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WILL COUNTY
JOLIET, ILLINOIS
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CERCLA

Expanded Site Inspection

Illinois Environmental
Protection Agency

CERCLA
EXPANDED SITE INSPECTION

For:

US Steel Corporation Joliet Works
ILD 005454566
LPC# 1970450024
Joliet, Illinois

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
OFFICE OF SITE EVALUATION

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1.0 Introduction

On October 18, 2003, the Illinois Environmental Protection Agency's (Illinois EPA), Office of Site Evaluation was tasked by United States Environmental Protection Agency (US EPA) Region V to conduct an Expanded Site Inspection (ESI) at the US Steel site in Joliet, Illinois. US Steel (ILD# 005454566) is located at 927 Collins Street in Joliet, IL, Will County. The ESI is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

The objective of an ESI is to collect all data necessary to prepare a Hazard Ranking System (HRS) scoring package to propose the site to the National Priorities List (NPL). To fully evaluate the site and fulfill HRS documentation requirements, the ESI should 1) Investigate and document critical hypotheses or assumptions not completely tested during previous investigations; 2) Collect samples to attribute hazardous substances to site operations; 3) Collect samples to establish representative background levels; 4) Collect any other missing HRS data for pathways of concern.

2.0 Site Background

2.1 Site Description

Due to the size of the US Steel site, the property was divided into two different sections for investigative purposes. The first parcel of property is presently owned by the US Steel Corporation and consists of approximately 59 acres. The second parcel of property is approximately 60 acres and is currently owned by the Will County Nature Preserve. For reporting purposes, both investigations have been combined and will be referred to as the site. The site is bordered on the east and south by

residential areas, on the west by the Illinois and Michigan Canal (I & M Canal) and the Des Plaines River, and on the north by the Joliet Correctional Center.

The site has contained a steel mill since the 1860's. Steel was produced at the plant until the 1930's, when the plant became a rolling mill. Historical activities at the plant involved conditioning of billets, a small rectangular bar of iron or steel, by grinding prior to being heated in a gas furnace and rolled into coiled product. The new finishing mill and warehouse were constructed in 1997 specifically for straight length rebar production. Cleaning operations (discontinued in approximately 1980) typically involved dipping of stock into vats of sulfuric acid and/or hydrochloric acid to remove scale.

Geologically the property contains approximately four to ten feet of glacial drift soil mixed with slag material underlain by dolomite bedrock. The dolomite formation ranges in thickness from 155 to 315 feet. The dolomite is underlain by a shale formation that ranges from 80 to 250 feet thick. A sequence of hydraulically connected dolomites and sandstones of the Cambrian-Ordovician age underlie the shale. The glacial drift and dolomite aquifers appear to be hydraulically connected because of a lack of a confining layer. The shale constitutes a confining layer between the shallow drift-dolomite formation and the Cambrian-Ordovician aquifer system (Hart Crowser 2002).

The City of Joliet pumps its municipal water from the Cambrian-Ordovician aquifer. An on-site production well also receives its water from the Cambrian-Ordovician aquifer. There are no down gradient water wells near the subject

property. The closest up gradient well is located ¼ mile to the northeast (Hart Crowser 2002).

The Des Plaines River and I & M Canal flow to the south. According to the Hart Crowser report the direction of shallow groundwater flow is to the west-southwest, toward and parallel to the river.

2.2 Site History

The US Steel (USS) wire facility operated at the site until American Steel & Wire (AS&W) purchased the subject property from USS in May 1986. USS Real Estate recently acquired the Joliet property from the now defunct Birmingham Steel Corporation. USS operated a steel plant on-site from the 1860's until the 1930's. A variety of steel products were manufactured during this period. Wire production was introduced to the site in the 1940's, which involved the production of rods, wire, woven fence, barbed wire, nails, concrete reinforcing mesh, and other miscellaneous wire products. The USS wire facility operated until AS&W took over the facility; however, production decreased greatly from 1979 to 1986 (Ecology and Environment 1990).

USS was granted a permit by IEPA to construct a wastewater treatment plant in March 1970. The wastewater treatment plant was put into operation in December 1971. In March 1974, USS was given permission by IEPA to bypass the wastewater treatment plant in order to install the final phases of their plant upgrading. During the period that the wastewater treatment plant was bypassed, wastewater was discharged directly into the Penitentiary Ditch, which runs through the site before entering the Des Plaines River. Wastewater was routinely discharged to the Penitentiary Ditch

prior to construction of the wastewater treatment plant (Ecology and Environment 1990).

2.3 Previous Investigations

On October 25, 1989, USEPA contractor Ecology and Environment, Inc. conducted a screening site inspection (SSI). The inspection included an interview with site representatives, a reconnaissance inspection of the site, and the collection of eight on-site soil/sediment samples. All samples collected were surface samples. Numerous compounds were detected in the samples collected at the USS site during the SSI (Health Assessment, IDPH 1996).

On September 27, 1994 the IEPA was tasked by the USEPA to conduct a Focused Site Inspection Prioritization (FSIP) at USS. The sampling portion of the FSIP was conducted on May 23 and 24, 1995. During the investigation seven sediment samples were collected from the I & M Canal and Penitentiary Ditch. Nine soil samples were collected from residential yards and schools surrounding the USS property (Health Assessment, IDPH 1996).

2.4 Regulatory Status

On August 1, 1980, USS was initially placed on Comprehensive Environmental Response, Compensation and Liability Act Information System (CERCLIS). In November 1980, USS submitted a RCRA application for generation and storage of hazardous wastes on site. The primary hazardous waste generated was waste "pickle liquor", which was produced from the process of cleaning iron rods. The waste was stored on-site in a 30,000-gallon storage tank prior to being shipped off site. In May 1981, USS submitted a USEPA Notification of Hazardous Waste Site form. The

form identified a small landfill, of approximately 3,800 cubic feet; located on site in which acids, used "pickle liquor", and material from plant spills had been deposited from 1972 to 1980. Sludge from the wastewater treatment plant was also disposed of in the landfill (Ecology and Environment 1990).

The USS facility in Joliet had a history of violations of USEPA air emissions standards during the 1970's and early 1980's. The violations involved operating a number of processes without proper operating permits, including nail galvanizing lines, steel grinders, and a cleaning house. IEPA had denied USS applications in 1974 and 1975 due to an excessive amount of potential particulate release from these processes. During site inspection in 1974 and 1975, IEPA officials observed air emission violations which included dense black smoke emitted from one of the operation splice bar mills, excessive particulates emitted from the galvanizing lines, and excessive sulfuric acid emitted from the cleaning house (Health Assessment, IDPH 1996).

3.0 Expanded Site Inspection Activities

3.1 Sampling Activities

The ESI was conducted on May 3 – 6 and May 24 – 26, 2004. The sampling team collected 54 soil samples from 53 different locations, 13 groundwater samples from 11 locations, and eight sediment samples.

3.1.1 Soil Sampling

During the Expanded Site Inspection of USS, 54 soil samples were obtained from 53 different locations (See Tables 1-4). The samples were analyzed for Volatile

Organic Compounds (VOC), Pesticide, PCB, Semi-volatiles, and inorganics. Figure 1 illustrates the approximate locations of all soil samples.

The soil samples were collected from approximately 59 acres of the USS property and the approximately 60 acres of the Will County Nature Preserve, which was formerly owned by USS. Due to the nature of the 59 acres on the USS property, a Samsung 280 excavator was used to dig test pits for soil sampling. The soil samples were collected from different depths of the test pits. Soil samples collected from the Will County Nature Preserve were obtained using a geoprobe. The geoprobe is a truck-mounted, hydraulically driven device used to advance steel rods with a core-sampling tool attached to its end. The core-sampling tool is able to remove soil from a desired sample depth. The sample depth was determined by visually examining each four-foot core and by the readings on the Flame Ionization Detector (FID) and Photo Ionization Detector (PID) as well as an X Ray Floresence (XRF).

Soil samples X102-X105 were collected from three test pits that were excavated in the vicinity of the old boiler house, which has since been demolished. Sample X102 was collected from 2.5 feet from a clayey, rusty brown slag like cindery material. The pit was dug on the edge of a concrete foundation, which was presumably the foundation for the boiler house. Groundwater was encountered at seven feet. Sample X103 was collected from three to four feet from a black coal like material known as mill scale. A TCLP sample was also collected. Sample X104 was taken from a pile of mill scale. Sample X105 was taken from 1-1.5 feet from a dark brown to gray silty, sandy material with gravel (See Figure 1). The samples were collected in this

location due to the proximity of a former above ground storage tank and to characterize a potential source.

Sample X106 was taken from the location of an old oil house. The sample was collected from two feet below ground surface. The sample consisted of dark brown, sandy, cindery material with bricks and wood. A petroleum odor existed within the pit (See Figure 1). This sample was collected to document contaminated soil from an area of concern.

Sample X107 was collected between the electric shop building and the pattern shop building in the location of a former gas producer. The sample was collected at three feet from a rusty brown sandy like material at the edge of a concrete foundation. The sample had an oily look (See Figure 1). This sample was collected to document contaminated soil from an area of concern.

Sample X108 was taken on the southeast corner of the pattern shop and storage building. The sample was collected at six foot below ground surface. The sample consisted of slag, fill and small pieces of limestone (See Figure 1). The sample was collected to document contamination from an area of concern.

Sample X109 was collected near some transformers. The sample was collected at four and a half feet below ground surface from a dark gray and black clayey material. The pit contained a petroleum odor (See Figure 1). The sample was collected to characterize a potential source. Sample X110 was collected on the south side of the former roll shop. The sample was collected at two feet in slag like material. A duplicate sample, X110A, was also collected at this location. Sample X110 and X110A were collected to document potential contamination at areas of concern.

Sample X111 and X113 were collected from the same test pit but at different depths. The test pit revealed a brick wall foundation. Vitrified coal tar was found on some of the bricks. Sample X111 was collected at five feet and X113 was collected from the black silty material and yellowish sandy material on the edge of the wall around the bricks (See Figure 1). The samples were collected to document potential contamination in areas of concern.

Sample X112 was collected from the area of former underground storage tanks (UST). The sample was collected from five feet below ground surface. The sample consisted of black slag fill measuring two to four inches in diameter. The sample was collected to characterize an underground storage tank, which is a potential source. Samples X114 and X116 were collected from the former splice bar shop. X114 was collected at four feet from a black cindery material. The entire profile from surface to six feet consisted of fill material. X116 was collected from five feet and consisted of a dark brown sandy fill material with fragments of brick, gravel and cinders. A concrete foundation was encountered along the west side of the pit at 18 inches below ground surface. Samples were collected to characterize potential areas of concern.

Sample X117 – X119 were collected inside the large storage and shipping building, which runs east and west. Sample X117 was collected from one to one and a half feet below ground surface; X118 was collected from four feet in a black sludge material. The pit had a slight odor. X119 was collected at two feet from a dark cinder material (See Figure 1). All samples represented potential areas of concern.

Sample X120 was collected from a former drum storage are located in the north west corner of the large storage and shipping building. The VOC's and semi volatiles

were collected from five feet and the inorganics were collected from two feet. A TCLP sample was also collected from this location. X120 was collected to characterize a potential source. X121 was collected on the west side of the large bar finishing mill building, which runs north and south. The sample was collected near some transformers. Sample X123 was collected from the cold well pit located on the south west corner of the bar finishing mill. The sediment was collected off the bottom of the pit. Organic samples were collected only. X128 was collected from the scale pit located on the north side of the #3 rod mill (See Figure 1). All samples were collected to characterize potential sources.

Sample X126, X127, and X129 were collected on the south side of the large storage and shipping building. Sample X126 was collected from a dark black and greenish soil at three and a half feet. A duplicate sample, X126A, was also collected. Sample X127 was taken from two feet and consisted of a dark gray to black silt with some sand, grave, cinders and slag. Sample X129 was collected from a black cindery material at six inches (See Figure 1). All three samples represented areas of concern.

Sample X130 was collected at five feet and four inches from the east end of rod mill #3. The sample was collected from the bucket of the excavator and had a reading on the FID of 60 (See Figure 1). The sample was used to characterize a potential source.

Sample X131, X132, and X145 were taken inside of rod mill #3. Sample X131 was taken from west end of the building. The sample was obtained from sludge on the floor. Sample X132 was also taken from sludge located on the floor next to a tank. The location of the sample was approximately the middle of rod mill #3.

Sample X145 was also taken from sludge located on the floor near the east side of rod mill #3 (See Figure 1). These samples were collected to characterize potential sources.

Soil sample X133 and X134 were collected in the former areas of rod mill #1 and #2. X133 was collected from the bucket of the excavator at five and a half feet. The contents of the sample consisted of brick and slag fill fragments. The sample also had a petroleum odor. The FID had a reading of 150. Sample X134 contained black cindery fill. Water was encountered at six and a half feet and had an oily sheen. The FID had a reading of 5 (See Figure 1). Samples were collected to characterize the extent of the possible contamination associated with the AST's.

Sample X135 was collected on the east side of the building where the pickle liquoring process took place. The sample was collected from six and a half feet. Bedrock was encountered at seven feet as well as groundwater. Sample X138 was collected from inside the hook conveyor building. The sample was collected from six to seven feet using the geoprobe. Pure product was noted from seven to eight feet. The FID reading was 30. Sample X139 was taken next to transformers that had stained soil next to them. The transformers were located on the north side of the hook conveyor building. The sample was collected from zero to three inches (See Figure 1). Samples were collected to document potential contamination associated with possible sources.

Sample X140 was collected on the northeast corner of the hook conveyor building. The pit contained visible petroleum contamination to a depth of four feet as well as a strong petroleum odor. The sample was collected at four feet. The FID reading was

75. The sample was made up of black shiny fill with cinders. Groundwater was encountered at five feet below ground surface. Sample X142 was collected from the former location of the grinder building. The sample was made up of the same material as X140. Petroleum product could be seen oozing from large pieces of slag. The sample was collected from four feet below ground surface from the excavator bucket. A strong petroleum odor was present. Sample X143 was collected from the vicinity of large UST that according to USS representatives contained Bunker C fuel oil. A strong hydrocarbon odor was present. The sample was made up of black cindery fill that was visually stained and contained a strong odor. Sample was collected at four feet. Sample X144 was collected in the vicinity of former acid tanks. The sample was collected at four and a half feet. The sample consisted of black silty sand with gravel. Groundwater was encountered at five feet. Samples were collected to document the extent of contamination due to the AST's.

Samples X146-X163 were all collected using the geoprobe. Sample X146 – X148 were collected from the Will County Nature Preserve in the area where solids from the wastewater treatment plant were stored. The VOC for X146 were collected from three to eight inches and the semi-volatiles and inorganics were collected from one to three feet. The three to ten inch horizon contained black cindery fill with black tar and from ten inches to three feet the soil consisted of black cindery fill. X147 consisted of fill material and was collected from zero to six inches. And X148 VOC was collected at five feet. The alarms on the FID went off at five feet. The remaining sample was collected from five to seven feet. The sample was made up of black

cindery gooey material with a coal tar odor (See Figure 1). These samples were collected to document potential contamination in areas of concern.

Sample X149 was collected from a power substation south of transformers. The location had oily transformer fluid on the concrete base on which the transformer was mounted. The gravel, sand and soil surrounding the concrete base were also covered in oil. The sample was collected from six inches to one foot. The sample consisted of sandy soil with fine grave. It was collected to document potential sources.

Sample X150-X153 were collected within the wastewater treatment plant. X150 was collected from four and a half feet. The sample consisted of cindery fill. X151 was collected from 11 – 12ft. The FID had a reading of 1300. X153 is a duplicate of X151. The sample was made up of black silt with an organic odor and strong petroleum odor. Sample X152 VOC were collected from nine to ten feet and the remaining sample were collected from seven to ten feet. From seven to ten feet the sample consisted of a strong coal tar odor and black watery muck (See Figure 1). These samples were collected to document areas of concern.

Sample X154 was collected east of the blast furnace #2 from four to six inches in sand that was formerly used as the floor of the pig iron pour area. X155 was collected at the far northeast corner of the hot blast stove area. The sample was collected from surface to six inches. Soil consisted of black silt. X156 was collected from an area referred to as the skull house. The sample consisted of all fill material and was collected from five and a half feet. Sample X157 was collected between blast furnace #3 and #4. The sample was closer to furnace #4. The depth the sample was collected was from surface to four inches. The soil was a medium gray to light

tan and darker beyond six inches and consisted of silty loam with gravel. Sample X158 was collected from six inches to two feet. The sample consisted of fill material from surface to six inches and clay material with limestone from six inches to one foot and brown fill from one foot to three feet (See Figure 1). Samples were collected in areas of possible concern.

Sample X159 was collected from the southwest corner of the gas engine house. The sample was collected from along the west wall of the ruins. It was sampled from surface to four inches. The soil was comprised of silty loam with cinders and slag throughout (See Figure 1). Sample was collected in areas of possible concern.

Samples X160 – X163 were collected in the vicinity of what was an illegal landfill. X160 was collected from six inches and consisted of brown silty loam. Sample X161 was collected from surface to two feet. The sample consisted of black silty loam. Sample X162 was collected from surface to two feet and consisted of black silty loam. Sample X163 was collected from six inches and was also black silty loam (See Figure 1). Samples were collected to characterize the landfill, which is a potential source.

3.1.2 Groundwater Sampling

Thirteen groundwater samples were collected during the Expanded Site Inspection at US Steel. Samples G101-G111 were analyzed for VOC's, semi-volatiles, pesticide, PCB and inorganics. Figure 2 illustrates the approximate locations of all groundwater samples collected. Tables five through nine contain analytical values for all samples collected.

The groundwater samples were collected from the USS property and the Will County Nature Preserve (See Figure 2). Sample G101 was taken from a monitoring well located in the northwest corner of the USS steel property. The total depth of the well was nine feet nine inches. The water level was at six feet one inch. A triple volume was collected for the MS/MSD samples. Sample G102 and a duplicate sample G105 were collected from a monitoring well located on the southwest corner of the USS property. The total depth was nine feet six inches and the water level was at five feet one inch. Sample G103 was collected from a monitoring well located on the southeast side of the USS property. The total depth was 11 feet eight inches and the water level was seven feet five inches. And sample G104 was collected from a monitoring well located on the northeast side of the USS property. The total depth was 13 feet one inch and the water level was at ten feet six inches (See Figure 2). All monitoring wells were sampled to document a potential release to groundwater.

Groundwater sample G106, G107 and G112 were collected from the USS property using a geoprobe. Sample G106 was screened from two feet five inches to six feet five inches, G107 was screened from two feet to six feet, and G112 was screened from six to ten feet (See Figure 2). These groundwater samples were taken in areas of potential concern.

Sample G108 thru G111 were collected from the Will County Nature Preserve property using a geoprobe. Sample G108 was screened from four feet to eight feet, G109 was screened from two to six feet, G110 and G110A was screened from six to ten feet, and G111 was screened from 11 to 15 feet. Sample G110A was a duplicate

of G110 (See Figure 2). These samples were collected to document potential release to groundwater in areas of concern

3.1.3 Sediment Sampling

Eight sediment samples were collected from the I&M Canal and the Penitentiary Ditch. All sample were collected using a stainless steel hand auger. The I&M Canal and Penitentiary Ditch are located on the west side of the Will County Nature Preserve and run parallel with the preserve (See Figure 3). All samples were run for VOC's, semi-volatiles, pesticide, PCB's and inorganics. Samples were collected to document a potential release to surface water.

Sediment sample X201 was sampled in the I&M Canal near the confluence of the I&M Canal and the Des Plaines River. The depth to sediment was six feet. The sample was collected from the surface of the sediment to 14 inches. The sediment sample was thick black clayey silt with a slight coal tar odor. Sediment sample X202 collected from the outfall of the wastewater treatment plant in the Penitentiary Ditch on the east side of the ditch. The water was approximately eight inches deep and was made up of black clayey silt with some gravel. The sample had a slight organic odor as well as a mild to medium petroleum odor. The sample was collected from the surface of the sediment to 14 inches (See Figure 3).

Sediment sample X203 was collected from the Penitentiary Ditch at the old gas washer ruins. It was collected on the east side of the ditch. The ditch was approximately 16 to 18 inches deep. The sample consisted of black silt with organic matter and small gravel from sediment surface to 10 inches and dark silty clay from 10 inches to 16 inches. The sample had a slight organic odor as well as a medium to

moderately strong petroleum odor. The sample was collected from sediment surface to 16 inches. Sample X204 was collected from the wastewater treatment outfall into the I&M Canal. The depth to sediment was six inches and the sample was collected from sediment to eight inches. The sample was composed of light to medium gray silt with a hint of petroleum odor (See Figure 3).

Sediment sample X205 was collected at the northern mouth of the Penitentiary Ditch and the I&M Canal. The depth to sediment was three feet. The sample was collected from sediment to 14 inches. The sample was black clayey silt with prominent coal tar odor. Sample X206 was collected from the I&M Canal in eight feet of water. The sample was collected from sediment to 14 inches. The sediment was medium brown sandy silt to three inches and black clayey silt from three inches to 14 inches (See Figure 3).

Sample X207 was collected from an outfall on the east bank of the I&M Canal. The depth to sediment was six feet and the sample depth was sediment to 14 inches. The sample was black clayey silt with an organic and petroleum odor. Sample X208 was collected near the wooden bridge at the far north part of the I&M Canal. The sample was collected at the waterline on the east side of the bank. The sample was collected from sediment to 14 inches. Organic odor was present but now petroleum odor noticed. The sample consisted of black clayey silt with medium gravel and fine to coarse sand intermixed (See Figure 3).

3.2 Analytical Results

This section presents results of the chemical analysis of soil, sediment, and groundwater samples collected by the IEPA Office of Site Evaluation during the

Expanded Site Inspection of US Steel. Complete chemical analysis results of soil, sediment, and groundwater sample are provided in Table 1 thru 13. Due to possible errors in the lab data an addendum to this report will follow as soon as information is made available.

Following sample collection, all samples were transferred to containers provided by Illinois EPA's Contract Laboratory Program. The sample containers were packaged and sealed in accordance with IEPA's Office of Site Evaluation Quality Assurance Project Plan. The groundwater and soil samples taken during the week of 05/03/04 thru 05/06/04 requiring organic analysis were sent to Ceimic Corporation in Narragansett, RI and the groundwater and soil samples for inorganic analysis were sent to Chemtech Consulting Group in Mountainside, NJ. The groundwater, soil and sediment samples taken during the week of 05/24/04 thru 05/26/04 requiring organic analysis were sent to CompuChem Environmental Corporation in Cary, NC and groundwater, soil and sediment sample requiring inorganic analysis were sent to Ceimic Corporation in Narragansett, RI. A complete analytical data package for the USS site is located in Volume two of the ESI. The criteria used to determine what may be considered an observed release was based on those samples with concentrations considered to be at least three times those concentrations found in samples taken from locations designated as background samples. Samples that were flagged with a J were considered an observed release with concentrations at least ten times background.

The analytical results of the groundwater samples revealed the presence of organic and inorganic samples that exceeded CERCLA's criteria for observed release. The

organic compounds exceeding three times background were naphthalene, phenanthrene, and pyrene. The compound 2-methylnaphthalene exceeded ten times background (See Table 18). The inorganic compounds exceeding three times background were arsenic, calcium, chromium, lead, magnesium, sodium, manganese and cyanide. Inorganic compounds exceeding ten times background included aluminum and iron (See Table 19).

The analytical results of the sediment samples revealed the presence of organic and inorganic sample that exceeded the observed release criteria. The organic compounds exceeding three times background and ten times background can be found in Tables 21 thru 23. The inorganic compounds can be found in Table 24.

The analytical results of the soil samples taken during the ESI revealed the presence of inorganic and organic compounds that exceeded three times background. A summary of all inorganic and organic compounds can be found in Tables 14 thru 17.

3.3 Additional Data

XRF data was used at each location to help determine the location as to where to collect the analytical data. XRF data can be found in Table 25.

4.0 Site Sources

This section includes descriptions of the various hazardous waste sources that have been identified at USS. The Hazard Ranking System (HRS) defines a source as: "Any area where a hazardous substance has been stored, disposed or placed, plus those soils that have become contaminated from migration of a hazardous substance."

The HRS definition of source does not include surface water or sediments below surface water that has become contaminated.

Information obtained during the ESI identified many sources of contamination at the US Steel property. Sources identified at the USS property included aboveground storage tanks (AST), landfill, and contaminated soil. The possibility exists that additional sources of contamination may exist such as surface impoundments, underground storage tanks (UST), waste piles and other types of sources.

4.1 Aboveground Storage Tanks

During the years of operation at USS, approximately 1930 to early 1980's, two large volume above ground storage tanks contained Bunker C Fuel oil. Based upon information gathered during the ESI, the extent of contamination can be defined by the soil samples collected near the AST's. Soil samples X135, X138, X140, and X142 thru X144 were visually contaminated with the contents of the AST, which was Bunker C fuel oil (See Figure 1). Soil sample X143 from four feet below ground surface, a strong hydrocarbon odor was present. The sample was collected in the approximate location of the former AST and the visual contamination extended approximately 600 feet to the west and was encountered in the test pits where samples X140, X142 and X133 collected. The Bunker C fuel oil is more commonly known as No. 6 fuel oil, which is a heavy oil used for heating furnaces. See Appendix C for additional information on Bunker C fuels. When these soil samples were compared to background samples they met the observed contamination criteria (See Tables 14 thru 17).

4.2 Landfill

According to the Focused Site Inspection Prioritization report, USS submitted a US EPA Notification of Hazardous Waste Site form in May 1981. The form identified a small landfill, of approximately 3800 cubic feet and 37,000 square feet, located on the property, which is now run by the Will County Nature Preserve. The landfill was located approximately in the location of samples X161 thru X163 (See Figure 1). The landfill was used from 1972 to 1980 for the disposal of acids, used pickling liquor, sludge from the wastewater treatment plant and material from plant spills. Samples X161 thru X163 had levels that met the observed contamination criteria, which is three times background (See Tables 14 thru 17).

4.3 Contaminated Soil

The area of contaminated soil encompasses the entire USS property, which sits on approximately 120 acres including the Will County Nature Preserve. Each of the soil samples collected within the source contained significant levels of contaminants that were more than three times background and can be related to the steel making process.

Samples X146 thru X148 were collected from the area that had been formally used for the disposal of wastewater treatment plant solids (See Figure 1 and Tables 14 thru 17). Elevated levels of lead were found in all three samples that exceeded three times background.

5.0 Migration Pathways

The Office of Site Evaluation identifies three migration pathways and one exposure pathway, as identified in CERCLA's Hazard Ranking System, by which

hazardous substances may pose threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

5.1 Groundwater

The city of Joliet obtains its municipal water supply from numerous wells located throughout the city. Two of these wells are located within one mile of the US Steel property. The wells obtain water from a depth of about 1500 feet from the Cambrian-Ordovician aquifer. Overlying this aquifer is the Maquoketa shale formation, which forms a geologic layer, which is essentially impermeable.

There are a total of three underground water-bearing units. The three aquifers, in descending order, are; a sand and gravel Quaternary drift deposit, a Silurian dolomite bedrock formation, and a sequence of hydraulically connected formations of dolomites and sandstones of Ordovician and Cambrian age, collectively called the Cambrian-Ordovician aquifer system (E & E 1990).

The Maquoketa shale formation, a known aquitard, lies between the Silurian dolomite bedrock formation and the Cambrian-Ordovician aquifer system

The Quaternary drift deposit ranges in thickness from one to 112 feet, and is composed of interbedded till units, lacustrine clay deposits, and water-bearing outwash units of sand and gravel. The Silurian dolomite formation ranges in thickness from 155 to 315 feet. The Maquoketa shale formation ranges in thickness from 80 to 250 feet. The Cambrian-Ordovician aquifer system is found at depths ranging from 260 to 575 feet (E & E 1990).

The Quaternary drift aquifer and the Silurian dolomite aquifer appear to be hydraulically connected because of the lack of a confining layer separating the two units, and together form the aquifer of concern (E & E).

A majority of the municipal wells operated by the city of Joliet (a total of approximately 16 wells) draw from the Cambrian-Ordovician aquifer, and five of these wells are located within a four-mile radius of the site. Approximately 25,000 people are served by the five wells located in the target distance limit. The Joliet Correctional Center and the Statesville Correctional Center both operate wells that are located within a four-mile radius of the site and draw from the Cambrian-Ordovician aquifer (E & E 1990).

Four ground water monitoring wells were installed on the USS property on October 6, 2003. Monitoring wells G103 and G104 are located on the east side of the property and G101 and G102 are located on the west side of the USS property (See Figure2). Well logs are located in Appendix D. The monitoring wells varied in depth from nine feet six inches in G102 to thirteen feet one inch in G104.

A total of 12 water samples were collected. Four were collected from monitoring wells and the remaining samples were collected using a Geoprobe. All samples collected had no VOC's above background levels and only G112 had semi-volatile compounds at levels above three times background. All samples had some inorganics that were above three times the background sample G108. Based upon data retrieved from groundwater samples and contaminants of concern found in other samples collected onsite, there is a release to the groundwater pathway.

5.2 Surface Water

Surface water runoff on the USS property and the Will Country Nature Preserve enters the Penitentiary Ditch, I & M Canal and the Des Plaines River, which are considered to be the probable point of entry (PPE). The Penitentiary Ditch, I & M Canal, and Des Plaines River all join together at the wastewater treatment plant.

The probable point of entry is defined as the point at which the overland segment of a hazardous substance migration path intersects with surface water. The PPE is assigned as the point at which entry of the hazardous substances to surface water is most likely. The target distance limit (TDL) is the distance over which the in-water segment of the hazardous substance migration path is evaluated. The TDL extends 15 miles from the PPE in the direction of flow or to the most distant sample point establishing an observed release; whichever is greater (See Appendix E). The Des Plaines River, I & M Canal and Penitentiary Ditch are not used as sources of drinking water. However, according to USGS topographic maps and observations made during the investigation, both the Des Plaines River and I & M Canal are used for recreational purposes and is a known fishery.

The nearest wetland is adjacent to the west side of the property and is classified as a Riverine lower perennial permanently flooded wetland with an unconsolidated bottom.

During the ESI, eight sediment samples were collected from the Penitentiary Ditch and the I & M Canal (See Figure 3). The sample results revealed the presence of VOC', semi-volatiles, pesticide/PCB and inorganics above three times background (See Table 21 – 24).

5.3 Soil Exposure

During the ESI, 54 soil samples were taken from the USS property and the Will County Nature Preserve. The soil samples revealed many organic and inorganic compounds that were above three times background (See Tables 14 thru 17). The organic and inorganic compounds found during the investigation are associated with former activities that occurred at the USS property. See Figure one for soil sample locations.

The Will County Nature Preserve is used as a recreational area, which includes a bike trail and a walk through exhibit of the old US Steel plant. The Will County Nature Preserve also runs parallel with the Penitentiary Ditch and the I & M Canal, which is a know fishery. Contamination found at the Will County Nature Preserve was synonymous with activities associated with the waster water treatment plant and activities conducted at the former USS property.

Estimated nearby population within one-mile of the site

On-Site	0
0-1/4	152
¼ -1/2	347
½- 1 mile	2000

5.4 Air Pathway

USS had a history of USEPA air emission violations during the 1970's and early 1980's. The violations involved operating a number of processes without proper operating permits, including nail galvanizing lines, steel grinders and a cleaning house. USS had applied for the required operating permits for these processes in

1974 and again I 1975,but the applications were denied by IEPA because of the potential for an excessive amount of particulate release from these processes. IEPA inspectors also observed air emission violations during inspections (FSIP, 1995).

No air samples were collected during the ESI sampling event, however, according to information obtained from the Focused Site Inspection Prioritization report, soil samples were collected from nearby residences yards during the investigation and found contaminants in nearby residential yards that are associated with the steel industry.

6.0 Additional Risk-Based Objectives

This section discusses additional risk-based objectives used to evaluate the USS property. These objectives have not been used to assess the site for Hazard Ranking System purposes.

6.1 sediment Quality Guidelines

The sediment samples collected during the ESI were compared to ecological benchmarks to help determine whether site activities have impacted the surface water pathway. Two sources of benchmarks were used for this comparison: Ontario sediment quality guidelines and US EPA ecotoxicological ("ecotox") thresholds. Ontario sediment quality guidelines are non-regulatory ecological benchmark values that serve as indicators of potential aquatic impacts. Levels of contaminants below Ontario benchmarks indicate a level of pollution that has no effect on the majority of sediment-dwelling organisms. Contaminants for which no Ontario benchmarks were available were compared to USEPA ecotox thresholds. Ecotox thresholds are ecological benchmarks above which there is sufficient concern regarding adverse

ecological effects to warrant further site investigation. Ecotox thresholds are to be used for screening purposes and are not to be used as regulatory criteria, site-specific cleanup standards or remediation goals. See Appendix F for Ontario Sediment Quality Guidelines and Ecotox Thresholds.

There were numerous sediment samples that exceeded the Ontario Sediment Quality Benchmarks and the Ecotox Thresholds. See Tables 21 thru 24.

7.0 References

Phase I Environmental Site Assessment; Hart Crowser; November 21, 2002.

Joliet Works Environmental Investigation; Waste Technology Report; November 2003.

Screening Site Inspection; Ecology and Environment; October 2, 1990.

Health Assessment; Illinois Department of Public Health; September 11, 1996.

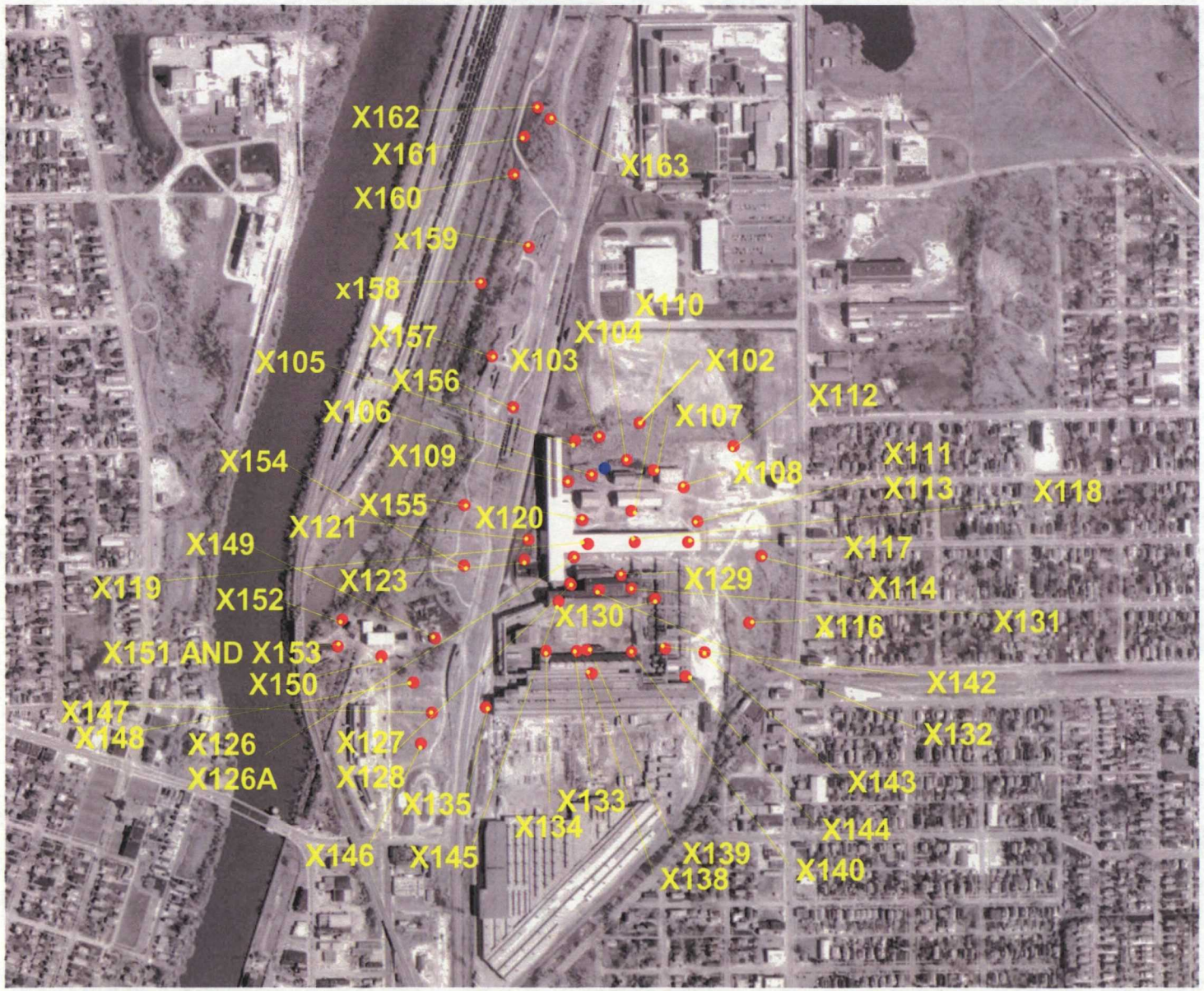
Focused Site Inspection Prioritization; Illinois Environmental Protection Agency; September 7, 1995.

Environmental Assessment; Mittelhauser Corporation; June 1989.

