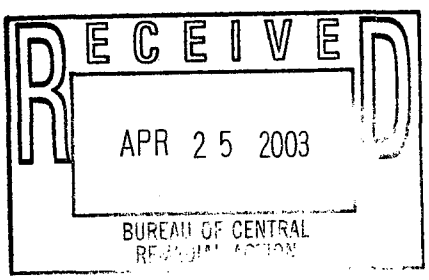
FILE NAME

"Report.VCP.v00615.2003-04-25.RAWP_Vol2of2_Site1_2_3.pdf"

NOTE

- Contains folded images. Images must be copied in their entirety.
- Images may contain color.
- Documents must be returned in the same arrangement in which they were received.

Please return electronic copies to Sally Dewes



Port Authority of New York and New Jersey

Site Investigation and Conceptual Remedial Action Workplan

Operable Unit 1 – Volume 2 of 2

HHMT – Port Ivory Facility

April 2003

40 Western Avenue, Staten Island, New York

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 1/ Woodburning Boiler	This seven-story building, encompassing 50,337 square feet, was built in 1983 in response to rising oil prices. Building 1 houses a wood burning boiler and associated wood storage hopper. The boiler (south end) and storage hopper (north end) comprise the majority of the building area. The boiler is suspended from the ceiling structure to allow for the expansion and contraction of the interior steam tubes. Former storage areas for parts, materials and equipment utilized in the operation of the boiler are located on the first and second floor of the structure. Wood is reported to have been processed in a building (Building 1A) located to the northwest of Building 1 and stored in an area to the south of Building 1B. Wood is reported to have been supplied to Building 1 via a conveyor belt system. The conveyor belt initiated at the wood storage area located to the southwest of Building 1B and entered Building 1 at the northwestern corner of the seventh floor.	The building is constructed with a concrete floor and sheet metal walls and ceiling. Parts and equipment utilized in the operation of the boiler unit were stored in this building at the time of the assessment and investigation activities.
Building 1A/ Wood Process	**This three-story building, encompassing 4,332 square feet, was built in 1983 in conjunction with the facility's former wood fueling system. Operations formerly conducted in this building consisted of the crushing and pulverizing of wood into wood chips. Wood is reported to have been delivered to the site and unloaded into a hopper and conveyor belt system located to the north of this building. The conveyor belt entered the building on the third floor and directed wood products into the crushing/pulverizing machine located in this building. Processed wood was loaded onto a second conveyor system which exited through the southern wall of the building. The processed wood was stored in an area to the south of the building until needed in the boiler unit.**	**Inspection of this building noted same to be constructed with concrete floors and sheet metal walls and ceilings.**

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 1B/ Wood Reclaim	This one-story building, encompassing 1,070 square feet, was built in 1983 in conjunction with the operation of the facility's former wood fueling system. Wood chips are reported to have been transferred to a blow pipe system located within this building. The wood chips were loaded into the building through a doorway along the western side of the building. The building is reported to have housed a "blower" system which was used to transfer wood chips, via a 14" diameter pipe, to Building 1 (i.e., the Wood Burning Boiler located on Operable Unit 2). According to P&G, the "blow pipe" system of moving the wood chips was replaced with the previously described conveyor belt system associated with Building 1.	Inspection of the building noted same to be constructed with a concrete floor, a combination of concrete and metal walls and a metal deck ceiling. An electric room was accessed via the eastern exterior of the building. The electric room was noted to house several pad mounted switch boxes and breaker panels.
Building 5/ Railroad Scale House	This one-story building was built in 1957 and occupies 132 square feet. This building is reported to have housed the equipment utilized in the operation of a railroad scale. The scale is reported to have been located underneath the railroad siding situated east of the scale house. According to a representative of P&G, the scale is electronic and is enclosed in a pit constructed with concrete base and walls.	The building was noted to be constructed with brick walls, a concrete ceiling and a vinyl floor with 12"x 12" tiles.
Building 12/ Machine Shop (Partially located on Operable Unit 1)	Building 12 is a two-story building which occupies 15,128 square feet and was built in 1918. According to P&G, this building was utilized as the "central" machine shop for the facility, contained typical equipment for a machine shop (i.e., grinders, lathers, saws, presses, etc.) and was used (2nd floor) for the storage of parts, equipment, and machinery.	The first floor and the eastern portion of the second floor are constructed with a concrete floor, brick walls and a concrete ceiling. The western portion of the second floor (i.e., the Locker Room) is constructed with a ceramic tile floor, a combination of sheet rock and ceramic tile floors and a drop panel (2' x 2' tile) ceiling. Overhead loading dock doors providing access to the exterior are located along the northern and western walls of Building 13.
