)		No elevated HNR reading were recorded during excavation.		
	2.0'	±2.5' wet, brown fine to medium SAND				
	±3.0'	Red-brown to gray varved SILT + CLAY (Moist)				
	4.0'	TEST PIT TERMINATED @ 4.5'				
	6.0'					
	8.0'					
	10.0'					

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Project: Atlgs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Excavation Contractor: Advanced Drilling Investigations

Operator Name: —

Inspector: Joel Taft

General Description:

Sample Equipment Used:

Test Pit No.: TP 7

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 6.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

TCL + TAL + CN

Graph Log	Depth Sect.	Material Description (check all that apply: MATERIAL, TYPE, color, texture, texture, bedding, moisture & minerals)	Remarks	Sample Number	Analysis Request
	2.0'	FILL: OK, gray to black fine to medium SAND; cinders & glass noted (Damp) - reworked brown SILT + CLAY noted (Moist) - metal bars & bricks noted	Water seeping into open hole from 4.5'-6.0'.		
	4.0'	- becomes wet @ ± 4.5'	Sample obtained from 5-6'. (ATL-TP7-5-6'). No elevated HNU readings were recorded during excavation.		
	6.0' H6.0'	Red-brown SILT + CLAY (moist)			
		TEST PIT TERMINATED @ 6.5'			
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-8

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 4.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Excavation Contractor: Advanced Drilling Investigations

Operator Name: —

Inspector: Joel Taft

General Description:

Sample Equipment Used:

No. of Samples

Graphic Log	Depth Sect.	Material Description <small>(Include in order: MATERIAL, TYPE, color, grain size, texture, bedding; moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
		FILL: Dark gray to black fine to medium SAND; brittle, metal frags & cinders noted (moist)	No elongated H-Ni readings were recorded during excavation.		
	1.5'				
	2.0'	Red-brown SILT & CLAY (moist) - little embedded rounded fine gravel noted			
	4.0'				
	6.0'	TEST PIT TERMINATED @ 4.5'			
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-BA

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 5.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Scale	Material Description <small>(Include border, MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Ok gray to black fine to coarse SAND; cinders, brick & glass noted (Damp).	No odors or staining noted.		
	4.0'		Test pit was excavated in mounded area.		
	+4.5'	Brown SILT, Some CLAY (Moist) -grades red-brown SILT+CLAY			
	6.0'	TEST PIT TERMINATED @ 5.0'			
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

## Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

#### **Sampling Point Location:**

## **TEST PIT / TRENCH LOG**

Test Pit No.: TP-4

Sheet 1 of

Excavation Contractor: Advanced Drilling Investigations  
Contract No.

**Operator Name:** —

Inspector: Joel Taft

### **General Description :**

### **Sample Equipment Used:**

Graphic Log	Depth Scale	Material Description (Include in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture & minerals)	No. of Samples	Container Size:	Remarks	Sample Number	Analysis Request
					1	2	3
		FILL: Brown SILT, Some CLAY; bricks noted (moist)					
	-	- Wood & concrete slabs noted @ ± 1.0'					
	2.0'	- becomes brown fine to medium SAND, some fine to coarse Gravel, little silt (Moist)					
	-	+3.5'					
		Red-brown SILT + CLAY (moist)					
	4.0'	TEST AT TERMINATED @ 4.0'					
	-						
	6.0'						
	-						
	8.0'						
	-						
	10.0'						

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-10

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 8.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graph Log	Depth Sect.	Material Description <small>(Include In Order: MATERIAL, TEXTURE, COLOR, CONSISTENCY, GRAVEL, SLAG, MOISTURE &amp; SUBSTRATE)</small>	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Brown fine to medium SAND, Some fine to coarse Gravel; brick fragments + slag noted - cobbles + concrete fragments noted (Damp to Moist)	Test pit was excavated within mounded area and was terminated at the base of the mound.		
	4.0'		No elevated Hg/Hg readings were recorded.		
	6.0'				
	8.0'	TEST PIT TERMINATED @ 8.0'			
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-11