US Census Bureau; www.factfinder.us.gov

FIGURES AND TABLES

Figure 1
Soil Samples
US Steel



● Soil Samples

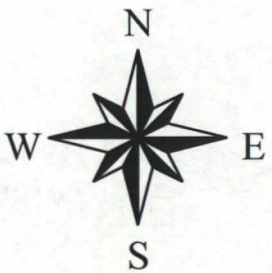
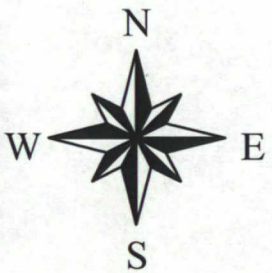
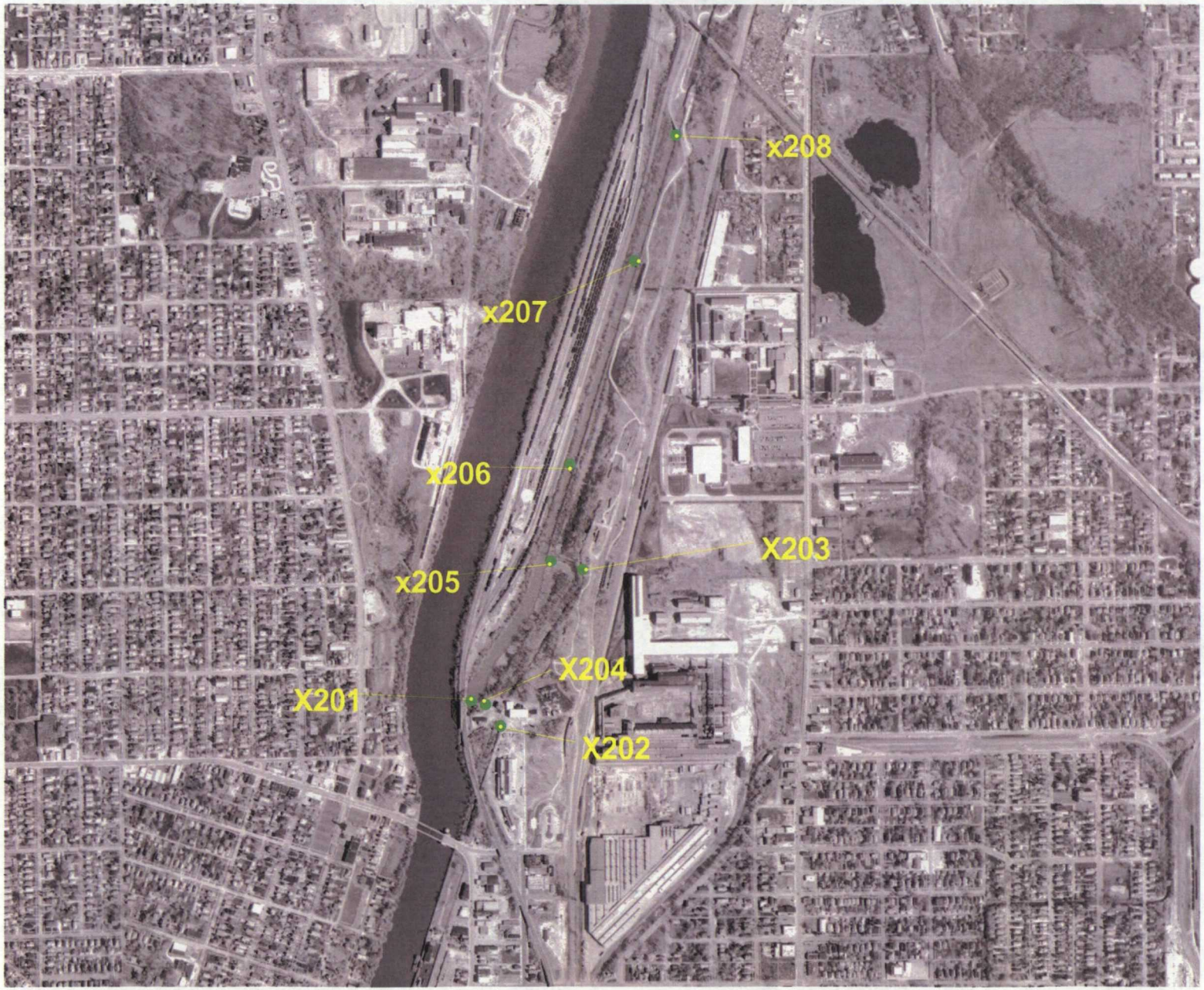


Figure 2
Groundwater Samples
US Steel

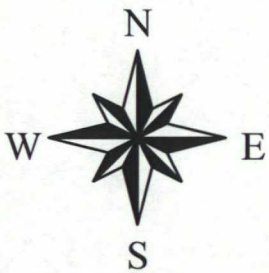
Groundwater Samples



Figu 3
Sediment Samples
US Steel



Sediment Sample



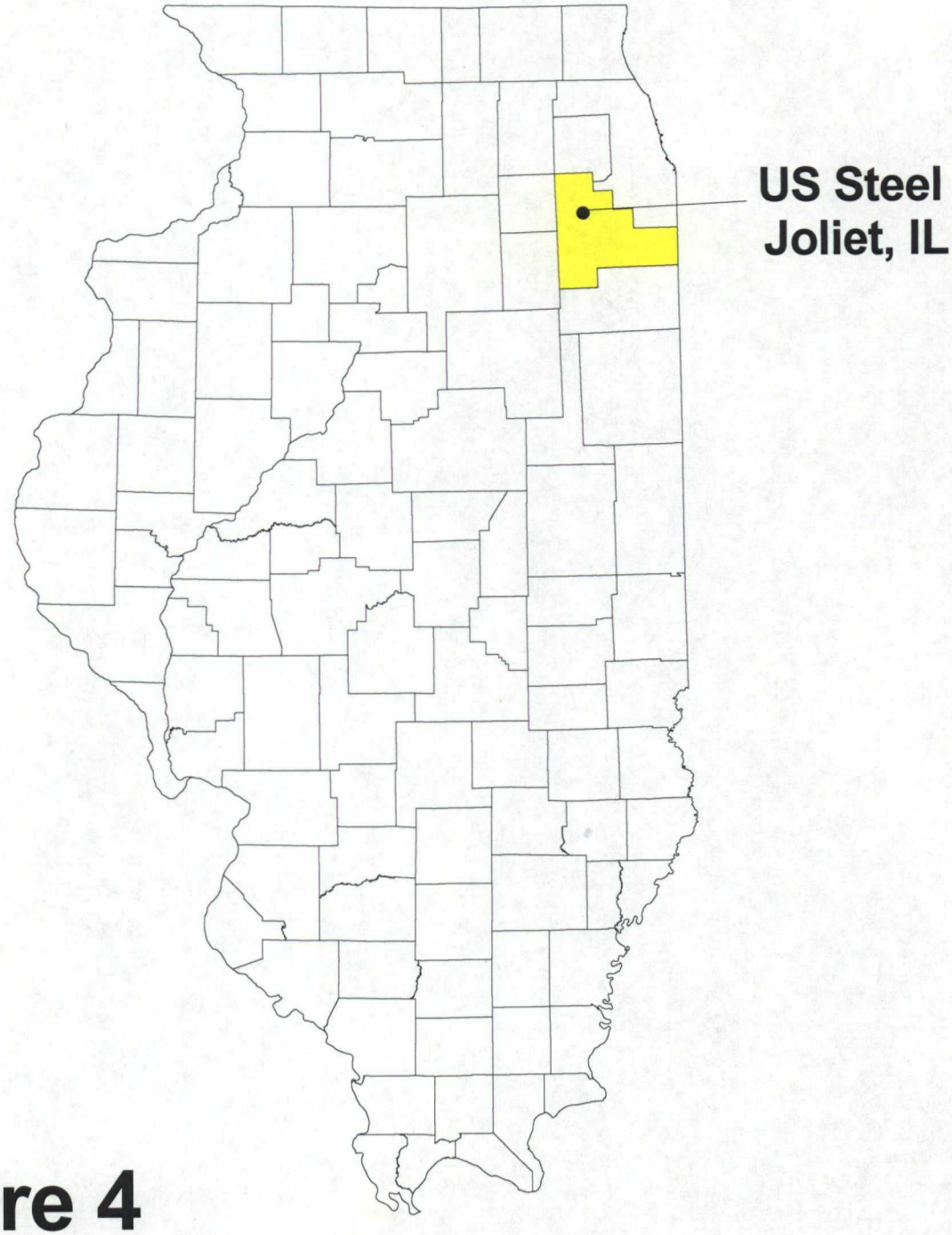


Figure 4
Site Location Map

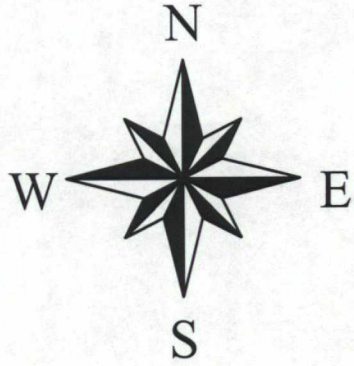


TABLE 1
US STEEL
VOLATILE SOILS

Sample Number :	E0067		E0066		E0068		E0065		E0062		E0063		E0050		E0064		E0069		E0070		E0075	
Sampling Location :	X102		X103		X104		X105		X106		X107		X108		X109		X110		X110A		X111	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/4/2004		5/4/2004		5/4/2004		5/5/2004	
Time Sampled :	11:40		10:30		11:50		09:45		08:45		08:10		14:45		09:10		13:10		13:10		08:40	
%Moisture :	21		15		0		13		19		37		17		35		27		29		33	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	UJ	10	UJ	10	UJ	10	UJ	11	UJ	16	UJ	10	UJ	16	UJ	14	UJ	16	UJ	16	UJ
CHLOROMETHANE	12	UJ	10	UJ	10	UJ	10	UJ	11	UJ	16	UJ	10	UJ	16	UJ	14	UJ	16	UJ	16	UJ
VINYL CHLORIDE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
BROMOMETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
TRICHLOROFLUOROMETHANE	12	U	10	U	10	U	0.8	J	11	U	16	U	10	U	16	U	14	U	16	U	3	J
1,1-DICHLOROETHENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
ACETONE	12	U	10	U	4	J	10	U	11	U	16	U	10	U	85		14	U	16	U	16	U
CARBON DISULFIDE	12	U	1	J	10	U	10	U	11	U	2	J	3	J	3	J	14	U	16	U	16	U
METHYL ACETATE	12	U	10	U	10	UJ	10	U	11	U	16	U	10	U	16	U	14	UJ	16	UJ	16	UJ
METHYLENE CHLORIDE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
TRANS-1,2-DICHLOROETHENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
METHYL TERT-BUTYL ETHER	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,1-DICHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CIS-1,2-DICHLOROETHENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
2-BUTANONE	12	U	10	U	10	UJ	10	U	11	U	16	U	10	U	30		14	UJ	16	UJ	16	UJ
CHLOROFORM	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,1,1-TRICHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CYCLOHEXANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CARBON TETRACHLORIDE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
BENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,2-DICHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
TRICHLOROETHENE	7	J	1	J	10	U	0.7	J	11	U	2	J	10	U	16	U	14	U	16	U	3	J
METHYLCYCLOHEXANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,2-DICHLOROPROPANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
BROMODICHLOROMETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CIS-1,3-DICHLOROPROPENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
4-METHYL-2-PENTANONE	12	U	10	U	10	UJ	10	U	11	U	16	U	10	U	16	U	14	UJ	16	UJ	16	UJ
TOLUENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
TRANS-1,3-DICHLOROPROPENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,1,2-TRICHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
TETRACHLOROETHENE	12	U	10	U	10	UJ	10	U	11	U	16	U	10	U	16	U	14	UJ	16	UJ	16	UJ
2-HEXANONE	12	U	10	U	10	UJ	10	U	11	U	16	U	10	U	16	U	14	UJ	16	UJ	16	UJ
DIBROMOCHLOROMETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,2-DIBROMOETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
CHLOROBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
ETHYLBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
XYLENES (TOTAL)	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
STYRENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
BROMOFORM	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
ISOPROPYLBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,1,2,2-TETRACHLOROETHANE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,3-DICHLOROBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,4-DICHLOROBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,2-DICHLOROBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U
1,2-DIBROMO-3-CHLOROPROPANE	12	U	10	U	10	R	10	U	11	U	16	U	10	U	16	U	14	R	16	R	16	R
1,2,4-TRICHLOROBENZENE	12	U	10	U	10	U	10	U	11	U	16	U	10	U	16	U	14	U	16	U	16	U

TABLE 1
US STEL
VOLATILE SOIL (cont.)

Sample Number :	E0096		E0076		E0089		E0090		E0074		E0073		E0072		E0071		E0055		E0041		E0083	
Sampling Location :	X112		X113		X114		X116		X117		X118		X119		X120		X121		X123		X126	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/6/2004		5/5/2004		5/6/2004		5/6/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/3/2004		5/5/2004	
Time Sampled :	13:50		08:40		07:45		08:30		16:00		15:00		14:30		13:50		15:45		11:45		11:45	
%Moisture :	34		59		7		15		9		22		18		17		23		6		25	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	17	U	33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	UJ	11	UJ	13	UJ	11	UJ	17	UJ
CHLOROMETHANE	17	U	33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	UJ	11	UJ	13	UJ	11	UJ	17	UJ
VINYL CHLORIDE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
BROMOMETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
TRICHLOROFLUOROMETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1-DICHLOROETHENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
ACETONE	100		8	J	10	U	5	J	2	J	7	J	12	U	19		13	U	10	J	17	U
CARBON DISULFIDE	2	J	16	J	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
METHYL ACETATE	17	U	33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	U	11	UJ	13	U	11	U	17	UJ
METHYLENE CHLORIDE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	25	U	17	U
TRANS-1,2-DICHLOROETHENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
METHYL TERT-BUTYL ETHER	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1-DICHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CIS-1,2-DICHLOROETHENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
2-BUTANONE	30		33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	U	11	UJ	13	U	11	U	17	UJ
CHLOROFORM	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1,1-TRICHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CYCLOHEXANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CARBON TETRACHLORIDE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
BENZENE	17	U	52		10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,2-DICHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
TRICHLOROETHENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
METHYLCYCLOHEXANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,2-DICHLOROPROPANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
BROMODICHLOROMETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CIS-1,3-DICHLOROPROPENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
4-METHYL-2-PENTANONE	17	U	33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	U	11	UJ	13	U	11	U	17	UJ
TOLUENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
TRANS-1,3-DICHLOROPROPENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1,2-TRICHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
TETRACHLOROETHENE	17	U	33	UJ	10	UJ	14	U	10	UJ	15	UJ	12	U	11	UJ	13	U	11	U	17	UJ
2-HEXANONE	17	UJ	33	UJ	10	UJ	14	UJ	10	UJ	15	UJ	12	U	11	UJ	13	U	11	U	17	UJ
DIBROMOCHLOROMETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,2-DIBROMOETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
CHLOROBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
ETHYLBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
XYLENES (TOTAL)	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	1	J	17	U
STYRENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
BROMOFORM	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
ISOPROPYLBENZENE	2	J	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,1,2,2-TETRACHLOROETHANE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,3-DICHLOROBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,4-DICHLOROBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,2-DICHLOROBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U
1,2-DIBROMO-3-CHLOROPROPANE	17	R	33	R	10	R	14	R	10	R	15	R	12	U	11	R	13	U	11	U	17	R
1,2,4-TRICHLOROBENZENE	17	U	33	U	10	U	14	U	10	U	15	U	12	U	11	U	13	U	11	U	17	U

TABEL 1
US STEEL
VOLATILE SOIL (cont.)

Sample Number :	E0084		E0085		E0042		E0082		E0097		E0047		E0048		E0093		E0094		E0095		E0087	
Sampling Location :	X126A		X127		X128		X129		X130		X131		X132		X133		X134		X135		X138	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/5/2004		5/5/2004		5/3/2004		5/5/2004		5/6/2004		5/3/2004		5/3/2004		5/6/2004		5/6/2004		5/6/2004		5/5/2004	
Time Sampled :	11:45		12:30		11:00		10:30		14:25		13:00		12:20		10:30		11:05		12:05		14:45	
%Moisture :	24		8		40		13		53		24		2		22		24		30		23	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	16	UJ	10	UJ	17	UJ	12	UJ	15	U	10	UJ	11	UJ	13	U	15	U	15	U	15	UJ
CHLOROMETHANE	16	UJ	10	UJ	17	UJ	12	UJ	15	U	10	UJ	2	J	13	U	15	U	15	U	15	UJ
VINYL CHLORIDE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
BROMOMETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CHLOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
TRICHLOROFLUOROMETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1-DICHLOROETHENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
ACETONE	16	U	10	U	7	J	12	U	17		16		13		11	J	62		110		9	J
CARBON DISULFIDE	16	U	10	U	17	U	12	U	7	J	10	U	3	J	13	U	4	J	3	J	3	J
METHYL ACETATE	16	UJ	10	UJ	17	U	12	UJ	15	U	10	U	11	U	13	U	15	U	15	U	15	UJ
METHYLENE CHLORIDE	16	U	10	U	33	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
TRANS-1,2-DICHLOROETHENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
METHYL TERT-BUTYL ETHER	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1-DICHLOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CIS-1,2-DICHLOROETHENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
2-BUTANONE	16	UJ	10	UJ	17	U	12	UJ	5	J	10	U	11	U	2	J	20		35		15	UJ
CHLOROFORM	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1,1-TRICHLOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CYCLOHEXANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CARBON TETRACHLORIDE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
BENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,2-DICHLOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
TRICHLOROETHENE	16	U	0.7	J	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
METHYLCYCLOHEXANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,2-DICHLOROPROPANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
BROMODICHLOROMETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CIS-1,3-DICHLOROPROPENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
4-METHYL-2-PENTANONE	16	UJ	10	UJ	17	U	12	UJ	15	U	10	U	11	U	13	U	15	U	15	U	15	UJ
TOLUENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
TRANS-1,3-DICHLOROPROPENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1,2-TRICHLOROETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	2	J	15	U	15	U	15	U
TETRACHLOROETHENE	16	UJ	10	UJ	17	U	12	UJ	15	U	10	U	11	U	13	U	15	U	15	U	15	UJ
2-HEXANONE	16	UJ	10	UJ	17	U	12	UJ	15	UJ	10	U	11	U	13	UJ	15	UJ	15	UJ	15	UJ
DIBROMOCHLOROMETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,2-DIBROMOETHANE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
CHLOROBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
ETHYLBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
XYLENES (TOTAL)	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
STYRENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
BROMOFORM	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
ISOPROPYLBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,1,2,2-TETRACHLOROETHANE	16	U	10	U	17	U	12	U	2	J	10	U	11	U	13	U	15	U	15	U	15	U
1,3-DICHLOROBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,4-DICHLOROBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,2-DICHLOROBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U
1,2-DIBROMO-3-CHLOROPROPANE	16	R	10	R	17	U	12	R	15	R	10	U	11	U	13	R	15	R	15	R	15	R
1,2,4-TRICHLOROBENZENE	16	U	10	U	17	U	12	U	15	U	10	U	11	U	13	U	15	U	15	U	15	U

TABLE 1
US STEEL
VOLATILE SOIL (cont.)

Sample Number :	E0060		E0092		E0091		E0088		E0086		E0049		E00C9		E00D0		E00D1		E00C8		E00D2	
Sampling Location :	X139		X140		X142		X143		X144		X145		X146		X147		X148		X149		X150	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/3/2004		5/6/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/26/2004	
Time Sampled :	16:30		09:45		09:15		16:50		16:10		13:10		08:35		09:20		09:50		16:30		10:35	
%Moisture :	20		37		29		28		19		2		22		18		19		22		16	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	13	UJ	18	U	14	U	13	UJ	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
CHLOROMETHANE	13	UJ	18	U	14	U	13	UJ	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
VINYL CHLORIDE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
BROMOMETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CHLOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
TRICHLOROFLUOROMETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1-DICHLOROETHENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
ACETONE	5	J	20		13	J	42		10	U	10	U	10	J	15	U	16		15		5	J
CARBON DISULFIDE	13	U	18	U	14	U	2	J	10	U	10	U	14	U	15	U	13	U	13	U	15	U
METHYL ACETATE	13	U	18	U	14	U	13	UJ	10	UJ	10	UJ	14	U	15	U	13	U	6	J	15	U
METHYLENE CHLORIDE	13	U	55	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
TRANS-1,2-DICHLOROETHENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
METHYL TERT-BUTYL ETHER	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1-DICHLOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CIS-1,2-DICHLOROETHENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
2-BUTANONE	13	U	3	J	2	J	15	J	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
CHLOROFORM	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1,1-TRICHLOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CYCLOHEXANE	13	U	13	J	14	U	3	J	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CARBON TETRACHLORIDE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
BENZENE	13	U	18	U	14	U	2	J	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,2-DICHLOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
TRICHLOROETHENE	13	U	18	U	14	U	1	J	10	U	10	U	14	U	15	U	13	U	13	U	15	U
METHYLCYCLOHEXANE	13	U	90		14	U	12	J	10	U	10	U	14	U	15	U	19		13	U	15	U
1,2-DICHLOROPROPANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
BROMODICHLOROMETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CIS-1,3-DICHLOROPROPENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
4-METHYL-2-PENTANONE	13	U	18	U	14	U	13	UJ	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
TOLUENE	13	U	18	U	14	U	4	J	10	U	10	U	14	U	15	U	13	U	3	J	15	U
TRANS-1,3-DICHLOROPROPENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1,2-TRICHLOROETHANE	13	U	150		14	U	18		10	U	10	U	14	U	15	U	13	U	13	U	15	U
TETRACHLOROETHENE	13	U	18	U	14	U	13	UJ	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
2-HEXANONE	13	U	93	J	14	UJ	54	J	10	UJ	10	UJ	14	U	15	U	13	U	13	U	15	U
DIBROMOCHLOROMETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,2-DIBROMOETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
CHLOROBENZENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
ETHYLBENZENE	13	U	18	U	14	U	3	J	10	U	10	U	14	U	15	U	13	U	13	U	15	U
XYLENES (TOTAL)	13	U	18	U	14	U	14		10	U	10	U	14	U	15	U	13	U	13	U	15	U
STYRENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
BROMOFORM	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	UJ	15	U
ISOPROPYLBENZENE	13	U	2	J	14	U	21		10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,1,2,2-TETRACHLOROETHANE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,3-DICHLOROBENZENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,4-DICHLOROBENZENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,2-DICHLOROBENZENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U
1,2-DIBROMO-3-CHLOROPROPANE	13	U	18	R	14	R	13	R	10	R	10	R	14	U	15	U	13	U	13	U	15	U
1,2,4-TRICHLOROBENZENE	13	U	18	U	14	U	13	U	10	U	10	U	14	U	15	U	13	U	13	U	15	U

TABLE 1
US STEEL
VOLATILE SOIL (cont.)

Sample Number :	E00D4		E00D5		E00D3		E00C5		E00C1		E00D6		E00C6		E00C7		E00C4		E00D9		E00D7	
Sampling Location :	X151		X152		X153		X154		X155		X156		X157		X158		X159		X160		X161	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/25/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004	
Time Sampled :	11:05		12:35		11:05		15:10		13:40		13:45		13:30		16:50		12:30		16:10		14:50	
%Moisture :	39		33		36		8		32		15		14		28		22		28		30	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CHLOROMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
VINYL CHLORIDE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
BROMOMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
TRICHLOROFLUOROMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,1-DICHLOROETHENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
ACETONE	61		19	U	57		31	J	72	J	12	U	24	J	30	J	84	J	12	U	11	U
CARBON DISULFIDE	19	U	19	U	18	U	14		5	J	12	U	10	U	11	U	12	U	12	U	11	U
METHYL ACETATE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
METHYLENE CHLORIDE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
TRANS-1,2-DICHLOROETHENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
METHYL TERT-BUTYL ETHER	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,1-DICHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CIS-1,2-DICHLOROETHENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
2-BUTANONE	19	U	19	U	18	U	16		25		12	U	11		8	J	26		12	U	11	U
CHLOROFORM	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,1,1-TRICHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CYCLOHEXANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CARBON TETRACHLORIDE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
BENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	10	J	12	U	11	U
1,2-DICHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
TRICHLOROETHENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
METHYLCYCLOHEXANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,2-DICHLOROPROPANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
BROMODICHLOROMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
CIS-1,3-DICHLOROPROPENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
4-METHYL-2-PENTANONE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
TOLUENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	6	J	12	UJ	11	U
TRANS-1,3-DICHLOROPROPENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,1,2-TRICHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
TETRACHLOROETHENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
2-HEXANONE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
DIBROMOCHLOROMETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
1,2-DIBROMOETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
CHLOROBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
ETHYLBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
XYLENES (TOTAL)	7	J	19	U	5	J	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
STYRENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
BROMOFORM	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	U	11	U
ISOPROPYLBENZENE	5	J	19	U	3	J	10	U	12	U	12	U	3	J	11	U	12	U	12	UJ	11	U
1,1,2,2-TETRACHLOROETHANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
1,3-DICHLOROBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
1,4-DICHLOROBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
1,2-DICHLOROBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
1,2-DIBROMO-3-CHLOROPROPANE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U
1,2,4-TRICHLOROBENZENE	19	U	19	U	18	U	10	U	12	U	12	U	10	U	11	U	12	U	12	UJ	11	U

TABLE 1
US STEEL
VOLATILE SOIL (cont.)

Sample Number :	E00D8		E00E0	
Sampling Location :	X162		X163	
Matrix :	Soil		Soil	
Units :	ug/Kg		ug/Kg	
Date Sampled :	5/26/2004		5/26/2004	
Time Sampled :	15:35		15:50	
%Moisture :	28		31	
pH :	7.0		7.0	
Dilution Factor :	1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	12	U	13	U
CHLOROMETHANE	12	U	13	UJ
VINYL CHLORIDE	12	U	13	U
BROMOMETHANE	12	U	13	U
CHLOROETHANE	12	U	13	U
TRICHLOROFLUOROMETHANE	12	U	13	U
1,1-DICHLOROETHENE	12	U	13	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	12	U	13	U
ACETONE	12	U	12	J
CARBON DISULFIDE	12	U	13	U
METHYL ACETATE	12	U	13	U
METHYLENE CHLORIDE	12	U	13	U
TRANS-1,2-DICHLOROETHENE	12	U	13	U
METHYL TERT-BUTYL ETHER	12	U	13	U
1,1-DICHLOROETHANE	12	U	13	U
CIS-1,2-DICHLOROETHENE	12	U	13	U
2-BUTANONE	12	U	13	U
CHLOROFORM	12	U	13	U
1,1,1-TRICHLOROETHANE	12	U	13	U
CYCLOHEXANE	12	U	13	U
CARBON TETRACHLORIDE	12	U	13	U
BENZENE	12	U	13	U
1,2-DICHLOROETHANE	12	U	13	U
TRICHLOROETHENE	12	U	13	U
METHYLCYCLOHEXANE	12	U	13	U
1,2-DICHLOROPROPANE	12	U	13	U
BROMODICHLOROMETHANE	12	U	13	U
CIS-1,3-DICHLOROPROPENE	12	U	13	U
4-METHYL-2-PENTANONE	12	UJ	13	U
TOLUENE	12	UJ	13	U
TRANS-1,3-DICHLOROPROPENE	12	U	13	U
1,1,2-TRICHLOROETHANE	12	U	13	U
TETRACHLOROETHENE	12	UJ	13	U
2-HEXANONE	12	UJ	13	U
DIBROMOCHLOROMETHANE	12	U	13	U
1,2-DIBROMOETHANE	12	UJ	13	U
CHLOROBENZENE	12	UJ	13	U
ETHYLBENZENE	12	UJ	13	U
XYLENES (TOTAL)	12	UJ	13	U
STYRENE	12	UJ	13	U
BROMOFORM	12	U	13	U
ISOPROPYLBENZENE	12	UJ	13	U
1,1,2,2-TETRACHLOROETHANE	12	UJ	13	U
1,3-DICHLOROBENZENE	12	UJ	13	U
1,4-DICHLOROBENZENE	12	UJ	13	U
1,2-DICHLOROBENZENE	12	UJ	13	U
1,2-DIBROMO-3-CHLOROPROPANE	12	UJ	13	UJ
1,2,4-TRICHLOROBENZENE	12	UJ	13	UJ

TABLE 2
US STEEL
SEMIVOLATILE SOIL

Sample Number :	E0067		E0067DL		E0066		E0068		E0065		E0062		E0062DL		E0063		E0050	
Sampling Location :	X102		X102		X103		X104		X105		X106		X106		X107		X108	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004	
Time Sampled :	11:40		11:40		10:30		11:50		09:45		08:45		08:45		08:10		14:45	
%Moisture :	10		10		2		6		12		23		23		50		12	
pH :	8.3		8.3		7.1		7.3		8.8		7.6		7.6		8.9		8.3	
Dilution Factor :	2.0		6.0		1.0		3.0		2.0		5.0		15.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	730	UJ	2200	UJ	340	UJ	1000	R	750	UJ	2100	UJ	6400	UJ	1400	J	370	UJ
PHENOL	730	UJ	2200	UJ	340	UJ	1000	R	750	U	2100	UJ	6400	UJ	650	UJ	370	U
BIS-(2-CHLOROETHYL)ETHER	730	UJ	2200	UJ	340	UJ	1000	R	750	U	2100	UJ	6400	UJ	650	UJ	370	U
2-CHLOROPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2-METHYLPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2,2'-OXYBIS(1- CHLOROPROPANE)	730	UJ	2200	UJ	340	UJ	1000	R	750	UJ	2100	UJ	6400	UJ	650	UJ	370	UJ
ACETOPHENONE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
4-METHYLPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
N-NITROSO-DI-N PROPYLAMINE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
HEXACHLOROETHANE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
NITROBENZENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
ISOPHORONE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2-NITROPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2,4-DIMETHYLPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
BIS(2-CHLOROETHOXY)METHANE	730	UJ	2200	UJ	340	UJ	1000	R	750	U	2100	UJ	6400	UJ	650	UJ	370	U
2,4-DICHLOROPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
NAPHTHALENE	360	J	350	J	340	U	1000	R	360	J	1000	J	6400	U	650	U	370	U
4-CHLOROANILINE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
HEXACHLOROBUTADIENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
CAPROLACTAM	730	U	2200	U	340	U	1000	R	750	UJ	2100	U	6400	U	650	U	370	UJ
4-CHLORO-3-METHYLPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2-METHYLNAPHTHALENE	150	J	2200	U	340	U	1000	R	270	J	930	J	820	J	650	U	370	U
HEXACHLOROCYCLO-PENTADIENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2,4,6-TRICHLOROPHENOL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2,4,5-TRICHLOROPHENOL	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
1,1'-BIPHENYL	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2-CHLORONAPHTHALENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2-NITROANILINE	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
DIMETHYLPHTHALATE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
2,6-DINITROTOLUENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
ACENAPHTHYLENE	950		830	J	340	U	1000	R	750	U	1500	J	1300	J	650	U	370	U
3-NITROANILINE	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
ACENAPHTHENE	730	U	2200	U	340	U	1000	R	87	J	350	J	6400	U	650	U	370	U
2,4-DINITROPHENOL	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
4-NITROPHENOL	1800	UJ	5500	UJ	850	UJ	2600	R	1900	UJ	5400	UJ	16000	UJ	1600	UJ	930	UJ
DIBENZOFURAN	730	U	2200	U	340	U	1000	R	250	J	1100	J	1000	J	650	U	370	U
2,4-DINITROTOLUENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
DIETHYLPHTHALATE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
FLUORENE	730	U	2200	U	340	U	1000	R	750	U	2300		2100	J	650	U	370	U
4-CHLOROPHENYL-PHENYL ETHER	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
4-NITROANILINE	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
4,6-DINITRO-2-METHYLPHENOL	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
N-NITROSO DIPHENYLAMINE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
4-BROMOPHENYL-PHENYLETHER	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
HEXACHLOROBENZENE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
ATRAZINE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
PENTACHLOROPHENOL	1800	U	5500	U	850	U	2600	R	1900	U	5400	U	16000	U	1600	U	930	U
PHENANTHRENE	1500		1400	J	340	U	1000	R	1500		21000		21000		730		110	J
ANTHRACENE	500	J	380	J	340	U	1000	R	210	J	4000		4100	J	160	J	370	U
CARBAZOLE	730	U	2200	U	340	U	1000	R	750	U	1500	J	1500	J	650	U	370	U
DI-N-BUTYLPHTHALATE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
FLUORANTHENE	3500		3500		340	U	1000	R	1600		22000		24000		1200		130	J
PYRENE	7700		7800		340	U	1000	R	1600		27000		28000		1600		160	J
BUTYLBENZYLPHTHALATE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
3,3'-DICHLOROBENZIDINE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
BENZO(A)ANTHRACENE	4000		3800		340	U	1000	R	770		12000		12000		980		83	J
CHRYSENE	4700		4700		340	U	1000	R	1000		13000		13000		1000		110	J
BIS(2-ETHYLHEXYL)PHTHALATE	250	J	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
DI-N-OCTYLPHTHALATE	730	U	2200	U	340	U	1000	R	750	U	2100	U	6400	U	650	U	370	U
BENZO(B)FLUORANTHENE	5200		4600		340	U	1000	R	820		12000		12000		1000		95	J
BENZO(K)FLUORANTHENE	4200		5100		340	U	1000	R	730	J	8400		9300		850		110	J
BENZO(A)PYRENE	7900		8100		340	U	1000	R	680	J	10000		10000		1000		88	J
INDENO(1,2,3-CD)-PYRENE	6400		6500		340	U	1000	R	480	J	7000		6700		770		370	U
DIBENZO(A,H)-ANTHRACENE	1800		2500		340	U	1000	R	180	J	3600		2500	J	230	J	370	U
BENZO(G,H,I)PERYLENE	9900	J	10000	J	340	U	1000	R	520	J	7300		7400		900		370	U

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0064		E0069		E0070		E0075		E0096		E0076		E0089		E0090		E0074	
Sampling Location :	X109		X110		X110A		X111		X112		X113		X114		X116		X117	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/5/2004		5/6/2004		5/5/2004		5/6/2004		5/6/2004		5/4/2004	
Time Sampled :	09:10		13:10		13:10		08:40		13:50		08:40		07:45		08:30		16:00	
%Moisture :	34		27		28		29		35		19		6		17		16	
pH :	6.6		8.1		8.3		6.4		7.1		4.0		8.0		7.5		8.6	
Dilution Factor :	3.0		3.0		3.0		1.0		1.0		5.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	300	J	1300	UJ	1400	UJ	460	U	98	J	2000	U	350	U	10000	UJ	390	U
PHENOL	1500	UJ	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
BIS-(2-CHLOROETHYL)ETHER	1500	UJ	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2-CHLOROPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2-METHYLPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,2'-OXYBIS(1- CHLOROPROPANE)	1500	UJ	1300	UJ	1400	UJ	460	U	500	UJ	2000	UJ	350	UJ	10000	U	390	U
ACETOPHENONE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
4-METHYLPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
N-NITROSO-DI-N PROPYLAMINE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
HEXACHLOROETHANE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
NITROBENZENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
ISOPHORONE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2-NITROPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,4-DIMETHYLPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
BIS(2-CHLOROETHOXY)METHANE	1500	UJ	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,4-DICHLOROPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
NAPHTHALENE	1500	U	1300	U	420	J	76	J	500	U	5900		350	U	10000	U	390	U
4-CHLOROANILINE	1500	U	1300	U	1400	U	460	U	500	U	460	J	350	U	10000	U	390	U
HEXACHLOROBUTADIENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
CAPROLACTAM	1500	U	1300	UJ	1400	UJ	460	U	500	U	2000	U	350	U	10000	U	390	U
4-CHLORO-3-METHYLPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2-METHYLNAPHTHALENE	1500	U	460	J	550	J	460	U	500	U	860	J	54	J	10000	U	390	U
HEXACHLOROCYCLO-PENTADIENE	1500	U	1300	U	1400	U	460	U	500	UJ	2000	UJ	350	UJ	10000	U	390	U
2,4,6-TRICHLOROPHENOL	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,4,5-TRICHLOROPHENOL	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
1,1'-BIPHENYL	1500	U	1300	U	1400	U	460	U	500	U	970	J	350	U	10000	U	390	U
2-CHLORONAPHTHALENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2-NITROANILINE	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
DIMETHYLPHTHALATE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,6-DINITROTOLUENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
ACENAPHTHYLENE	1500	U	1300	U	1400	U	49	J	500	U	2000	U	350	U	10000	U	390	U
3-NITROANILINE	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
ACENAPHTHENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
2,4-DINITROPHENOL	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
4-NITROPHENOL	3700	UJ	3400	UJ	3400	UJ	1200	U	1300	UJ	5100	UJ	880	UJ	25000	U	980	U
DIBENZOFURAN	1500	U	190	J	240	J	460	U	500	U	1200	J	350	U	10000	U	390	U
2,4-DINITROTOLUENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
DIETHYLPHTHALATE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
FLUORENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
4-CHLOROPHENYL-PHENYL ETHER	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
4-NITROANILINE	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
4,6-DINITRO-2-METHYLPHENOL	3700	U	3400	U	3400	U	1200	U	1300	U	5100	U	880	U	25000	U	980	U
N-NITROSO DIPHENYLAMINE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
4-BROMOPHENYL-PHENYLETHER	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
HEXACHLOROBENZENE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
ATRAZINE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
PENTACHLOROPHENOL	3700	U	3400	U	3400	U	1200	U	1300	UJ	5100	UJ	880	UJ	25000	U	980	U
PHENANTHRENE	1500	U	1600		1900		360	J	500	U	5700		85	J	1800	J	190	J
ANTHRACENE	1500	U	200	J	270	J	51	J	500	U	1000	J	350	U	10000	U	390	U
CARBAZOLE	1500	U	1300	U	1400	U	460	U	500	U	520	J	350	U	10000	U	390	U
DI-N-BUTYLPHTHALATE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
FLUORANTHENE	1500	U	980	J	1400		1700		500	U	13000		350	U	1700	J	370	J
PYRENE	1500	U	1200	J	1700		840		500	U	9100		45	J	2300	J	310	J
BUTYLBENZYLPHTHALATE	1500	U	1300	U	1400	U	460	U	500	UJ	2000	UJ	350	UJ	10000	U	390	U
3,3'-DICHLOROBENZIDINE	1500	U	1300	U	1400	U	460	U	500	U	2000	U	350	U	10000	U	390	U
BENZO(A)ANTHRACENE	1500	U	590	J	710	J	460		500	U	7900		40	J	1200	J	200	J
CHRYSENE	1500	U	970	J	1100	J	1100		500	U	13000		68	J	1700	J	270	J
BIS(2-ETHYLHEXYL)PHTHALATE	1500	U	1300	U	1400	U	290	J	89	J	2000	UJ	54	J	4800	J	150	J
DI-N-OCTYLPHTHALATE	1500	U	1300	U	1400	U	460	U	500	UJ	2000	UJ	350	UJ	10000	U	390	U
BENZO(B)FLUORANTHENE	1500	U	630	J	770	J	1600		500	U	5300		37	J	10000	U	550	
BENZO(K)FLUORANTHENE	1500	U	670	J	640	J	590	J	500	U	6300	J	350	U	1200	J	290	J
BENZO(A)PYRENE	1500	U	500	J	600	J	300	J	500	U	1900	J	350	U	1000	J	190	J
INDENO(1,2,3-CD)-PYRENE	1500	U	430	J	490	J	310	J	500	U	7800	J	84	J	10000	U	86	J
DIBENZO(A,H)-ANTHRACENE	1500	U	1300	U	160	J	52	J	500	U	1900	J	49	J	10000	U	390	U
BENZO(G,H,I)PERYLENE	1500	U	560	J	640	J	360	J	500	U	8300		180	J	10000	U	110	J