Building 13/ Engineering (Partially located on Operable Unit 1)	This two-story 6,040 square foot building was built in 1916 to have been used solely for office/administrative purposes including, in particular, housing the Engineering Department.	The building is constructed with a combination of ceramic tile/linoleum or concrete flooring, sheet rock walls and a drop (2' x 2' tile) panel ceiling. An Electric Room is located on the second floor of this building. Inspection of this room noted the presence of several wall-mounted transformer units and electrical panels. This room was constructed with a 9"x 9" vinyl tile floor. Two office trailers, formerly utilized for additional office space, were noted to be situated in the area located immediately north of Building 13.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building S-16/ Bar Soap Shop	**This one-story 2,700 square foot building was built in 1977 and was utilized as a machine shop for the bar soap process.**	**This building is constructed with a concrete floor and sheet metal walls and ceilings. Several floor drains, including a floor drain set in a concrete diked area are located within this building. According to a representative of P&G, these floor drains, as well as the remainder of the floor drains located in the facility, are either connected to the sanitary sewer system, or in the case of drains that collect liquids from process operations, are connected back into the process. No septic systems or dry wells are reported to be present at the subject site. Visual inspection of the underlying concrete flooring noted the integrity of same to be intact.**
Building 17/ Offices @STU Shop	**This two-story 13,362 square foot building was built in 1930 and was utilized as a machine shop (first floor) and administrative offices (second floor) for the manufactured soap granules process.**	**The first floor of this building is constructed with a concrete floor, brick walls and a concrete ceiling. A single overhead door is located along the southern wall of the facility and provides access to the southern exterior of the building. Visual inspection of the underlying concrete flooring noted minor staining. However, the floor appeared to be intact and free of breaches in its integrity. Two floor drains are located on the first floor of this building. Refer to Building S-16 information for comments on facility floor drains.**
Building 19/ Fire Pump House	This one-story 252 square foot building was built in 1962, and was utilized to house pumps associated with the facility's fire suppression system. Fire suppression water is maintained in a 2.5 million gallon reservoir located immediately adjacent to (east of) this building. This building is reported to be connected, via underground piping, to a second water reservoir and pump house (i.e., Building 30). According to P&G, no chemicals were added to the fire suppression system. The 2.5 million gallon water storage reservoir is reported to be filled on an as-needed basis through pipe connections to the City of New York water supply system.	Building 19 is constructed with concrete floor and walls and a metal deck ceiling. Inspection of this building noted the presence of an oil-fired (diesel) generator. Staining was noted along the underside of the generator and the underlying concrete floor. Inspection of the underlying concrete floor noted same to be intact and free of breaches in its integrity. Based on the construction of the building and the fact that the floor is set at a lower elevation than the doorway, it is unlikely that discharges, if any, from the generator could migrate to the exterior area surrounding this building. Diesel fuel utilized in the operation of the generator unit is stored in a 500-gallon AST located along the southern exterior of the building. The AST is situated inside of a containment dike constructed with a concrete floor and masonry walls. Visual inspection of the containment dike did not reveal the presence of any indications that a discharge has occurred within same.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 20/ Locomotive House	This one-story 3,4000 square foot building was built in 1913 and was used as a maintenance garage for the facility's railroad locomotives.	Building 20 is constructed with a combination concrete and bare soil flooring, brick walls and a concrete ceiling. The building is divided into three bays with overhead doors along the southern wall of the building providing access to the railroad sidings at the exterior. Inspection of the soil floor in the eastern and western bays noted the presence of staining in several areas. A subsurface maintenance pit constructed of concrete is located in the central bay of this building. At the time of the assessment and investigation activities, snow removal equipment, an air compressor, hoses and parts as well as several small containers (i.e., five-gallons or less) of various lubricants, oils and other petroleum products were noted to be present in this building. Concrete pads are located along the western and northern sides of this building. A non-paved, gravel covered area measuring approximately 50 feet by 100 feet was noted on the eastern side of Building 20. No staining was noted on the gravel surface.