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 6.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphite Log	Depth Sectile	Material Description <small>(Include in order: MATERIAL, TYPE, color, texture, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number
		FILL: Brown fine to medium SAND. Some fine to coarse Gravel, little silt; Concrete Slabs & bricks noted (Moist)		Water level @ 5.0' at completion of excavation.	
	2.0'			No odors or sheens noted during excavation.	
	4.0'	- water running into hole e ± 4.5'		Sample was collected from 4-5' (ATL-TPII-45').	
	±5.5'	Brown CLAY & SILT (Moist)			
	6.0'	TEST PIT TERMINATED @ 6.0'			
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP12

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 4.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Excavation Contractor: Advanced Drilling Investigations

Operator Name: —

Inspector: Joel Taft

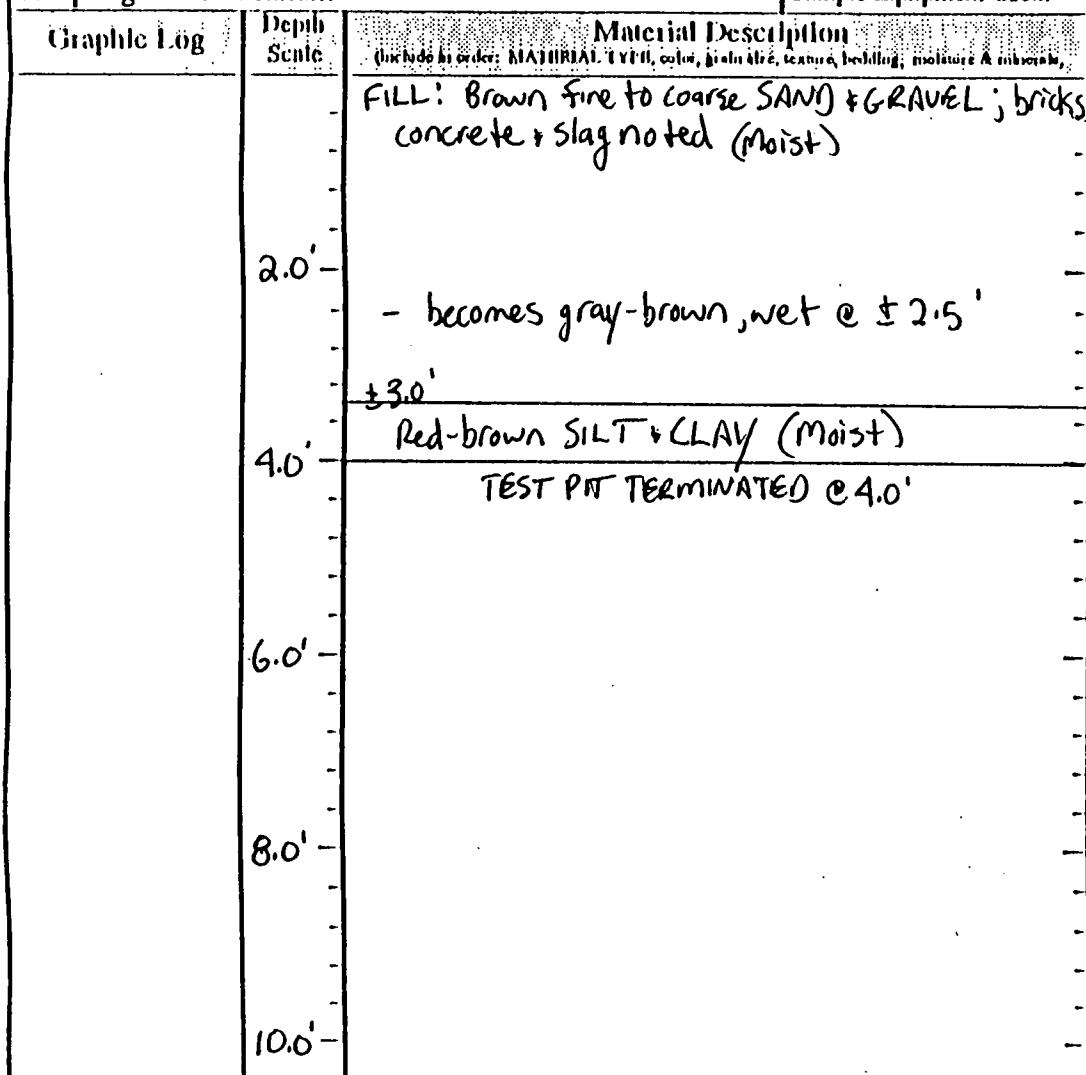
General Description:

Sample Equipment Used:

No. of Samples

Remarks

Sample Number



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Project: Atlgs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-13

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 3.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Secte	Material Description <small>Including texture, MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; mineral</small>	Remarks	Sample Number	Analysis Request
		FILL: Brown fine to coarse SAND & GRAVEL; Wood & bricks noted (Wet)	No odors or sheens noted during excavation.	-	
	2.0'	+2.0' Red-brown CLAY & SILT (Moist)		-	
	4.0'	TEST PIT TERMINATED @ 3.5'		-	
	6.0'			-	
	8.0'			-	
	10.0'			-	

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

		TEST PIT / TRENCH LOG		Test Pit No.: TP-14	Job No: 40093-00174
				Sheet 1 of 1	Date Started: 11-3-92
					Date Finished: 11-3-92
Graphic Log	Depth Scale	Material Description <small>(Include in order: MATERIAL TYPE, color, grain size, texture, bonding; moisture &amp; microfauna)</small>	No. of Samples	Sample Number	Analysis Request
		FILL: Brown fine to coarse SAND, Some fine to coarse Gravel, little silt (Moist to wet)			TCL+TAL+CN
	2.0'	+2.0' Gray-brown SILT+CLAY (Moist)			
	4.0'	TEST PIT TERMINATED @ 3.0'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-15

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 3.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sectile	Material Description <small>(Include in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number	Analysis Request
		FILL: Gray-brown fine to medium SAND, some fine gravel (Moist)		Water seeping into open hole from 2.0-2.5'.		
	2.0'	- becomes wet @ ± 2.0'		No odors or sheens noted during excavation.		
	+2.5'	Red-brown CLAY + SILT (Moist)				
	4.0'	TEST PIT TERMINATED @ 3.0'				
	6.0'					
	8.0'					
	10.0'					

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-16

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 3.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Listed in order: MATERIAL, TYPE, color, plasticity, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Brown fine to coarse SAND + GRAVEL, little silt; Cinders + Slag noted (Moist) - becomes wet @ 1.5' + 2.0' Gray-brown CLAY + SILT (Moist)		Water seeping into open hole from 1.5-2.0'.		
	4.0'	TEST PIT TERMINATED @ 3.0'		No odors or sheens were noted.		
	6.0'					
	8.0'					
	10.0'					

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

		TEST PIT / TRENCH LOG		
		Test Pit No.: TP17	Sheet 1 of 1	Job No: 40093-00174
		Excavation Contractor: Advanced Drilling Investigations	Date Started: 11-3-92	
		Operator Name: —	Date Finished: 11-3-92	
		Inspector: Joel Taft	Total Depth: 3.5'	
General Description:				
Sample Equipment Used:		No. of Samples		
		Remarks	Sample Number	Analysis Request
<b>Graphic Log</b> 		No odors noted during excavation		
Depth Scale:				
2.0'				
+2.5'				
4.0'				
6.0'				
8.0'				
10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-18