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0073		E0072		E0071		E0055		E0041		E0083		E0084		E0085		E0042	
Sampling Location :	X118		X119		X120		X121		X123		X126		X126A		X127		X128	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004		5/5/2004		5/3/2004	
Time Sampled :	15:00		14:30		13:50		15:45		11:45		11:45		11:45		12:30		11:00	
%Moisture :	51		12		23		25		17		23		24		14		37	
pH :	7.6		8.8		7.4		8.6		5.6		5.0		5.4		8.1		5.4	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		5.0		5.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	20000	UJ	370	UJ	95	J	440	UJ	12000	U	2100	U	2200	U	380	U	11000	UJ
PHENOL	20000	U	370	U	420	U	440	UJ	12000	U	2100	U	2200	U	380	U	11000	U
BIS-(2-CHLOROETHYL)ETHER	20000	U	370	U	420	U	440	UJ	12000	U	2100	U	2200	U	380	U	11000	U
2-CHLOROPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2-METHYLPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2,2'-OXYBIS(1- CHLOROPROPANE)	20000	U	370	UJ	420	UJ	440	UJ	12000	U	2100	U	2200	U	380	UJ	11000	U
ACETOPHENONE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
4-METHYLPHENOL	20000	U	370	U	65	J	440	U	12000	U	2100	U	2200	U	380	U	11000	U
N-NITROSO-DI-N PROPYLAMINE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
HEXACHLOROETHANE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
NITROBENZENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
ISOPHORONE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2-NITROPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2,4-DIMETHYLPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
BIS(2-CHLOROETHOXY)METHANE	20000	U	370	U	420	U	440	UJ	12000	U	2100	U	2200	U	380	U	11000	U
2,4-DICHLOROPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
NAPHTHALENE	20000	U	370	U	420	U	440	U	12000	U	500	J	490	J	380	U	11000	U
4-CHLOROANILINE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
HEXACHLOROBUTADIENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
CAPROLACTAM	20000	U	370	UJ	420	UJ	440	U	12000	U	2100	U	580	J	380	U	11000	U
4-CHLORO-3-METHYLPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2-METHYLNAPHTHALENE	20000	U	72	J	420	U	90	J	12000	U	600	J	660	J	160	J	1500	J
HEXACHLOROCYCLO-PENTADIENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	UJ	11000	U
2,4,6-TRICHLOROPHENOL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2,4,5-TRICHLOROPHENOL	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
1,1'-BIPHENYL	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2-CHLORONAPHTHALENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2-NITROANILINE	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
DIMETHYLPHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
2,6-DINITROTOLUENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
ACENAPHTHYLENE	20000	U	370	U	420	U	180	J	12000	U	2100	U	2200	U	170	J	11000	U
3-NITROANILINE	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
ACENAPHTHENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	130	J	11000	U
2,4-DINITROPHENOL	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
4-NITROPHENOL	51000	U	930	UJ	1100	UJ	1100	UJ	30000	U	5400	U	5400	U	950	UJ	28000	U
DIBENZOFURAN	20000	U	86	J	420	U	97	J	12000	U	490	J	590	J	170	J	11000	U
2,4-DINITROTOLUENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
DIETHYLPHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
FLUORENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	230	J	11000	U
4-CHLOROPHENYL-PHENYL ETHER	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
4-NITROANILINE	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
4,6-DINITRO-2-METHYLPHENOL	51000	U	930	U	1100	U	1100	U	30000	U	5400	U	5400	U	950	U	28000	U
N-NITROSO DIPHENYLAMINE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
4-BROMOPHENYL-PHENYLETHER	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
HEXACHLOROBENZENE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
ATRAZINE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
PENTACHLOROPHENOL	51000	U	930	R	1100	U	1100	U	30000	U	5400	U	5400	U	950	UJ	28000	U
PHENANTHRENE	20000	U	890		200	J	1300		12000	U	2600		3400		1500		11000	U
ANTHRACENE	20000	U	77	J	100	J	250	J	12000	U	2100	U	2200	U	510		11000	U
CARBAZOLE	20000	U	54	J	420	U	92	J	12000	U	2100	U	2200	U	130	J	11000	U
DI-N-BUTYLPHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
FLUORANTHENE	20000	U	990		180	J	2000		12000	U	660	J	840	J	1700		11000	U
PYRENE	20000	U	1100		200	J	2500		12000	U	410	J	510	J	1600		11000	U
BUTYLBENZYLPHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	UJ	11000	U
3,3'-DICHLOROBENZIDINE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	U	11000	U
BENZO(A)ANTHRACENE	20000	U	750		110	J	1500		12000	U	220	J	250	J	860		11000	U
CHRYSENE	20000	U	850		110	J	2000		12000	U	250	J	330	J	1300		11000	U
BIS(2-ETHYLHEXYL)PHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	UJ	11000	U
DI-N-OCTYLPHTHALATE	20000	U	370	U	420	U	440	U	12000	U	2100	U	2200	U	380	UJ	11000	U
BENZO(B)FLUORANTHENE	20000	U	670		420	U	1900		12000	U	2100	U	2200	U	1000		11000	U
BENZO(K)FLUORANTHENE	20000	U	750		420	U	1400	J	12000	U	2100	U	2200	U	940	J	11000	U
BENZO(A)PYRENE	20000	U	670		420	U	1500		12000	U	2100	U	2200	U	870		11000	U
INDENO(1,2,3-CD)-PYRENE	20000	U	480		420	U	1100		12000	U	2100	U	2200	U	710		11000	U
DIBENZO(A,H)-ANTHRACENE	20000	U	180	J	420	U	580		12000	U	2100	U	2200	U	330	J	11000	U
BENZO(G,H,I)PERYLENE	20000	U	530		420	U	1100		12000	U	2100	U	2200	U	710		11000	U

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0082		E0097		E0047		E0048		E0093		E0094		E0095		E0087		E0060	
Sampling Location :	X129		X130		X131		X132		X133		X134		X135		X138		X139	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/5/2004		5/6/2004		5/3/2004		5/3/2004		5/6/2004		5/6/2004		5/6/2004		5/5/2004		5/3/2004	
Time Sampled :	10:30		14:25		13:00		12:20		10:30		11:05		12:05		14:45		16:30	
%Moisture :	11		35		16		3		30		37		29		27		23	
pH :	9.4		6.9		8.0		6.3		5.6		5.6		6.5		7.1		6.7	
Dilution Factor :	1.0		1.0		5.0		1.0		1.0		2.0		1.0		1.0		20.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	11000	UJ	14000	UJ	1900	UJ	10000	UJ	10000	UJ	230	J	460	U	14000	UJ	240000	UJ
PHENOL	11000	U	14000	U	2300	J	2400	J	10000	U	1000	U	460	U	14000	U	240000	U
BIS-(2-CHLOROETHYL)ETHER	11000	U	14000	U	1900	UJ	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-CHLOROPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-METHYLPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2,2'-OXYBIS(1- CHLOROPROPANE)	11000	U	14000	U	1900	UJ	10000	U	10000	U	1000	UJ	460	UJ	14000	U	240000	U
ACETOPHENONE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
4-METHYLPHENOL	11000	U	14000	U	3600		10000	U	10000	U	180	J	460	U	14000	U	240000	U
N-NITROSO-DI-N PROPYLAMINE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
HEXACHLOROETHANE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
NITROBENZENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
ISOPHORONE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-NITROPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2,4-DIMETHYLPHENOL	11000	U	14000	U	12000		10000	U	10000	U	1000	U	460	U	14000	U	240000	U
BIS(2-CHLOROETHOXY)METHANE	11000	U	14000	U	1900	UJ	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2,4-DICHLOROPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
NAPHTHALENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	3100	J	240000	U
4-CHLOROANILINE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
HEXACHLOROBUTADIENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
CAPROLACTAM	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
4-CHLORO-3-METHYLPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-METHYLNAPHTHALENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	2000	J	240000	U
HEXACHLOROCYCLO-PENTADIENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	UJ	460	UJ	14000	U	240000	U
2,4,6-TRICHLOROPHENOL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2,4,5-TRICHLOROPHENOL	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
1,1'-BIPHENYL	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-CHLORONAPHTHALENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2-NITROANILINE	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
DIMETHYLPHTHALATE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
2,6-DINITROTOLUENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
ACENAPHTHYLENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	4300	J	240000	U
3-NITROANILINE	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
ACENAPHTHENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	200	J	14000	U	240000	U
2,4-DINITROPHENOL	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
4-NITROPHENOL	28000	U	35000	U	4900	UJ	25000	U	25000	U	2600	UJ	1200	UJ	34000	U	590000	U
DIBENZOFURAN	11000	U	14000	U	1900	U	10000	U	10000	U	150	J	79	J	4600	J	240000	U
2,4-DINITROTOLUENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
DIETHYLPHTHALATE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
FLUORENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	170	J	5900	J	240000	U
4-CHLOROPHENYL-PHENYL ETHER	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
4-NITROANILINE	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
4,6-DINITRO-2-METHYLPHENOL	28000	U	35000	U	4900	U	25000	U	25000	U	2600	U	1200	U	34000	U	590000	U
N-NITROSO DIPHENYLAMINE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
4-BROMOPHENYL-PHENYLETHER	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
HEXACHLOROBENZENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
ATRAZINE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
PENTACHLOROPHENOL	28000	U	35000	U	4900	U	25000	U	25000	U	2600	UJ	1200	UJ	34000	U	590000	U
PHENANTHRENE	11000	U	1500	J	1900	U	10000	U	2000	J	950	J	2000		36000		240000	U
ANTHRACENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	400	J	10000	J	240000	U
CARBAZOLE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	330	J	2500	J	240000	U
DI-N-BUTYLPHTHALATE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
FLUORANTHENE	1400	J	3600	J	1900	U	10000	U	10000	U	350	J	3500		30000		240000	U
PYRENE	1700	J	6100	J	1900	U	10000	U	10000	U	280	J	3300		31000	J	240000	U
BUTYLBENZYLPHTHALATE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	UJ	460	UJ	14000	U	240000	U
3,3'-DICHLOROBENZIDINE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	460	U	14000	U	240000	U
BENZO(A)ANTHRACENE	11000	U	2700	J	1900	U	10000	U	10000	U	130	J	1700		13000	J	240000	U
CHRYSENE	1700	J	3900	J	1900	U	10000	U	10000	U	240	J	2100		14000		240000	U
BIS(2-ETHYLHEXYL)PHTHALATE	11000	U	14000	U	1900	U	7900	J	10000	U	1000	UJ	110	J	14000	U	240000	U
DI-N-OCTYLPHTHALATE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	UJ	460	UJ	14000	U	240000	U
BENZO(B)FLUORANTHENE	1800	J	2000	J	1900	U	10000	U	10000	U	1000	U	2000		9000	J	240000	U
BENZO(K)FLUORANTHENE	1300	J	2000	J	1900	U	10000	U	10000	U	1000	U	1400		10000	J	240000	U
BENZO(A)PYRENE	1200	J	1900	J	1900	U	10000	U	10000	U	1000	U	1800	J	11000	J	240000	U
INDENO(1,2,3-CD)-PYRENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	1500	J	7200	J	240000	U
DIBENZO(A,H)-ANTHRACENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	540	J	2300	J	240000	U
BENZO(G,H,I)PERYLENE	11000	U	14000	U	1900	U	10000	U	10000	U	1000	U	1600		7700	J	240000	U

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0092		E0091		E0088		E0086		E0049		E00C9		E00D0		E00D1		E00C8	
Sampling Location :	X140		X142		X143		X144		X145		X146		X147		X148		X149	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/6/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004	
Time Sampled :	09:45		09:15		16:50		16:10		13:10		08:35		09:20		09:50		16:30	
%Moisture :	38		31		22		17		2		22		18		19		13	
pH :	6.7		7.0		5.9		7.7		6.0		6.2		7.9		6.3		7.8	
Dilution Factor :	10.0		1.0		10.0		1.0		1.0		20.0		2.0		1.0		10.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	120000	U	13000	UJ	110000	UJ	400	U	10000	UJ	8500	UJ	24000	UJ	410	UJ	3800	U
PHENOL	120000	U	13000	U	110000	U	400	U	17000		8500	U	24000	UJ	410	U	3800	U
BIS-(2-CHLOROETHYL)ETHER	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2-CHLOROPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	UJ	410	U	3800	U
2-METHYLPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2,2'-OXYBIS(1- CHLOROPROPANE)	120000	UJ	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
ACETOPHENONE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	5100	J	410	U	3800	U
4-METHYLPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
N-NITROSO-DI-N PROPYLAMINE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	UJ	410	U	3800	U
HEXACHLOROETHANE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
NITROBENZENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
ISOPHORONE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2-NITROPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2,4-DIMETHYLPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
BIS(2-CHLOROETHOXY)METHANE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2,4-DICHLOROPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
NAPHTHALENE	120000	U	13000	U	110000	U	530		10000	U	8500	U	24000	U	410	U	3800	U
4-CHLOROANILINE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
HEXACHLOROBUTADIENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
CAPROLACTAM	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	130	J	3800	U
4-CHLORO-3-METHYLPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	UJ	410	U	3800	U
2-METHYLNAPHTHALENE	35000	J	14000		170000		220	J	10000	U	8500	U	24000	U	410	U	3800	U
HEXACHLOROCYCLO-PENTADIENE	120000	UJ	13000	U	110000	U	400	U	10000	U	8500	UJ	24000	UJ	410	UJ	3800	UJ
2,4,6-TRICHLOROPHENOL	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2,4,5-TRICHLOROPHENOL	290000	U	33000	U	270000	U	1000	U	26000	U	21000	U	61000	U	1000	U	9500	U
1,1'-BIPHENYL	120000	U	13000	U	110000	U	80	J	10000	U	8500	U	24000	U	410	U	3800	U
2-CHLORONAPHTHALENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2-NITROANILINE	290000	U	33000	U	270000	U	1000	U	26000	U	21000	U	61000	U	1000	U	9500	U
DIMETHYLPHTHALATE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
2,6-DINITROTOLUENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
ACENAPHTHYLENE	120000	U	13000	U	110000	U	53	J	10000	U	2900	J	15000	J	410	U	3800	U
3-NITROANILINE	290000	U	33000	U	270000	U	1000	U	26000	U	21000	U	61000	U	1000	U	9500	U
ACENAPHTHENE	15000	J	1800	J	19000	J	100	J	10000	U	8500	U	24000	UJ	410	U	3800	U
2,4-DINITROPHENOL	290000	U	33000	U	270000	U	1000	U	26000	U	21000	UJ	61000	UJ	1000	UJ	9500	UJ
4-NITROPHENOL	290000	UJ	33000	U	270000	U	1000	U	26000	U	21000	U	61000	UJ	1000	UJ	9500	UJ
DIBENZOFURAN	120000	U	13000	U	12000	J	300	J	10000	U	8500	U	24000	U	410	U	3800	U
2,4-DINITROTOLUENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	UJ	410	U	3800	U
DIETHYLPHTHALATE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	U
FLUORENE	29000	J	4200	J	25000	J	40	J	10000	U	8500	U	24000	U	160	J	3800	U
4-CHLOROPHENYL-PHENYL ETHER	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	U	3800	UJ
4-NITROANILINE	290000	U	33000	U	270000	U	1000	U	26000	U	21000	U	61000	U	1000	U	9500	UJ
4,6-DINITRO-2-METHYLPHENOL	290000	U	33000	U	270000	U	1000	U	26000	U	21000	UJ	61000	UJ	1000	UJ	9500	UJ
N-NITROSO DIPHENYLAMINE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
4-BROMOPHENYL-PHENYLETHER	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
HEXACHLOROBENZENE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
ATRAZINE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
PENTACHLOROPHENOL	290000	UJ	33000	U	270000	U	1000	U	26000	U	21000	U	61000	UJ	1000	UJ	9500	U
PHENANTHRENE	110000	J	24000		75000	J	960		10000	U	11000		63000		410	UJ	3800	U
ANTHRACENE	23000	J	5800	J	14000	J	97	J	10000	U	3500	J	23000	J	410	UJ	3800	U
CARBAZOLE	120000	U	13000	U	110000	U	400	U	10000	U	3700	J	24000	U	410	UJ	3800	UJ
DI-N-BUTYLPHTHALATE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
FLUORANTHENE	16000	J	5100	J	110000	U	820		1800	J	25000		150000	J	360	J	3800	U
PYRENE	74000	J	27000		110000	U	800		1700	J	25000		130000	J	1600	J	3800	U
BUTYLBENZYLPHTHALATE	120000	UJ	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
3,3'-DICHLOROBENZIDINE	120000	U	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
BENZO(A)ANTHRACENE	21000	J	5300	J	110000	U	430		10000	U	12000		64000		720	J	3800	U
CHRYSENE	34000	J	7400	J	110000	U	540		10000	U	13000		66000		870	J	3800	U
BIS(2-ETHYLHEXYL)PHTHALATE	120000	UJ	5000	J	110000	U	75	J	5600	J	8500	U	24000	U	410	UJ	3800	U
DI-N-OCTYLPHTHALATE	120000	UJ	13000	U	110000	U	400	U	10000	U	8500	U	24000	U	410	UJ	3800	U
BENZO(B)FLUORANTHENE	120000	U	3200	J	110000	U	830		10000	U	12000		57000		390	J	3800	U
BENZO(K)FLUORANTHENE	120000	U	2900	J	110000	U	400	J	10000	U	9800		44000	J	350	J	3800	U
BENZO(A)PYRENE	13000	J	3800	J	110000	U	540		10000	U	12000		54000		330	J	3800	U
INDENO(1,2,3-CD)-PYRENE	120000	U	13000	U	110000	U	140	J	10000	U	7600	J	40000		140	J	3800	U
DIBENZO(A,H)-ANTHRACENE	120000	U	13000	U	110000	U	400	U	10000	U	2800	J	12000	J	120	J	3800	U
BENZO(G,H,I)PERYLENE	12000	J	3900	J	110000	U	150	J	10000	U	5900	J	25000		200	J	3800	U

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E00D2		E00D4		E00D4DL		E00D5		E00D3		E00D3DL		E00C5		E00C1		E00D6	
Sampling Location :	X150		X151		X151		X152		X153		X153		X154		X155		X156	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004	
Time Sampled :	10:35		11:05		11:05		12:35		11:05		11:05		15:10		13:40		13:45	
%Moisture :	16		39		39		33		36		36		7		33		15	
pH :	7.6		7.4		7.4		9.2		7.8		7.8		7.4		7.4		7.4	
Dilution Factor :	1.0		1.0		6.0		1.0		1.0		4.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	BACKGROUND		Result	Flag
BENZALDEHYDE	390	UJ	540	UJ	3200	UJ	490	UJ	520	UJ	2100	UJ	350	UJ	490	UJ	390	UJ
PHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
BIS-(2-CHLOROETHYL)ETHER	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2-CHLOROPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2-METHYLPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2,2'-OXYBIS(1- CHLOROPROPANE)	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
ACETOPHENONE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
4-METHYLPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
N-NITROSO-DI-N PROPYLAMINE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
HEXACHLOROETHANE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
NITROBENZENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
ISOPHORONE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2-NITROPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2,4-DIMETHYLPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
BIS(2-CHLOROETHOXY)METHANE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2,4-DICHLOROPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
NAPHTHALENE	390	U	2800		2800	J	490	U	2100		2000	J	350	U	490	U	390	U
4-CHLOROANILINE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
HEXACHLOROBUTADIENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
CAPROLACTAM	390	U	310	J	3200	U	490	U	180	J	2100	U	350	U	490	U	390	U
4-CHLORO-3-METHYLPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2-METHYLNAPHTHALENE	390	U	2100		2200	J	490	U	1500	J	1400	J	350	U	490	U	390	U
HEXACHLOROCYCLO-PENTADIENE	390	UJ	540	UJ	3200	UJ	490	UJ	520	UJ	2100	UJ	350	UJ	490	UJ	390	UJ
2,4,6-TRICHLOROPHENOL	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2,4,5-TRICHLOROPHENOL	990	U	1400	U	8200	U	1200	U	1300	U	5200	U	890	U	1200	U	980	U
1,1'-BIPHENYL	390	U	1000		850	J	490	U	690		610	J	350	U	490	U	390	U
2-CHLORONAPHTHALENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2-NITROANILINE	990	U	1400	U	8200	U	1200	U	1300	U	5200	U	890	U	1200	U	980	U
DIMETHYLPHTHALATE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
2,6-DINITROTOLUENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
ACENAPHTHYLENE	390	U	940		980	J	490	U	590		650	J	350	U	490	U	390	U
3-NITROANILINE	990	U	1400	U	8200	U	1200	U	1300	U	5200	U	890	U	1200	U	980	U
ACENAPHTHENE	390	U	2400		2700	J	490	U	1900		2000	J	350	U	490	U	390	U
2,4-DINITROPHENOL	990	UJ	1400	UJ	8200	UJ	1200	UJ	1300	UJ	5200	UJ	890	UJ	1200	UJ	980	UJ
4-NITROPHENOL	990	UJ	1400	UJ	8200	U	1200	UJ	1300	UJ	5200	U	890	UJ	1200	UJ	980	UJ
DIBENZOFURAN	390	U	560		3200	U	490	U	340	J	2100	U	350	U	490	U	390	U
2,4-DINITROTOLUENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
DIETHYLPHTHALATE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
FLUORENE	390	U	2100		2500	J	490	U	1500		1700	J	350	U	490	U	390	U
4-CHLOROPHENYL-PHENYL ETHER	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
4-NITROANILINE	990	U	1400	U	8200	U	1200	U	1300	U	5200	U	890	U	1200	U	980	U
4,6-DINITRO-2-METHYLPHENOL	990	UJ	1400	UJ	8200	UJ	1200	UJ	1300	UJ	5200	UJ	890	UJ	1200	UJ	980	UJ
N-NITROSO DIPHENYLAMINE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
4-BROMOPHENYL-PHENYLETHER	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
HEXACHLOROBENZENE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
ATRAZINE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
PENTACHLOROPHENOL	990	U	1400	U	8200	U	1200	U	1300	U	5200	U	890	U	1200	U	980	U
PHENANTHRENE	600		15000		14000		150	J	9000		8500		230	J	490	U	210	J
ANTHRACENE	110	J	5100		4900		150	J	3000		3000		350	U	490	U	390	U
CARBAZOLE	390	U	230	J	3200	U	490	U	130	J	2100	U	350	U	490	U	390	U
DI-N-BUTYLPHTHALATE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
FLUORANTHENE	920		11000		11000		560		7000		7100		810		180	J	130	J
PYRENE	870		12000		13000		1200		8900		8200		590		180	J	120	J
BUTYLBENZYLPHTHALATE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
3,3'-DICHLOROBENZIDINE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
BENZO(A)ANTHRACENE	470		6800		5600		640		4100		3600		450		490	U	390	U
CHRYSENE	570		6400		5700		570		4100		3500		610		130	J	100	J
BIS(2-ETHYLHEXYL)PHTHALATE	390	U	540	U	3200	U	170	J	190	J	2100	U	350	U	370	J	390	U
DI-N-OCTYLPHTHALATE	390	U	540	U	3200	U	490	U	520	U	2100	U	350	U	490	U	390	U
BENZO(B)FLUORANTHENE	480		4300		2700	J	430	J	2600		1900	J	670		110	J	88	J
BENZO(K)FLUORANTHENE	370	J	2600	J	3500	J	310	J	2100	J	2300		530	J	490	U	390	U
BENZO(A)PYRENE	440		6000		5300		490		3900		3500		460		110	J	390	U
INDENO(1,2,3-CD)-PYRENE	310	J	2700		2400	J	310	J	1700		1800	J	510		110	J	390	U
DIBENZO(A,H)-ANTHRACENE	120	J	910		820	J	120	J	530		540	J	190	J	490	U	390	U
BENZO(G,H,I)PERYLENE	380	J	2500		2200	J	250	J	1500		1500	J	300	J	130	J	390	U

TABLE 2
US STEEL
SEMIVOLATILE SOIL (cont.)

Sample Number :	E00C6		E00C7		E00C4		E00C4DL		E00D9		E00D7		E00D7DL		E00D8		E00E0	
Sampling Location :	X157		X158		X159		X159		X160		X161		X161		X162		X163	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/25/2004		5/25/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	13:30		16:50		12:30		12:30		16:10		14:50		14:50		15:35		15:50	
%Moisture :	17		24		18		18		28		30		30		28		31	
pH :	7.8		7.5		7.7		7.7		7.4		7.6		7.6		7.3		8.0	
Dilution Factor :	1.0		1.0		1.0		10.0		2.0		1.0		3.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	400	UJ	430	UJ	400	UJ	4000	UJ	920	UJ	470	UJ	1400	UJ	460	UJ	480	UJ
PHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
BIS-(2-CHLOROETHYL)ETHER	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-CHLOROPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-METHYLPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2,2'-OXYBIS(1- CHLOROPROPANE)	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
ACETOPHENONE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
4-METHYLPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
N-NITROSO-DI-N PROPYLAMINE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
HEXACHLOROETHANE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
NITROBENZENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
ISOPHORONE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-NITROPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2,4-DIMETHYLPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
BIS(2-CHLOROETHOXY)METHANE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2,4-DICHLOROPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
NAPHTHALENE	400	U	430	U	90	J	4000	U	920	U	110	J	1400	U	460	U	480	U
4-CHLOROANILINE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
HEXACHLOROBUTADIENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
CAPROLACTAM	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
4-CHLORO-3-METHYLPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-METHYLNAPHTHALENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	100	J	480	U
HEXACHLOROCYCLO-PENTADIENE	400	UJ	430	UJ	400	UJ	4000	UJ	920	UJ	470	UJ	1400	UJ	460	UJ	480	UJ
2,4,6-TRICHLOROPHENOL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2,4,5-TRICHLOROPHENOL	1000	U	1100	U	1000	U	10000	U	2300	U	1200	U	3600	U	1200	U	1200	U
1,1'-BIPHENYL	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-CHLORONAPHTHALENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2-NITROANILINE	1000	U	1100	U	1000	U	10000	U	2300	U	1200	U	3600	U	1200	U	1200	U
DIMETHYLPHTHALATE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
2,6-DINITROTOLUENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
ACENAPHTHYLENE	400	U	430	U	400	U	4000	U	280	J	400	J	380	J	460	U	150	J
3-NITROANILINE	1000	U	1100	U	1000	U	10000	U	2300	U	1200	U	3600	U	1200	U	1200	U
ACENAPHTHENE	400	U	430	U	320	J	4000	U	920	U	380	J	330	J	460	U	480	U
2,4-DINITROPHENOL	1000	UJ	1100	UJ	1000	UJ	10000	UJ	2300	UJ	1200	UJ	3600	UJ	1200	UJ	1200	UJ
4-NITROPHENOL	1000	UJ	1100	UJ	1000	UJ	10000	U	2300	U	1200	UJ	3600	U	1200	U	1200	U
DIBENZOFURAN	400	U	430	U	400	U	4000	U	920	U	260	J	1400	U	460	U	480	U
2,4-DINITROTOLUENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
DIETHYLPHTHALATE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
FLUORENE	400	U	430	U	400	U	4000	U	920	U	430	J	350	J	460	U	480	U
4-CHLOROPHENYL-PHENYL ETHER	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
4-NITROANILINE	1000	U	1100	U	1000	U	10000	U	2300	U	1200	U	3600	U	1200	U	1200	U
4,6-DINITRO-2-METHYLPHENOL	1000	UJ	1100	UJ	1000	UJ	10000	UJ	2300	UJ	1200	UJ	3600	UJ	1200	UJ	1200	UJ
N-NITROSO DIPHENYLAMINE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
4-BROMOPHENYL-PHENYLETHER	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
HEXACHLOROBENZENE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
ATRAZINE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
PENTACHLOROPHENOL	1000	U	1100	U	1000	U	10000	U	2300	U	1200	U	3600	U	1200	U	1200	U
PHENANTHRENE	400	U	430	U	1100		1300	J	310	J	4000		4100		170	J	340	J
ANTHRACENE	400	U	430	U	240	J	4000	U	920	U	1200		1100	J	460	U	170	J
CARBAZOLE	400	U	430	U	160	J	4000	U	920	U	530		420	J	460	U	480	U
DI-N-BUTYLPHTHALATE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
FLUORANTHENE	400	U	430	U	3900		5100		670	J	7100	J	6700	J	230	J	890	
PYRENE	400	U	430	U	4200		4700		590	J	5800	J	4900	J	230	J	720	
BUTYLBENZYLPHTHALATE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
3,3'-DICHLOROBENZIDINE	400	U	430	U	400	U	4000	U	920	U	470	U	1400	U	460	U	480	U
BENZO(A)ANTHRACENE	400	U	430	U	7000		6700		270	J	3200		2700		120	J	500	
CHRYSENE	400	U	430	U	8800		10000		420	J	3300		2800		160	J	590	
BIS(2-ETHYLHEXYL)PHTHALATE	400	U	430	U	400	U	4000	U	920	U	240	J	1400	U	110	J	220	J
DI-N-OCTYLPHTHALATE	400	U	430	U	130	J	4000	U	920	U	470	U	1400	U	460	U	480	U
BENZO(B)FLUORANTHENE	400	U	430	U	21000		18000		660	J	3500		2500		160	J	670	
BENZO(K)FLUORANTHENE	400	U	430	U	19000	J	10000		400	J	2200	J	2200	J	140	J	510	
BENZO(A)PYRENE	400	U	430	U	9400		11000		550	J	2800		2500		150	J	620	
INDENO(1,2,3-CD)-PYRENE	400	U	430	U	9600	J	12000		560	J	1700		1800		200	J	480	
DIBENZO(A,H)-ANTHRACENE	400	U	430	U	3600	J	3700	J	920	U	620		550	J	460	U	140	J
BENZO(G,H,I)PERYLENE	400	U	430	U	8700		11000	J	500	J	1500		1400		200	J	480	

TABLE 3
US STEEL
PESTICIDE/PCB

Sample Number :	E0067		E0066		E0068		E0065		E0065DL		E0062		E0062DL		E0063		E0050		E0064		E0069	
Sampling Location :	X102		X103		X104		X105		X105		X106		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/4/2004		5/4/2004	
Time Sampled :	11:40		10:30		11:50		09:45		09:45		08:45		08:45		08:10		14:45		09:10		13:10	
%Moisture :	10		2		6		12		12		23		23		50		12		34		27	
pH :	8.3		7.1		7.3		8.8		8.8		7.6		7.6		8.9		8.3		6.6		8.1	
Dilution Factor :	1.0		1.0		1.0		1.0		10.0		1.0		10.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	1.9	UJ	1.7	U	1.8	UJ	1.9	U	19	U	2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
BETA-BHC	1.9	UJ	1.7	U	8.2	J	1.9	U	19	U	2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
DELTA-BHC	1.9	UJ	1.7	U	1.8	UJ	2.0	J	19	U	2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
GAMMA-BHC (LINDANE)	1.9	UJ	1.7	U	1.8	UJ	1.9	U	19	U	2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
HEPTACHLOR	2.0	J	1.7	U	1.8	UJ	1.9	U	19	U	4.4	J	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
ALDRIN	1.9	UJ	1.7	U	1.8	UJ	47		58		2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
HEPTACHLOR EPOXIDE	1.9	UJ	1.7	U	1.8	UJ	1.9	U	19	U	4.3	J	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
ENDOSU1FAN I	1.9	UJ	1.7	U	1.8	UJ	1.9	U	19	U	2.2	UJ	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
DIELDRIN	3.7	UJ	3.3	U	3.5	UJ	310		370		4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
4,4'-DDE	3.7	UJ	3.3	U	3.5	UJ	3.7	U	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
ENDRIN	3.7	UJ	3.3	U	3.5	UJ	3.7	U	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
ENDOSULFAN II	3.7	UJ	3.3	U	3.5	UJ	5.3	J	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
4,4'-DDD	3.7	UJ	3.3	U	3.5	UJ	3.7	U	37	U	5.0	J	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
ENDOSULFAN SULFATE	3.7	UJ	3.3	U	4.2	J	3.7	U	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
4,4'-DDT	3.7	UJ	3.3	U	3.5	UJ	3.7	U	37	U	6.7	J	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
METHOXYCHLOR	19	UJ	17	U	18	UJ	19	U	190	U	22	UJ	220	U	34	U	19	U	25	U	23	UJ
ENDRIN KETONE	3.7	UJ	3.3	U	3.5	UJ	15	J	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
ENDRIN ALDEHYDE	3.7	UJ	3.3	U	3.5	UJ	3.7	U	37	U	4.2	UJ	42	U	6.6	U	3.7	U	4.9	U	4.4	UJ
ALPHA-CHLORDANE	1.9	UJ	1.7	U	1.8	UJ	2.1	J	19	U	7.2	J	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
GAMMA-CHLORDANE	1.9	UJ	1.7	U	1.8	UJ	1.9	U	19	U	5.7	J	22	U	3.4	U	1.9	U	2.5	U	2.3	UJ
TOXAPHENE	190	UJ	170	U	180	UJ	190	U	1900	U	220	UJ	2200	U	340	U	190	U	250	U	230	UJ
AROCLOR-1016	37	UJ	33	U	35	UJ	37	U	370	U	42	UJ	420	U	66	U	37	U	49	U	44	UJ
AROCLOR-1221	74	UJ	68	U	71	UJ	75	U	750	U	86	UJ	860	U	130	U	76	U	100	U	90	UJ
AROCLOR-1232	37	UJ	33	U	35	UJ	37	U	370	U	42	UJ	420	U	66	U	37	U	49	U	44	UJ
AROCLOR-1242	37	UJ	33	U	35	UJ	37	U	370	U	42	UJ	420	U	66	U	37	U	49	U	44	UJ
AROCLOR-1248	37	UJ	33	U	35	UJ	37	U	370	U	160	J	250	J	66	U	110	J	49	U	44	UJ
AROCLOR-1254	37	UJ	33	U	35	UJ	37	U	370	U	42	UJ	420	U	66	U	37	U	49	U	44	UJ
AROCLOR-1260	37	UJ	33	U	35	UJ	37	U	370	U	42	UJ	420	U	66	U	37	U	49	U	44	UJ

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E0070		E0075		E0096		E0076		E0076DL		E0089		E0090		E0090DL		E0074		E0073		E0073DL	
Sampling Location :	X110A		X111		X112		X113		X113		X114		X116		X116		X117		X118		X118	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/5/2004		5/6/2004		5/5/2004		5/5/2004		5/6/2004		5/6/2004		5/6/2004		5/4/2004		5/4/2004		5/4/2004	
Time Sampled :	13:10		08:40		13:50		08:40		08:40		07:45		08:30		08:30		16:00		15:00		15:00	
%Moisture :	28		29		35		19		19		6		17		17		16		51		51	
pH :	8.3		6.4		7.1		4.0		4.0		8.0		7.5		7.5		8.6		7.6		7.6	
Dilution Factor :	1.0		1.0		1.0		1.0		10.0		1.0		1.0		10.0		1.0		1.0		10.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
BETA-BHC	2.3	UJ	2.4	U	2.6	U	2.3	J	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.8	J	34	U
DELTA-BHC	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
GAMMA-BHC (LINDANE)	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
HEPTACHLOR	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
ALDRIN	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
HEPTACHLOR EPOXIDE	2.3	UJ	2.4	U	2.6	U	19	J	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
ENDOSU1FAN I	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
DIELDRIN	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	4.0	UJ	40	U	3.9	U	6.7	UJ	67	U
4,4'-DDE	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	6.6	J	40	U	3.9	U	6.7	UJ	67	U
ENDRIN	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	4.0	UJ	40	U	3.9	U	6.7	UJ	67	U
ENDOSULFAN II	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	10	J	40	U	3.9	U	6.7	UJ	67	U
4,4'-DDD	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	4.0	UJ	40	U	3.9	U	6.7	UJ	67	U
ENDOSULFAN SULFATE	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	4.0	UJ	40	U	3.9	U	6.7	UJ	67	U
4,4'-DDT	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	5.8	J	40	U	3.9	U	6.7	UJ	67	U
METHOXYCHLOR	23	UJ	24	U	26	U	21	U	210	U	18	U	20	UJ	200	U	20	U	34	UJ	340	U
ENDRIN KETONE	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	19	J	40	U	3.9	U	6.7	UJ	67	U
ENDRIN ALDEHYDE	4.5	UJ	4.6	U	5.0	U	4.1	U	41	U	3.5	U	5.7	J	40	U	3.9	U	6.7	UJ	67	U
ALPHA-CHLORDANE	2.3	UJ	2.4	U	2.6	U	6.0	J	21	U	1.8	U	3.0	J	20	U	2.0	U	3.4	UJ	34	U
GAMMA-CHLORDANE	2.3	UJ	2.4	U	2.6	U	2.1	U	21	U	1.8	U	2.0	UJ	20	U	2.0	U	3.4	UJ	34	U
TOXAPHENE	230	UJ	240	U	260	U	210	U	2100	U	180	U	200	UJ	2000	U	200	U	340	UJ	3400	U
AROCLOR-1016	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U
AROCLOR-1221	92	UJ	94	U	100	U	82	U	820	U	70	U	81	UJ	810	U	79	U	140	UJ	1400	U
AROCLOR-1232	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U
AROCLOR-1242	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U
AROCLOR-1248	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U
AROCLOR-1254	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U
AROCLOR-1260	45	UJ	46	U	50	U	41	U	410	U	35	U	40	UJ	400	U	39	U	67	UJ	670	U