Thirty Series Buildings		
Building 30/Fresh Water Pump House	This one-story, 740 square foot structure was built in 1915 and formerly functioned as one of the two, on-site pump houses associated with the facility fire suppression system. The building is located immediately to the north of a concrete lined water reservoir with a reported capacity of approximately 50,000-gallons. This pump house is reported to be connected, via underground piping, to the main pump house, Building 19.	Building 30 is constructed with a concrete floor, a combination of concrete and brick walls and a concrete ceiling. The building is divided into two levels, separated by a metal grate floor/ceiling. Metal steps provide access to the lower level of Building 30. Visual inspection of the building noted the presence of a diesel oil-fired generator and two large pump units. Diesel oil associated with the generator unit is stored in a 1,000-gallon (approximate) AST suspended underneath the metal grate floor. The fill and vent pipe system associated with the AST extends through the eastern wall of the building. Staining was noted on the generator unit as well as on the underlying concrete pad. However, staining was noted to be limited to the concrete pad.
Building 31	This one-story, 9,000 square foot building was constructed in 1909 and was utilized for storage.	The building was constructed with a concrete floor, brick walls and wood ceilings. Due to potential safety concerns, no access to this building was provided to HMM. This building, as well as Building 33 and 33A did not have a roof.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 31A/ Glycerine House	This two-story building occupies 8,000 square feet and was constructed in 1909. According to a representative of P&G, this building was utilized as a storage area for equipment and parts associated with the boiler house. The first floor of the building was used for miscellaneous storage and the second floor of the building was utilized for office space.	Building 31A is constructed with a concrete floor, brick walls and a wooden roof. A fenced-in storage area is located along the exterior of the western wall of Building 31A. The storage area is underlain with concrete and separated into storage areas via masonry walls. Based on the signage on the fencing, this area was formerly utilized to store (empty and full) pressurized gas cylinders (i.e., acetylene, oxygen, etc.). A pad-mounted compactor is located along the exterior of the southwestern corner of this building. Inspection of same proved unremarkable.
Building 32/ Boiler House	This two level (one floor and a basement), 29,860 square foot building was built in 1909 and was utilized to house two boiler units (i.e., natural gas and diesel oil) as well as the main and two secondary generator units. The generators are reported to be powered by steam manufactured during the operation of the boiler units. According to P&G, the two boiler units were removed from the northern portion of this building (the floor cut-out was noted at the time of the inspection). Natural gas is reported to be provided by Con-Edison. Diesel fuel is reported to have been stored in an UST formerly located along the eastern exterior of the building.	Building 32 is constructed with a concrete floor, brick walls and a metal deck ceiling. Reportedly, the cut-outs present in the flooring/ceiling were to allow for equipment clearance. The main electric room for the facility is situated in Building 32. This room is constructed with a concrete floor, a combination of concrete and brick walls and a metal deck ceiling. Inspection of this room noted the presence of several pad-mounted switch and breaker box units. Four 55-gallon drums of Sunoco TH Fluid were noted to be stored along the eastern wall of the electric room. The main generator (7500 kva) and two secondary generators (1500 kva) are located in Building 32. These generators are seated on the concrete floor in the basement and protrude through to the first floor via the floor cut-outs.
Building 32A/ Boiler House	This two level (one floor and a basement), 3,200 square foot building was built in 1909 and was utilized to house a diesel oil-fired generator unit used on weekends and during maintenance of the boilers located in Building 32. Diesel fuel is reported to have been stored in an UST formerly located along the eastern exterior of the building.	Inspection of the building noted similar construction to Building 32. Some staining was noted on the concrete flooring. However, the flooring was noted to be intact. A 3,000-gallon AST (approximate) is located in the northwestern corner of the basement of this building. The AST is reported to be associated with a cooling tower located on the roof of this building.
Building 33/ Kettle House 1	This three-story, 54,000 square foot building was built in 1909 and was utilized in soap manufacturing. Specifically, a large kettle utilized in the melting of soap was located in this building. The kettle was heated via steam generated in the Boiler House (i.e., Buildings 32 and 32A). The kettle was described as a large tank that extended to the second floor of the building. The upper floors were utilized for storage purposes as well as to monitor the kettle operations.	Due to potential safety concerns, HMM was not provided access to this building. This building as well as Buildings 31 and 33A did not have a roof. The building was noted to be constructed with a concrete floor, brick walls and wood ceilings.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 33A/ Comet Making (Kettle House 3)	This three-story, 20,100 square foot building was built in 1909 and was utilized for activities associated with soap and Comet cleanser manufacturing. A large kettle utilized in the melting of soap and the manufacture of Comet cleanser was formerly located in this building. The kettle was heated via steam generated in the Boiler House (i.e., Buildings 32 and 32A). The kettle was described as a large tank that extended to the second floor of the building. The upper floors were utilized for storage purposes as well as to monitor the kettle operations.	HMM was not provided access to this building. This building as well as Building 31 and 33 did not have a roof. The building was noted to be constructed with a concrete floor, brick walls and wood ceilings.