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 3.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Secte	Material Description <small>Inches to feet: MATERIAL, texture, color, grain size, texture, bedding, moisture &amp; minerals.</small>	Remarks	Sample Number	Analysis Request
	-	FILL: Gray fine to medium SAND, Some fine to coarse Gravel (Moist to Wet)	Water seeping into open hole @ 1.0'		
	2.0'		No odors or sheens noted during excavation.		
	+2.5'	Gray-brown varved SILT + CLAY (moist)			
	4.0'	TEST PIT TERMINATED @ 3.5'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-19

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 4.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sect.	Material Description <small>(Include in order: MATERIAL, FILL, color, grain size, texture, bedding, moisture &amp; vibratory)</small>	Remarks	Sample Number	Analysis Request
		FILL: Gray-brown fine to medium SAND + GRAVEL; bricks + Slag noted (Moist)	Water running into open hole @ 2.0 → 3.0'.		
	2.0'	- becomes wet @ ± 2.0'	No elevated HAN readings were recorded during excavation.		
	± 3.0'	Gray-brown SILT + CLAY			
	4.0'	TEST PIT TERMINATED @ 4.0'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-20

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 5.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

TCL+TAL+CN

Graphic Log	Depth Scale	Material Description	Sample Number	Remarks	Analysis Request
		FILL: Brown fine to coarse SAND + GRAVEL; concrete slag + bricks noted		Sample was collected from 2-3'. (ATL-TP20-2-3').	
	2.0'	- becomes light gray @ ± 2.0'  (Damp to Moist)		No elevated HANU readings were recorded during excavation.	
	4.0'	Gray-brown SILT, Some Clay -grades to red-brown SILT+CLAY @ ± 4.5'			
	6.0'	TEST PIT TERMINATED @ 5.0'			
	8.0'				
	10.0'				

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## TEST PIT / TRENCH LOG

Project: Atlas Steel Site  
Client: Benderson Development Co.  
Purpose: Phase II - Environmental Site Assessment  
Site Location: Elmwood Ave - Buffalo, N.Y.  
Sampling Point Location:

Test Pit No.: TP-21  
Sheet 1 of 1

Job No: 40093-00174  
Date Started: 11-3-92  
Date Finished: 11-3-92  
Total Depth: 4.0'  
Ground Elev.:  
S.W.L.:  
Container Size:

Graphic Log	Depth Sect.	Material Description <small>Incl. to order: MATERIAL, TYPE, color, granular, texture, bedding, moisture &amp; inclusions,</small>	Sample Equipment Used	No. of Samples	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Gray-brown fine to medium SAND - wood from former railroad bed noted @ ±1.0'			Water seeping into hole @ 2.5 - 3.0'.		
	3.0'	- wet, dark gray cinders noted @ ±2.5'			No elevated HNU readings were recorded.		
	4.0'	Gray-brown SILT+CLAY (Moist) TEST PIT TERMINATED @4.0'					
	6.0'						
	8.0'						
	10.0'						

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Project: Atlgs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-22

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 4.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

TCL+TAL+CN

Graphic Log	Depth Scale	Material Description <small>(Include in order: MATERIAL, TEXTURE, color, grain size, texture, bedding; moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
		FILL: Brown fine to medium SAND, little silt; Bricks, Wood & metal debris noted	- Water seeping into hole from 2.5-3.0'. Sample was collected from 2.0 to 3.0 interval, (ATL-TP22-2-3').		
	2.0'	±2.5' - becomes wet; dark gray to black CLAYERS	- No elevated HNU readings were recorded.		
	3.0'				
	4.0'	Gray SILT, Some CLAY (Moist) grades to reddish-brown SILT + CLAY			
		TEST PIT TERMINATED @ 4.0'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP23

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 2.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(check in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number
		FILL: Gray-brown fine to coarse SAND & GRAVEL; metal debris, Wood & Concrete noted		No elevated HAN readings were recorded.	
	2.0'	Concrete Slabs @ ± 2.0'			
	4.0'				
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT TRENCH LOG