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E0072		E0071		E0071DL		E0055		E0041		E0041DL		E0083		E0083DL		E0084		E0084DL		E0085	
Sampling Location :	X119		X120		X120		X121		X123		X123		X126		X126		X126A		X126A		X127	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004		5/5/2004		5/5/2004		5/5/2004	
Time Sampled :	14:30		13:50		13:50		15:45		11:45		11:45		11:45		11:45		11:45		11:45		12:30	
%Moisture :	12		23		23		25		17		17		23		23		24		24		14	
pH :	8.8		7.4		7.4		8.6		5.6		5.6		5.0		5.0		5.4		5.4		8.1	
Dilution Factor :	1.0		1.0		10.0		1.0		1.0		10.0		1.0		10.0		1.0		10.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	1.9	U	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
BETA-BHC	1.9	U	6.3	J	22	U	2.2	UJ	59	J	90		2.2	U	22	U	2.2	U	22	U	2.0	U
DELTA-BHC	1.9	U	3.7	J	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
GAMMA-BHC (LINDANE)	1.9	U	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
HEPTACHLOR	1.9	U	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
ALDRIN	1.9	UJ	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
HEPTACHLOR EPOXIDE	1.9	U	2.2	U	22	U	2.2	UJ	35	J	71	J	9.3	J	22	U	6.2	J	22	U	2.0	U
ENDOSU1FAN I	1.9	U	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
DIELDRIN	3.7	U	4.3	U	43	U	4.4	UJ	13	J	39	U	4.2	U	42	U	4.3	U	43	U	3.8	U
4,4'-DDE	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	22		42	U	15		43	U	4.1	
ENDRIN	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	5.5	J	42	U	6.7	J	43	U	3.8	U
ENDOSULFAN II	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	25	J	59		27	J	45	J	3.8	U
4,4'-DDD	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	4.2	U	42	U	4.3	U	43	U	3.8	U
ENDOSULFAN SULFATE	3.7	U	4.3	U	43	U	4.4	UJ	7.8	J	39	U	4.2	U	42	U	4.3	U	43	U	3.8	U
4,4'-DDT	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	26	J	42	U	20	J	43	U	3.8	U
METHOXYCHLOR	19	U	22	U	220	U	22	UJ	20	R	200	U	36	J	220	U	22	U	220	U	20	U
ENDRIN KETONE	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	37	J	42	U	19	J	43	U	8.4	J
ENDRIN ALDEHYDE	3.7	U	4.3	U	43	U	4.4	UJ	3.9	R	39	U	20	J	42	U	8.7	J	43	U	3.8	U
ALPHA-CHLORDANE	2.8	J	2.2	U	22	U	2.2	UJ	2.0	R	20	U	29	J	22	J	2.2	U	22	U	2.0	U
GAMMA-CHLORDANE	1.9	U	2.2	U	22	U	2.2	UJ	2.0	R	20	U	2.2	U	22	U	2.2	U	22	U	2.0	U
TOXAPHENE	190	U	220	U	2200	U	220	UJ	200	R	2000	U	220	U	2200	U	220	U	2200	U	200	U
AROCLOR-1016	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U
AROCLOR-1221	76	U	87	U	870	U	88	UJ	80	R	800	U	86	U	860	U	88	U	880	U	77	U
AROCLOR-1232	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U
AROCLOR-1242	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U
AROCLOR-1248	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U
AROCLOR-1254	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U
AROCLOR-1260	37	U	43	U	430	U	44	UJ	39	R	390	U	42	U	420	U	43	U	430	U	38	U

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E0042		E0042DL		E0082		E0082DL		E0097		E0097DL		E0047		E0047DL		E0048		E0093		E0093DL	
Sampling Location :	X128		X128		X129		X129		X130		X130		X131		X131		X132		X133		X133	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/3/2004		5/3/2004		5/5/2004		5/5/2004		5/6/2004		5/6/2004		5/3/2004		5/3/2004		5/3/2004		5/6/2004		5/6/2004	
Time Sampled :	11:00		11:00		10:30		10:30		14:25		14:25		13:00		13:00		12:20		10:30		10:30	
%Moisture :	37		37		11		11		35		35		16		16		3		30		30	
pH :	5.4		5.4		9.4		9.4		6.9		6.9		8.0		8.0		6.3		5.6		5.6	
Dilution Factor :	1.0		10.0		1.0		10.0		1.0		10.0		1.0		10.0		1.0		1.0		10.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	2.0	UJ	20	U	17	U	2.4	U	24	U
BETA-BHC	2.7	UJ	27	U	2.7	J	19	U	2.6	U	26	U	4.6	J	20	U	17	U	2.4	U	24	U
DELTA-BHC	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	2.0	UJ	20	U	17	U	2.4	U	24	U
GAMMA-BHC (LINDANE)	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	2.0	UJ	20	U	17	U	2.4	U	24	U
HEPTACHLOR	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	4.6	J	20	U	17	U	2.4	U	24	U
ALDRIN	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	2.0	UJ	23		17	U	2.4	U	24	U
HEPTACHLOR EPOXIDE	15	J	27	U	1.9	U	19	U	11	J	26	U	5.2	J	20	U	17	U	2.6	J	24	U
ENDOSU1FAN I	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	15	J	20	U	17	U	2.4	U	24	U
DIELDRIN	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	9.1	J	39	U	34	U	4.7	U	47	U
4,4'-DDE	5.2	UJ	52	U	9.8	J	37	U	11	J	50	U	3.9	UJ	39	U	34	U	4.7	U	47	U
ENDRIN	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	4.1	J	39	U	34	U	4.7	U	47	U
ENDOSULFAN II	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	56	J	39	U	34	U	4.7	U	47	U
4,4'-DDD	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	3.9	UJ	39	U	34	U	4.7	U	47	U
ENDOSULFAN SULFATE	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	3.9	UJ	39	U	34	U	4.7	U	47	U
4,4'-DDT	5.2	UJ	52	U	53	J	64	J	5.0	U	50	U	16	J	47	J	34	U	4.7	U	47	U
METHOXYCHLOR	27	UJ	270	U	19	U	190	U	26	U	260	U	71	J	200	U	170	U	24	U	240	U
ENDRIN KETONE	5.2	UJ	52	U	24	J	37	U	35	J	50	U	21	J	39	U	34	U	4.9	J	47	U
ENDRIN ALDEHYDE	5.2	UJ	52	U	3.7	U	37	U	5.0	U	50	U	3.9	UJ	39	U	34	U	4.7	U	47	U
ALPHA-CHLORDANE	2.7	UJ	27	U	7.2		19	U	3.3	J	26	U	2.0	UJ	20	U	17	U	2.4	U	24	U
GAMMA-CHLORDANE	2.7	UJ	27	U	1.9	U	19	U	2.6	U	26	U	2.0	UJ	20	U	17	U	2.4	U	24	U
TOXAPHENE	270	UJ	2700	U	190	U	1900	U	260	U	2600	U	200	UJ	2000	U	1700	U	240	U	2400	U
AROCLOR-1016	52	UJ	520	U	37	U	370	U	50	U	500	U	39	UJ	390	U	340	U	47	U	470	U
AROCLOR-1221	100	UJ	1000	U	75	U	750	U	100	U	1000	U	79	UJ	790	U	690	U	95	U	950	U
AROCLOR-1232	52	UJ	520	U	37	U	370	U	50	U	500	U	39	UJ	390	U	340	U	47	U	470	U
AROCLOR-1242	52	UJ	520	U	37	U	370	U	50	U	500	U	39	UJ	390	U	340	U	47	U	470	U
AROCLOR-1248	52	UJ	520	U	37	U	370	U	50	U	500	U	39	UJ	390	U	340	U	47	U	470	U
AROCLOR-1254	52	UJ	520	U	37	U	370	U	50	U	500	U	960	J	1400		340	J	47	U	470	U
AROCLOR-1260	52	UJ	520	U	37	U	370	U	50	U	500	U	39	UJ	390	U	340	U	47	U	470	U

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E0094		E0095		E0095DL		E0087		E0087DL		E0060		E0060DL		E0092		E0091		E0088		E0088DL	
Sampling Location :	X134		X135		X135		X138		X138		X139		X139		X140		X142		X143		X143	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/6/2004		5/6/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/3/2004		5/6/2004		5/6/2004		5/5/2004		5/5/2004	
Time Sampled :	11:05		12:05		12:05		14:45		14:45		16:30		16:30		09:45		09:15		16:50		16:50	
%Moisture :	37		29		29		27		27		23		23		38		31		22		22	
pH :	5.6		6.5		6.5		7.1		7.1		6.7		6.7		6.7		7.0		5.9		5.9	
Dilution Factor :	1.0		1.0		10.0		1.0		10.0		2.0		20.0		1.0		1.0		1.0		10.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	2.2	U	22	U
BETA-BHC	2.7	U	2.4	U	24	U	13	J	23	U	35	J	44	U	27	U	2.4	U	68	J	110	
DELTA-BHC	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	8.2	J	22	U
GAMMA-BHC (LINDANE)	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	2.2	U	22	U
HEPTACHLOR	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	2.2	U	22	U
ALDRIN	2.7	U	2.4	U	24	U	5.4	J	23	U	4.4	R	44	U	27	U	2.4	U	2.2	U	22	U
HEPTACHLOR EPOXIDE	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	2.2	U	22	U
ENDOSU1FAN I	2.7	U	2.4	U	24	U	2.3	R	23	U	42	J	44	U	27	U	2.8	J	2.2	U	22	U
DIELDRIN	5.2	U	4.6	U	46	U	4.5	R	45	U	8.5	R	85	U	53	U	4.8	U	9.9	J	42	U
4,4'-DDE	5.2	U	4.6	U	46	U	13	J	45	U	8.5	R	85	U	53	U	7.2	J	4.2	U	42	U
ENDRIN	5.2	U	4.6	U	46	U	4.5	R	45	U	16	J	85	U	53	U	4.8	U	8.3	J	42	U
ENDOSULFAN II	5.2	U	4.6	U	46	U	4.5	R	45	U	40	J	85	U	53	U	4.8	U	4.2	U	42	U
4,4'-DDD	5.2	U	4.6	U	46	U	4.5	R	45	U	20	J	85	U	53	U	4.8	U	4.2	U	42	U
ENDOSULFAN SULFATE	5.2	U	4.6	U	46	U	4.5	R	45	U	8.5	R	85	U	53	U	4.8	U	4.2	U	42	U
4,4'-DDT	5.2	U	4.6	U	46	U	4.5	R	45	U	8.5	R	160	J	53	U	6.8	J	4.2	U	42	U
METHOXYCHLOR	27	U	24	U	240	U	23	R	230	U	44	R	440	U	270	U	24	U	30	J	220	U
ENDRIN KETONE	6.3	J	7.6	J	46	U	17	J	45	U	57	J	85	U	90	J	19	J	4.2	U	42	U
ENDRIN ALDEHYDE	5.2	U	4.6	U	46	U	4.5	R	45	U	8.5	R	85	U	53	U	4.8	U	12	J	42	U
ALPHA-CHLORDANE	2.7	U	2.4	U	24	U	10	J	23	U	4.4	R	44	U	50	J	2.4	U	41	J	22	U
GAMMA-CHLORDANE	2.7	U	2.4	U	24	U	2.3	R	23	U	4.4	R	44	U	27	U	2.4	U	2.5	J	22	U
TOXAPHENE	270	U	240	U	2400	U	230	R	2300	U	440	R	4400	U	2700	U	240	U	220	U	2200	U
AROCLOR-1016	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U
AROCLOR-1221	110	U	94	U	940	U	91	R	910	U	170	R	1700	U	1100	U	96	U	85	U	850	U
AROCLOR-1232	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U
AROCLOR-1242	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U
AROCLOR-1248	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U
AROCLOR-1254	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U
AROCLOR-1260	52	U	46	U	460	U	45	R	450	U	85	R	850	U	530	U	48	U	42	U	420	U

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E0086		E0049		E00C9		E00C9DL		E00D0		E00D0DL		E00D1		E00C8		E00C8DL		E00D2		E00D2DL	
Sampling Location :	X144		X145		X146		X146		X147		X147		X148		X149		X149		X150		X150	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/5/2004		5/3/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004	
Time Sampled :	16:10		13:10		08:35		08:35		09:20		09:20		09:50		16:30		16:30		10:35		10:35	
%Moisture :	17		2		22		22		18		18		19		13		13		16		16	
pH :	7.7		6.0		6.2		6.2		7.9		7.9		6.3		7.8		7.8		7.6		7.6	
Dilution Factor :	1.0		1.0		1.0		2.0		1.0		2.0		1.0		2.0		20.0		1.0		5.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	2.0	J	3.9	U	39	U	2.0	U	10	U
BETA-BHC	2.0	U	17	UJ	2.2	U	4.4	U	71	J	28	J	31	J	72	J	73	J	48	J	41	J
DELTA-BHC	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	2.1	U	3.9	U	39	U	2.0	U	10	U
GAMMA-BHC (LINDANE)	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	2.1	U	3.9	U	39	U	2.0	U	10	U
HEPTACHLOR	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	2.1	U	3.9	U	39	U	2.0	U	10	U
ALDRIN	2.0	U	17	UJ	65	J	37	J	2.1	U	4.1	U	2.1	U	3.9	U	39	U	2.0	U	10	U
HEPTACHLOR EPOXIDE	2.0	U	17	UJ	2.2	U	4.4	U	4.7	J	1.5	J	2.1	U	3.9	U	39	U	2.0	U	10	U
ENDOSU1FAN I	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	2.1	U	3.9	U	39	U	2.0	U	10	U
DIELDRIN	3.9	U	33	UJ	4.2	U	8.5	U	4.0	U	8.0	U	4.1	U	7.6	U	76	U	3.9	U	20	U
4,4'-DDE	3.9	U	33	UJ	90	J	47	J	4.0	U	8.0	U	3.3	J	5.4	J	76	U	3.9	U	20	U
ENDRIN	3.9	U	33	UJ	61	J	62	J	4.0	U	8.0	U	6.4	J	25	J	76	U	3.9	U	20	U
ENDOSULFAN II	3.9	U	33	UJ	4.2	U	8.5	U	4.0	U	8.0	U	4.1	U	7.6	U	76	U	3.9	U	20	U
4,4'-DDD	3.9	U	33	UJ	65	J	39	J	4.0	U	8.0	U	7.2	J	5.0	J	76	U	3.9	U	20	U
ENDOSULFAN SULFATE	3.9	U	33	UJ	200	J	8.5	U	4.0	U	8.0	U	4.1	U	7.6	U	76	U	3.9	U	20	U
4,4'-DDT	3.9	U	33	UJ	55	J	8.5	U	16	J	21	J	3.7	J	7.6	U	76	U	3.4	J	20	U
METHOXYCHLOR	20	U	170	UJ	250	J	44	U	21	U	340	J	21	U	39	U	390	U	16	J	100	U
ENDRIN KETONE	5.2	J	33	UJ	4.2	U	55	J	64	J	76	J	1.9	J	6.6	J	76	U	3.2	J	20	U
ENDRIN ALDEHYDE	3.9	U	33	UJ	4.2	U	74	J	16	J	34	J	1.9	J	13	J	76	U	2.6	J	20	U
ALPHA-CHLORDANE	2.0	U	17	UJ	2.2	U	4.4	U	2.1	U	4.1	U	1.2	J	3.9	U	39	U	2.0	U	10	U
GAMMA-CHLORDANE	2.0	U	17	UJ	130	J	4.4	U	2.1	U	4.1	U	1.2	J	11	J	39	U	2.0	U	10	U
TOXAPHENE	200	U	1700	UJ	220	U	440	U	210	U	410	U	210	U	390	U	3900	U	200	U	1000	U
AROCLOR-1016	39	U	330	UJ	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U
AROCLOR-1221	79	U	670	UJ	86	U	170	U	82	U	160	U	83	U	150	U	1500	U	80	U	400	U
AROCLOR-1232	39	U	330	UJ	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U
AROCLOR-1242	39	U	330	UJ	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U
AROCLOR-1248	39	U	330	UJ	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U
AROCLOR-1254	39	U	590	J	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U
AROCLOR-1260	39	U	330	UJ	42	U	85	U	40	U	80	U	41	U	76	U	760	U	39	U	200	U

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E00D4		E00D4DL		E00D5		E00D3		E00C5		E00C1		E00D6		E00C6		E00C7		E00C4		E00D9	
Sampling Location :	X151		X151		X152		X153		X154		X155		X156		X157		X158		X159		X160	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/25/2004		5/25/2004		5/25/2004		5/26/2004	
Time Sampled :	11:05		11:05		12:35		11:05		15:10		13:40		13:45		13:30		16:50		12:30		16:10	
%Moisture :	39		39		33		36		7		33		15		17		24		18		28	
pH :	7.4		7.4		9.2		7.8		7.4		7.4		7.4		7.8		7.5		7.7		7.4	
Dilution Factor :	1.0		10.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	2.8	U	28	U	0.82	J	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
BETA-BHC	74	J	140	J	8.3	J	41	J	0.59	J	1.4	J	12	J	0.92	J	1.5	J	5.1	J	4.3	J
DELTA-BHC	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
GAMMA-BHC (LINDANE)	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
HEPTACHLOR	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
ALDRIN	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
HEPTACHLOR EPOXIDE	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
ENDOSU1FAN I	2.8	U	28	U	2.5	U	2.7	U	1.8	U	2.5	U	2.0	U	2.0	U	2.2	U	2.1	U	2.4	U
DIELDRIN	5.4	U	54	U	4.9	U	5.2	U	3.5	U	15	J	3.9	U	4.0	U	4.3	U	4.0	U	2.7	J
4,4'-DDE	5.4	U	54	U	13	J	1.9	J	3.5	U	2.3	J	3.9	U	4.0	U	4.3	U	4.0	U	4.6	U
ENDRIN	36	J	54	U	4.9	U	13	J	3.5	U	4.9	U	3.9	U	4.0	U	4.3	U	3.8	J	4.6	U
ENDOSULFAN II	5.4	U	54	U	4.9	U	5.2	U	3.5	U	4.9	U	3.9	U	4.0	U	4.3	U	4.0	U	4.6	U
4,4'-DDD	21	J	54	U	21	J	3.2	J	3.5	U	4.9	U	3.9	U	0.89	J	4.3	U	4.0	U	4.6	U
ENDOSULFAN SULFATE	5.4	U	54	U	4.9	U	5.2	U	3.5	U	4.9	U	3.9	U	4.0	U	4.3	U	4.0	U	4.6	U
4,4'-DDT	3.5	J	54	U	4.9	U	2.5	J	3.5	U	4.9	U	3.9	U	1.5	J	4.3	U	1.8	J	4.6	U
METHOXYCHLOR	28	U	280	U	25	U	27	U	9.3	J	25	U	20	U	4.8	J	22	U	29	J	24	U
ENDRIN KETONE	3.3	J	54	U	4.9	U	3.1	J	3.5	U	4.9	U	3.9	U	4.0	U	4.3	U	35	J	4.6	U
ENDRIN ALDEHYDE	11	J	21	J	4.9	U	9.8	J	3.5	U	4.9	U	3.9	U	4.0	U	4.3	U	1.9	J	4.6	U
ALPHA-CHLORDANE	3.7	J	28	U	4.7	J	2.7	U	1.8	U	12	J	2.0	U	2.0	U	2.2	U	2.1	U	1.9	J
GAMMA-CHLORDANE	18	J	28	U	11	J	2.7	U	1.8	U	13	J	2.0	U	0.64	J	2.2	U	2.1	U	1.6	J
TOXAPHENE	280	U	2800	U	250	U	270	U	180	U	250	U	200	U	200	U	220	U	210	U	240	U
AROCLOR-1016	54	U	540	U	49	U	52	U	35	U	49	U	39	U	40	U	43	U	40	U	46	U
AROCLOR-1221	110	U	1100	U	100	U	100	U	72	U	100	U	79	U	81	U	88	U	82	U	93	U
AROCLOR-1232	54	U	540	U	49	U	52	U	35	U	49	U	39	U	40	U	43	U	40	U	46	U
AROCLOR-1242	54	U	540	U	49	U	52	U	35	U	49	U	39	U	40	U	43	U	40	U	46	U
AROCLOR-1248	54	U	540	U	49	U	52	U	35	U	49	U	39	U	40	U	43	U	40	U	46	U
AROCLOR-1254	54	U	540	U	49	U	52	U	35	U	630		39	U	40	U	43	U	40	U	46	U
AROCLOR-1260	54	U	540	U	49	U	52	U	35	U	270		39	U	40	U	43	U	40	U	80	

TABLE 3
US STEEL
PESTICIDE/PCB (cont.)

Sample Number :	E00D7		E00D8		E00E0	
Sampling Location :	X161		X162		X163	
Matrix :	Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	14:50		15:35		15:50	
%Moisture :	30		28		31	
pH :	7.6		7.3		8.0	
Dilution Factor :	1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	1.1	J	2.4	U	2.5	U
BETA-BHC	24	J	4.6	J	3.4	J
DELTA-BHC	2.4	U	2.4	U	2.5	U
GAMMA-BHC (LINDANE)	2.4	U	2.4	U	2.5	U
HEPTACHLOR	2.4	U	2.4	U	2.5	U
ALDRIN	2.4	U	2.4	U	2.5	U
HEPTACHLOR EPOXIDE	2.4	U	3.6	J	2.5	U
ENDOSU1FAN I	2.4	U	2.4	U	2.5	U
DIELDRIN	14	J	13	J	9.0	J
4,4'-DDE	5.2	J	3.6	J	4.0	J
ENDRIN	4.7	U	4.6	U	4.8	U
ENDOSULFAN II	4.7	U	4.6	U	2.4	J
4,4'-DDD	4.7	U	4.6	U	4.8	U
ENDOSULFAN SULFATE	4.7	U	4.6	U	4.8	U
4,4'-DDT	4.7	U	19	J	4.8	U
METHOXYCHLOR	24	U	24	U	25	U
ENDRIN KETONE	4.7	U	4.6	U	4.8	U
ENDRIN ALDEHYDE	4.7	U	4.6	U	4.8	U
ALPHA-CHLORDANE	12	J	14	J	15	J
GAMMA-CHLORDANE	17	J	15		22	J
TOXAPHENE	240	U	240	U	250	U
AROCLOR-1016	47	U	46	U	48	U
AROCLOR-1221	96	U	93	U	97	U
AROCLOR-1232	47	U	46	U	48	U
AROCLOR-1242	47	U	46	U	48	U
AROCLOR-1248	47	U	46	U	48	U
AROCLOR-1254	340	J	46	U	210	J
AROCLOR-1260	300	J	310		210	J

TABLE 4
US STEEL
INORGANIC SOIL

Sample Number :	ME0067		ME0066		ME0068		ME0065		ME0062		ME0063		ME0050		ME0064		ME0069		ME0070		ME0075	
Sampling Location :	X102		X103		X104		X105		X106		X107		X108		X109		X110		X110A		X111	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/4/2004		5/4/2004		5/4/2004		5/5/2004	
Time Sampled :	11:40		10:30		11:50		09:45		08:45		08:10		14:45		09:10		13:10		13:10		08:40	
%Solids :	81.5		97		97.2		85.9		79.9		72.2		86.7		59.4		75.7		71.7		69	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4790		103		55.8		4430		6330		6460		6920		11700		5370		5510		8590	
ANTIMONY	7.2	U	6.2	U	24.5		7	U	7.5	U	8.3	U	6.8	U	10.1	U	7.9	U	8.4	U	19.7	J
ARSENIC	18.9		3.8		29.8		19.9		14.8		14.4		10.4		6.7		24.4		23		337	J
BARIUM	106		20.6	U	20.6	U	68.8		71.1		218		62.4		131		79.2		91.4		1510	R
BERYLLIUM	0.68	J	0.52	UJ	0.51	UJ	1	J	1.3	J	1	J	1.1	J	1.1	J	1.9	J	1.8	J	7.1	
CADMIUM	0.6	R	0.52	R	0.51	R	0.58	UJ	0.63	UJ	0.69	R	0.57	R	0.84	U	0.66	UJ	0.7	UJ	1.6	J
CALCIUM	17500	J	515	UJ	802	J	47900	J	47700	J	48900	J	28700	J	34400	J	24700	J	26000	J	3610	
CHROMIUM	8	J	149	J	539	J	20.7	J	16.5	J	39.4	J	13.9	J	12.4	J	2.9	J	6.9	J	29.9	
COBALT	9.1	J	11.1	J	48.3	J	6.6	J	8.4	J	6.9	UJ	10.7	J	10.1	J	6.9	J	10.3	J	36.2	
COPPER	202		115		1890		97.3		48.2		41.3		49.3		20.9		88.1		99.2		210	J
IRON	82600		190000		476000		61900		57700		63000		189000		36400		122000		123000		30100	
LEAD	174	J	57.2	J	1	R	148	J	74.8	J	30.3	J	24.4	J	29.7	J	133	J	148	J	307	R
MAGNESIUM	7800		515	UJ	514	UJ	22100		23900		12800		8430		23800		11500		12400		804	J
MANGANESE	698	J	2400	J	4930	J	1220	J	1710	J	8880	J	3900	J	406	J	1220	J	1460	J	337	
MERCURY	1.5	J	0.1	UJ	0.1	UJ	0.65	J	0.24	J	0.24	J	0.12	UJ	0.16	UJ	0.29	J	0.36	J	0.14	U
NICKEL	18.7	J	102	J	587	J	24.2	J	26.2	J	14.5	J	16.8	J	21.5	J	22.2	J	24.8	J	86.6	
POTASSIUM	776	J	515	UJ	514	UJ	860	J	1010	J	903	J	996	J	1110	J	819	J	860	J	717	J
SELENIUM	4.2	UJ	3.6	R	3.6	R	4.1	UJ	4.4	UJ	4.8	UJ	4	R	5.9	UJ	4.6	UJ	4.9	UJ	7.3	J-
SILVER	0.41	J	1	UJ	1	UJ	1.2	UJ	1.3	UJ	1.4	UJ	1.1	UJ	1.7	UJ	1.3	UJ	1.4	UJ	2.5	J-
SODIUM	602	U	515	U	514	U	582	U	626	U	700		565	U	841	U	661	U	697	U	1510	J+
THALLIUM	3	R	2.6	R	2.6	R	2.9	R	3.1	R	3.5	R	2.8	R	4.2	R	3.3	R	3.5	R	3.6	UJ
VANADIUM	22	J	16	J	23.5	J	25.9	J	33.9	J	76.1	J	44	J	22.4	J	34.9	J	34	J	70.7	R
ZINC	301	J	6.2	UJ	11.1	J	201	J	337	J	113	J	206	J	117	J	316	J	361	J	439	J
CYANIDE	3.1	U	2.6	U	2.6	U	2.9	U	3.1	U	3.5	U	2.9	U	13.7		3.3	U	3.5	U	32.1	J

TABLE 4
US STEEL
INORGANIC SOIL (cont.)

Sample Number :	ME0096		ME0076		ME0089		ME0090		ME0074		ME0073		ME0072		ME0071		ME0055		ME0083		ME0084	
Sampling Location :	X112		X113		X114		X116		X117		X118		X119		X120		X121		X126		X126A	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/5/2004		5/6/2004		5/6/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	13:50		08:40		07:45		08:30		16:00		15:00		14:30		13:50		15:45		11:45		11:45	
%Solids :	62.6		75.1		92.9		82		86.6		65.4		89.6		83.9		77.9		79.9		78.1	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	9190		1400		1260		3310		4390		5140		10800		4080		4610		2540		3300	
ANTIMONY	9.6	UJ	8	UJ	9.5	J	4.8	J	6.9	U	9	U	15.8		1560		7.7	U	1.2	J	1.6	J
ARSENIC	3.5	J+	204	J	12.5	J	8.7	J+	11.9		8.6		17.5		22		21		54.2	J	49.5	J
BARIUM	102		54.1	R	284		71.3		47.5		60.8		89.6		95.8		48.6		30.6	R	34.6	R
BERYLLIUM	0.8	U	0.67	J	0.54	U	0.92	J+J-	1	J	0.75	UJ	2.2	J	1.1	J	0.64	UJ	1.6		1.6	
CADMIUM	0.8	UJ	0.67	UJ	2	J-	1.1	J-	0.58	R	0.75	UJ	0.56	UJ	0.63	J-	0.64	R	0.61	UJ	0.64	J
CALCIUM	76400	J	666	J	2750	J	10700	J	29000	J	8700	J	29100	J	17400	J	19900	J	17400		17900	
CHROMIUM	9.2	J	11.2		18.4	J	13.6	J	14.8	J	10.7	J	8.5	J	4	J	37.4	J	6.3		9.3	
COBALT	8	UJ	6.7	UJ	8.4	J+J-	6.1	UJ	10.2	J	7.5	UJ	9.7	J	8.1	J	17.5	J	6.1	UJ	6.4	UJ
COPPER	12.3	J-	22.6	J	237	J	51.7	J	62.3		187		140		1420		67.2		46.8	J	28.7	J
IRON	14100		51400		169000		46600		142000		31100		126000		119000		247000		47800		44600	
LEAD	11.9	J	197	R	437	J	102	J	55.1	J	147	J	1380	J	4610	J	34.1	J	70.9	R	64.2	R
MAGNESIUM	30300	J	732	J	538	UJ	2640	J	14400		2980		16700		8030		5830		627	J	647	J
MANGANESE	579	J	93.5		1120	J	1060	J	1440	J	253	J	4360	J	2050	J	5070	J	104		99.4	
MERCURY	0.16	U	0.13	U	0.11	U	0.15	J+J-	0.35	J	3.5	J	0.12	J	0.29	J	0.61	J	0.13	U	0.12	U
NICKEL	9.8	J	2.2	J	3.6	J	13.7	J	30.9	J	13.4	J	18.1	J	13.8	J	30.2	J	10.8		10.1	
POTASSIUM	1120		2060	J	538	U	610	U	792	J	998	J	1750	J	614	J	642	UJ	1270	J	1550	J
SELENIUM	5.6	UJ	15.9	J-	3.8	UJ	4.2	UJ	4	R	5.2	UJ	3.9	R	4.2	UJ	4.5	R	2	J-	2.2	J-
SILVER	1.6	UJ	2.5	J-	1.1	R	1.2	UJ	1.2	UJ	1.5	UJ	1.1	UJ	1.2	UJ	1.3	R	1.2	UJ	1.3	UJ
SODIUM	799	U	666	U	538	U	610	U	577	U	750	U	558	U	596	U	642	U	614	U	640	UJ
THALLIUM	4	UJ	3.3	UJ	2.7	R	3	R	2.9	R	3.7	R	2.8	R	3	R	3.2	R	3.1	UJ	3.2	UJ
VANADIUM	12.7		46.8	R	13.8		13.7		31.6	J	15.3	J	45.9	J	33.5	J	91	J	16.9	R	25	R
ZINC	30	J	250	J	49.8	J	260	J	201	J	308	J	422	J	640	J	214	J	127	J	122	J
CYANIDE	4	U	20.3	J	2.7	U	3	U	2.9	U	3.8	U	3.1		3	U	3.2	U	3.1	UJ	3.2	UJ

TABLE 4
US STEEL
INORGANIC SOIL (cont.)

Sample Number :	ME0085		ME0042		ME0082		ME0097		ME0047		ME0048		ME0093		ME0094		ME0095		ME0087		ME0060	
Sampling Location :	X127		X128		X129		X130		X131		X132		X133		X134		X135		X138		X139	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/5/2004		5/3/2004		5/5/2004		5/6/2004		5/3/2004		5/3/2004		5/6/2004		5/6/2004		5/6/2004		5/5/2004		5/3/2004	
Time Sampled :	12:30		11:00		10:30		14:25		13:00		12:20		10:30		11:05		12:05		14:45		16:30	
%Solids :	86.7		58		87.9		59.8		85.2		96.9		75.7		57.1		71.3		74.3		81.4	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2620		6570		5710		2970		1320		2060		6190		14900		6330		2860		12800	
ANTIMONY	1.7	J	10.3	U	4.4	J	38.8	J	10.5		6.2	U	0.77	J	10.2	UJ	8.4	UJ	1.1	J	11.1	
ARSENIC	21.2	J	12.1		15.6	J	23.9	J	13		5		12.2	J	347	J	8.3	J+	13.5	J	17	
BARIUM	97.8		52.4		176	R	90.7		431		26.4		54.7		92.2		88.7		45.9		201	
BERYLLIUM	0.7	J+J-	0.86	UJ	1.1		0.84	U	0.58	UJ	0.52	UJ	0.71	J+J-	2.9		0.68	U	1.3	J+J-	3.2	J
CADMIUM	1.4	J-	0.86	UJ	4.1	J	5.1	J-	91.8		0.52	UJ	0.66	UJ	8.4	J	0.7	UJ	1.2	J-	16.4	
CALCIUM	12400	J	3470	J	42300		14900	J	4960	J	1520	J	3050	J	8230	J	31800	J	5030	J	19000	J
CHROMIUM	81.6	J	48.5	J	237		76.2	J	148	J	15.8	J	13.3	J	17.1	J	14.7	J	7.4	J	24.4	J
COBALT	12	J	8.6	UJ	20.4		19.4	J	19.7	J	5.2	UJ	10.8	J	35.1	J	7.5	J+J-	6.9	J+J-	13.7	J
COPPER	73.1	J	131		5280	J	233	J	584		38.8		27.2	J	25.5	J	18.5	J	39.6	J	1570	
IRON	73200		29700		70800		244000		319000		11200		26100		10400		24800		41400		56100	
LEAD	75.4	J	12.2	J	398	R	254	J	393	J	15.8	J	30.3	J	18.3	J	27.2	J	51.8	J	458	J
MAGNESIUM	4690	J	2470		12300	J	5800	J	2740		1010		2710	J	2120	J	17700	J	1140	J	4970	
MANGANESE	1200	J	235	J	813		1610	J	2840	J	92.6	J	992	J	90.2	J	503	J	1200	J	964	J
MERCURY	0.12	J+J-	0.16	UJ	1.4		0.51	J+J-	0.11	UJ	0.1	UJ	0.13	U	0.18	U	0.13	U	0.13	U	0.12	J
NICKEL	66.6	J	50	J	882		63.7	J	125	J	15	J	21	J	185	J	15.5	J	17.6	J	52.4	J
POTASSIUM	577	U	1310	J	752	J	836	U	1450	J	776	J	902		918		809		660	U	1040	J
SELENIUM	1.2	J-	6	UJ	1.1	J-	4.2	J-	4.1	R	3.6	UJ	4.6	UJ	6	UJ	4.9	UJ	1.3	J-	4.3	UJ
SILVER	1.2	UJ	1.7	UJ	1.1	UJ	5.8	J-	1.2	R	1	UJ	1.3	J-	1.7	UJ	0.98	J-	1.3	UJ	1.2	UJ
SODIUM	577	U	862	U	1200	J+	836	U	2240		516	U	661	U	850	U	701	U	660	U	820	
THALLIUM	2.9	R	4.3	R	2.8	UJ	4.2	R	2.9	R	2.6	R	3.3	UJ	4.3	UJ	3.5	UJ	3.4	R	3.1	R
VANADIUM	5.8	UJ	13.6	J	13.8	R	8.4	UJ	18.1	J	4.7	J	27.1		28.2		16		13.1		36.7	J
ZINC	167	J	91.7	J	464	J	331	J	538	J	75.7	J	89.7	J	1850	J	113	J	287	J	6820	J
CYANIDE	2.9	U	4.3	U	10.3	J	4.2	U	2.9	U	2.6	U	3.3	U	4.4	U	3.5	U	3.4	U	3.1	U

TABLE 4
US STEEL
INORGANIC SOIL (cont.)