Building 34/ Comet Warehouse	Building 34, a one-story 8,568 square foot structure, was built in 1929 and was utilized for the storage of cardboard packaging for Comet cleanser.	Inspection of this building noted same to be constructed with concrete floors, brick walls and a wood ceiling.
Building 35/ Comet Packing	This three-story (two floors and a basement) 25,336 square foot structure was built in 1909 and was utilized for packaging activities for Comet cleanser. A bridge, located in the southeastern corner of the second floor, connects this building to Building 42C. This bridge was utilized to transfer manufactured liquids stored in this building (manufactured in Building 38) to the packaging facility located in Building 42C. An elevated area located in the southwestern corner of the second floor is reported to have been utilized for the storage of packaging materials as well as spare parts for the packaging machinery.	Visual inspection of this building noted same to be constructed with a combination of concrete and wooden floors, brick and masonry walls and wooden ceilings.
Building S-35/ North Gate House	This one-story 336 square foot building was constructed in 1930 and was utilized as a Guard House (security station).	Visual reconnaissance of the building noted the northern portion to be utilized as a Guard House and the southern portion to be utilized to house electrical equipment (i.e., transformers, switch boxes, breaker boxes, etc.)
Building 36/ Comet Warehouse	This five-story (plus partial basement) 26, 390 square foot building was built in 1923 and was utilized to warehouse packaging materials associated with the Comet cleanser line. According to P&G, a conveyor system in a tunnel in the the basement was utilized to transport finished Comet product to Building 43A.	Visual inspection of this building noted that all five floors were constructed with wooden floors, brick walls and wooden ceilings.
Building 38/Liquids Making (HSC)	This two-story 2,992 square foot building was built in 1927 and was utilized for the manufacturing of Solo liquid detergent. The manufacturing process is reported to have consisted of blending operations. Mixing vats are reported to have been situated on the first floor of the building and to have protruded, through "cut-outs", to the second floor of the building.	This building is constructed with wooden floors, brick walls and a wooden ceiling. Inspection of the building noted two circular "cut-outs" in the second floor. These "cut-outs" appear to denote the locations of the former blending vats.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Forty Series Buildings		
Building 40/ Cafeteria	Building 40 is a three-story (i.e., two floor plus a basement) 25,608 square foot structure constructed in 1916 and utilized for cafeteria activities, office/administrative tasks and for employee training activities (i.e., classrooms/ demonstration rooms).	The building is constructed with a ceramic tile floor (some portions), concrete walls and wooden ceilings. A sump pump system and a gas-fired heating unit were noted in the basement. The sump system is reported to discharge, via aboveground piping and hoses, to the southeastern exterior of the building and eventually, Western Avenue.
Building 41/Offices	This two-story 21,500 square foot building was constructed in 1907 and was utilized for office/administrative purposes as well as locker rooms (northeastern corner of the first floor).	The building is constructed with carpeted and linoleum floors, sheet rock walls, and drop panel ceilings. A HVAC room with a single HVAC unit and transformer is located on the second floor of Building 41.
Building S-41/ Natural Gas Meter House	This one-story 588 square foot structure was built in 1955 and formerly housed components of the natural gas entry system. The system was shut down and replaced by new connections from the street into the individual buildings.	Inspection of this structure noted same to be constructed of concrete (i.e., floor, walls and ceiling). The structure is divided into two rooms (north and south) which contain the natural gas piping, valves and meters.
Building S-42/ Transformer Shelter	This one-story 315 square foot structure was built in 1927 and houses the main electrical switches and breaker boxes.	This building is constructed with a concrete floor, brick walls and a concrete ceiling. At the time of the May 2000 site reconnaissance, this structure contained six breaker boxes, several switch boxes and several back-up batteries. A concrete dike system is located along the southern exterior of Building 42. This dike contains five exterior transformer units. No staining was noted on the units or the concrete base of the containment dike.