Test Pit No.: TP-24

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 4.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL TYPE, color, grain size, texture, bedding, moisture &amp; texture)</small>	No. of Samples	Sample Number	Remarks	Analysis Request
	2.0'	FILL: Brown fine to coarse Sand & Gravel; Cinders + Slag noted - becomes gray @ 0.5-1.0' - bricks, Some Silt + Clay noted @ ± 1.5'; iron staining			Sample collected from 1.2' (ATL-TP24-1-2'). No elevated RNU readings recorded.	TCL + TAL + CN
	± 3.0'					
	4.0'	Gray-brown SILT, Some Clay - grades to brown CLAY + SILT (Moist)				
	6.0'					
	8.0'					
	10.0'					

TEST PIT TERMINATED @ 4.0'

DUNN GEOSCIENCE CORPORATION  
405 Commerce Drive Amherst, New York 14260



Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-25

Job No: 40093-00174

Sheet 1 of 1

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 3.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Soile	Material Description <small>(Include thickness; MATERIAL TYPE, color, grain size, texture, bedding; moisture &amp; mineral)</small>	Remarks	Sample Number	Analysis Request
		FILL: Wood, bricks, brown Sand + Gravel - becomes red-brown fine to medium sand (wet)	- Water running into hole @ 1.0' - No elevated Hg/Hg readings - were recorded.		
	2.0'	± 2.0' Brown SILT, Some CLAY (Moist) - grades to brown CLAY + SILT @ ± 2.5'			
	4.0'	TEST PIT TERMINATED @ 3.5'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP 26

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 1.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; moisture)</small>	Remarks	Sample Number	Analysis Request
	-	FILL: Bricks, wood & metal debris to 1.0' - Concrete Slab @ 1.0'			
	2.0'				
	4.0'				
	6.0'				
	8.0'				
	10.0'				

TEST PIT TERMINATED @ 1.0'

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405 Commerce Drive • Amherst, New York 14220



Project: Atlgs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

		TEST PIT / TRENCH LOG		Test Pit No.: TP27	Job No: 40093-00174		
				Sheet 1 of 1	Date Started: 11-3-92		
					Date Finished: 11-3-92		
Operator Name:	—	Excavation Contractor:	Advanced Drilling Investigations	Total Depth: 4.0'			
Inspector:	Joel Taft	General Description:		Ground Elev.:			
Sample Equipment Used:		No. of Samples		S.W.L.:			
Sample Number				Container Size:			
Graphic Log		Depth Scale	Material Description <small>(Include in order: MATERIAL, texture, color, plasticity, texture, bedding, moisture &amp; minerals)</small>	Remarks			
2.0'		FILL: BRICKS, metal fragments, concrete & slag (Damp to Moist)		Sample collected from 2-3'. (ATL-TP27-2-3')			
- becomes dark gray to brown fine to medium SAND etc. (Moist to wet)		No elevated HANU readings were recorded.					
- metal plates & concrete slabs @ ± 2.0'							
± 3.5'		Brown-red to gray mottled SILT, Some Clay (Moist)					
4.0'		TEST PIT TERMINATED @ 4.0'					
6.0'							
8.0'							
10.0'							
Analysis Request							
TCL+TAL+CN							

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-28

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-3-92

Date Finished: 11-3-92

Total Depth: 1.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphite Log	Depth Sonic	Material Description <small>Inches in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; inclusions</small>	Remarks	Sample Number	Analysis Request
		FILL: Wood + bricks			
	-	- Concrete Slab @ ± 1.5'			
	2.0'	TEST PIT TERMINATED @ 1.5'			
	4.0'				
	6.0'				
	8.0'				
	10.0'				

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Project: Atlqs Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP29

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-2-92

Date Finished: 11-2-92

Total Depth: 7.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Scale	Material Description <small>(Indicate in order: MATERIAL TYPE, color, grain size, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number	Analysis Request
		FILL: Tan-brown fine SAND; Concrete blocks + bricks noted (Damp) - metal beam + wiring noted		Water seeping into open hole from 5.0-6.0'.		
	2.0'	- reworked red-brown SILT+CLAY noted @ 2.5-3.0'		No odors or sheens were noted during excavation.		
	4.0'	±3.0' - becomes gray fine to medium SAND, little silt (Moist to wet)				
	6.0'	Gray-brown SILT + CLAY (moist)				
	8.0'	TEST PIT TERMINATED @ 7.0'				
	10.0'					