Sample Number :	ME0092		ME0091		ME0088		ME0086		ME0049		ME00C9		ME00D0		ME00D1		ME00C8		ME00D2		ME00D4	
Sampling Location :	X140		X142		X143		X144		X145		X146		X147		X148		X149		X150		X151	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/26/2004		5/26/2004	
Time Sampled :	09:45		09:15		16:50		16:10		13:10		08:35		09:20		09:50		16:30		10:35		11:05	
%Solids :	70.5		79.3		87.4		84.3		99.2		80.5		83.2		79.2		82.2		86.2		64.2	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	760		3330		2070		1120		244		8750		10400		13200		14600		8060		9400	
ANTIMONY	0.85	J	5.7	J	4.3	J	7	UJ	25.3		2.4	J	1.2	J	1.8	J	2.6	J	6.8	UJ	1.3	J
ARSENIC	47.1	J	15.4	J	15.5	J	17.1	J	61		22.1	J-	62.9		18.3	J-	20.3	J-	26.7		14.6	J-
BARIUM	28.4	U	47.4		27.8		40.8		20.2	U	294		718		16.3	J	266		197		119	
BERYLLIUM	1.2	J+J-	0.91	J+J-	0.71	J+J-	0.58	U	0.5	UJ	0.52	J	5.8		8.3		0.77		2		0.06	J+
CADMIUM	0.71	UJ	1.7	J-	1.7	J-	3.3	J	0.5	R	3.2		11.1		52.8		4.6		5.9		2.3	J+
CALCIUM	12400	J	10100	J	3710	J	5510	J	2740	J	30400		37200		6130		61700		27500		34600	
CHROMIUM	6.8	J	25.7	J	6.1	J	140	J	436	J	15.7		15.6		22.3		14.7		36.5		47.2	
COBALT	7.1	UJ	7	J+J-	9.2	J	17	J	45.5	J	12.8	J	11.7	J	20	J	7.2	J	8.7	J	9	J
COPPER	49.6	J	60.2	J	36.3	J	86.7	J	2750		83.5		51.9		46.1		147		55.2		139	
IRON	38000		76100		55800		157000		414000		53800		72000		41900		41900		55800		36300	
LEAD	58.2	J	77.9	J	52.4	J	84.3	J	38.3	J	109		787		20700		244		105		257	
MAGNESIUM	2370	J	3640	J	1390	J	2460	J	1140		1310		11400		1970		28300		10900		19900	
MANGANESE	582	J	3350	J	2500	J	2310	J	3800	J	762		1800		432		1060		3740		375	
MERCURY	0.2	J+J-	0.11	U	0.11	U	0.12	U	0.1	UJ	0.06	J	1		0.05	J	0.06	J	0.55		3.5	
NICKEL	7.6	J	23.3	J	22.5	J	87.7	J	884	J	32.3		42		83.1		19.6		21.9		27.4	
POTASSIUM	709		624	U	572	U	581	U	504	UJ	827		1200		1150		1740		1390		1750	
SELENIUM	2.4	J-	4.4	UJ	4	UJ	1.7	J-	3.5	R	4.1	U	4.6	J+	3.9	U	6.6	J+	4.5	J+	5.4	U
SILVER	2.1	J-	1.3	UJ	1.1	UJ	1.2	R	1	UJ	1.2	R	1.2	UJ	1.1	U	1.1	R	1.1	UJ	2.4	
SODIUM	709	U	624	U	572	U	581	U	504	U	633		644		564	U	688		603		771	U
THALLIUM	3.5	UJ	3.2	R	2.9	R	2.9	R	2.5	R	3	UJ	2.9	UJ	2.8	UJ	2.8	UJ	2.8	UJ	3.9	UJ
VANADIUM	13.4		56.8		17.9		5.8	UJ	34.3	J	36.7		64.8		45.2		24.7		29.8		20.3	
ZINC	106	J	309	J	215	J	116	J	60.3	J	409		2560		7580		874		1060		530	
CYANIDE	3.5	U	3.2	U	2.9	U	3	U	2.5	U	3.1	UJ	3	UJ	3.2	UJ	3	UJ	2.9	UJ	3.9	UJ

TABLE 4
US STEEL
INORGANIC SOIL (cont.)

Sample Number :	ME00D5		ME00D3		ME00C5		ME00C1		ME00D6		ME00C6		ME00C7		ME00C4		ME00D9		ME00D7		ME00D8		ME00E0	
Sampling Location :	X152		X153		X154		X155		X156		X157		X158		X159		X160		X161		X162		X163	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/25/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	12:35		11:05		15:10		13:40		13:45		13:30		16:50		12:30		16:10		14:50		15:35		15:50	
%Solids :	76.5		66.4		92.9		67.6		76.6		84.3		62.7		81.1		72.2		69.7		69.8		69.3	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	14800	J	8820		9110		2290		17100	J	8920		5950		4700		1900	J	4040	J	6060	J	5140	J
ANTIMONY	7.2	UJ	9	UJ	5.8	UJ	8.1	UJ	7.4	UJ	6.5	UJ	8.8	UJ	6.9	UJ	7.2	J	11.8	J	7.4	J	6.4	J
ARSENIC	29	J	10.2	J-	10.2	J-	55.6		35.4	J	6.3	J-	20	J-	27.3		1.3	R	1.3	R	1.3	R	1.3	R
BARIUM	159		96.3		95.1		114		63.2		45.7		69.9		392		47.6		114		122		134	
BERYLLIUM	0.6	U	0.15	J+	0.48	U	0.68	U	1.8		0.54	U	0.86		0.57	U	0.63	U	0.65	U	0.66	U	0.67	U
CADMIUM	4.2		1.8	J+	3.3		20		4.9		0.62	J+	3.1	J+	4.6		5.9	J	10.6		9.8		13.8	
CALCIUM	70100		40000		58100		25000		12200		67100		8260		71200		67800		23200		27300		27400	
CHROMIUM	79.4		37.2		12.6		576		19.9		17		30.5		40		137		270		235		288	
COBALT	6		9	J	4.8	UJ	21.1	J	14		10	J	7.8	J	17.8	J	12.8		22.9		15.8		16.5	
COPPER	38.9		97.7		28.7		295		80.6		38.2		48.2		346		64		243		176		160	
IRON	65900		30500		139000		461000		86900		21800		100000		52400		310000		443000		311000		332000	
LEAD	46.5	J	202		11.3		1870		119	J	16.5		84.6		160		591	J	1030	J	1180	J	1010	J
MAGNESIUM	28600	J	23000		7930		3610		3550	J	29400		5880		4630		5720	J	4760	J	6010	J	6750	J
MANGANESE	5870	J	393		1950		4280		1480	J	448		1580		883		2700	J	2740	J	2250	J	2470	J
MERCURY	0.59		2		0.04	J	0.35		0.14		0.09	J	0.08	J	0.88		0.17		0.4		0.35		0.48	
NICKEL	18.8	J	25.5		5.3		223		43.5	J	26		17.2		103		112	J	195	J	165	J	156	J
POTASSIUM	1800		1540		1110		800		1750		2130		732	U	594		630	U	650	U	907		670	U
SELENIUM	14.8	J+	5.3	J+	3.8	J+	4.8	U	4.3	U	7.6	J+	5.1	U	4	U	4.4	R	4.6	R	4.6	R	4.7	R
SILVER	1.2	R	1.5	J+	0.97	R	1.6	J+	1.2	UJ	1.1	U	1.5	U	1.1	U	1.3	R	1.3	R	1.3	R	1.3	R
SODIUM	728		753	U	485	U	679	U	620	U	544	U	732	U	571	U	211	J	119	J	117	J	105	J
THALLIUM	3	UJ	3.8	UJ	2.4	UJ	3.4	R	3.1	UJ	2.7	UJ	3.7	UJ	2.9	UJ	3.1	UJ	3.3	UJ	3.3	UJ	3.3	UJ
VANADIUM	35.7		18		24.2		16.5		39.3		19.3		23.5		18.7		35.7		54.4		46.3		48.5	
ZINC	214	J	389		74		3700		809	J	58.9		267		899		18100	J	3050	J	4140	J	7520	J
CYANIDE	3.3	U	3.8	UJ	2.7	UJ	3.7	UJ	3.3	U	3	UJ	4	UJ	3.1	UJ	3.5	U	3.6	U	4.9		6.2	

TABLE 5
US STEEL
VOLATILE WATER

Sample Number :	E0056		E0051		E0043		E0045		E0053		E0077		E0080	
Sampling Location :	G101		G102		G103		G104		G105		G106		G107	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	16:00		15:00		12:30		13:15		15:00		08:40		10:30	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
pH :														
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
CHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
VINYL CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMOMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	10	U	10	U	10	U	10	U	10	U	10	UJ	10	UJ
CARBON DISULFIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYL ACETATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYLENE CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRANS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYL TERT-BUTYL ETHER	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-BUTANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CARBON TETRACHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
METHYLCYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMODICHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-METHYL-2-PENTANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TRANS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
TETRACHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-HEXANONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
DIBROMOCHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMOETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ETHYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
XYLENES (TOTAL)	10	U	10	U	10	U	10	U	10	U	10	U	10	U
STYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BROMOFORM	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-TETRACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,3-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMO-3-CHLOROPROPANE	10	R	10	R	10	R	10	R	10	R	10	R	10	R
1,2,4-TRICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U

TABLE 5
US STEEL
VOLATLIE WATER (cont.)

Sample Number :	E00B7		E0098		E00A1		E00A2		E00C0		E00A6	
Sampling Location :	G108		G109		G110		G110A		G111		G112	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		13:45		15:55		15:55		12:25		18:35	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A	
pH :												
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
VINYL CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U
BROMOMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROFLUOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	10	U	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
CARBON DISULFIDE	10	U	10	U	10	U	10	U	10	U	0.7	J
METHYL ACETATE	10	U	10	U	10	U	10	U	10	U	10	U
METHYLENE CHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U
TRANS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U
METHYL TERT-BUTYL ETHER	10	U	10	U	10	U	10	U	10	U	10	U
1,1-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,2-DICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U
2-BUTANONE	10	U	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
CHLOROFORM	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	10	U
CARBON TETRACHLORIDE	10	U	10	U	10	U	10	U	10	U	10	U
BENZENE	10	U	10	U	10	U	10	U	10	U	4	J
1,2-DICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
TRICHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U
METHYLCYCLOHEXANE	10	U	10	U	10	U	10	U	10	U	1	J
1,2-DICHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U
BROMODICHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CIS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U
4-METHYL-2-PENTANONE	10	U	10	U	10	U	10	U	10	U	10	U
TOLUENE	10	U	10	U	10	U	10	U	10	U	0.9	J
TRANS-1,3-DICHLOROPROPENE	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
TETRACHLOROETHENE	10	U	10	U	10	U	10	U	10	U	10	U
2-HEXANONE	10	U	10	U	10	U	10	U	10	U	10	U
DIBROMOCHLOROMETHANE	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMOETHANE	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U
ETHYLBENZENE	10	U	10	U	10	U	10	U	10	U	2	J
XYLENES (TOTAL)	10	U	10	U	10	U	10	U	10	U	10	
STYRENE	10	U	10	U	10	U	10	U	10	U	10	U
BROMOFORM	10	U	10	U	10	U	10	U	10	U	10	U
ISOPROPYLBENZENE	10	U	10	U	10	U	10	U	10	U	2	J
1,1,2,2-TETRACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U
1,3-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	0.2	J
1,4-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	0.2	J
1,2-DICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	0.3	J
1,2-DIBROMO-3-CHLOROPROPANE	10	U	10	U	10	U	10	U	10	U	10	U
1,2,4-TRICHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U

TABLE 6
US STEEL
SEMIVOLATILE WATER

Sample Number :	E0056		E0051		E0043		E0045		E0053		E0077		E0080	
Sampling Location :	G101		G102		G103		G104		G105		G106		G107	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	16:00		15:00		12:30		13:15		15:00		08:40		10:30	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
pH :														
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
PHENOL	10	U	10	U	10	UJ	10	U	10	U	10	U	10	UJ
BIS-(2-CHLOROETHYL)ETHER	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	U	10	UJ
2-CHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,2'-OXYBIS(1- CHLOROPROPANE)	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
ACETOPHENONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
N-NITROSO-DI-N PROPYLAMINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
HEXACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
NITROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ISOPHORONE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-NITROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DIMETHYLPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BIS(2-CHLOROETHOXY)METHANE	10	U	10	U	10	UJ	10	U	10	U	10	U	10	UJ
2,4-DICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
NAPHTHALENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROANILINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
HEXACHLOROBUTADIENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CAPROLACTAM	10	U	10	U	10	UJ	10	U	10	U	10	UJ	10	U
4-CHLORO-3-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-METHYLNAPHTHALENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
HEXACHLOROCYCLO-PENTADIEN	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4,6-TRICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4,5-TRICHLOROPHENOL	25	U	25	U	25	U	25	U	25	U	25	U	25	U
1,1'-BIPHENYL	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-CHLORONAPHTHALENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-NITROANILINE	25	U	25	U	25	U	25	U	25	U	25	U	25	U
DIMETHYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,6-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACENAPHTHYLENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
3-NITROANILINE	25	U	25	U	25	U	25	U	25	U	25	U	25	U
ACENAPHTHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DINITROPHENOL	25	U	25	U	25	U	25	U	25	U	25	U	25	U
4-NITROPHENOL	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ
DIBENZOFURAN	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
DIETHYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
FLUORENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROPHENYL-PHENYL ETHE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-NITROANILINE	25	U	25	U	25	U	25	U	25	U	25	U	25	U
4,6-DINITRO-2-METHYLPHENOL	25	U	25	U	25	U	25	U	25	U	25	U	25	U
N-NITROSO DIPHENYLAMINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-BROMOPHENYL-PHENYLETHER	10	U	10	U	10	U	10	U	10	U	10	U	10	U
HEXACHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ATRAZINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
PENTACHLOROPHENOL	25	U	25	U	25	U	25	U	25	U	25	U	25	U
PHENANTHRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ANTHRACENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CARBAZOLE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
DI-N-BUTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	7	J
FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
PYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BUTYLBENZYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	6	J
3,3'-DICHLOROBENZIDINE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(A)ANTHRACENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHRYSENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
DI-N-OCTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(B)FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(K)FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(A)PYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
INDENO(1,2,3-CD)-PYRENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
DIBENZO(A,H)-ANTHRACENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(G,H,I)PERYLENE	10	U	10	U	10	U	10	U	10	U	10	U	10	U

TABLE 6
US STEEL
SEMIVOLATILE WATER (cont.)

Sample Number :	E00B7		E0098		E00A1		E00A2		E00C0		E00A6	
Sampling Location :	G108		G109		G110		G110A		G111		G112	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		13:45		15:55		15:55		12:25		18:35	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A	
pH :												
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		5.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	50	UJ
PHENOL	10	U	10	U	10	U	10	U	10	U	50	U
BIS-(2-CHLOROETHYL)ETHER	10	U	10	U	10	U	10	U	10	U	50	U
2-CHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
2-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
2,2'-OXYBIS(1- CHLOROPROPANE)	10	U	10	U	10	U	10	U	10	U	50	U
ACETOPHENONE	10	U	10	U	10	U	10	U	10	U	50	U
4-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
N-NITROSO-DI-N PROPYLAMINE	10	U	10	U	10	U	10	U	10	U	50	U
HEXACHLOROETHANE	10	U	10	U	10	U	10	U	10	U	50	U
NITROBENZENE	10	U	10	U	10	U	10	U	10	U	50	U
ISOPHORONE	10	U	10	U	10	U	10	U	10	U	50	U
2-NITROPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
2,4-DIMETHYLPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
BIS(2-CHLOROETHOXY)METHANE	10	U	10	U	10	U	10	U	10	U	50	U
2,4-DICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
NAPHTHALENE	10	U	10	U	10	U	10	U	10	U	110	
4-CHLOROANILINE	10	U	10	U	10	U	10	U	10	U	50	U
HEXACHLOROBUTADIENE	10	U	10	U	10	U	10	U	10	U	50	U
CAPROLACTAM	10	U	10	U	10	U	10	U	10	U	50	U
4-CHLORO-3-METHYLPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
2-METHYLNAPHTHALENE	10	U	10	U	10	U	10	U	10	U	230	J
HEXACHLOROCYCLO-PENTADIEN	10	U	10	U	10	U	10	U	10	U	50	U
2,4,6-TRICHLOROPHENOL	10	U	10	U	10	U	10	U	10	U	50	U
2,4,5-TRICHLOROPHENOL	25	U	25	U	25	U	25	U	25	U	130	U
1,1'-BIPHENYL	10	U	10	U	10	U	10	U	10	U	50	U
2-CHLORONAPHTHALENE	10	U	10	U	10	U	10	U	10	U	50	U
2-NITROANILINE	25	U	25	U	25	U	25	U	25	U	130	U
DIMETHYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	50	U
2,6-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	50	U
ACENAPHTHYLENE	10	U	10	U	10	U	10	U	10	U	50	U
3-NITROANILINE	25	U	25	U	25	U	25	U	25	U	130	U
ACENAPHTHENE	10	U	10	U	10	U	10	U	10	U	24	J
2,4-DINITROPHENOL	25	U	25	U	25	U	25	U	25	U	130	U
4-NITROPHENOL	25	U	25	U	25	U	25	U	25	U	130	U
DIBENZOFURAN	10	U	10	U	10	U	10	U	10	U	50	U
2,4-DINITROTOLUENE	10	U	10	U	10	U	10	U	10	U	50	U
DIETHYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	50	U
FLUORENE	10	U	10	U	10	U	10	U	10	U	40	J
4-CHLOROPHENYL-PHENYL ETHE	10	U	10	U	10	U	10	U	10	U	50	U
4-NITROANILINE	25	U	25	U	25	U	25	U	25	U	130	U
4,6-DINITRO-2-METHYLPHENOL	25	U	25	U	25	U	25	U	25	U	130	U
N-NITROSO DIPHENYLAMINE	10	U	10	U	10	U	10	U	10	U	50	U
4-BROMOPHENYL-PHENYLETHER	10	U	10	U	10	U	10	U	10	U	50	U
HEXACHLOROBENZENE	10	U	10	U	10	U	10	U	10	U	50	U
ATRAZINE	10	U	10	U	10	U	10	U	10	U	50	U
PENTACHLOROPHENOL	25	U	25	U	25	U	25	U	25	U	130	U
PHENANTHRENE	10	U	10	U	10	U	10	U	10	U	130	
ANTHRACENE	10	U	10	U	10	U	10	U	10	U	22	J
CARBAZOLE	10	U	10	U	10	U	10	U	10	U	50	U
DI-N-BUTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	50	U
FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	16	J
PYRENE	10	U	10	U	10	U	10	U	10	U	66	
BUTYLBENZYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	50	U
3,3'-DICHLOROBENZIDINE	10	U	10	U	10	U	10	U	10	U	50	U
BENZO(A)ANTHRACENE	10	U	10	U	10	U	10	U	10	U	25	J
CHRYSENE	10	U	10	U	10	U	10	U	10	U	39	J
BIS(2-ETHYLHEXYL)PHTHALATE	5	J	10	U	10		8	J	3	J	50	U
DI-N-OCTYLPHTHALATE	10	U	10	U	10	U	10	U	10	U	50	U
BENZO(B)FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	50	U
BENZO(K)FLUORANTHENE	10	U	10	U	10	U	10	U	10	U	50	U
BENZO(A)PYRENE	10	U	10	U	10	U	10	U	10	U	15	J
INDENO(1,2,3-CD)-PYRENE	10	U	10	U	10	U	10	U	10	U	50	U
DIBENZO(A,H)-ANTHRACENE	10	U	10	U	10	U	10	U	10	U	50	U
BENZO(G,H,I)PERYLENE	10	U	10	U	10	U	10	U	10	U	50	U

TABLE 7
US STEEL
PESTICIDE/PCB WATER

Sample Number :	E0056		E0051		E0043		E0045		E0053		E0077		E0080	
Sampling Location :	G101		G102		G103		G104		G105		G106		G107	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	16:00		15:00		12:30		13:15		15:00		08:40		10:30	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
pH :														
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
BETA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
DELTA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
GAMMA-BHC (LINDANE)	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
HEPTACHLOR	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
ALDRIN	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
HEPTACHLOR EPOXIDE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
ENDOSU1FAN I	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
DIELDRIN	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDRIN	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDOSULFAN II	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDD	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDOSULFAN SULFATE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDT	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
METHOXYCHLOR	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
ENDRIN KETONE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDRIN ALDEHYDE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ALPHA-CHLORDANE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
GAMMA-CHLORDANE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
TOXAPHENE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
AROCLOR-1016	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1221	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
AROCLOR-1232	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1242	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1248	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1254	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1260	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

TABLE 7
US STEEL
PESTICIDE/PCB WATER (cont.)

Sample Number :	E00B7		E0098		E00A1		E00A2		E00C0		E00A6	
Sampling Location :	G108		G109		G110		G110A		G111		G112	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		13:45		15:55		15:55		12:25		18:35	
%Moisture :	N/A		N/A		N/A		N/A		N/A		N/A	
pH :												
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
BETA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.021	J
DELTA-BHC	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
GAMMA-BHC (LINDANE)	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
HEPTACHLOR	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.018	J
ALDRIN	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
HEPTACHLOR EPOXIDE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.019	J
ENDOSU1FAN I	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
DIELDRIN	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDRIN	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDOSULFAN II	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDD	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDOSULFAN SULFATE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDT	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
METHOXYCHLOR	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
ENDRIN KETONE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ENDRIN ALDEHYDE	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
ALPHA-CHLORDANE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
GAMMA-CHLORDANE	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
TOXAPHENE	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
AROCLOR-1016	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1221	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
AROCLOR-1232	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1242	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1248	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1254	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
AROCLOR-1260	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

TABLE 8
US STEEL
INORGANIC WATER

Sample Number :	ME0056		ME0051		ME0043		ME0045		ME0053		ME0077		ME0080	
Sampling Location :	G101		G102		G103		G104		G105		G106		G107	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	16:00		15:00		12:30		13:15		15:00		08:40		10:30	
%Solids :	0		0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2420	J	5030	J	2920	J	1960	J	3740	J	823	J	200	UJ
ANTIMONY	60	U	60	U	60	U	60	U	60	U	60	U	60	U
ARSENIC	15	J+J-	43.7		10	U	10	U	35		10	U	10	U
BARIUM	200	U	200	U	200	U	200	U	200	U	200	U	200	U
BERYLLIUM	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CADMIUM	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
CALCIUM	343000		470000		893000		646000		343000		40200		69000	
CHROMIUM	10	U	14.2		15.5		10	U	10.7		10	U	10	U
COBALT	50	U	50	U	50	U	50	U	50	U	50	U	50	U
COPPER	36.3		70.9		30.3		25	U	47.9		25	U	25	U
IRON	20100	J	59300	J	14300	J	10200	J	45900	J	1550	J	100	UJ
LEAD	58.7		155		44.9		10	U	112		15.2		10	U
MAGNESIUM	191000		281000		565000		444000		188000		63200		27900	
MANGANESE	829	J	1940	J	6380	J	956	J	1650	J	159	J	18.8	J
MERCURY	0.35	J+/J-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
NICKEL	15.1	J	25	J	27.3	J	8.3	J	19.5	J	3	J	40	U
POTASSIUM	8230		8050		17800		23800		7480		18200		7700	
SELENIUM	35	U	35	U	35	U	35	U	35	U	35	U	35	U
SILVER	10	U	10	U	10	U	10	U	10	U	10	U	10	U
SODIUM	25600		21800		22300		76800		21100		10400		22800	
THALLIUM	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ
VANADIUM	50	U	50	U	50	U	50	U	50	U	50	U	50	U
ZINC	150		124		109		64.9		98.2		129		60	U
CYANIDE	10	U	10	U	10	U	10	U	10	U	10	U	10	U

TABLE 8
US STEEL
INORGANIC WATER (cont.)

Sample Number :	ME00B7		ME0098		ME00A1		ME00A2		ME00C0		ME00A6	
Sampling Location :	G108		G109		G110		G110A		G111		G112	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		13:45		15:55		15:55		12:25		18:35	
%Solids :	0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	U	200	U	200	U	200	U	970		673	
ANTIMONY	60	UJ	60	U	60	UJ	60	UJ	60	U	60	UJ
ARSENIC	10	UJ	10	U	10	UJ	10	UJ	10	U	12.6	J+/-
BARIUM	15.3	J	10.7	J	30.9	J	29.1	J	134	J	85.2	J
BERYLLIUM	5	UJ	5	U	5	UJ	5	UJ	5	U	0.2	J-
CADMIUM	5	U	5	U	5	U	5	U	5	U	1.8	J
CALCIUM	119000		84000		105000		96100		99400		97500	
CHROMIUM	0.88	J	1.1	J	1.4	J	10	U	3.2	J	27.5	
COBALT	50	UJ	50	U	50	UJ	50	UJ	50	U	50	UJ
COPPER	25	U	25	U	3.7	J	3.6	J	3.5	J	28.7	
IRON	241		88.2	J	179		189		6580		78900	
LEAD	10	U	10	U	10	U	10	U	10	U	16.1	J+
MAGNESIUM	117000		76800		273000		255000		46400		23100	
MANGANESE	51.6	J+	4.1	J	18.4	J+	20.8	J+	612		3850	
MERCURY	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.05	J
NICKEL	40	U	40	U	40	U	40	U	2.7	J	13.5	J
POTASSIUM	9550		18500		14300		13700		5000	U	6020	
SELENIUM	35	U	35	U	42.4	J+	42	J+	35	U	35	U
SILVER	10	U	10	U	10	U	10	U	10	U	10	U
SODIUM	6530		27100		22000		20400		62000		7730	
THALLIUM	25	UJ	25	U	25	UJ	25	UJ	25	U	25	UJ
VANADIUM	50	U	50	U	50	U	50	U	3	J	107	
ZINC	60	U	60	U	60	U	60	U	60	U	60	U
CYANIDE	10	U	35.2		10	U	10	U	10	U	10	U

TABLE 9
US STEEL
INORGANIC DISSOLVED WATER

Sample Number :	ME0057		ME0052		ME0044		ME0046		ME0054		ME0078		ME0081	
Sampling Location :	G101DM		G102DM		G103DM		G104DM		G105DM		G106DM		G107DM	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	16:00		15:00		12:30		13:15		15:00		08:40		10:30	
%Solids :	0		0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	U	200	U	200	U	200	U	200	U	200	U	200	U
ANTIMONY	60	U	60	U	60	U	60	U	60	U	60	U	60	U
ARSENIC	10	U	10.9		10	U	10	U	10	U	10	U	10	U
BARIUM	29.7	J	60	J	38.6	J	49	J	58.2	J	22	J	200	U
BERYLLIUM	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CADMIUM	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CALCIUM	92800		97300		421000		182000		92800		37600		78300	
CHROMIUM	10	U	147		10	U	10	U	61.8		3.5	J	10	U
COBALT	50	U	50	U	50	U	50	U	50	U	50	U	50	U
COPPER	6.6	J	25	U	25	U	25	U	25	U	25	U	25	U
IRON	145		6610		2410		100	U	4710		100	U	100	U
LEAD	10	U	10	U	10	U	10	U	10	U	10	U	10	U
MAGNESIUM	31300		31900		258000		106000		30000		65500		32000	
MANGANESE	157		425		5890		3.2	J	399		94.6		16.6	
MERCURY	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
NICKEL	40	U	40.8		15.3	J	40	U	15.9	J	40	U	40	U
POTASSIUM	7540		6310		16700		20500		6140		17700		8080	
SELENIUM	35	U	35	U	35	U	6.6	J	35	U	35	U	35	U
SILVER	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
SODIUM	29800	J	24600	J	25300	J	80400	J	23900	J	10400	J	25500	J
THALLIUM	25	U	11.3	J	25	U	25	U	13.1	J	25	U	25	U
VANADIUM	50	U	50	U	50	UJ	50	UJ	50	U	50	U	50	U
ZINC	60	U	60	U	60	U	60	U	60	U	60	U	60	U

TABLE 9
US STEEL
INORGANIC DISSOLVED WATER (cont.)

Sample Number :	ME00B6		ME0099		ME00A4		ME00A5		ME00B9		ME00A7	
Sampling Location :	GF108		GF109		GF110		GF110A		GF111		GF112	
Matrix :	Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		13:45		15:55		15:55		12:25		18:35	
%Solids :	0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	U	200	U	200	U	200	U	200	U	200	U
ANTIMONY	60	UJ	60	U	60	UJ	60	UJ	60	U	60	U
ARSENIC	10	UJ	10	U	10	UJ	10	UJ	10	U	10	U
BARIUM	15	J	11	J	30.4	J	31.5	J	126	J	78	J
BERYLLIUM	5	UJ	5	U	5	UJ	5	UJ	5	U	5	U
CADMIUM	5	U	5	U	5	U	5	U	5	U	5	U
CALCIUM	118000		88200		100000		102000		94700		94500	
CHROMIUM	10	U	10	U	1.1	J	1.3	J	1.1	J	2.6	J
COBALT	50	UJ	50	U	50	UJ	50	UJ	50	U	50	U
COPPER	1.6	J	25	U	3.4	J	3.5	J	1.5	J	1.6	J
IRON	79.5	J	35.1	J	53.8	J	112		5460		36600	
LEAD	10	U	10	U	10	U	10	U	10	U	10	U
MAGNESIUM	114000		79600		270000		272000		41600		21000	
MANGANESE	44.7	J+	3.9	J	12.2	J+	15.2	J+	597		2040	
MERCURY	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
NICKEL	40	U	40	U	40	U	40	U	40	U	40	U
POTASSIUM	9910		19200		14100		14700		5000	U	5740	
SELENIUM	35	U	35	U	35	U	35	U	35	U	35	U
SILVER	10	U	10	U	10	U	10	U	10	U	10	U
SODIUM	6330		28600		22000		22300		68400		7670	
THALLIUM	25	UJ	25	U	25	UJ	25	UJ	25	U	25	U
VANADIUM	50	U	50	U	50	U	50	U	50	U	50	U
ZINC	60	U	60	U	60	U	60	U	60	U	60	U

TABLE 10
US STEEL
VOLATILE SEDIMENTS

Sample Number :	E00A8		E00A9		E00B0		E00B1		E00B2		E00B3		E00B4		E00B5	
Sampling Location :	X201		X202		X203		X204		X205		X206		X207		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	12:45		18:00		18:20		09:15		13:45		14:25		14:50		15:40	
%Moisture :	47		41		32		50		50		46		45		39	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
DICHLORODIFLUOROMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CHLOROMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
VINYL CHLORIDE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
BROMOMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TRICHLOROFLUOROMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,1-DICHLOROETHENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
ACETONE	170		100		37		35		64		140		100		24	
CARBON DISULFIDE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
METHYL ACETATE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
METHYLENE CHLORIDE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TRANS-1,2-DICHLOROETHENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
METHYL TERT-BUTYL ETHER	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,1-DICHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CIS-1,2-DICHLOROETHENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
2-BUTANONE	19	U	26		15	U	20	U	20	U	19	U	18	U	16	U
CHLOROFORM	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,1,1-TRICHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CYCLOHEXANE	19	U	17	U	15	U	20	U	13	J	19	U	18	U	16	U
CARBON TETRACHLORIDE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
BENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,2-DICHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TRICHLOROETHENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
METHYLCYCLOHEXANE	19	U	17	U	15	U	20	U	55		19	U	18	U	16	U
1,2-DICHLOROPROPANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
BROMODICHLOROMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CIS-1,3-DICHLOROPROPENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
4-METHYL-2-PENTANONE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TOLUENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TRANS-1,3-DICHLOROPROPENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,1,2-TRICHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
TETRACHLOROETHENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
2-HEXANONE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
DIBROMOCHLOROMETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,2-DIBROMOETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
CHLOROBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
ETHYLBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
XYLENES (TOTAL)	14	J	17	U	15	U	20	U	20	U	19	U	18	U	16	U
STYRENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
BROMOFORM	19	UJ	17	UJ	15	UJ	20	UJ	20	U	19	UJ	18	UJ	16	U
ISOPROPYLBENZENE	9	J	17	U	15	U	20	U	20	U	5	J	3	J	16	U
1,1,2,2-TETRACHLOROETHANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,3-DICHLOROBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,4-DICHLOROBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,2-DICHLOROBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,2-DIBROMO-3-CHLOROPROPANE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U
1,2,4-TRICHLOROBENZENE	19	U	17	U	15	U	20	U	20	U	19	U	18	U	16	U

TABLE 11
US STEEL
SEMIVOLATILE SEDIMENTS

Sample Number :	E00A8		E00A9		E00B0		E00B1		E00B2		E00B2DL		E00B3		E00B3DL		E00B4		E00B4DL		E00B5	
Sampling Location :	X201		X202		X203		X204		X205		X205		X206		X206		X207		X207		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	12:45		18:00		18:20		09:15		13:45		13:45		14:25		14:25		14:50		14:50		15:40	
%Moisture :	47		40		32		50		50		50		46		46		45		45		39	
pH :	7.4		7.6		7.8		7.5		7.2		7.2		7.3		7.3		7.2		7.2		7.1	
Dilution Factor :	3.0		3.0		1.0		3.0		4.0		20.0		3.0		15.0		3.0		20.0		2.0	
Semivolatile Compound	Result	Flag	Result	Flag	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BENZALDEHYDE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
PHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
BIS-(2-CHLOROETHYL)ETHER	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-CHLOROPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-METHYLPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,2'-OXYBIS(1- CHLOROPROPANE)	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
ACETOPHENONE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
4-METHYLPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
N-NITROSO-DI-N PROPYLAMINE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
HEXACHLOROETHANE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
NITROBENZENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
ISOPHORONE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-NITROPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,4-DIMETHYLPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
BIS(2-CHLOROETHOXY)METHANE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,4-DICHLOROPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
NAPHTHALENE	1900	U	1700	U	160	J	2000	U	1200	J	13000	U	960	J	9200	U	1200	J	12000	U	1100	U
4-CHLOROANILINE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
HEXACHLOROBUTADIENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
CAPROLACTAM	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
4-CHLORO-3-METHYLPHENOL	1900	U	390	J	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-METHYLNAPHTHALENE	1900	U	1700	U	170	J	2000	U	680	J	13000	U	870	J	9200	U	1200	J	12000	U	1100	U
HEXACHLOROCYCLO-PENTADIENE	1900	UJ	1700	UJ	490	UJ	2000	UJ	2600	UJ	13000	UJ	1800	UJ	9200	UJ	1800	UJ	12000	UJ	1100	UJ
2,4,6-TRICHLOROPHENOL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,4,5-TRICHLOROPHENOL	4700	U	4200	U	1200	U	5000	U	6600	U	33000	U	4600	U	23000	U	4500	U	30000	U	2700	U
1,1'-BIPHENYL	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-CHLORONAPHTHALENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2-NITROANILINE	4700	U	4200	U	1200	U	5000	U	6600	U	33000	U	4600	U	23000	U	4500	U	30000	U	2700	U
DIMETHYLPHTHALATE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,6-DINITROTOLUENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
ACENAPHTHYLENE	720	J	590	J	470	J	490	J	3500		3000	J	2200		9200	U	2800		3300	J	820	J
3-NITROANILINE	4700	U	4200	U	1200	U	5000	U	6600	U	33000	U	4600	U	23000	U	4500	U	30000	U	2700	U
ACENAPHTHENE	1900	U	1700	U	490	U	2000	U	3400		3300	J	5600		5900	J	6800		11000	J	900	J
2,4-DINITROPHENOL	4700	UJ	4200	UJ	1200	UJ	5000	UJ	6600	UJ	33000	UJ	4600	UJ	23000	UJ	4500	UJ	30000	UJ	2700	UJ
4-NITROPHENOL	4700	UJ	4200	UJ	1200	UJ	5000	UJ	6600	UJ	33000	UJ	4600	UJ	23000	UJ	4500	UJ	30000	UJ	2700	UJ
DIBENZOFURAN	1900	U	1700	U	110	J	2000	U	990	J	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
2,4-DINITROTOLUENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
DIETHYLPHTHALATE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
FLUORENE	1900	U	1700	U	140	J	440	J	5000		5100	J	4500		4200	J	8700		15000		370	J
4-CHLOROPHENYL-PHENYL ETHER	1900	UJ	1700	UJ	490	UJ	2000	UJ	2600	UJ	13000	UJ	1800	UJ	9200	UJ	1800	UJ	12000	UJ	1100	UJ
4-NITROANILINE	4700	UJ	4200	UJ	1200	UJ	5000	UJ	6600	UJ	33000	U	4600	UJ	23000	U	4500	UJ	30000	U	2700	UJ
4,6-DINITRO-2-METHYLPHENOL	4700	UJ	4200	UJ	1200	UJ	5000	UJ	6600	UJ	33000	UJ	4600	UJ	23000	UJ	4500	UJ	30000	UJ	2700	UJ
N-NITROSO DIPHENYLAMINE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
4-BROMOPHENYL-PHENYLETHER	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
HEXACHLOROBENZENE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
ATRAZINE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
PENTACHLOROPHENOL	4700	U	4200	U	1200	U	5000	U	6600	U	33000	UJ	4600	U	23000	UJ	4500	U	30000	UJ	2700	U
PHENANTHRENE	1700	J	1600	J	660		2000		31000		30000		11000		11000		56000		87000		2200	
ANTHRACENE	1400	J	1100	J	690		980	J	12000		13000		6000		5800	J	19000		26000		1300	
CARBAZOLE	1900	UJ	1700	UJ	490	UJ	2000	UJ	2600	UJ	13000	UJ	1800	UJ	9200	UJ	1800	UJ	12000	UJ	420	J
DI-N-BUTYLPHTHALATE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
FLUORANTHENE	3300		2600		1900		3900		59000		57000		24000		21000		38000		53000		6400	
PYRENE	3400	J	3300		1400		4000		37000		49000		33000		30000		51000		77000		7200	
BUTYLBENZYLPHTHALATE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
3,3'-DICHLOROBENZIDINE	1900	U	1700	U	490	U	2000	U	2600	U	13000	UJ	1800	U	9200	UJ	1800	U	12000	UJ	1100	U
BENZO(A)ANTHRACENE	1900		1600	J	800		2300		23000		25000		11000		10000		22000		30000		3800	
CHRYSENE	3500		3100		1200		3300		29000		31000		12000		11000		24000		32000		5500	
BIS(2-ETHYLHEXYL)PHTHALATE	2400		2200		230	J	1400	J	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
DI-N-OCTYLPHTHALATE	1900	U	1700	U	490	U	2000	U	2600	U	13000	U	1800	U	9200	U	1800	U	12000	U	1100	U
BENZO(B)FLUORANTHENE	3400		3000		1400		2700		22000		17000		5900		4400	J	9300		10000	J	5300	
BENZO(K)FLUORANTHENE	2600	J	1900	J	1200		2200	J	15000	J	16000	J	5500	J	5900	J	10000	J	15000	J	3100	J
BENZO(A)PYRENE	3600		3200		1200		2800		21000		21000		9700		9400		17000		25000		4500	
INDENO(1,2,3-CD)-PYRENE	1200	J	920	J	630		1500	J	8000		12000	J	3500		4200	J	4700		8800	J	2400	
DIBENZO(A,H)-ANTHRACENE	1900	U	1700	U	170	J	470	J	2800		3100	J	990	J	9200	U	1500	J	12000	U	740	J
BENZO(G,H,I)PERYLENE	830	J	740	J	510		1200	J	5100		8200	J	2600		3800	J	3300		7100	J	1400	

TABLE 12
US STEEL
PESTICIDE/PCB SEDIMENT

Sample Number :	E00A8		E00A8DL		E00A9		E00A9DL		E00B0		E00B1		E00B2	
Sampling Location :	X201		X201		X202		X202		X203		X204		X205	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	12:45		12:45		18:00		18:00		18:20		09:15		13:45	
%Moisture :	47		47		40		40		32		50		50	
pH :	7.4		7.4		7.6		7.6		7.8		7.5		7.2	
Dilution Factor :	1.0		2.0		1.0		2.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	BACKGROUND		Result	Flag	Result	Flag
ALPHA-BHC	3.2	U	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	9.0	J
BETA-BHC	66	J	67	J	31	J	28	J	4.0	J	14	J	100	J
DELTA-BHC	3.2	U	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
GAMMA-BHC (LINDANE)	3.2	UJ	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
HEPTACHLOR	3.2	R	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
ALDRIN	3.2	UJ	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
HEPTACHLOR EPOXIDE	3.2	U	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
ENDOSU1FAN I	3.2	U	6.4	U	2.8	U	5.7	U	2.5	UJ	3.4	UJ	3.4	U
DIELDRIN	6.2	U	12	U	5.5	U	11	U	2.3	J	6.6	UJ	6.6	U
4,4'-DDE	1.9	J	4.3	J	200	J	170	J	1.7	J	2.7	J	6.6	U
ENDRIN	15	J	18	J	5.5	U	11	U	4.9	UJ	6.6	UJ	16	J
ENDOSULFAN II	6.2	U	12	U	5.5	U	11	U	4.9	UJ	6.6	UJ	4.6	J
4,4'-DDD	2.2	J	12	U	51	J	29	J	2.0	J	2.4	J	6.7	J
ENDOSULFAN SULFATE	6.2	U	12	U	5.5	U	11	U	4.9	UJ	6.6	UJ	6.6	U
4,4'-DDT	6.2	UJ	12	U	5.5	U	11	U	4.9	UJ	6.6	UJ	2.9	J
METHOXYCHLOR	32	U	64	U	28	U	57	U	25	UJ	34	UJ	34	U
ENDRIN KETONE	5.4	J	12	U	5.5	U	11	U	4.9	UJ	6.6	UJ	10	J
ENDRIN ALDEHYDE	6.8	J	9.4	J	5.5	U	11	U	4.9	UJ	6.6	UJ	5.2	J
ALPHA-CHLORDANE	0.89	J	6.4	U	15	J	13	J	1.6	J	3.4	UJ	3.4	U
GAMMA-CHLORDANE	2.1	J	5.2	J	2.8	U	5.7	U	4.4	J	3.4	UJ	3.4	U
TOXAPHENE	320	U	640	U	280	U	570	U	250	UJ	340	UJ	340	U
AROCLOR-1016	62	U	120	U	55	U	110	U	49	UJ	66	UJ	66	U
AROCLOR-1221	130	U	250	U	110	U	220	U	99	UJ	130	UJ	130	U
AROCLOR-1232	62	U	120	U	55	U	110	U	49	UJ	66	UJ	66	U
AROCLOR-1242	62	U	120	U	55	U	110	U	49	UJ	66	UJ	66	U
AROCLOR-1248	62	U	120	U	55	U	110	U	49	UJ	66	UJ	66	U
AROCLOR-1254	62	U	120	U	1000	J	870	J	49	UJ	66	UJ	66	U
AROCLOR-1260	62	U	120	U	850	J	670	J	54	J	66	UJ	66	U

TABLE 12
US STEEL
PESTICIDE/PCB SEDIMENT (cont.)