Building 42A/ Bar Soap Storage	This four-story 63, 200 square foot structure was built in 1918 and was utilized for the manufacture and packaging, including the storage of packaging materials, of Coast Soap.	Building 42 was noted to be constructed with a combination of tile, wood and concrete floors, masonry and brick walls and wood and/or concrete ceilings. Two circular "cut-outs" in the ceiling of the first floor of Building 42A denote the locations of two former ASTs or circular storage vessels. The tanks are reported to have been utilized to store scrap soap which was collected for re-use. A floor drain was noted in the southwestern corner of the first floor of Building 42A. According to P&G, all interior drains were/are connected into the sanitary sewer system or, in the case of drains that collected materials from process operations, connected to process systems.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 42B/Bar Soap Processing/Packaging	This three-story 81,300 square foot structure was built in 1908 and was utilized for the processing and packaging of finished bars of Ivory Soap and a machine shop for packaging equipment. A "dry house" was located on the eastern side of this floor. The "dry house" consisted of a conveyor belt system that traversed through a heat enclosure. After exiting the "dry house", the bars were cut, stamped and packaged.	Inspection of this building noted same to be constructed with concrete floors, masonry walls and wooden ceilings. A machine shop, utilized to maintain the packaging machines located in Buildings 42A, 42B and 42C was formerly located along the eastern side of the first floor of this building. The northern side of this building is open to the second story and formerly housed a large storage tank which contained liquid Ivory soap. The liquid soap was transferred to this location from the Hydrolizer Building which was formerly located to the north of Building 16; the Hydrolizer was demolished prior to the May 2000 site reconnaissance. The liquid soap was then pumped from this AST to the third floor of the building for drying, shaping, cutting and packaging. Several floor drains were noted on the third floor of this building. These drains were utilized to collect water from the plotter stamps which transferred the "Ivory" stamp onto the soap bars. This representative added that water collected via these drains was re-blended and recycled.
Building 42C/ Liquids/Solo Packing and Storage	This three-story 81,300 square foot structure was built in 1908 and was utilized for the storage of cardboard packaging for the finished soap products and for packaging activities for Mr. Clean products.	The building is constructed with concrete floors, a combination of masonry and brick walls and wooden ceilings. An electrical room containing a transformer unit and other wall-mounted electrical panels is located in this building. Inspection of the third floor of this building noted the presence of several square pads surrounded by trench drain systems. According to P&G, machinery associated with the packaging of Mr. Clean cleaning solution was formerly located on these pads. The trench drain systems were utilized to collect any spilled cleaning solution and transfer same back into the process.
Building 43/ LSP Granules	This three-story 37,380 square foot structure was built in 1927 and was utilized for the packaging of synthetic granule type soaps and detergents (i.e., Ivory Snow and Ivory Flakes). Soap granules were separated based on their size and then placed into the buggies which dumped same, through floor openings in the northern portion of this building, into hoppers located on the second floor. The various sized granules were blended together to prepare Ivory Snow and Ivory Flakes.	Inspection of this building noted same to be constructed with a concrete floor, masonry walls and combination of steel and wood ceilings. Inspection of the first floor of Building 43 noted the presence of a concrete pad along the northern wall of the building and a trench drain situated on the southern side of the pad. Further, the entrance/exit of a subsurface tunnel was noted in the northern portion of the building. According to a representative of P&G, the tunnel formerly housed a conveyor belt system which was utilized to transfer raw product from the "forty series" buildings to Building 43 for packaging.
Building 43A/ LSP Granules	This three-story 55,296 square foot structure was built in 1927 and was utilized for the packaging of synthetic granule type soaps and detergents (i.e., Ivory Snow and Ivory Flakes).	Inspection of this building noted same to be constructed with a concrete floor, masonry walls and combination of steel and wood ceilings.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 44/ LSP Granules	This four-story 24,176 square foot structure was built in 1912 and was utilized for the packaging of synthetic granule type soaps and detergents.	Inspection of this building noted same to be constructed with a combination concrete and ceramic tile floor, masonry walls and concrete ceilings.
Building 45/Main Gate Guard House	Building 45, a one-story 344 square foot structure, is utilized as a security house for the main gate of the facility. The structure was built in 1982.	Inspection of this building noted same to be constructed with non-slip floor tiles over concrete, a combination of masonry and glass walls and a drop panel ceiling (2' x 2' tiles).