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-30

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-2-92

Date Finished: 11-2-92

Total Depth: 2.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL TYPE, color, plasticity, texture, bedding, moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
		FILL! Tan fine SAND - (Damp)			
	2.0'	Concrete Slab (foundation) @ 2.0'			
		TEST PIT TERMINATED @ 2.0'			
	4.0'				
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

		TEST PIT / TRENCH LOG		Test Pit No.: TP-31	Job No: 40093-00174
				Sheet 1 of 1	Date Started: 11-2-92
					Date Finished: 11-2-92
Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL, TYPE, color, texture, texture, bedding, moisture &amp; minerals)</small>	No. of Samples	Remarks	Sample Number
		FILL! Brown fine to coarse SAND & GRAVEL; bricks, cinders & slag noted (Damp to moist)			
	2.0'				
		- becomes gray fine to medium SAND Some Gravel; Slag - slight petroleum odor noted (Moist to wet)			
	4.0'	\$4.0' Brown SILT & CLAY (moist)			
		TEST PIT TERMINATED @ 4.5'			
	6.0'				
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-32

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-2-92

Date Finished: 11-2-92

Total Depth: 5.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Secte	Material Description <small>(Include in order: MATERIAL TYPE, color, texture, texture, bedding, moisture &amp; consistency)</small>	Remarks	No. of Samples	Sample Number
		FILL: Brown fine to coarse SAND & GRAVEL; Unders. Slag & Bricks noted			
	2.0'	- becomes gray @ ± 3.0'			
	4.0'	±4.0' - water pouring in to hole with heavy Sheen & petroleum odor noted			
	6.0'	TEST PIT TERMINATED @ 5.0'			
	8.0'				
	10.0'				

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Project: Atlags Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-33

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 7.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

TCL+TAL+CN

Graphic Log	Depth Sect.	Material Description <small>(includes in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; vibration)</small>	No. of Samples	Sample Number	Remarks	Analysis Request
	-	FILL: Brown fine SAND, bricks (Damp) - becomes brown fine to coarse SAND, little silt; bricks, slag + cinders noted			Water level @ 5.0' upon completion of excavation.	
	2.0'	±2.0' - becomes dark gray - petroleum odor noted (Moist to wet)			HNU readings ranged from 5 ppm to 20 ppm during excavation from 4.0-7.0'.	
	4.0'	±4.0' - becomes dark gray to black - dark water with heavy sheen + petroleum odor running into hole from 4.0-6.0'.			Sample was obtained from 4-6' (ATL-TP33-4-6').	
	6.0'					
	8.0'	TEST PIT TERMINATED @ 7.0'				
	10.0'					

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## **TEST PIT / TRENCH LOG**

Test Pit No.: TR 35

Sheet 1 of

Job No: 40093-00174

Date Started: 11-7-97

Date Finished: 11-2-97

Total Depth: 4.0'

## Ground Elev.:

S.W.I.:

**Container Size:**

### Analysis Request

Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

#### **Sampling Point Location:**

Graphic Log	Depth Scale	Material Description (Include in order: MATERIAL, TYPE, color, grain size, texture, bedding, moisture & inclusions)	No. of Samples	Container Size:
			Sample Number	Analysis Request
		FILL: Brown fine to coarse SAND & GRAVEL, little silt; Cinders & Slag noted. ±1.0' - Wood planks noted. ±1.5' - Gray-brown fine to medium SAND, Some fine Gravel & Cinders		
	2.0'			
	4.0'	±4.0' Concrete Slab TEST PIT TERMINATED @ 4.0'		
	6.0'			
	8.0'			
	10.0'			

**DUNN GEOSCIENCE CORPORATION**  
405 Commerce Drive, Amherst, New York 14260



Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

#### **Sampling Point Location:**

## **TEST PIT / TRENCH LOG**

Test Pit No.: TP-36

Sheet 1 of

Job No: 40093-00174

Date Started: 11-2-92

Date Finished: 11-2-92

Total Depth: 4.0'

| Ground Elev.:

S.W.I.