Sample Number :	E00B2DL		E00B3		E00B3DL		E00B4		E00B4DL		E00B5		E00B5DL	
Sampling Location :	X205		X206		X206		X207		X207		X208		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	13:45		14:25		14:25		14:50		14:50		15:40		15:40	
%Moisture :	50		46		46		45		45		39		39	
pH :	7.2		7.3		7.3		7.2		7.2		7.1		7.1	
Dilution Factor :	2.0		1.0		5.0		1.0		5.0		1.0		5.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	11	J	11	J	16		3.1	U	15	U	2.8	U	14	U
BETA-BHC	97	J	110	J	130	J	150	J	150	J	73	J	70	J
DELTA-BHC	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
GAMMA-BHC (LINDANE)	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
HEPTACHLOR	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
ALDRIN	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
HEPTACHLOR EPOXIDE	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
ENDOSU1FAN I	6.8	U	3.1	U	16	U	3.1	U	15	U	2.8	U	14	U
DIELDRIN	13	U	6.1	U	31	U	6.0	U	30	U	5.4	U	27	U
4,4'-DDE	13	U	1.6	J	31	U	6.0	U	12	J	5.4	U	27	U
ENDRIN	18	J	18	J	33	J	42	J	46	J	5.4	U	27	U
ENDOSULFAN II	13	U	4.8	J	31	U	9.5	J	8.3	J	5.4	U	27	U
4,4'-DDD	9.5	J	7.2	J	13	J	8.0	J	12	J	5.4	U	27	U
ENDOSULFAN SULFATE	13	U	6.1	U	31	U	6.0	U	30	U	5.4	U	27	U
4,4'-DDT	4.8	J	2.9	J	31	U	2.0	J	20	J	5.4	U	27	U
METHOXYCHLOR	68	U	31	U	160	U	31	U	150	U	19	J	140	U
ENDRIN KETONE	4.0	J	11	J	9.8	J	1.5	J	8.8	J	5.4	U	27	U
ENDRIN ALDEHYDE	6.0	J	4.2	J	16	U	29	J	33	J	4.0	J	27	U
ALPHA-CHLORDANE	6.8	U	3.1	U	16	U	0.79	J	15	U	2.8	U	14	U
GAMMA-CHLORDANE	6.8	U	3.1	U	16	U	22	J	15	U	2.8	U	14	U
TOXAPHENE	680	U	310	U	1600	U	310	U	1500	U	280	U	1400	U
AROCLOR-1016	130	U	61	U	310	U	60	U	300	U	54	U	270	U
AROCLOR-1221	270	U	120	U	620	U	120	U	610	U	110	U	550	U
AROCLOR-1232	130	U	61	U	310	U	60	U	300	U	54	U	270	U
AROCLOR-1242	130	U	61	U	310	U	60	U	300	U	54	U	270	U
AROCLOR-1248	130	U	61	U	310	U	60	U	300	U	54	U	270	U
AROCLOR-1254	130	U	61	U	310	U	60	U	300	U	54	U	270	U
AROCLOR-1260	130	U	61	U	310	U	60	U	300	U	54	U	270	U

TABLE 13
US STEEL
INORGANIC SEDIMENT

Sample Number :	ME00A8		ME00A9		ME00B0		ME00B1		ME00B2		ME00B3		ME00B4		ME00B5	
Sampling Location :	X201		X202		X203		X204		X205		X206		X207		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	12:45		18:00		18:50		09:15		13:45		14:25		14:50		15:40	
%Solids :	57.5		60.9		54.1		40.8		49.8		50.7		57.4		52.6	
Dilution Factor :	1		1		1		1		1		1		1		1	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	11100		5330		4040		10500		14700		7740		9190		8700	
ANTIMONY	9.1	UJ	2.1	J	2.5	J	14.6	UJ	10.3	UJ	10.5	UJ	9.5	UJ	10.8	UJ
ARSENIC	6.7	J-	52.8		18	J-	6.2	J-	18.9	J-	11.6	J-	9.4	J-	26.2	J-
BARIUM	94.9		146		153		130		255		110		87.8		160	
BERYLLIUM	0.76	U	0.15	J+	0.08	J+	0.05	J+	0.3	J+	0.18	J+	0.06	J+	0.9	U
CADMIUM	1.4	J+	54.9		33.1		4.6		9.9		1.9	J+	1.5	J+	11	
CALCIUM	50300		20400		216000		41100		25800		37000		37000		41400	
CHROMIUM	30.4		688		487		72.4		141		28.6		26.5		87.7	
COBALT	10.5	J	26.4	J	11.1	J	8.7	J	9.3	J	8.2	J	8	J	9.8	J
COPPER	84.8		649		346		154		208		78.7		78.6		209	
IRON	24400		374000		43100		25700		26400		41600		23200		37800	
LEAD	233		817		301		240		308		125		119		303	
MAGNESIUM	26900		8060		12800		20300		9400		17300		20400		16500	
MANGANESE	415		2780		549		401		311		457		280		327	
MERCURY	3.1		1.1		1.8		0.87		4		1.2		2.8		3.5	
NICKEL	28.4		467		552		37		37.5		20.7		22		34.3	
POTASSIUM	2090		798		668	J	1840		1830		1240		1830		1140	
SELENIUM	6.2	J+	19.3	J+	18.7	J+	8.5	U	6	U	6.1	U	5.7	J+	6.3	U
SILVER	1.5	U	4.2		4.5		2.4	U	1.7	U	1.7	U	1.6	U	1.8	U
SODIUM	756	U	789	U	906	U	1210	U	858	U	873	U	792	U	897	U
THALLIUM	3.8	UJ	5.2	J	4.5	U	6.1	U	4.3	U	4.4	U	4	U	4.5	UJ
VANADIUM	22.7		17.9		10.2		21.3		27.1		17.9		20.9		19.8	
ZINC	295		1550		1250		397		630		263		316		846	
CYANIDE	4.3	UJ	4.1	UJ	4.6	UJ	6.1	UJ	5	UJ	4.9	UJ	4.4	UJ	4.8	UJ

TABLE 14
US STEEL
KEY SAMPLE SUMMARY
VOLATILE SOIL

Sample Number :	E00D6		E0076		E0094		E0095		E0092		E0088		E00D4		E00D3	
Sampling Location :	X156		X113		X134		X135		X140		X143		X151		X153	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/26/2004		5/5/2004		5/6/2004		5/6/2004		5/6/2004		5/5/2004		5/26/2004		5/26/2004	
Time Sampled :	13:45		08:40		11:05		12:05		09:45		16:50		11:05		11:05	
%Moisture :	15		59		24		30		37		28		39		36	
pH :	7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ACETONE	0.012	U			0.062		0.11				0.042		0.061		0.057	
BENZENE	0.012	U	0.052													
METHYLCYCLOHEXANE	0.012	U							0.09							
1,1,2-TRICHLOROETHANE	0.012	U							0.15							

TABLE 15
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE SOIL

Sample Number :	E0096		E0067		E0067DL		E0065		E0062		E0062DL		E0063		E0069		E0070	
Sampling Location :	X112		X102		X102		X105		X106		X106		X107		X110		X110A	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004	
Time Sampled :	13:50		11:40		11:40		09:45		08:45		08:45		08:10		13:10		13:10	
%Moisture :	35		10		10		12		23		23		50		27		28	
pH :	7.1		8.3		8.3		8.8		7.6		7.6		8.9		8.1		8.3	
Dilution Factor :	1.0		2.0		6.0		2.0		5.0		15.0		1.0		3.0		3.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
PHENOL	0.5	U																
4-METHYLPHENOL	0.5	U																
2,4-DIMETHYLPHENOL	0.5	U																
NAPHTHALENE	0.5	U																
2-METHYLNAPHTHALENE	0.5	U																
ACENAPHTHYLENE	0.5	U																
ACENAPHTHENE	0.5	U																
DIBENZOFURAN	0.5	U																
FLUORENE	0.5	U							2.3									
PHENANTHRENE	0.5	U	1.5				1.5		21		21				1.6		1.9	
ANTHRACENE	0.5	U							4									
FLUORANTHENE	0.5	U	3.5		3.5		1.6		22		24							
PYRENE	0.5	U	7.7		7.8		1.6		27		28		1.6				1.7	
BENZO(A)ANTHRACENE	0.5	U	4		3.8				12		12							
CHRYSENE	0.5	U	4.7		4.7				13		13							
BIS(2-ETHYLHEXYL)PHTHALATE	0.089	J																
BENZO(B)FLUORANTHENE	0.5	U	5.2		4.6				12		12							
BENZO(K)FLUORANTHENE	0.5	U	4.2		5.1				8.4		9.3							
BENZO(A)PYRENE	0.5	U	7.9		8.1				10		10							
INDENO(1,2,3-CD)-PYRENE	0.5	U	6.4		6.5				7		6.7							
DIBENZO(A,H)-ANTHRACENE	0.5	U	1.8		2.5				3.6									
BENZO(G,H,I)PERYLENE	0.5	U	9.9	J	10	J			7.3		7.4							

TABLE 15
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE SOIL (cont.)

Sample Number :			E0096		E0075		E0076		E0055		E0083		E0084		E0085		E0097		E0047	
Sampling Location :			X112		X111		X113		X121		X126		X126A		X127		X130		X131	
Matrix :			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :			mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :			5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/5/2004		5/5/2004		5/5/2004		5/6/2004		5/3/2004	
Time Sampled :			13:50		08:40		08:40		15:45		11:45		11:45		12:30		14:25		13:00	
%Moisture :			35		29		19		25		23		24		14		35		16	
pH :			7.1		6.4		4.0		8.6		5.0		5.4		8.1		6.9		8.0	
Dilution Factor :			1.0		1.0		5.0		1.0		5.0		5.0		1.0		1.0		5.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
PHENOL	0.5	U																		
4-METHYLPHENOL	0.5	U																	3.6	
2,4-DIMETHYLPHENOL	0.5	U																	12	
NAPHTHALENE	0.5	U			5.9															
2-METHYLNAPHTHALENE	0.5	U																		
ACENAPHTHYLENE	0.5	U																		
ACENAPHTHENE	0.5	U																		
DIBENZOFURAN	0.5	U																		
FLUORENE	0.5	U																		
PHENANTHRENE	0.5	U			5.7				2.6		3.4		1.5							
ANTHRACENE	0.5	U																		
FLUORANTHENE	0.5	U	1.7		13		2						1.7							
PYRENE	0.5	U			9.1		2.5						1.6		6.1	J				
BENZO(A)ANTHRACENE	0.5	U			7.9															
CHRYSENE	0.5	U			13		2													
BIS(2-ETHYLHEXYL)PHTHALATE	0.089	J																		
BENZO(B)FLUORANTHENE	0.5	U	1.6		5.3		1.9													
BENZO(K)FLUORANTHENE	0.5	U			6.3	J														
BENZO(A)PYRENE	0.5	U					1.5													
INDENO(1,2,3-CD)-PYRENE	0.5	U			7.8	J														
DIBENZO(A,H)-ANTHRACENE	0.5	U																		
BENZO(G,H,I)PERYLENE	0.5	U			8.3															

TABLE 15
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0096		E0048		E0095		E0087		E0092		E0091		E0088		E0049		E00C9	
Sampling Location :	X112		X132		X135		X138		X140		X142		X143		X145		X146	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/3/2004		5/6/2004		5/5/2004		5/6/2004		5/6/2004		5/5/2004		5/3/2004		5/26/2004	
Time Sampled :	13:50		12:20		12:05		14:45		09:45				16:50		13:10		08:35	
%Moisture :	35		3		29		27		38		31		22		2		22	
pH :	7.1		6.3		6.5		7.1		6.7		7.0		5.9		6.0		6.2	
Dilution Factor :	1.0		1.0		1.0		1.0		10.0		1.0		10.0		1.0		20.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
PHENOL	0.5	U													17			
4-METHYLPHENOL	0.5	U																
2,4-DIMETHYLPHENOL	0.5	U																
NAPHTHALENE	0.5	U																
2-METHYLNAPHTHALENE	0.5	U							35	J	14		170					
ACENAPHTHYLENE	0.5	U																
ACENAPHTHENE	0.5	U							15	J			19	J				
DIBENZOFURAN	0.5	U											12	J				
FLUORENE	0.5	U					5.9	J	29	J			25	J				
PHENANTHRENE	0.5	U			2		36		110	J	24		75	J			11	
ANTHRACENE	0.5	U					10	J	23	J	5.8	J	14	J				
FLUORANTHENE	0.5	U			3.5		30		16	J	5.1	J					25	
PYRENE	0.5	U			3.3		31	J	74	J	27						25	
BENZO(A)ANTHRACENE	0.5	U			1.7		13	J	21	J	5.3	J					12	
CHRYSENE	0.5	U			2.1		14		34	J	7.4	J					13	
BIS(2-ETHYLHEXYL)PHTHALATE	0.089	J	7.9	J							5	J			5.6	J		
BENZO(B)FLUORANTHENE	0.5	U			2		9	J									12	
BENZO(K)FLUORANTHENE	0.5	U					10	J									9.8	
BENZO(A)PYRENE	0.5	U					11	J	13	J							12	
INDENO(1,2,3-CD)-PYRENE	0.5	U					7.2	J									7.6	J
DIBENZO(A,H)-ANTHRACENE	0.5	U																
BENZO(G,H,I)PERYLENE	0.5	U			1.6		7.7	J	12	J							5.9	J

TABLE 15
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE SOIL (cont.)

Sample Number :	E0096		E00D0		E00D4		E00D4DL		E00D3		E00D3DL		E00C4		E00C4DL		E00D7		E00D7DL	
Sampling Location :	X112		X147		X151		X151		X153		X153		X159		X159		X161		X161	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004	
Time Sampled :	13:50		09:20		11:05		11:05		11:05		11:05		12:30		12:30		14:50		14:50	
%Moisture :	35		18		39		39		36		36		18		18		30		30	
pH :	7.1		7.9		7.4		7.4		7.8		7.8		7.7		7.7		7.6		7.6	
Dilution Factor :	1.0		2.0		1.0		6.0		1.0		4.0		1.0		10.0		1.0		3.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
PHENOL	0.5	U																		
4-METHYLPHENOL	0.5	U																		
2,4-DIMETHYLPHENOL	0.5	U																		
NAPHTHALENE	0.5	U			2.8				2.1											
2-METHYLNAPHTHALENE	0.5	U			2.1															
ACENAPHTHYLENE	0.5	U	15	J																
ACENAPHTHENE	0.5	U			2.4															
DIBENZOFURAN	0.5	U																		
FLUORENE	0.5	U			2.1				1.5											
PHENANTHRENE	0.5	U	63		15		14		9		8.5						4		4.1	
ANTHRACENE	0.5	U	23	J	5.1		4.9		3		3									
FLUORANTHENE	0.5	U	150	J	11		11		7		7.1		3.9		5.1		7.1	J	6.7	J
PYRENE	0.5	U	130	J	12		13		8.9		8.2		4.2		4.7		5.8	J		
BENZO(A)ANTHRACENE	0.5	U	64		6.8		5.6		4.1		3.6		7		6.7		3.2		2.7	
CHRYSENE	0.5	U	66		6.4		5.7		4.1		3.5		8.8		10		3.3		2.8	
BIS(2-ETHYLHEXYL)PHTHALATE	0.089	J																		
BENZO(B)FLUORANTHENE	0.5	U	57		4.3				2.6				21		18		3.5		2.5	
BENZO(K)FLUORANTHENE	0.5	U	44	J							2.3		19	J	10					
BENZO(A)PYRENE	0.5	U	54		6		5.3		3.9		3.5		9.4		11		2.8		2.5	
INDENO(1,2,3-CD)-PYRENE	0.5	U	40		2.7				1.7				9.6	J	12		1.7		1.8	
DIBENZO(A,H)-ANTHRACENE	0.5	U	12	J																
BENZO(G,H,I)PERYLENE	0.5	U	25		2.5				1.5				8.7		11	J	1.5			

TABLE 16
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SOIL

Sample Number :	E0089		E0065		E0065DL		E0076		E0041		E0041DL		E0083		E0083DL		E0084		E0084DL		E0082	
Sampling Location :	X114		X105		X105		X113		X123		X123		X126		X126		X126A		X126A		X129	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/4/2004		5/4/2004		5/5/2004		5/3/2004		5/3/2004		5/5/2004		5/5/2004		5/5/2004		5/5/2004		5/5/2004	
Time Sampled :	07:45		09:45		09:45		08:40		11:45		11:45		11:45		11:45		11:45		11:45		10:30	
%Moisture :	6		12		12		19		17		17		23		23		24		24		11	
pH :	8.0		8.8		8.8		4.0		5.6		5.6		5.0		5.0		5.4		5.4		9.4	
Dilution Factor :	1.0		1.0		10.0		1.0		1.0		10.0		1.0		10.0		1.0		10.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BETA-BHC	0.0018	U							0.059	J	0.09											
ALDRIN	0.0018	U	0.047		0.058																	
HEPTACHLOR EPOXIDE	0.0018	U					0.019	J	0.035	J	0.071	J										
ENDOSU1FAN I	0.0018	U																				
DIELDRIN	0.0035	U	0.31		0.37																	
4,4'-DDE	0.0035	U											0.022				0.015					
ENDRIN	0.0035	U																				
ENDOSULFAN II	0.0035	U													0.059				0.045	J		
4,4'-DDD	0.0035	U																				
ENDOSULFAN SULFATE	0.0035	U																				
4,4'-DDT	0.0035	U																			0.053	J
METHOXYCHLOR	0.018	U																				
ENDRIN KETONE	0.0035	U											0.037	J								
ENDRIN ALDEHYDE	0.0035	U																				
ALPHA-CHLORDANE	0.0018	U											0.029	J	0.022	J					0.0072	
GAMMA-CHLORDANE	0.0018	U																				
AROCLOR-1254	0.035	U																				
AROCLOR-1260	0.035	U																				

TABLE 16
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SOIL (cont.)

Sample Number :	E0089		E0082DL		E0097		E0047		E0047DL		E0060		E0060DL		E0092		E0088		E0088DL		E0049	
Sampling Location :	X114		X129		X130		X131		X131		X139		X139		X140		X143		X143		X145	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/5/2004		5/6/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004	
Time Sampled :	07:45		10:30		14:25		13:00		13:00		16:30		16:30		09:45		16:50		16:50		13:10	
%Moisture :	6		11		35		16		16		23		23		38		22		22		2	
pH :	8.0		9.4		6.9		8.0		8.0		6.7		6.7		6.7		5.9		5.9		6.0	
Dilution Factor :	1.0		10.0		1.0		1.0		10.0		2.0		20.0		1.0		1.0		10.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BETA-BHC	0.0018	U									0.035	J					0.068	J	0.11			
ALDRIN	0.0018	U							0.023													
HEPTACHLOR EPOXIDE	0.0018	U																				
ENDOSU1FAN I	0.0018	U									0.042	J										
DIELDRIN	0.0035	U																				
4,4'-DDE	0.0035	U																				
ENDRIN	0.0035	U																				
ENDOSULFAN II	0.0035	U					0.056	J			0.04	J										
4,4'-DDD	0.0035	U																				
ENDOSULFAN SULFATE	0.0035	U																				
4,4'-DDT	0.0035	U	0.064	J					0.047	J			0.16	J								
METHOXYCHLOR	0.018	U																				
ENDRIN KETONE	0.0035	U			0.035	J					0.057	J			0.09	J						
ENDRIN ALDEHYDE	0.0035	U																				
ALPHA-CHLORDANE	0.0018	U													0.05	J	0.041	J				
GAMMA-CHLORDANE	0.0018	U																				
AROCLOR-1254	0.035	U					0.96	J	1.4												0.59	J
AROCLOR-1260	0.035	U																				

TABLE 16
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SOIL (cont.)

Sample Number :	E0089		E00C9		E00C9DL		E00D0		E00D0DL		E00D1		E00C8		E00C8DL		E00D2		E00D2DL		E00D4	
Sampling Location :	X114		X146		X146		X147		X147		X148		X149		X149		X150		X150		X151	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	07:45		08:35		08:35		09:20		09:20		09:50		16:30		16:30		10:35		10:35		11:05	
%Moisture :	6		22		22		18		18		19		13		13		16		16		39	
pH :	8.0		6.2		6.2		7.9		7.9		6.3		7.8		7.8		7.6		7.6		7.4	
Dilution Factor :	1.0		1.0		2.0		1.0		2.0		1.0		2.0		20.0		1.0		5.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BETA-BHC	0.0018	U					0.071	J	0.028	J	0.031	J	0.072	J	0.073	J	0.048	J	0.041	J	0.074	J
ALDRIN	0.0018	U	0.065	J	0.037	J																
HEPTACHLOR EPOXIDE	0.0018	U																				
ENDOSU1FAN I	0.0018	U																				
DIELDRIN	0.0035	U																				
4,4'-DDE	0.0035	U	0.09	J	0.047	J																
ENDRIN	0.0035	U	0.061	J	0.062	J															0.036	J
ENDOSULFAN II	0.0035	U																				
4,4'-DDD	0.0035	U	0.065	J	0.039	J																
ENDOSULFAN SULFATE	0.0035	U	0.2	J																		
4,4'-DDT	0.0035	U	0.055	J																		
METHOXYCHLOR	0.018	U	0.25	J					0.34	J												
ENDRIN KETONE	0.0035	U			0.055	J	0.064	J	0.076	J												
ENDRIN ALDEHYDE	0.0035	U			0.074	J	0.016	J														
ALPHA-CHLORDANE	0.0018	U																				
GAMMA-CHLORDANE	0.0018	U	0.13	J																	0.018	J
AROCLOR-1254	0.035	U																				
AROCLOR-1260	0.035	U																				

TABLE 16
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SOIL (cont.)

Sample Number :	E0089		E00D4DL		E00D3		E00C1		E00C4		E00D9		E00D7		E00D8		E00E0	
Sampling Location :	X114		X151		X153		X155		X159		X160		X161		X162		X163	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2004		5/26/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	07:45		11:05		11:05		13:40		12:30		16:10		14:50		15:35		15:50	
%Moisture :	6		39		36		33		18		28		30		28		31	
pH :	8.0		7.4		7.8		7.4		7.7		7.4		7.6		7.3		8.0	
Dilution Factor :	1.0		10.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BETA-BHC	0.0018	U	0.14	J	0.041	J							0.024	J				
ALDRIN	0.0018	U																
HEPTACHLOR EPOXIDE	0.0018	U																
ENDOSU1FAN I	0.0018	U																
DIELDRIN	0.0035	U																
4,4'-DDE	0.0035	U																
ENDRIN	0.0035	U																
ENDOSULFAN II	0.0035	U																
4,4'-DDD	0.0035	U																
ENDOSULFAN SULFATE	0.0035	U																
4,4'-DDT	0.0035	U																
METHOXYCHLOR	0.018	U																
ENDRIN KETONE	0.0035	U							0.035	J								
ENDRIN ALDEHYDE	0.0035	U																
ALPHA-CHLORDANE	0.0018	U																
GAMMA-CHLORDANE	0.0018	U													0.015		0.022	J
AROCLOR-1254	0.035	U					0.63						0.34	J			0.21	J
AROCLOR-1260	0.035	U					0.27				0.08		0.3	J	0.31		0.21	J

TABLE 17
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SOIL

Sample Number :	ME0048		ME0067		ME0066		ME0068		ME0065		ME0062		ME0063		ME0050		ME0064		ME0069		ME0070		ME0075	
Sampling Location :	X132		X102		X103		X104		X105		X106		X107		X108		X109		X110		X110A		X111	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/3/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/4/2004		5/4/2004		5/4/2004		5/5/2004	
Time Sampled :	12:20		11:40		10:30		11:50		09:45		08:45		08:10		14:45		09:10		13:10		13:10		08:40	
%Solids :	96.9		81.5		97		97.2		85.9		79.9		72.2		86.7		59.4		75.7		71.7		69	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2060										6330		6460		6920		11700						8590	
ANTIMONY	6.2	U					24.5																	
ARSENIC	5		18.9				29.8		19.9		14.8								24.4		23		337	J
BARIUM	26.4		106										218				131		79.2		91.4			
BERYLLIUM	0.52	UJ																					7.1	
CADMIUM	0.52	UJ																						
CALCIUM	1520	J	17500	J					47900	J	47700	J	48900	J	28700	J	34400	J	24700	J	26000	J		
CHROMIUM	15.8	J					539	J																
COBALT	5.2	UJ																					36.2	
COPPER	38.8		202				1890																	
IRON	11200		82600		190000		476000		61900		57700		63000		189000		36400		122000		123000			
LEAD	15.8	J	174	J																				
MAGNESIUM	1010		7800						22100		23900		12800		8430		23800		11500		12400			
MANGANESE	92.6	J			2400	J	4930	J	1220	J	1710	J	8880	J	3900	J			1220	J	1460	J	337	
MERCURY	0.1	UJ	1.5	J					0.65	J														
NICKEL	15	J																					86.6	
VANADIUM	4.7	J											76.1	J										
ZINC	75.7	J																						
CYANIDE	2.6	U															13.7							

TABLE 17
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SOIL (cont.)

Sample Number :	ME0048		ME0096		ME0076		ME0089		ME0090		ME0074		ME0073		ME0072		ME0071		ME0055		ME0083		ME0084	
Sampling Location :	X132		X112		X113		X114		X116		X117		X118		X119		X120		X121		X126		X126A	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/3/2004		5/6/2004		5/5/2004		5/6/2004		5/6/2004		5/4/2004		5/4/2004		5/4/2004		5/4/2004		5/3/2004		5/5/2004		5/5/2004	
Time Sampled :	12:20		13:50		08:40		07:45		08:30		16:00		15:00		14:30		13:50		15:45		11:45		11:45	
%Solids :	96.9		62.6		75.1		92.9		82		86.6		65.4		89.6		83.9		77.9		79.9		78.1	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2060		9190												10800									
ANTIMONY	6.2	U															1560							
ARSENIC	5				204	J									17.5		22		21		54.2	J		
BARIUM	26.4		102				284								89.6		95.8							
BERYLLIUM	0.52	UJ																			1.6		1.6	
CADMIUM	0.52	UJ																						
CALCIUM	1520	J	76400	J							29000	J			29100	J	17400	J	19900	J	17400		17900	
CHROMIUM	15.8	J																						
COBALT	5.2	UJ																						
COPPER	38.8												187		140		1420		67.2					
IRON	11200				51400		169000		46600		142000				126000		119000		247000		47800		44600	
LEAD	15.8	J					437	J							1380	J	4610	J						
MAGNESIUM	1010		30300	J							14400		2980		16700		8030		5830					
MANGANESE	92.6	J					1120	J	1060	J	1440	J			4360	J	2050	J	5070	J				
MERCURY	0.1	UJ											3.5	J										
NICKEL	15	J																						
VANADIUM	4.7	J																	91	J				
ZINC	75.7	J																						
CYANIDE	2.6	U																						

TABLE 17
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SOIL (cont.)

Sample Number :	ME0048		ME0085		ME0042		ME0082		ME0097		ME0047		ME0093		ME0094		ME0095		ME0087		ME0060		ME0092	
Sampling Location :	X132		X127		X128		X129		X130		X131		X133		X134		X135		X138		X139		X140	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/3/2004		5/5/2004		5/3/2004		5/5/2004		5/6/2004		5/3/2004		5/6/2004		5/6/2004		5/6/2004		5/5/2004		5/3/2004		5/6/2004	
Time Sampled :	12:20		12:30		11:00		10:30		14:25		13:00		10:30		11:05		12:05		14:45		16:30		09:45	
%Solids :	96.9		86.7		58		87.9		59.8		85.2		75.7		57.1		71.3		74.3		81.4		70.5	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2060				6570								6190		14900		6330				12800			
ANTIMONY	6.2	U																						
ARSENIC	5														347	J								
BARIUM	26.4		97.8						90.7		431				92.2		88.7				201			
BERYLLIUM	0.52	UJ													2.9									
CADMIUM	0.52	UJ									91.8										16.4			
CALCIUM	1520	J					42300										31800	J			19000	J		
CHROMIUM	15.8	J					237																	
COBALT	5.2	UJ					20.4																	
COPPER	38.8				131		5280	J			584										1570			
IRON	11200		73200				70800		244000		319000								41400		56100		38000	
LEAD	15.8	J							254	J	393	J									458	J		
MAGNESIUM	1010						12300	J									17700	J			4970			
MANGANESE	92.6	J	1200	J			813		1610	J	2840	J	992	J					1200	J	964	J		
MERCURY	0.1	UJ					1.4																	
NICKEL	15	J					882								185	J								
VANADIUM	4.7	J											27.1		28.2		16							
ZINC	75.7	J													1850	J					6820	J		
CYANIDE	2.6	U																						

TABLE 17
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SOIL (cont.)

Sample Number :	ME0048		ME0091		ME0088		ME0086		ME0049		ME00C9		ME00D0		ME00D1		ME00C8		ME00D2		ME00D4		ME00D5	
Sampling Location :	X132		X142		X143		X144		X145		X146		X147		X148		X149		X150		X151		X152	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/3/2004		5/6/2004		5/5/2004		5/5/2004		5/3/2004		5/26/2004		5/26/2004		5/26/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	12:20		09:15		16:50		16:10		13:10		08:35		09:20		09:50		16:30		10:35		11:05		12:35	
%Solids :	96.9		79.3		87.4		84.3		99.2		80.5		83.2		79.2		82.2		86.2		64.2		76.5	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2060										8750		10400		13200		14600		8060		9400			
ANTIMONY	6.2	U							25.3															
ARSENIC	5								61				62.9						26.7					
BARIUM	26.4										294		718				266		197		119		159	
BERYLLIUM	0.52	UJ											5.8		8.3				2					
CADMIUM	0.52	UJ									3.2		11.1		52.8		4.6		5.9				4.2	
CALCIUM	1520	J									30400		37200		6130		61700		27500		34600		70100	
CHROMIUM	15.8	J							436	J													79.4	
COBALT	5.2	UJ																						
COPPER	38.8								2750								147				139			
IRON	11200		76100		55800		157000		414000		53800		72000		41900		41900		55800		36300		65900	
LEAD	15.8	J									109		787		20700		244		105		257			
MAGNESIUM	1010												11400				28300		10900		19900		28600	J
MANGANESE	92.6	J	3350	J	2500	J	2310	J	3800	J	762		1800		432		1060		3740		375		5870	J
MERCURY	0.1	UJ											1						0.55		3.5		0.59	
NICKEL	15	J							884	J					83.1									
VANADIUM	4.7	J	56.8		17.9						36.7		64.8		45.2		24.7		29.8		20.3		35.7	
ZINC	75.7	J									409		2560		7580		874		1060		530			
CYANIDE	2.6	U																						

TABLE 17
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SOIL (cont.)

Sample Number :	ME0048		ME00D3		ME00C5		ME00C1		ME00D6		ME00C6		ME00C7		ME00C4		ME00D9		ME00D7		ME00D8		ME00E0	
Sampling Location :	X132		X153		X154		X155		X156		X157		X158		X159		X160		X161		X162		X163	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/3/2004		5/26/2004		5/25/2004		5/25/2004		5/26/2004		5/25/2004		5/25/2004		5/25/2004		5/26/2004		5/26/2004		5/26/2004		5/26/2004	
Time Sampled :	12:20		11:05		15:10		13:40		13:45		13:30		16:50		12:30		16:10		14:50		15:35		15:50	
%Solids :	96.9		66.4		92.9		67.6		76.6		84.3		62.7		81.1		72.2		69.7		69.8		69.3	
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2060		8820		9110						8920													
ANTIMONY	6.2	U																						
ARSENIC	5						55.6								27.3									
BARIUM	26.4		96.3		95.1		114								392				114		122		134	
BERYLLIUM	0.52	UJ							1.8															
CADMIUM	0.52	UJ			3.3		20		4.9						4.6		5.9	J	10.6		9.8		13.8	
CALCIUM	1520	J	40000		58100		25000		12200		67100		8260		71200		67800		23200		27300		27400	
CHROMIUM	15.8	J					576										137		270		235		288	
COBALT	5.2	UJ																	22.9		15.8		16.5	
COPPER	38.8						295								346				243		176		160	
IRON	11200				139000		461000		86900				100000		52400		310000		443000		311000		332000	
LEAD	15.8	J	202				1870						84.6		160		591	J	1030	J	1180	J	1010	J
MAGNESIUM	1010		23000		7930		3610		3550	J	29400		5880		4630									
MANGANESE	92.6	J	393		1950		4280		1480	J	448		1580		883		2700	J	2740	J	2250	J	2470	J
MERCURY	0.1	UJ	2				0.35								0.88				0.4		0.35		0.48	
NICKEL	15	J					223								103				195	J	165	J	156	J
VANADIUM	4.7	J	18		24.2		16.5		39.3		19.3		23.5		18.7		35.7		54.4		46.3		48.5	
ZINC	75.7	J	389				3700		809	J			267		899		18100	J	3050	J	4140	J	7520	J
CYANIDE	2.6	U																						

TABLE 18
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE WATER

Sample Number :	E00B7		E00A6	
Sampling Location :	G108		G112	
Matrix :	Water		Water	
Units :	ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004	
Time Sampled :	10:05		18:35	
%Moisture :	N/A		N/A	
pH :				
Dilution Factor :	1.0		5.0	
Semivolatile Compound	BACKGROUND		Result	Flag
NAPHTHALENE	10	U	110	
2-METHYLNAPHTHALENE	10	U	230	J
PHENANTHRENE	10	U	130	
PYRENE	10	U	66	

TABLE 19
US STEEL
KEY SAMPLE SUMMARY
INORGANIC WATER

Sample Number :	ME00B7		ME0056		ME0051		ME0043		ME0045		ME0053		ME0080		ME0098	
Sampling Location :	G108		G101		G102		G103		G104		G105		G107		G109	
Matrix :	Water		Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/5/2004		5/24/2004	
Time Sampled :	10:05		16:00		15:00		12:30		13:15		15:00		10:30		13:45	
%Solids :	0		0		0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	U	2420	J	5030	J	2920	J			3740	J				
ARSENIC	10	UJ			43.7						35					
CALCIUM	119000				470000		893000		646000							
CHROMIUM	0.88	J			14.2		15.5				10.7					
IRON	241		20100	J	59300	J	14300	J	10200	J	45900	J				
LEAD	10	U	58.7		155		44.9				112					
MAGNESIUM	117000						565000		444000							
MANGANESE	51.6	J+	829	J	1940	J	6380	J	956	J	1650	J				
SODIUM	6530		25600		21800		22300		76800		21100		22800		27100	
CYANIDE	10	U													35.2	

TABLE 19
US STEEL
KEY SAMPLE SUMMARY
INORGANIC WATER (cont.)