Building 46/ Sewage Pump Station	This structure was built in 1970. Although given a building designation, the Sewerage Pump Station is a covered concrete pit. The structure was never occupied by employees. The pump station is utilized to house the piping, pumps and valves associated with the transfer of sanitary sewage from the facility and to the New York City sanitary sewer system.	The facility's sanitary sewage holding and pre-treatment system is located immediately west of Building 46. Sanitary flow from the facility, via gravity flow, is directed to two concrete pits. From these pits, the sanitary wastes are pumped into two 71,000-gallon holding tanks which are located within a concrete dike. Pretreatment of the wastes by P&G is reported to consist of pH adjustment and correction via the addition of either sulfuric acid or sodium hydroxide. These materials were noted to be stored in three 250-gallon plastic tote-type storage tanks (one for sulfuric acid and two for sodium hydroxide). The tote-type tanks are located over a sloped concrete pad which leads into the diked area. After pre-treatment, the wastes are pumped to the New York City sanitary sewer system via the piping located within Building 46. According to a representative of P&G, Building 46 contains a mechanically actuated valve system which detects pH and closes the system in the event of a problem.
Building 300/ Water Treatment	This two-story 3,268 square foot structure (one floor and a basement) wasconstructed in 1929. Operations in this building are reported to have consisted of the treatment of water utilized in process operations.	This building is constructed with a concrete floor, brick walls and a metal deck ceiling. Equipment utilized in the water treatment operations was noted to be present in this building. Two ASTs, located in a concrete containment area along the southern exterior wall of this building, and a third AST, situated on a concrete pad along the southwestern corner of the building, were also noted to be present. The two tanks, located within the containment area are reported to contain acid and caustic utilized in the water treatment process. The third AST is reported to be utilized to store treated "neutralized" water. A sump is located within the concrete containment berm associated with the two exterior tanks. Several floor and trench drains were noted around the water treatment equipment. These drains are reported to transfer collected liquids to the sanitary sewer system.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Fifty Series Buildings		
Building 52/ Finished Products	This three-story 96,948 square foot building was constructed in 1926. Former operations in this building are reported to have consisted of the packaging of manufactured food oils (i.e., Crisco) and the storage of packaging materials.	The building was noted to be constructed of concrete floors, walls and ceilings. Inspection of the first floor of the facility noted overhead loading dock doors along the northern, eastern and southern sides of same. A conveyor system located in this building was formerly utilized to transfer finished and packaged products from this building to Buildings 74 and 75.
Building 53/ Food Office/Locker Room	This two-story 9,700 square foot structure was built in 1926 and was formerly utilized as a locker room/break room for P&G employees (first floor) and as an office/administrative area for an outside company, Everything Yogurt. Prior to use by Everything Yogurt, the office/administrative area was utilized by P&G.	Inspection of the first floor of the facility noted ceramic tile floors, brick walls and a drop panel ceiling (2' x 4' tiles). The first floor was noted to contain a large shower/bathroom facility. The second floor of Building 53 was constructed with linoleum floors, sheet rock walls and a drop panel ceiling (2 'x 4' tiles).
Building S-53/ Temporary Storage	This one-story 2,100 square foot building was built in 1926 and was utilized for storage of miscellaneous parts and equipment. No petroleum products or hazardous materials are reported to have been stored in this building.	Inspection of this building noted same to be constructed with a concrete floor and sheet metal walls and ceiling. Staining was noted on the concrete floor. However, the flooring was noted to be intact.
Building 54/ Deodorizer	This two-story 9,216 square foot structure was built in 1926 and was utilized in deodorizing operations for food oils. It should be noted that at the time of the May 2000 site reconnaissance, the building had only one floor. The building appeared to have undergone some demolition activities which removed the second floor of same.	The building was constructed with a concrete floor, brick walls and a concrete ceiling. Inspection of this building noted that the eastern wall of same had been removed. As such, the building was open to the outside environment. The concrete floor appeared to extend beyond the limit of the former eastern wall. It was not possible to determine if the concrete extension represented an additional structure or a storage or loading area. Visual reconnaissance of the building noted several concrete foundations, discolored areas and drains indicating the former presence of tanks, equipment, machinery, etc. However, no visual indications of discharges to exterior surfaces were observed.