**Container Size:**

### Analysis Request

Sampling Point Location:	Sample Equipment Used:	No. of Samples	Container Size:		
Graphic Log	Depth Sect.	Material Description (Include in order: MATERIAL TYPE, color, grain size, texture, bedding, moisture & minerals)	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Brown fine to coarse SAND, Some Silt; metal debris, slag, cinders & bricks noted (Damp to Moist)	No odors or staining noted during excavation.		
	3.0'	Red-brown varved CLAY + SILT (Moist)			
	4.0'	TEST PIT TERMINATED @ 4.0'			
	6.0'				
	8.0'				
	10.0'				

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## TEST PIT / TRENCH LOG

Test Pit No.: TP-37

Sheet 1 of 1

Job No: 40093-00174

Date Started: 11-2-92

Date Finished: 11-2-92

Total Depth: 4.5'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Project: Atlas Steel Site

Client: Henderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

Graphic Log	Depth Scale	Material Description <small>(check in order: MATERIAL, TEXT, color, texture, texture, bedding, moisture &amp; minerals)</small>	Sample Equipment Used	No. of Samples	Remarks	Sample Number	Analysis Request
	2.0'	FILL: Brown fine to coarse SAND + GRAVEL; bricks, concrete + metal piping noted (Damp)			Sample obtained from 3-4'. (ATL-TP37-3-4')		TCL + TAL + CN
	4.0'	- becomes gray @ ±3.0', wood fragment noted - sweet, pine odor noted (Moist)					
	6.0'	- metal piping + concrete noted @ ±4.5'					
	8.0'						
	10.0'						

TEST PIT TERMINATED @ 4.5'

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-38

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 5.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Sonic	Material Description <small>(Include in order: MATERIAL TYPE, color, distribution, texture &amp; bedding, moisture &amp; minerals)</small>	Remarks	Sample Number	Analysis Request
		FILL: Brown fine to coarse SAND; bricks, wood + metal piping noted (Damp)			
	2.0'	- becomes gray, cinders + slag noted (Moist)			
		- becomes wet @ ± 3.5'			
	4.0'	4.0' Red-brown SILT + CLAY (Moist)			
	6.0'	TEST PIT TERMINATED @ 5.0'			
	8.0'				
	10.0'				

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Project: Atlas Steel Site

Client: Benderson Development Co.

Purpose: Phase II - Environmental Site Assessment

Site Location: Elmwood Ave - Buffalo, N.Y.

Sampling Point Location:

## TEST PIT / TRENCH LOG

Test Pit No.: TP-39

Sheet 1 of 1

Job No: 40093-00174

Date Started: 10-30-92

Date Finished: 10-30-92

Total Depth: 6.0'

Ground Elev.:

S.W.L.:

Container Size:

Analysis Request

Graphic Log	Depth Scale	Material Description <small>(Include texture: MATERIAL, TYPE, color, grain size, texture, bedding, moisture &amp; odor)</small>	Remarks	Sample Number	Analysis Request
	2.0'	FILL: BRICKS, METAL, Some fine to coarse Sand (Moist to Damp)	No elevated Hg readings were recorded during excavation.		
	4.0'	±1.5' - becomes brown fine to coarse Sand; slag & cinders noted, tar ±3.5' Gray-brown SILT, some Clay, trace roots - decaying organic odor noted (Moist) - grades to red-brown to gray mottled SILT & CLAY (Moist)			
	6.0'	TEST PIT TERMINATED @ 6.0'			
	8.0'				
	10.0'				

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