Sample Number :	ME00B7		ME00A1		ME00A2		ME00C0		ME00A6	
Sampling Location :	G108		G110		G110A		G111		G112	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		15:55		15:55		12:25		18:35	
%Solids :	0		0		0		0		0	
Dilution Factor :	1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	U					970		673	
CHROMIUM	0.88	J							27.5	
IRON	241						6580		78900	
MANGANESE	51.6	J+					612		3850	
SODIUM	6530		22000		20400		62000		7730	

TABLE 20
US STEEL
KEY SAMPLE SUMMARY
INORGANIC DISSOLVED WATER

Sample Number :	ME00B6		ME0057		ME0052		ME0044		ME0054		ME00B9		ME00A7	
Sampling Location :	GF108		G101DM		G102DM		G103DM		G105DM		GF111		GF112	
Matrix :	Water		Water		Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	5/25/2004		5/3/2004		5/3/2004		5/3/2004		5/3/2004		5/25/2004		5/24/2004	
Time Sampled :	10:05		16:00		15:00		12:30		15:00		12:25		18:35	
%Solids :	0		0		0		0		0		0		0	
Dilution Factor :	1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
CALCIUM	118000						421000							
CHROMIUM	10	U			147				61.8					
IRON	79.5	J			6610		2410		4710		5460		36600	
MANGANESE	44.7	J+	157		425		5890		399		597		2040	

TABLE 21
US STEEL
KEY SAMPLE SUMMARY
VOLATILE SEDIMENTS

Sample Number :	E00B0		E00B2		E00B3		E00B4	
Sampling Location :	X203		X205		X206		X207	
Matrix :	Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	18:20		13:45		14:25		14:50	
%Moisture :	32		50		46		45	
pH :	7.0		7.0		7.0		7.0	
Dilution Factor :	1.0		1.0		1.0		1.0	
Volatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag
ACETONE	0.037				0.14		0.1	
METHYLCYCLOHEXANE	0.015	U	0.055					

TABLE 22
US STEEL
KEY SAMPLE SUMMARY
SEMIVOLATILE SEDIMENTS

Sample Number :	E00B0		E00A8		E00A9		E00B1		E00B2		E00B2DL		E00B3		E00B3DL		E00B4		E00B4DL		E00B5	
Sampling Location :	X203		X201		X202		X204		X205		X205		X206		X206		X207		X207		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	18:20		12:45		18:00		09:15		13:45		13:45		14:25		14:25		14:50		14:50		15:40	
%Moisture :	32		47		40		50		50		50		46		46		45		45		39	
pH :	7.8		7.4		7.6		7.5		7.2		7.2		7.3		7.3		7.2		7.2		7.1	
Dilution Factor :	1.0		3.0		3.0		3.0		4.0		20.0		3.0		15.0		3.0		20.0		2.0	
Semivolatile Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ACENAPHTHYLENE	0.47	J							3.5				2.2				2.8					
ACENAPHTHENE	0.49	U							3.4				5.6		5.9	J	6.8		11	J		
FLUORENE	0.14	J							5		5.1	J	4.5		4.2	J	8.7		15			
PHENANTHRENE	0.66						2		31		30		11		11		56		87		2.2	
ANTHRACENE	0.69								12		13		6				19		26			
FLUORANTHENE	1.9								59		57		24		21		38		53		6.4	
PYRENE	1.4								37		49		33		30		51		77		7.2	
BENZO(A)ANTHRACENE	0.8								23		25		11		10		22		30		3.8	
CHRYSENE	1.2								29		31		12		11		24		32		5.5	
BIS(2-ETHYLHEXYL)PHTHALATE	0.23	J	2.4		2.2																	
BENZO(B)FLUORANTHENE	1.4								22		17		5.9		4.4	J	9.3				5.3	
BENZO(K)FLUORANTHENE	1.2								15	J	16	J							15	J		
BENZO(A)PYRENE	1.2		3.6						21		21		9.7		9.4		17		25		4.5	
INDENO(1,2,3-CD)-PYRENE	0.63								8		12	J	3.5				4.7		8.8	J	2.4	
DIBENZO(A,H)-ANTHRACENE	0.17	J							2.8		31	J										
BENZO(G,H,I)PERYLENE	0.51								5.1		82	J	2.6				3.3		7.1	J		

TABLE 23
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SEDIMENT

Sample Number :	E00B0		E00A8		E00A8DL		E00A9		E00A9DL		E00B1		E00B2	
Sampling Location :	X203		X201		X201		X202		X202		X204		X205	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004	
Time Sampled :	18:20		12:45		12:45		18:00		18:00		09:15		13:45	
%Moisture :	32		47		47		40		40		50		50	
pH :	7.8		7.4		7.4		7.6		7.6		7.5		7.2	
Dilution Factor :	1.0		1.0		2.0		1.0		2.0		1.0		1.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
BETA-BHC	0.004	J	0.066	J	0.067	J							0.1	J
4,4'-DDE	0.0017	J					0.2	J	0.17	J				
4,4'-DDD	0.002	J					0.051	J	0.029	J				
ALPHA-CHLORDANE	0.0016	J					0.015	J	0.013	J				
AROCLOR-1254	0.049	UJ					1	J	0.87	J				
AROCLOR-1260	0.054	J					0.85	J	0.67	J				

TABLE 23
US STEEL
KEY SAMPLE SUMMARY
PESTICIDE/PCB SEDIMENT (cont.)

Sample Number :	E00B0		E00B2DL		E00B3		E00B3DL		E00B4		E00B4DL		E00B5		E00B5DL	
Sampling Location :	X203		X205		X206		X206		X207		X207		X208		X208	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	18:20		13:45		14:25		14:25		14:50		14:50		15:40		15:40	
%Moisture :	32		50		46		46		45		45		39		39	
pH :	7.8		7.2		7.3		7.3		7.2		7.2		7.1		7.1	
Dilution Factor :	1.0		2.0		1.0		5.0		1.0		5.0		1.0		5.0	
Pesticide/PCB Compound	BACKGROUND		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALPHA-BHC	0.0025	UJ					0.016									
BETA-BHC	0.004	J	0.097	J	0.11	J	0.13	J	0.15	J	0.15	J	0.073	J	0.07	J

TABLE 24
US STEEL
KEY SAMPLE SUMMARY
INORGANIC SEDIMENT

Sample Number :	ME0034		Ontario		ME00A8		ME00A9		ME00B0		ME00B1		ME00B2		ME00B3		ME00B4		ME00B5	
Sampling Location :	X303				X201		X202		X203		X204		X205		X206		X207		X208	
Matrix :	Soil		Sediment		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	10/15/2003		Quality		5/24/2004		5/24/2004		5/24/2004		5/25/2004		5/24/2004		5/24/2004		5/24/2004		5/24/2004	
Time Sampled :	11:20				12:45		18:00		18:50		09:15		13:45		14:25		14:50		15:40	
%Solids :	29.7		Guidelines		57.5		60.9		54.1		40.8		49.8		50.7		57.4		52.6	
Dilution Factor :	1				1		1		1		1		1		1		1		1	
ANALYTE	BACKGROUND		LEL[1]	SEL[2]	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ARSENIC			6	33	6.7	J-	52.8		18	J-	6.2	J-	18.9	J-	11.6	J-	9.4	J-	26.2	J-
ALUMINUM	896				11100		5330		4040		10500		14700		7740		9190		8700	
BARIUM	25.2				94.9		146		153		130		255		110		87.8		160	
CADMIUM	0.39		0.06	10	1.4		54.9		33.1		4.6		9.9		1.9	J+	1.5	J+	11	
CALCIUM	780				50300		20400		216000		41100		25800		37000		37000		41400	
CHROMIUM	1.5		26	110	30.4		688		487		72.4		141		28.6		26.5		87.7	
COBALT	0.46			50	10.5	J	26.4	J	11.1	J	8.7	J	9.3	J	8.2	J	8	J	9.8	J
COPPER	5.6		16	110	84.8		649		346		154		208		78.7		78.6		209	
IRON	800				24400		374000		43100		25700		26400		41600		23200		37800	
LEAD	63.3	J	31	250	233		817		301		240		308						303	
MAGNESIUM	313				26900		8060		12800		20300		9400		17300		20400		16500	
MANGANESE	6.3	J	460	1100	415		2780		549		401		311		457		280		327	
MERCURY	0.54		0.2	2	3.1								4				2.8		3.5	
NICKEL	1.1		16	75	28.4		467		552		37		37.5		20.7		22		34.3	
POTASSIUM	534				2090						1840		1830				1830			
SILVER	0.25	J		0.5			4.2		4.5											
VANADIUM	1.8				22.7		17.9		10.2		21.3		27.1		17.9		20.9		19.8	
ZINC	38.5	J	120	820	295		1550		1250		397		630		263		316		846	
CYANIDE				0.1																

1. LEL - Lowest Effect Level
2. SEL - Severe Effect Level

TABLE 25
XRF DATA

No	Ssec	Date/Time	Sr	Sr Error	Rb	Rb Error	Pb	Pb Error	As	As Error	Zn	Zn Error	Ni	Ni Error	Co	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error
10	59.6	5/25/2004 13:16	<LOD	19.35	36.6	12	60.9	20.2	<LOD	23.1	276.2	57.4	416.8	180	<LOD	510	20096	800	<LOD	990	<LOD	690
11	63.7	5/25/2004 13:20	<LOD	17.1	29.8	11.2	102	24	<LOD	26.85	2849.6	140	1100	230	<LOD	825	57600	1600	<LOD	1650	<LOD	1065
12	60.2	5/25/2004 13:27	55.1	22.9	<LOD	30.45	243.2	56.1	<LOD	66.45	5238.4	310	1609.6	680	5859	2299.2	460800	13990.4	<LOD	7046.4	<LOD	4348.8
13	61	5/25/2004 14:09	<LOD	14.4	31.5	9.9	<LOD	21.3	<LOD	17.55	345.4	52.6	<LOD	180	<LOD	300	6726.4	420	<LOD	570	<LOD	450
14	60.5	5/25/2004 14:13	<LOD	17.7	60.3	14.2	36.7	19.5	<LOD	23.55	<LOD	78	984.8	210	<LOD	510	16000	750	<LOD	960	<LOD	690
15	60.3	5/25/2004 15:14	<LOD	34.65	<LOD	32.55	682	98.9	<LOD	107.1	1420	200	<LOD	1320	6278	3200	662733	24998.4	<LOD	9897.6	8320	4099.2
16	60.6	5/25/2004 16:01	<LOD	15.45	56.7	11.7	131.4	22.3	32.4	17.6	262.6	48	536.4	160	<LOD	615	41676.8	1100	<LOD	1244.4	<LOD	795
17	60.3	5/25/2004 16:05	<LOD	16.2	53.9	12.2	28.6	16	<LOD	18.3	69.3	43.6	314.2	160	<LOD	390	11494.4	560	<LOD	750	<LOD	540
18	61.4	5/25/2004 16:12	<LOD	18.45	60.5	15	<LOD	30.3	<LOD	24.45	153.2	57.4	<LOD	300	<LOD	705	33177.6	1200	<LOD	1410	<LOD	945
19	60.1	5/25/2004 16:15	<LOD	17.55	43.8	12.4	<LOD	25.35	<LOD	19.95	<LOD	70.2	632.4	220	1060	660	87552	2099.2	<LOD	1950	<LOD	1274.4
20	60.1	5/25/2004 16:18	<LOD	17.55	43.8	12.4	<LOD	25.35	<LOD	19.95	<LOD	70.2	632.4	220	1060	660	87552	2099.2	<LOD	1950	<LOD	1274.4
21	61.8	5/25/2004 16:22	<LOD	17.7	24.7	11.7	39.4	21.2	<LOD	24.9	<LOD	88.05	1160	250	<LOD	780	40576	1400	<LOD	1500	2769.6	780
22	21.7	5/25/2004 17:16	<LOD	24.6	<LOD	19.8	<LOD	40.2	<LOD	36.45	233.8	97.8	<LOD	615	<LOD	1800	94361.6	3798.4	<LOD	3600	<LOD	2250
23	21.6	5/25/2004 17:17	<LOD	22.2	24.3	14	<LOD	36.15	<LOD	28.35	<LOD	79.35	<LOD	270	<LOD	570	12000	840	<LOD	1155	<LOD	840
25	30.8	5/26/2004 9:55	<LOD	29.55	52.9	19	440.8	56.2	<LOD	60.6	1100	120	474.4	290	<LOD	1215	70656	2400	<LOD	2400	1668.8	1100
26	61.1	5/26/2004 9:58	<LOD	19.65	33.2	12.2	364.8	38.7	53.3	29.2	2889.6	140	<LOD	360	1659	760	111923	2499.2	<LOD	2250	<LOD	1424.4
27	60.7	5/26/2004 10:24	<LOD	14.1	35.9	9	304.4	26.8	<LOD	29.4	2689.6	100	<LOD	165	410.8	240	16000	550	<LOD	690	<LOD	480
28	60.3	5/26/2004 11:09	<LOD	20.55	40	12.4	141.4	25.5	53.6	21	1939.2	110	678.8	200	<LOD	765	53350.4	1400	1680	1100	<LOD	1065
29	30.8	5/26/2004 11:49	<LOD	16.95	88.6	15.9	101.7	24.1	<LOD	26.85	154.5	47.6	<LOD	210	<LOD	450	14489.6	700	<LOD	885	<LOD	630
30	27	5/26/2004 12:56	<LOD	29.85	29.5	16.6	<LOD	31.8	<LOD	28.35	<LOD	92.55	442.4	230	<LOD	480	6604.8	640	<LOD	960	<LOD	840
31	60.2	5/26/2004 14:17	<LOD	25.5	44.4	19.4	81.5	38.1	<LOD	46.65	352.8	100	<LOD	810	3440	1899.2	370893	9996.8	<LOD	5846.4	5068.8	2400
32	60.6	5/26/2004 15:23	<LOD	29.25	<LOD	28.8	669.6	84.8	<LOD	91.05	2148.8	200	1489.6	790	6448	2899.2	730726	21990.4	<LOD	8846.4	8307.2	3600
34	20.5	5/26/2004 16:20	<LOD	31.2	<LOD	31.8	294	71.3	<LOD	78.9	2360	250	<LOD	945	3930	2099.2	221798	8896	<LOD	6446.4	<LOD	4048.8
35	21.9	5/26/2004 16:22	<LOD	42.45	<LOD	46.35	672.4	130	<LOD	130.65	3089.6	360	1899.2	1100	<LOD	5548.8	501760	22988.8	<LOD	11548.8	<LOD	7200
36	20.5	5/26/2004 16:25	<LOD	43.95	<LOD	45.15	411.6	100	<LOD	113.25	2489.6	320	<LOD	1334.4	<LOD	4948.8	396902	18995.2	<LOD	10195.2	<LOD	6446.4
37	20.6	5/26/2004 16:29	<LOD	47.55	<LOD	48	369.4	96.2	<LOD	109.65	890.4	210	1580	889.6	<LOD	4500	343859	16000	<LOD	9446.4	<LOD	5846.4
38	60.8	5/26/2004 16:47	<LOD	30.75	<LOD	28.5	327.2	61.2	<LOD	67.5	9126.4	430	1309.6	650	3728	2200	438682	12998.4	9427	4697.6	<LOD	4348.8
39	59.7	5/26/2004 16:51	114.4	23.6	<LOD	29.85	502	70	<LOD	77.55	21299	750	1140	650	5248	2299.2	502989	13990.4	11398	4800	<LOD	4348.8
40	60.4	5/26/2004 16:57	188.5	26.4	<LOD	26.85	294.4	57	<LOD	65.55	19290	680	1748.8	650	6880	2200	492749	13990.4	10400	4598.4	<LOD	4348.8

APPENDIX A

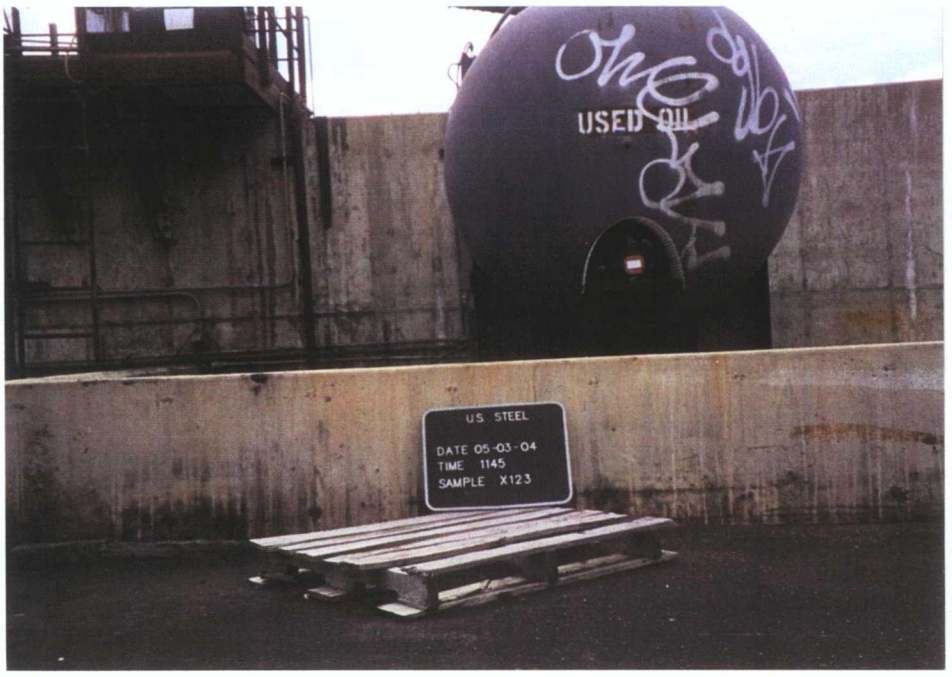
PHOTOS

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1100
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample X128 was collected from a large pit located on the north side of rod mill #3.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1145
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X123 was collected from a large pit located on the west side of the bar finishing mill. Collected only volatiles and organics.

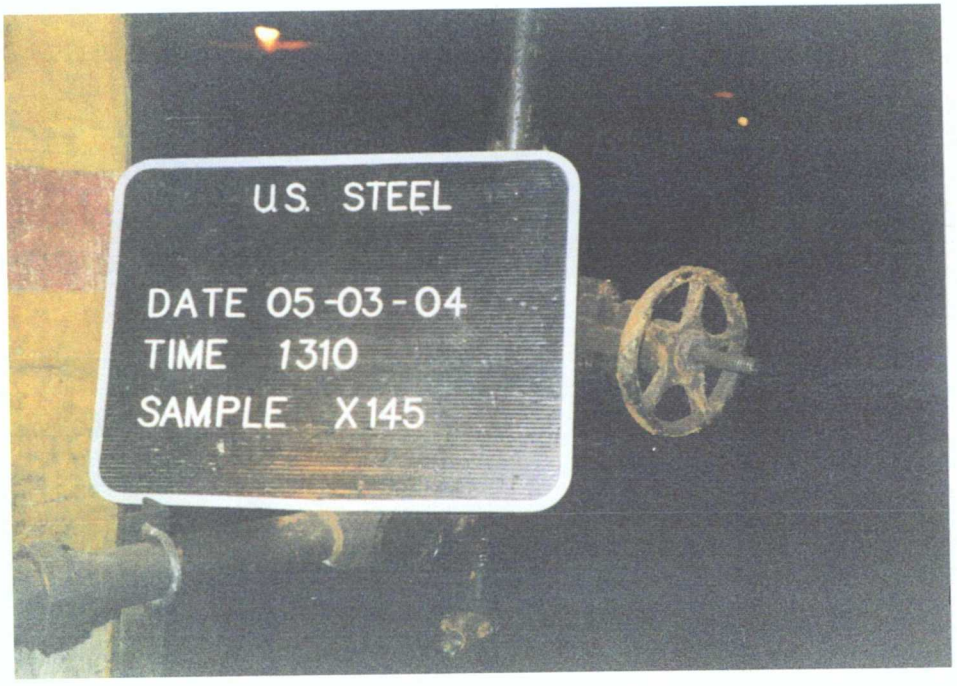


SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1220
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X132 was taken in the middle of the mill from sludge located on floor near a tank.

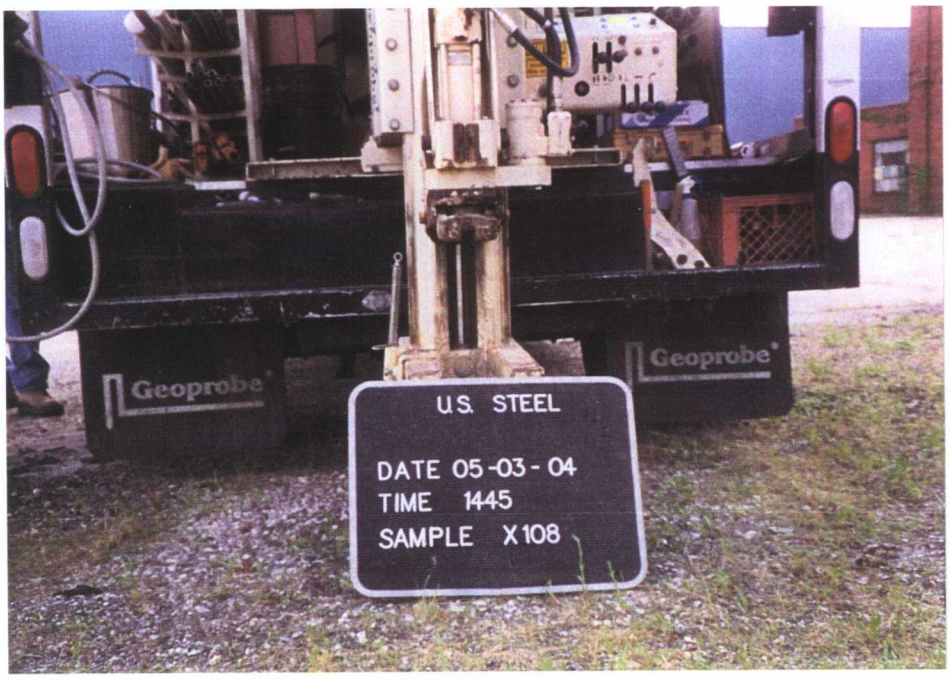
SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1310
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X145 was taken on the east side of rod mill #3 from sludge on floor inside of building.



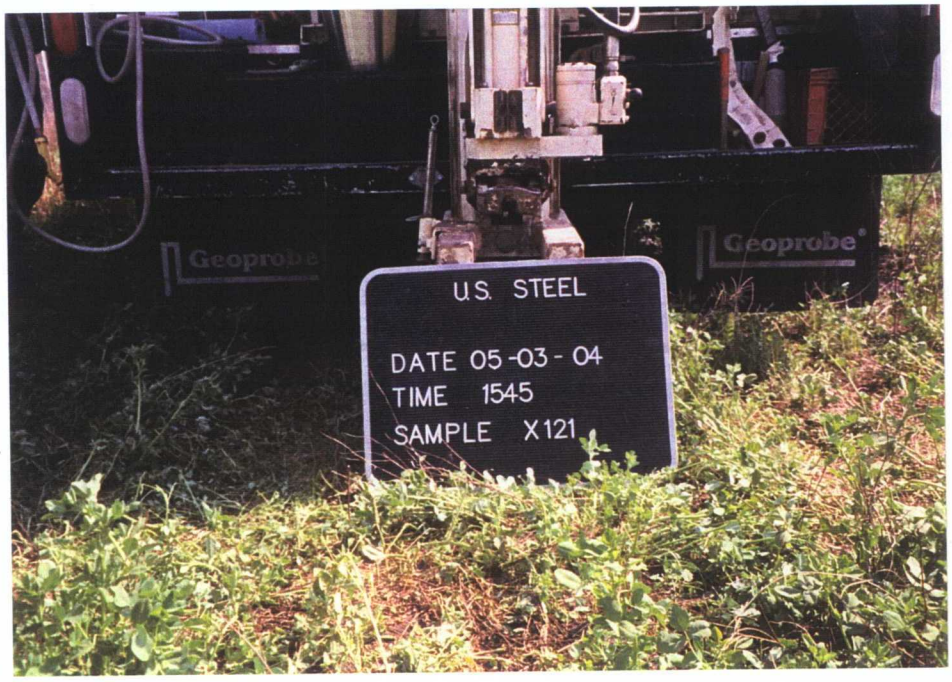
SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1445
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X108 was taken from 6ft using the geoprobe. Slag , fill and a little limestone from 0-6ft.



SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1545
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X121 was taken from 6.5ft. Sand, gravel, and slag from 0-6.5ft.



SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1630
PHOTE BY: Tony Wasilewski
DIRECTION:
COMMENTS: Sample X139 was collected next to some transformers that had stained soil around them.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1600
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample G101 was a triple volume collected from a monitoring well located in the northwest corner of the site.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1500
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample G102 was taken from the south monitoring well located on the west side of the site. G105 is a duplicate of G102.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/03/04
TIME: 1315
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample G103 was collected from the southeast monitoring well. Total depth was 11.8ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

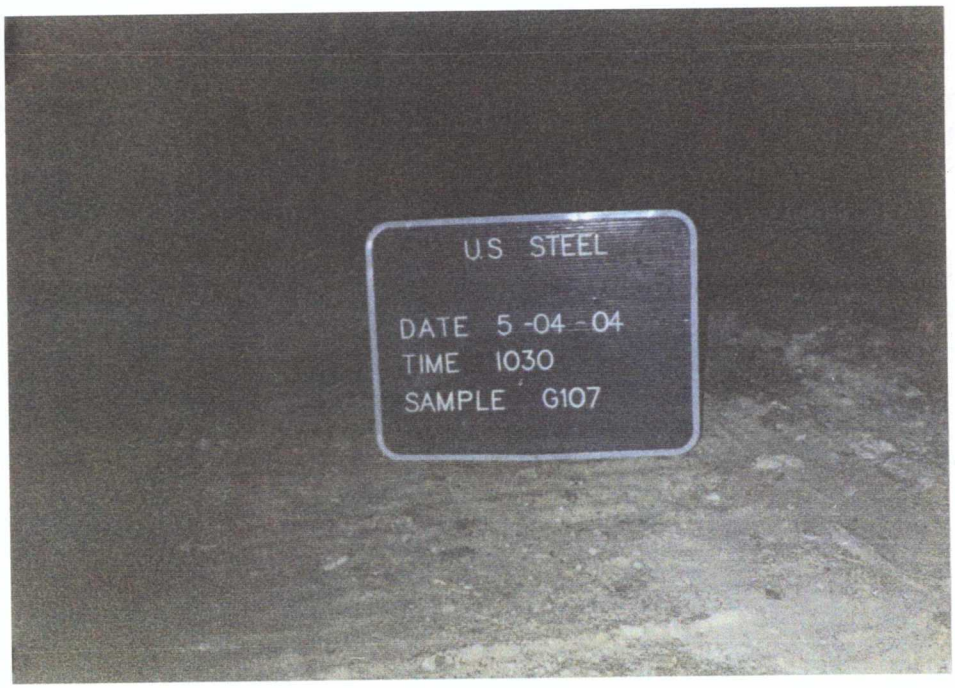
DATE: 05/03/04
TIME: 1230
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample G104 was collected from the northeast monitoring well. The well depth was 13.1ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 0840
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample G106 was collected using the geoprobe. The sample was screened from 2.5 ft-6.5ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1030
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample G107 was collected in the rod storage building. The sample was screened from 2 ft - 6 ft.



SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 0810
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X107 was collected from a rusty brown sandy like material at edge of concrete foundation portion at center of test pit. Had oily look to material.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 0845
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X106 was collected at 2 ft from a dark brown matrix.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 0910
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X109 was collected at 4.5ft from dark gray-black clayey material. Water was

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 0945
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X105 was collected from 1ft-1.5ft. Sample was dark brown, gray silty, sandy material with gravel.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1030
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X103 was collected from 3ft-5.5ft A TCLP sample was also collected at this location. The VOC sample was collected at 5.5ft and the rest of the sample was collected from 3-4ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1140
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X102 was collected from 2.5ft. Sample was clayey, gravely, rusty brown material. Pit was located at the edge of a concrete foundation.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1150
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X104 was taken from mill scale pile. TCLP sample was also collected.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1310
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X110 and the duplicate X110A were collected from 2ft in slag like material.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1350
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X120 metals were collected at 2ft. Sample was gray and dark gray sand and gravelly material-silty. VOC's and SVOC's were collected at 4.5ft. Sample was brown and gray sandy clay on top of bedrock with gravel. Collected TCLP from 2ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1430
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X119 was collected at 2ft from a dark cindery material. Water level was at 5ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1500
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X118 was collected in the middle of the rod storage building. Sample was collected at 4ft in black sludge. Test pit had slight odor.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/04/04
TIME: 1600
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X117 was collected from 1ft-1.5ft. Water and bedrock was at 3.5ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 0840
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample X111 and X113 . X111 was sampled at 4ft in the redish sandy material and X113 was sampled at approximately 6ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1030
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X129 collected from the black cindery material at 6 inches.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1145
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X126 and duplicate X126A collected at 3.5ft from dark black and greenish soil.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1230
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X127 was collect at 2ft from dark gray to black silt with some sand, gravel, cinders, and slag.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1445
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X138 collected from 6-7ft using geoprobe. Pure product was noted from 7-8ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1610
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X144 was collected at 4.5ft. Collected triple volume.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/05/04
TIME: 1650
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X143 was collected at 4ft from black cindery fill which was visually stained and had a stron odor.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 0745
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X114 was collected at 4ft from black cindery material, fill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 0830
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X116 was collected at 5ft from dark brown sandy fill with fragments of brick, grave, and cinders.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 0915
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X142 collected from 4ft below ground surface. The sample was obtained from the bucket of the excavator. The test pit had a strong odor. The FID registered 390 and flamed out.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 0945
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X140 collected at 4ft from bucket of excavator. Petroleum contamination could be seen at depth of 48 inches. TVA reading of 75 on FID.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 1030
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X133 was collected from 5.6ft from the bucket of the excavator. FID was 150.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 1105
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X134 collected at 6.6ft. Water at 6.6ft with a sheen on water.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 1205
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X135 collected from 6.5ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 1350
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X112 collected at 5.7ft from black slag fill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/06/04
TIME: 1425
PHOTE BY: Tony Wasilewski
DIRECTION: N/A
COMMENTS: Sample X130 collected at 5.4ft from bucket of excavator. FID 60ppm.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1245
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X201 collected sediment from sediment surface to 14inches. Slight coal tar odor.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1345
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample X205 collected from I & M Canal from sediment surface to 14 inches.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1425
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X206 was collected from center of I & M Canal. Sampled from sediment surface to 14 inches.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

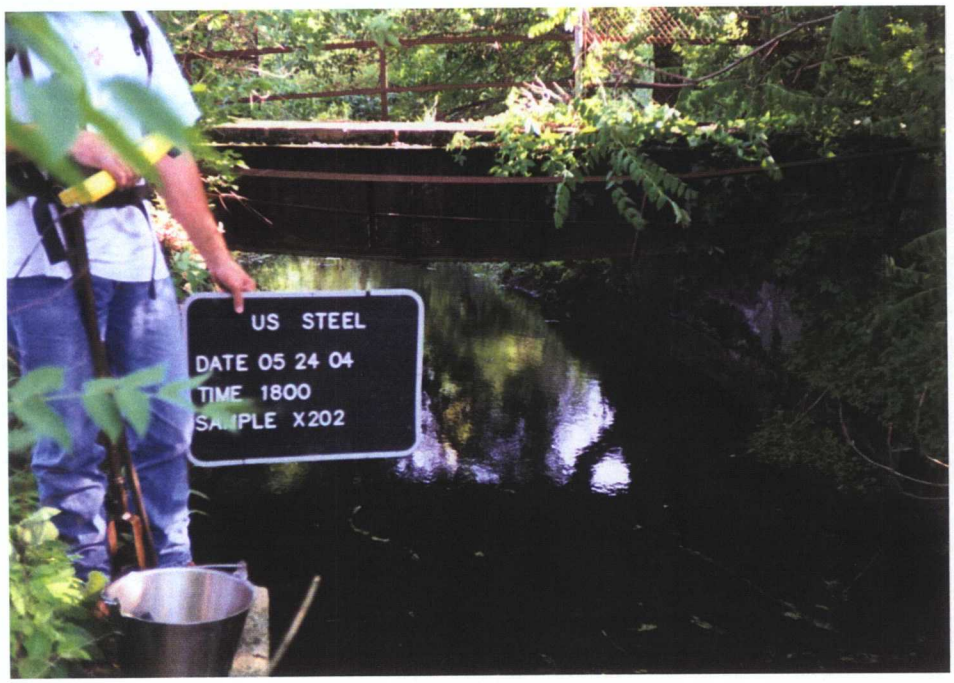
DATE: 05/24/04
TIME: 1450
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X207 collected from an outfall on east bank of I & M Canal. Sample collected from sediment surface to 14 inches

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1540
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample X208 collected from I & M Canal near wooden bridge. Collected from waterline on along east bank of canal. Sample collected from sediment surface to 14 inches.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 5/24/04
TIME: 1800
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X202 collected from outfall of wastewater treatment plant in Penitentiary Ditch. Collected along east side of ditch. Sampled from sediment surface to 14 inches.



SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1815
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample X203 collected from Penitentiary Ditch at the old gas washer ruins. Collected along east edge of ditch with auger. Sampled from sediment surface to 16 inches. Strong petroleum odor.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1345
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample G109 was collected with a geoprobe. The sample was screened from 2-6ft. Triple volume collected.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1555
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample G110 and G110A were screened from 6-10ft. G110A is a duplicate of G110.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/24/04
TIME: 1835
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample G112 was screened from 6-10ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1005
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample G108 was screened from 4-8ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1225
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample G111 screened from 11-15ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 0925
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X204 collected from outfall from waste treatment plant into I & M canal, outfall located west of treatment plant. Sampled from sediment surface to 8 inches.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1230
PHOTE BY: Tony Wasilewski
DIRECTION: Northeast
COMMENTS: Sample X159 collected from surface to 4 inches. Sampled at southwest corner of gas engine house along west wall.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1330
PHOTE BY: Tony Wasilewski
DIRECTION: Northeast
COMMENTS: Sample X157 collected from surface to 4inches. Sampled between blast furnace 3 and 4. Soil was medium gray to light tan. Silty loam with gravel.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1440
PHOTE BY: Tony Wasilewski
DIRECTION: Southwest
COMMENTS: Sample X155 collected from surface to 6inches. Collected far northeast corner of hot blast stove area. Black silt.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

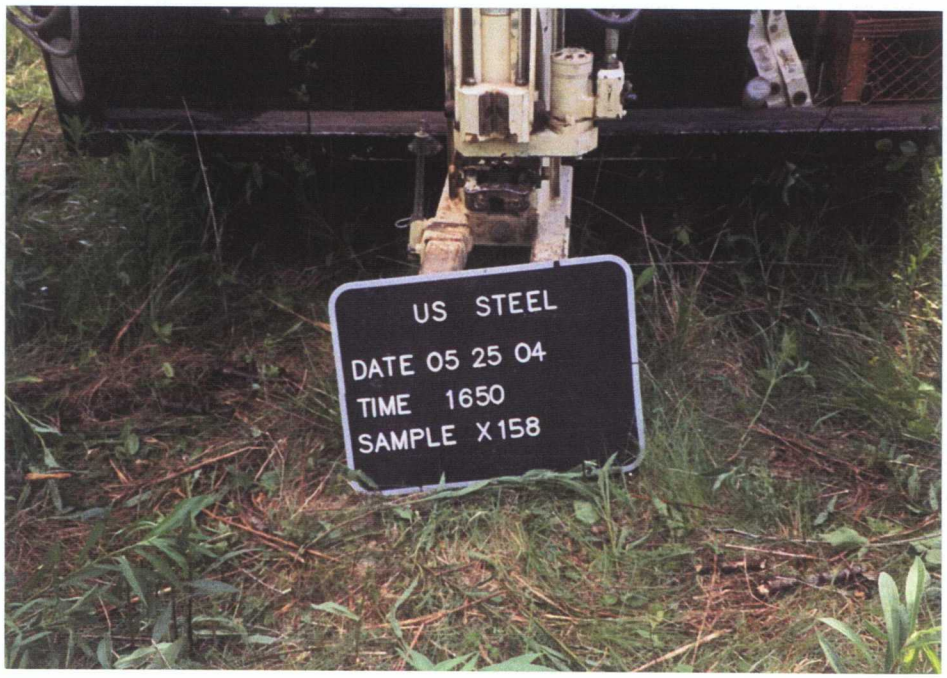
DATE: 05/25/04
TIME: 1510
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X154 collected from 4 - 6 inches. Sampled in sand used as floor of pig iron pour area.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1630
PHOTE BY: Tony Wasilewski
DIRECTION: Northwest
COMMENTS: Sample X149 collected from 6inches to 1 foot. Sampled in sandy soil with fine gravel.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/25/04
TIME: 1650
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X158 collected from 6inches to 2foot. Sampled clay material with limestone and brown fill.



SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 0835
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample X146 collected volatiles from 3in - 8in and collected semi's and inorganics from 1ft to 3ft. Black tar located at 3in to 8in.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 0920
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample X147 collected from surface to 6 inches. Fill material.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 0950
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X148 collected volatile from 5ft and remaining sample collected from 5ft to 7ft. FID alarm went off at 5ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1035
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X150 collected volatiles from 4.5ft

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1105
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample X151 and X153 collected sample from 9feet. FID was at 7000. X153 is a duplicate of X151

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1235
PHOTE BY: Tony Wasilewski
DIRECTION: East
COMMENTS: Sample X152 collected volatiles from 9ft to 10ft. Collected remaining sample from 7ft to 10ft.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1345
PHOTE BY: Tony Wasilewski
DIRECTION: North
COMMENTS: Sample X156 collected at 5.5ft. All fill material.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1450
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X161 collected from surface to 2ft. Collected sample on potential landfill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1535
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X162 collected from surface to 2ft. Collected sample on potential landfill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: **1550**
PHOTE BY: Tony Wasilewski
DIRECTION: West
COMMENTS: Sample X163 collected from 6 inches. Surface to 6 inches black silty loam. Collected sample on potential landfill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE: 05/26/04
TIME: 1610
PHOTE BY: Tony Wasilewski
DIRECTION: South
COMMENTS: Sample X160 collected from 6 inches. Collected sample from potential landfill.

SITE NAME: US Steel	
CERCLIS ID: ILD 005 454 566	**COUNTY:** Will

DATE:
TIME:
PHOTE BY: Tony Wasilewski
DIRECTION:
COMMENTS:

APPENDIX B

TARGET COMPOUND LIST

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chlorde	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroehtene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate

1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobolt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

APPENDIX C

BUNKER FUELS

Bunker Fuels

Bunker fuel is also known by other names: heavy oil, #6 oil, resid, Bunker C, blended fuel oil, furnace oil and other often locally used names. No matter the origin of bunker fuel it has common properties where ever found: color, viscosity, contaminants, and operator problems.

Origin of Bunker Fuel

The origin of the bunker fuel being considered is crude oil. When crude oil is subjected to refining, the lighter fractions (gasoline, kerosene, diesel, etc.) are removed by distillation. The heaviest materials in crude petroleum are not distilled - the boiling points are too high to be conveniently recovered. These materials (asphaltenes, waxes, very large molecules, etc.) carry through refining and become residual oil (or resid). During various operations in the refinery (principally heating at high temperatures), rearrangement of molecules may take place forming even larger molecular materials that have still higher boiling points. These materials also become part of the resid. Finally, any contaminants in the crude will not be distilled from the crude and will also be in the resid. This includes any salts (chemical elements that are typically soluble in water), sediment (oil-wetted solids), and the heavy organic molecules from various sources. Just as salt water leaves a residue of salt behind when it evaporates, so too does the refining process leave solids behind when the lighter materials are removed. Before selling resid as bunker fuel, a refiner will very often dilute it to meet various sales specifications for trace metals, sulfur and/or viscosity.

Color

The color of resid/bunker fuel is always black, dark brown, or at least very dark. This color arises from the asphaltenes in the crude oil. Asphaltenes are very large molecules containing carbon, hydrogen, oxygen, sulfur, and some nitrogen. Their true structures have never been completely determined, but the manner in which they are stable in oil has. Asphaltenes are completely insoluble in oil. However, they are stabilized in the oil by molecules called maltenes. The maltenes are "attached" to the asphaltenes through various bonding mechanisms. When crude oil is pumped from the ground, there is a delicate balance between the asphaltenes and maltenes. This balance causes the asphaltenes to appear stable and soluble in the oil. As various processes are carried out on petroleum to transport it, refine it and store it, this balance is often changed causing asphaltenes to no longer be stabilized by the maltenes. This change in stability can cause the asphaltenes to precipitate and/or coagulate from the fuels.

Because asphaltenes (and maltenes) are very large, complex molecules, they have high boiling points and carry into the resid. Since most asphaltenes end up in the "heavy" oils these oils are very often intensely black. (And similarly, since the asphaltenes don't distill into other petroleum fractions, distillates are normally light in color.) Asphaltenes when separated from fuels are shiny black solids and are very hard. The common definition of

asphaltene is it is insoluble in aliphatic solvents, but very soluble in aromatic solvents. The common test for asphaltenes, IP 148, takes advantage of this property to determine asphaltenes in petroleum fractions.

Viscosity

Due to the nature of the components that make up resid, it is generally viscous, especially as first produced at the refinery. Resids can actually be solids at ambient temperatures. To facilitate transport, resids are often blended with other refinery fractions to lower their viscosity. (Blending can also be required to meet various sales specification needs.) This blending comes at a price - the blend "solvents" normally have a higher value than the resid. This results in a blended price of the resid that is higher than the resid would be otherwise. Also, if the blending process is not closely monitored or if inappropriate solvents are used it can further destabilize the maltene/asphaltene balance, which can lead to further problems. (The very simple ASTM Spot test D2781, to determine fuel stability has been developed to help avoid this problem.) To control viscosity in use, resid is almost always stored and transferred under heated conditions. And when being fed to burners (of whatever description) the temperature of the resid is normally raised even further to lower its viscosity still more so the correct atomization can be achieved for complete combustion. Correct atomization is required to avoid incomplete combustion and smoke formation.

Contaminants

Anything that doesn't distill during refining carries into the residual oil. This includes not only water soluble metal salts sodium (Na), potassium (K), calcium (Ca), sulfates (=SO4), and several others, but also the oil soluble metals vanadium (V), lead (Pb), nickel (Ni) and others. Oil wetted materials such as rust and metal particles will also be present. The water-soluble materials enter the refinery contained in very small droplets of water dispersed through out the crude oil. As refining proceeds, the water is boiled away leaving the contaminants behind. Sodium, the most prevalent water-soluble contaminant, comes from salt water normally produced with the crude oil. ("Salt" in this sense is sodium chloride.) Additional amounts of sodium can be introduced at the refinery if low cost caustic (sodium hydroxide) is used as a neutralizer for chlorides in the oil. Sodium can also be added during ocean transportation, as salt water is normally used as ballast for ships when they sail (especially when empty). There are methods to remove vanadium from oil (solvent dilution, etc.). However, these methods are not economically attractive. Therefore nearly all refiners simply concentrate the vanadium in the inexpensive resid fractions.

It is important to note the oil soluble metals vanadium and nickel are present as chemical molecules known as porphyrins. These come from the primordial materials that became petroleum. Porphyrins are very large molecules. As such they have very high boiling points. Therefore, they do not distill during refining. Because of the concentration effects when roughly 90% of each liter of crude is removed, these oil

soluble contaminants are concentrated approximately 10 times in the resulting resid. Thus for a crude oil containing 15 ppm vanadium, the resulting resid would contain about 150 ppm vanadium. The contaminant lead is rarely encountered today. Lead does not exist in nature as a crude oil contaminant. When found in oils or resids it is almost always due to fuel contamination with leaded gasolines. As the use of lead in gasolines has diminished, the amount of lead seen in fuels has correspondingly decreased. However, due to the very corrosive attack by lead in fired equipment a check for lead should always be made.

Another contaminant encountered in nearly all fuels is sulfur. Sulfur exists as both a water-soluble contaminant (as contaminant-metal sulfates, sulfites, and sulfides) and as an oil soluble contaminant (polysulfides, thiols, mercaptans, pyrroles, etc.). Except for adding to deposits in fired equipment, sulfur problems normally occur after going through the combustion process. The level of sulfur found in a resid is normally controlled by the specifications from the fuel purchaser. Environmental laws in nearly all countries have required a reduction in the amounts of sulfur that can be combusted. Sulfur can also be removed from oil, but the cost has never met with widespread acceptance. The normal practice is to reduce the amount of sulfur in fuels that are sold by blending with low sulfur solvents. In the United States, the current level of sulfur that can be burned is about 0.75% without stack scrubbers. The cost of scrubbers to remove the sulfur combustion products has forced many smaller fuel users to burn much cleaner - albeit more expensive - fuels.

Contaminants occurring in resids should also include various suspended solids (rust, catalyst fines, etc.) and other materials that are introduced in the refinery (corrosion inhibitors, soaps, water wetted solids, etc.). These contaminants typically cause problems as filter plugging materials and in some cases as particulate emissions from stacks.

Problems Caused by Contaminants in Bunker Fuels

Each of the above mentioned contaminants cause problems.

The exact nature of the problem is due to the chemical characteristics of the contaminant.

Deposits

Various metal contaminants are present in all fuels (of greatest concern are vanadium, sodium, potassium, nickel, and lead). Sodium and potassium are water-soluble. They are contained in the water that is in the fuel and could be "washed out."

Vanadium, nickel, and lead are oil soluble and cannot be removed economically from fuel. When all of these metal contaminants are combusted, they form various oxides, sulfates, and eutectic mixtures (two or more materials that melt at lower temperatures than any of the components). The metals that cause the most problems (V, Na, K, and Pb) form oxides with melting points in the typical operating temperature range of boilers, gas turbines, and diesel engine exhaust systems. These molten metal oxides deposit on the cooler surfaces forming sticky deposits. When eutectic mixtures of these metal oxides form they can remain liquid to very low temperatures. If the metal oxides remain molten they have the possibility of causing corrosion.

Normally it will be metallic elements that cause deposits. These deposits result from differences in melting points. ALL chemical compounds have a melting point; solid materials just tend to have higher melting points. The exact value of each compound's melting point results from many physico-chemical interactions and will not be explained in this discussion. It is sufficient to say they exist. Since all the equipment we are interested in operates at high temperatures (much greater than ambient), melting points become important. As fuel passes through burners and is burned as flames (flame temperatures are often above 2000° C) the metallic elements are converted primarily to oxides. Due to equipment operating temperatures, most of the oxides of interest will be in a molten state in the hot flame. After leaving the flame, the operating temperature of the equipment of interest will very likely be above the melting point of the compounds that have been formed during combustion. When temperatures are higher than a compound's melting point, the metallic oxide will remain molten. To maximize the effective life of the equipment in the path of the hot flames, the surfaces are normally cooled. In a boiler this cooling is effected by the water inside the boiler tubes, in a gas turbine by extra air passing through the blade cooling holes, and in a diesel engine by the mass of the engine itself and cooling water.

When these sticky, molten metal oxides come into contact with the cooler surfaces, they can deposit on these cooler surfaces. As these sticky materials stay on the surface they are cooled by the surface and will eventually reach their melting point (only from the other side: from hotter to cooler). When this occurs, they become solids. This process repeats: hot, sticky molten compounds impact cooler surfaces, themselves cooling, etc. The end result is deposits grow. As the deposits grow they can interfere with the proper operation of the equipment.

Hot Corrosions

The metals discussed above cause hot Corrosion: sodium, vanadium, lead and potassium. (Other metals may contribute to deposit formation, but only these four metals are considered to be corrosive.) It is important and critical to be aware that the corrosion mechanism discussed only occurs while these metals are in a liquid or molten state. The corrosion mechanism does not take place while these metal oxides are solids.

Alloys used in high temperature applications are carefully selected to be able to withstand the mechanical stresses they are subjected to and also because they develop

tightly adherent oxide coatings when exposed to the hot combustion gases under use conditions. This oxide layer develops to protect the metallurgy from additional oxidation and from attack from some of the corrosive elements in the gases. For example chromium is alloyed in a metal because it forms very thin, very tight layers of Cr_2O_3 on the exterior of a metal part. (This is why many automobile trim parts have been made with a "chrome" coating, they resist corrosion.) These oxide coatings will also repair themselves if local damage occurs. The coatings will also reform if stripped off. These properties are due to natural metal oxide surface protection.

The problem of high temperature corrosion of metallic parts arises when the hot combustion gases contain materials that can deposit as a liquid on these parts. The corrosive materials cause destruction of the previously described protective oxide layer. These corrosive materials may destroy the protective oxide layer, disrupt its continuity and adherence, or possibly prevent the formation of a new, tightly adherent layer to replace the old. Among the elements known to form these corrosive agents in combustion systems are vanadium (V), sodium (Na), potassium (K), and lead (Pb). These metals can react with each other and with oxygen and sulfur in combustion gases to form volatile compounds such as oxides, alkali sulfates, and vanadates when the fuel is burned. In passing through the system, the hot gases cool, high pressures may fall, and the partial oxygen pressure may rise. As a result of all of these actions, liquid or solid residues may form on the surfaces of high temperature parts of the system.

High temperature corrosion is believed to be due primarily to vanadium and sodium contained in the fuel. When fuel containing vanadium is combusted in fired equipment, vanadium combines with oxygen to typically form vanadium pentoxide (V_2O_5). Vanadium pentoxide normally melts about 675° C. When sodium in the fuel is combusted, sodium sulfate (Na_2SO_4, M.P. 880° C) can be formed from the sodium and sulfur also from the fuel. A lower melting eutectic can be formed when amounts of sodium sulfate are present in the vanadium pentoxide (as low as 300° C for 65% sodium sulfate, 35% vanadium pentoxide). While in the liquid state vanadium oxides and sodium sulfate can use an "oxygen transport" mechanism to "dissolve" the natural metal oxides that form on the alloy surfaces. When the metal oxide coating is dissolved by the vanadium oxides, the metal forms a new oxide coating which again dissolves, the metal forms a new oxide coating, etc., etc., in an endless cycle. Each cycle removes a thin layer of the alloy metal. The overall effect is corrosion. It is also possible for vanadium oxide to penetrate into the grain boundaries of an alloy causing small particles of metal to be removed. This leads to more rapid metal losses.

Cold - end corrosion

Sulfur trioxide formed during the combustion of sulfur contained in the fuel condenses with water vapor to form sulfuric acid. (Typically only about 2 - 5% of the sulfur dioxide that results from combustion of fuel-sulfur is further oxidized to the trioxide.) This acid then condenses on the cooler equipment surfaces. Not only is the acid corrosive, it also acts as a trap for ash particles especially in boiler applications. (In gas turbine applications, system temperatures are typically well above the acid dew point,

HOWEVER, when heat recovery equipment is on the back end of a gas turbine, a similar acid condensation can occur.) The combination of acid and ash particles forms deposits, which further restrict the effectiveness of any heat transfer equipment. Typical indicators for this problem are black, sticky deposits on heat transfer surfaces, blocked airflow passages, corrosion and/or deposits in stacks, and often a blue-white plume.

Magnesium Use to Solve Chemical Problems in Bunker Fuels

The problems described above ONLY occur when the big four metals (vanadium, sodium, potassium and lead) are molten. Magnesium solves these chemical problems by combining with these metals (to varying degrees) to form higher melting chemical compounds.

The corrosive effects of vanadium have been known for many years. And just as quickly it was found that one metal, magnesium, stood out as the most economical and effective element to combat this corrosiveness. Magnesium works by combining with vanadium in the flame to produce magnesium orthovanadate (and other compounds). This compound has a melting point well above 1200° C. Since magnesium orthovanadate is not a liquid, it will not be corrosive and it will not form deposits.

The minimum treating ratio of 3 parts of magnesium to 1 part of vanadium for gas turbines was determined to be correct in the late 1960's to early 1970's. Initially the treat rate was set at 3.5 to 1 to insure adequate magnesium would be added. The more appropriate 3:1 was agreed upon as an industry standard since the early 1980's. The actual stoichiometric amount of magnesium required to just react with vanadium to make safe compounds is only about 0.7:1. However, additional magnesium is added because not only is the desired magnesium orthovanadate formed, but other less desirable magnesium vanadium compounds can also be formed. To force the reaction to the desired product, more magnesium is required. Other magnesium products are also formed (magnesium oxide and magnesium sulfate). More magnesium needs to be added to offset these less desirable compounds. And finally, since the time allowed for the reaction is very short (high gas velocity in the region of the flame), the greater the amount of magnesium added, the greater are the opportunity for a vanadium atom to find a magnesium atom.

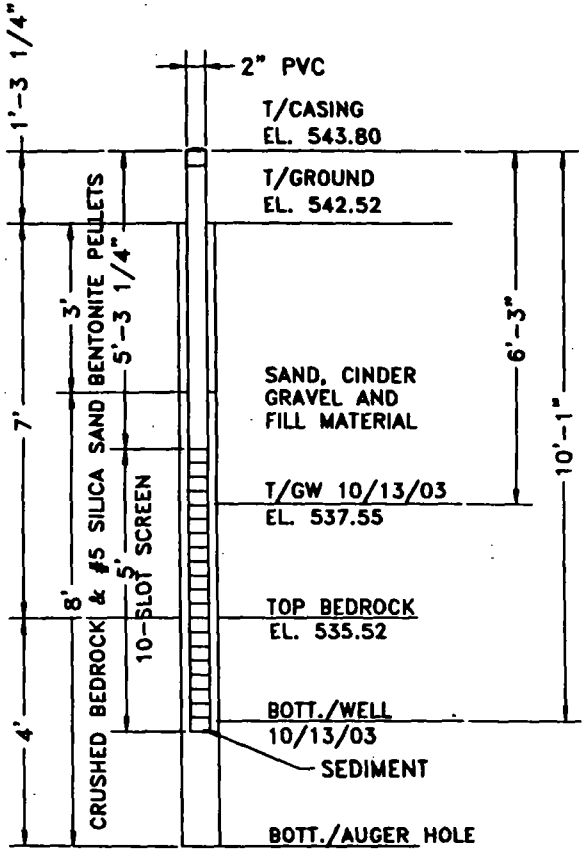
In diesels and boilers, less magnesium is required to fully control the effects of vanadium. Most research and empirical use of true oil soluble magnesium proves that suggested levels as low as 1 part of magnesium to 5 parts of vanadium, sodium, potassium, and lead for boilers and closer to 1 part to 1 part for diesel engines is sufficient. The lower dosage amounts are believed to be possible because of greater amounts of reactive surface area provided by the nano particles in the oil soluble magnesium and temperatures are lower in equipment other than gas turbines and the residence time (time for the reaction to take place) is greater in boilers and diesel engines. LMGI agrees with these suggestions and treatment rates, however; LMGI additives have provided some customers the opportunity to go to even lower treatment rates. LMGI will suggest a starting dosage rate and after close examination, the customer

may in fact be able to lower the dosage rate to maximize the return on investment without sacrificing results.

Sulfur trioxide formation and subsequent formation of sulfuric acid can also be controlled with the use of magnesium. This mechanism is not as well defined as the corrosion mechanism. It appears that magnesium additives form very finely divided particles of magnesium oxide when they are combusted. These particles both coat the internal surfaces of high temperature equipment and also are available to neutralize any acid that forms. By coating the internal surfaces, the catalytic effect of hot iron is removed from the sulfur trioxide formation reaction.

APPENDIX D

WELL LOGS



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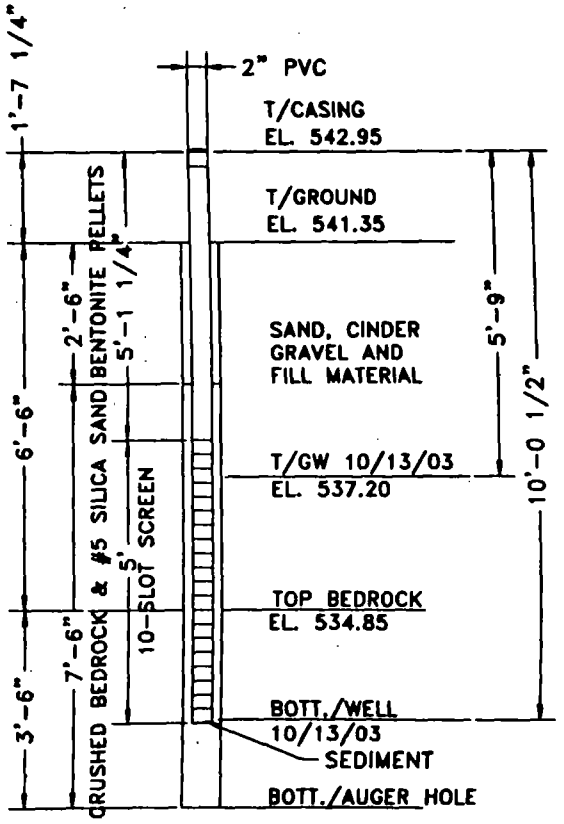
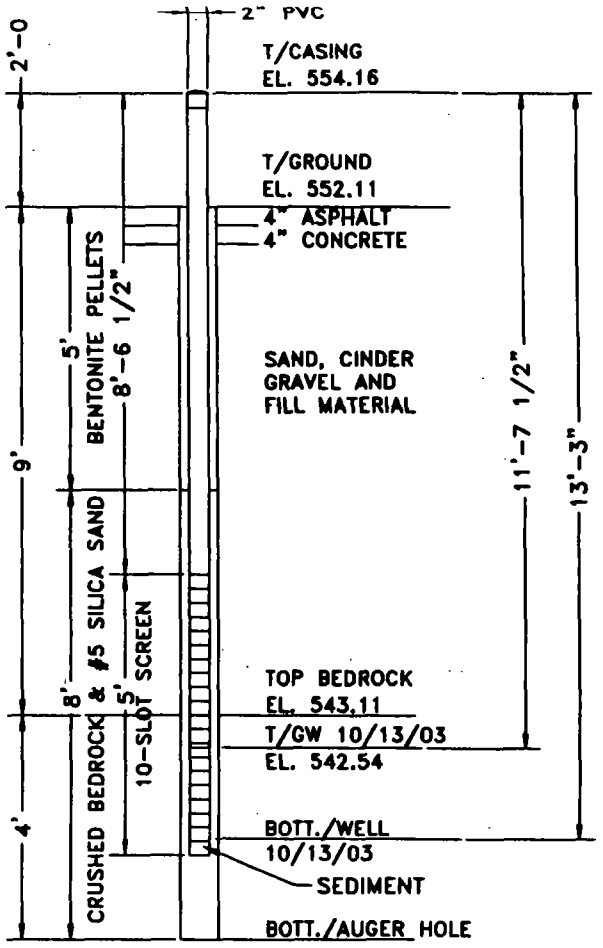


Monitoring Well G102 & G105 (Waste Technology)

MONITORING WELL DETAILS



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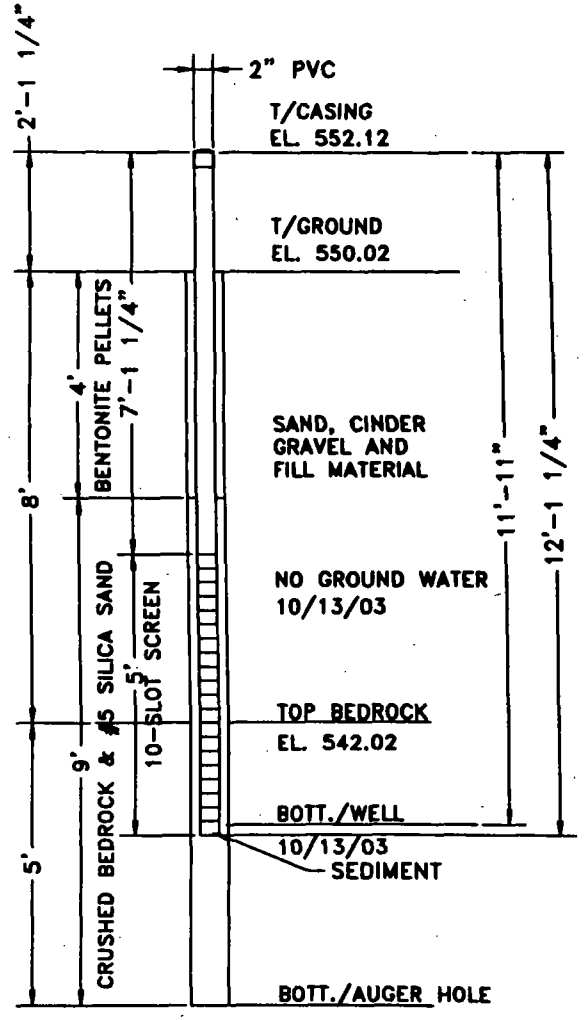


Monitoring Well G103 (Waste Technology)

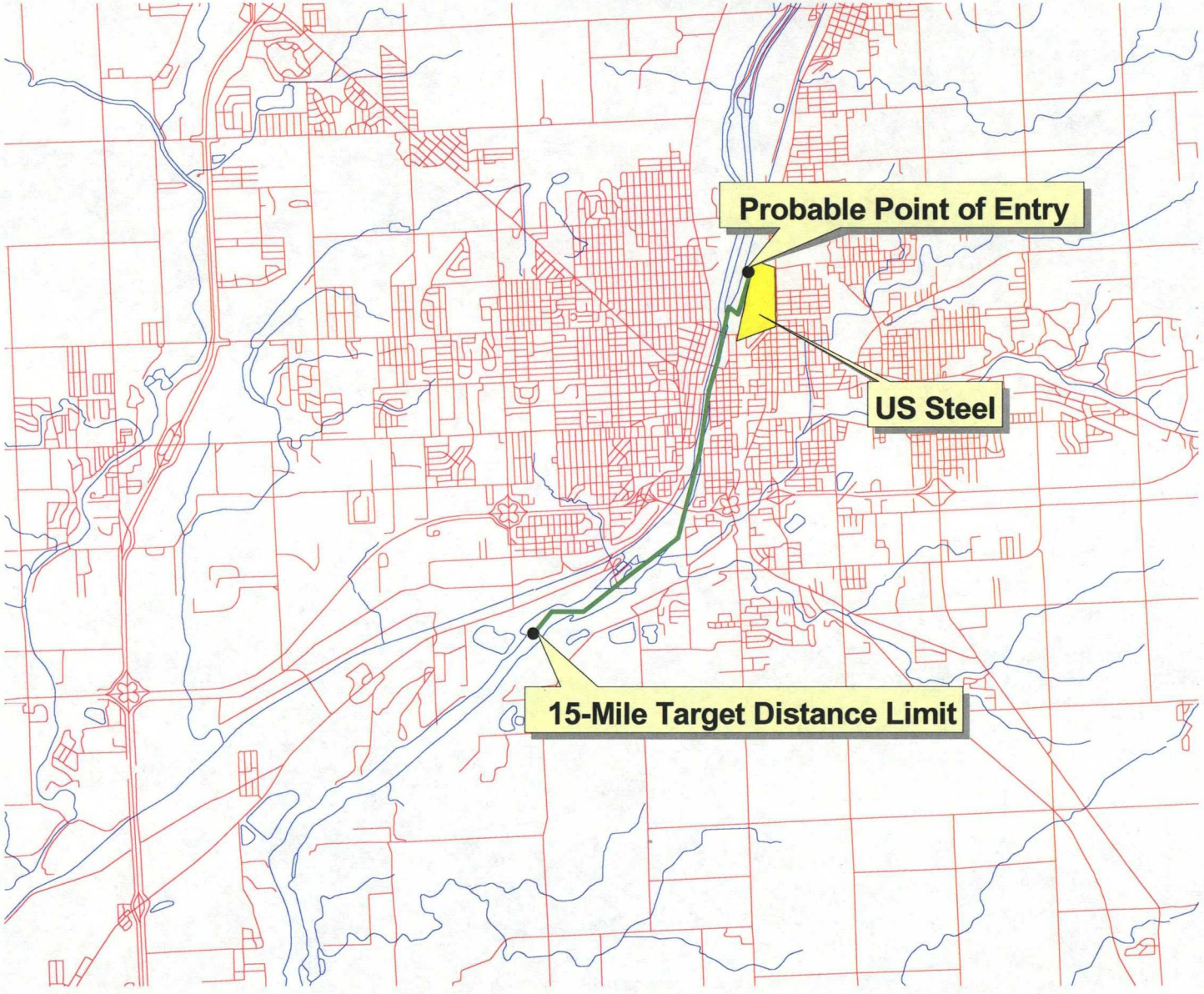
MONITORING WELL DETAILS

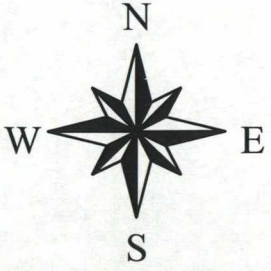
APPENDIX E

4-MILE RADIUS AND 15-MILE SURFACE WATER ROUTE

non responsive

15-Mile Surface Water Route Map
US Steel





APPENDIX F

ONTARIO SEDIMENT AND ECOTOX THRESHOLD

ıble 7 Sediment quality benchmarks*

Substance	Ontario Sediment Quality Guidelines[i] (mg/kg)		Canadian Sediment Quality Guidelines[ii] (mg/kg)	Probable Effect Levels (mg/kg)	Ontario Guideline for Use at Contaminated Sites Sediments-LEL[iii] (mg/kg)
	LEL[iv]	SEL[v]			
Acenaphthene			6.71 • g/kg	88.9 • g/kg	
Acenaphthylene			5.87 • g/kg	128 • g/kg	
Aldrin					0.002
Ammonia		100[vi]			
Anthracene			0.0469	0.245	0.22
Arsenic	6	33	5.9	17	6
Benzo(a)anthracene			0.0317	0.385	0.32
Benzo(k)fluoranthene					0.24
Benzo(g,h,i)perylene					0.17
Benzo(a)pyrene			0.0319	0.782	0.37
Cadmium	0.6	10	0.6	3.5	0.6
Carbon, Total Organic (TOC)	1%	10%			
Chlordane			4.50 • g/kg	8.87 • g/kg	7 • g/kg
Chromium	26	110	37.3	90	(total)26
Chrysene			0.0571	0.862	0.34
Cobalt		50[vii]			50

[i] From Ontario Ministry of Environment and Energy, "Protection and Management of Aquatic Sediment Quality in Ontario," August 1993, unless otherwise noted.

[ii] See Environment Canada's Environmental Quality Guidelines at www.ec.gc.ca/ceqg-rcqe.

[iii] From *Guideline for Use at Contaminated Sites in Ontario*, Ontario Ministry of Environment and Energy, February 1997.

[iv] Lowest Effect Level

[v] Severe Effect Level

[vi] From the Open Water Disposal Guidelines (OWDG).

[vii] From OWDG.

Copper	16	110	35.7	197	16
Cyanide		0.1[viii]			0.1
DDD (*p,p-* and *o,p-)*			3.54 • g/kg	8.51 • g/kg	8 • g/kg
DDE (*p,p-* and *o,p-)*			1.42 • g/kg	6.75 • g/kg	5 • g/kg
DDT (*p,p-* and *o,p-)*			1.19 • g/kg	4.77 • g/kg	7 • g/kg
Dibenzo(a,h)anthracene			6.22 • g/kg	135 • g/kg	60 • g/kg
Dieldrin			2.85 • g/kg	6.67 • g/kg	2 • g/kg
Endrin			2.67 • g/kg	62.4 • g/kg	3 • g/kg
Fluoranthene			0.111	2.355	0.75
Fluorene			0.0212	0.144	0.19
Heptachlor epoxide			0.60 • g/kg	2.74 • g/kg	5 • g/kg
Hexachlorobenzene					0.02
Indeno(1,2,3-c,d) pyrene					0.2
Iron	2%	4%			
Lead	31	250	35	91.3	31
Lindane			0.94 • g/kg	1.38 • g/kg	
Manganese	460	1100			
Mercury	0.2	2	0.17	0.486	0.2
Methylnaphthalene, 2-			0.0202	0.201	
Naphthalene			0.0346	0.391	
Nickel	16	75			16
Nitrogen (total kjeldahl) (TKN)	550	4800			
Oil and Grease		0.15 %[ix]			
Phenanthrene			0.0419	0.515	0.56
Phosphorus (total)	600	2000			
Polychlorinated biphenyls (PCBs)			(total) 0.0341 Aroclor 1254 0.060	(total) 0.277 Aroclor 1254 0.340	(total) 0.07
Pyrene			0.053	0.875	0.49

[viii] From OWDG.

[ix] From OWDG.

·lver		0.5[x]			0.5
ı oxaphene			1.5 • g/kg		
Zinc	120	820	123	315	120

*All values in milligrams per kilogram (mg/kg) unless otherwise indicated. Please note that mg/kg is equivalent to • g/g.

[x] From OWDG.

Table 2: Ecotox Thresholds for 67 Chemicals Commonly Found At Superfund Sites								
		Surface Water (ug/L)			Sediment (mg/kg)			
		Freshwater		Marine	EPA SQC[3]			
CAS Number	Chemical	AWQC or FCV[1]	Tier II[2]	AWQC or FCV[1]	Fresh-water	Marine	EPA SQB[4]	ERL[5]
	Metals (20)							
22569728	Arsenic III	190		36				8.2 t
17428410	Arsenic V		8.1 *					
7440393	Barium		3.9 *					
7440417	Beryllium		5.1 *					
7440439	Cadmium	1.0 h		9.3				1.2
1308141	Chromium III	180 h						81 t
18540299	Chromium VI	10		50				
7440484	Cobalt		3.0 *					
7440508	Copper	11 h		2.4				34
7439896	Iron	1000						
7439921	Lead	2.5 h		8.1				47
7439965	Manganese		80 *					
7439976	Mercury, inorganic	1.3		1.1				0.15 t
22967926	Mercury, methyl		0.003 *					
7439987	Molybdenum		240 *					
7440020	Nickel	160 h		8.2				21
7782492	Selenium	5.0		71				
7440622	Vanadium		19 *					
7440666	Zinc	100 h		81				150
57125	Cyanide	5.2		1.0				
	Organic Compounds (47)							
83329	Acenaphthene	23 S		40 S	0.62	1.1		0.016
71432	Benzene		46 *				0.057	
50328	Benzo(a)pyrene		0.014 *					0.43
92524	Biphenyl		14 #				1.1	
117817	Bis(2-ethylhexyl)phthalate		32 *					

Table 2 (continued)								
		Surface Water (ug/L)			Sediment (mg/kg)			
		Freshwater		Marine	EPA SQC[3]			
CAS Number	Chemical	AWQC or FCV[1]	Tier II[2]	AWQC or FCV[1]	Fresh-water	Marine	EPA SQB[4]	ERL[5]
101553	Bromophenyl phenyl ether, 4-		1.5 #				1.3	
85687	Butylbenzyl phthalate		19 #				11	
108907	Chlorobenzene		130 *				0.82	
50293	DDT		0.013 +					0.0016
333415	Diazinon	0.043 F					0.0019	
132649	Dibenzofuran		20 *				2.0	
95501	Dichlorobenzene, 1,2-		14 #				0.34	
541731	Dichlorobenzene, 1,3-		71 #				1.7	
106467	Dichlorobenzene, 1,4-		15 #				0.35	
75343	Dichloroethane, 1,1-		47 *					
60571	Dieldrin	0.062 S		0.11 S	0.052	0.095		
84662	Diethyl phthalate		220 *				0.63	
84742	Di-n-butyl phthalate		33 *				11	
115297	Endosulfan, mixed isomers		0.051 #				0.0054	
959988	Endosulfan, alpha		0.051 #				0.0029	
33213659	Endosulfan, beta		0.051 #				0.014	
72208	Endrin	0.061 S		0.01 S	0.02	0.0035		
100414	Ethylbenzene		290 *				3.6	
206440	Fluoranthene	8.1 S		11 S	2.9	1.4		0.6
86737	Fluorene		3.9 #				0.54	
76448	Heptachlor		0.0069 +					
67721	Hexachloroethane		12 #				1.0	
58899	Lindane/Hexachlorocyclohexane	0.08					0.0037	
121755	Malathion		0.097				0.00067	
72435	Methoxychlor		0.019 #				0.019	
91203	Naphthalene		24 *				0.48	0.16
608935	Pentachlorobenzene		0.47 #				0.69	
87865	Pentachlorophenol	13 pH		7.9				

Table 2 (continued)								
		Surface Water (ug/L)			Sediment (mg/kg)			
		Freshwater		Marine	EPA SQC[3]			
CAS Number	Chemical	AWQC or FCV[1]	Tier II[2]	AWQC or FCV[1]	Fresh-water	Marine	EPA SQB[4]	ERL[5]
1000	Polynuclear aromatic hydrocarbons							4.0
11096825	Polychlorinated biphenyls		0.19 *					0.023
85018	Phenanthrene	6.3 S		8.3 S	0.85	1.1		0.24
129000	Pyrene							0.66
79345	Tetrachloroethane, 1,1,2,2-		420 *				0.94	
127184	Tetrachloroethylene		120 *				0.53	
56235	Tetrachloromethane		240 #				1.2	
108883	Toluene		130 *				0.67	
8001352	Toxaphene		0.011	0.21			0.028	
75252	Tribromomethane		320 #				0.65	
120821	Trichlorobenzene, 1,2,4-		110 #				9.2	
71556	Trichloroethane, 1,1,1-		62 *				0.17	
79016	Trichloroethylene		350 *				1.6	
108383	Xylene, m-		1.8 #				0.025	

[1]USEPA chronic ambient water quality criteria (AWQC) or EPA-derived final chronic values (FCVs) (USEPA, 1986a, 1986b, 1987). Metals concentrations are for total dissolved chemical.
[2]Values calculated using Great Lakes Water Quality Initiative Tier II methodology (40 CFR 9 et al.).
[3]USEPA *Sediment Quality Criteria* (SQC). Assumes 1 percent organic carbon (USEPA, 1993g). Values are lower limit of 95 percent confidence interval.
[4]Sediment quality benchmarks (SQBs) by equilibrium partitioning. Assumes 1 percent organic carbon. (USEPA, 1995b).
[5]ERL = Effects Range – Low (Long et al., 1995).

Notes:
ug/L = micrograms per liter.
mg/kg = micrograms per kilogram.
h = hardness-dependent ambient water quality criterion (100 mg/L as $CaCO_3$ used).
pH = pH-dependent ambient water quality criterion (7.8 pH used).
S = final chronic value derived for EPA Sediment Quality Criteria documents (EPA, 1993a, b, c, d, e).
F = final chronic value calculated using Great Lakes Water Quality Initiative Tier I methodology.
t = value is for total of all chemical forms.
* = value as calculated in Suter and Mabrey, 1994.
+ = value with EPA support documents.
# = value calculated for this project.