Building 55/ Hardening	This two-story 17,444 square foot structure was built in 1926 and was utilized for oil hardening processes associated with the formulation of food oils.	The building was noted to be constructed with concrete floors, brick walls and concrete ceilings. Inspection of the northern portion of the first floor noted the presence of two tank foundations. In addition several tank foundations and cradles (supports) were noted in the eastern portion of the first floor. Several floor drains were noted to be present throughout the facility. According to P&G, all interior drains were/are connected to the sanitary sewer system or, in the case of drains that collected materials from process operations, connected to process collection systems. A concrete loading dock is located along the eastern exterior of this building.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 56/ Oil Refinery	This three-story 24,456 square foot structure was built in 1926. Operations in this building consisted of the refining of various types of oils to formulate consumer food quality oils.	Building 56 is constructed with concrete floors and ceilings and brick walls. Inspection of the first floor noted the presence of approximately nine, fifteen foot diameter, former tank locations/pads. These locations were noted to be filled with sand. In addition, supports for other various machinery and equipment was noted in this area. Inspection of the second floor of the facility noted four additional sand filled former tank location and machine supports. Inspection of the third floor of Building 56 noted openings in the underlying concrete floor which correspond to the locations of the former tanks located on the second floor.
Sixty Series Buildings		
Building 60/ Warehouse Building	This two-story 98,000 square foot structure (plus basement) was built in 1916 and was utilized for the warehousing and distribution of a variety of products.	Inspection of this building noted same to be constructed with a combination of concrete, wood and ceramic (bathrooms only) floors, brick and masonry walls and wooden ceilings. Several overhead loading dock doors located along the western wall provide access to the exterior loading/unloading areas. The northern portion of Building 60 is currently utilized by RPM Trucking for warehouse purposes. Cocoa beans, coffee and miscellaneous equipment were noted to be stored at the time of the site inspection. RPM Trucking also performs tasks associated with the rehabilitation of pallets. This tenant also occupies Buildings 67N, 67S and 80. Two large openings in the northern portion of the building floor were observed. These openings are to allow for the hoisting/lowering of products between the first and second floors of this building. Doorways were noted along the eastern and western walls of the second floor of Building 60. The eastern doorway provides access to a bridge which connects Building 60 to Building 66. The western doorway provides access to a bridge which connects Building 60 to the "forty series" buildings located on the western side of Western Avenue. These bridges were reportedly utilized for the transfer of finished products.
Building 60A/ Warehouse Building	This two-story 60,00 square foot structure was built in 1925 and was utilized for the warehousing and distribution of products.	This building is constructed with a combination of concrete and wood floors, brick walls and wooden ceilings. Inspection of the second floor of Building 60A noted a doorway along the eastern wall of same. This doorway provides access to a bridge which connects Building 60A to Building 64. This bridge was utilized for the transfer of finished products.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 60B/ Warehouse Building	This two-story 24,600 square foot structure (plus basement) was built in 1926 and was utilized for the warehousing and distribution of products.	This building is constructed with a combination of concrete and brick walls, concrete and wooden floors, and wooden ceilings. Several overhead loading dock doors are located along the western wall of the first floor of this building. These doors provide access to exterior loading/unloading areas
Building 64/ Warehouse Building	This two-story 59,200 square foot structure (plus basement) was built in 1934 and was utilized for the warehousing and distribution of products.	This building is constructed with concrete floors, brick walls and wooden ceilings. Inspection of the first floor of this building noted a former battery charging area which included raised concrete platforms and an overhead three ton crane. The crane was utilized to move the batteries around the charging area. Inspection of the concrete noted same to be stained and pitted in several areas. However, the pitting did not appear to be sufficient to compromise the integrity of the concrete flooring.
Building 65/ Warehouse Building	This two-story 36,000 square foot structure was built in 1934 and was utilized for the warehousing and distribution of products.	This building is constructed with concrete floors, brick walls and wooden ceilings. A large opening in the floor, formerly utilized for the lifting of equipment and materials between floors, is located in the central portion of the second floor
Building 66/ Warehouse Building	This two-story 40,000 square foot structure was built in 1934 and is reported to have been utilized for the warehousing of products.	This building is constructed with concrete floors, brick walls and wooden ceilings.
Building 67N/ Warehouse Building	This one-story 56,420 square foot structure was built in 1958 and is reported to have been utilized for warehousing or products.	This building is constructed with concrete floors, a combination of masonry and brick walls and metal deck ceilings. The building is currently occupied by RPM Trucking which utilizes same for the warehousing and distribution of cocoa beans, coffee beans and cases of marinated mushrooms. This building is not reported to be heated.
Building 67S/ Warehouse Building	This one-story 43,440 square foot structure was built in 1958 and was utilized for the warehousing of products.	This building is constructed with concrete floors, a combination of masonry and brick walls and metal deck ceilings. Eight overhead loading dock doors, which supply access to the exterior concrete loading dock area, are located along the southern exterior wall of this building. This building is currently occupied by RPM Trucking and includes a bulking station consisting of a metal frame hopper and concrete scale. Beans, stored in the hopper, are reported to be removed from the hopper, bagged and weighed. The scale is electronic and is situated directly on the underlying concrete floor. No pit is associated with the scale.
Seventy Series Buildings		
Building 70/ Citrus Office	Building 70 is a one- story 8,000 square foot structure built in 1959 and utilized for office/administration activities for Citrus Hill and Duncan Hines Bake Mix (DHBM) Division.	Inspection of this building was impeded by lack of lighting. The building appeared to be constructed with concrete floors, masonry walls and a concrete ceiling. Floor drains in the bathroom, locker room and shower areas are reported to be connected to the sanitary sewer system.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 70A/ DHBM Making	This one-story 1,220 square foot structure was built in approximately 1959 and was utilized for the blending and mixing the various dry ingredients used in the formulation of Duncan Hines Bake Mixes. The dry ingredients (i.e., sugar, flour, etc.) are reported to have been transferred to the building via a rail siding located along the southern side of this building. The ingredients were "blown" into the building and placed into large mixing vats.	This building is constructed with concrete floors, masonry walls and concrete ceilings. The building contains a mezzanine level which is reported to have been utilized to fill and monitor the blending vats. Several sealed overhead doorways were noted along the northern wall of this building. These doorways were formerly utilized to transfer the blended cake mixes into the adjacent building, Building 70B, for packaging. A large pad-mounted transformer unit as well as other pad-mounted electrical equipment was noted along the southwestern corner of this building. A concrete truck ramp is located along the southeastern corner of Building 70A. Tank saddles were noted along the western side of the ramp. No indications of staining were noted on or adjacent to the tank saddles.
Building 70B/ DHBM Packing	This two-story 14,140 square foot building was built in 1959 and was used for the packing of the cake mixes and the storage of cardboard packing materials.	Building 70B is constructed with a combination of concrete and vinyl tile flooring, masonry walls and a concrete ceiling. The eastern portion of this building was noted to consist of a single floor which included a hoist system. The system is reported to have been used to transfer packaging materials from the second floor storage area to the first floor packing area. Inspection of the second floor of the facility noted several floor drains and a mop well. These drains are reported to be connected to the sanitary sewer system servicing the subject site. Minor staining was noted on the concrete flooring in these areas. However, the flooring was noted to be intact.
Buildings 70C and 70D	These two building designations are combined into a single one-story warehouse structure reported to have been built in 1959. Building 70C occupies 14,271 square feet and 70D occupies 34,829 feet. These building are reported to have been utilized for warehousing purposes as well as the packaging of Citrus Hill orange juice (eastern portion of the warehouse area).	This building is constructed with concrete floors, masonry walls and a metal deck ceiling. Electrical equipment, a hot water heater and a transformer are located along the western wall of this area. Several trench drains are located in the eastern portion of this building. According to P&G, these trench drain systems formerly surrounded the packaging equipment associated with the packaging of Citrus Hill orange juice. These floor drains, as well as the remainder of the floor drains located in the facility, are either connected to the sanitary sewer system, or in the case of drains that collect liquids from process operations, are connected back into the process.
Building 70F/ DHBM Kitchen	This one-story structure was constructed in 1978 and occupies 644 square feet. According to a representative P&G, this building was utilized for the testing of the DHBM.	This area was constructed with a ceramic tile floor, masonry walls and a metal deck ceiling. Inspection of this building noted counter top areas along the eastern side of this area.
Building 70G/ DHBM Contractor Building	This two-story 1,804 square foot structure was constructed in 1978 and was utilized for the storage of compressors associated with the operations formerly conducted in Building 70A.	This building designation appears to correspond with an alcove located along the southern wall of Building 70A. Construction of this area proved similar to that noted in Building 70A.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 70I/ Personnel	This one-story 1,941 square foot structure was built in 1986. No information regarding the former usage of this building was provided by P&G.	Inspection of this area noted same to be divided into individual office areas constructed with sheet rock walls. The overall construction of this structure was noted to be similar to that noted in Building 70D.
Building 70J/ Citrus Shop	This one-story 2,880 square foot structure was built in 1988. P&G did not provide any information regarding the former operations conducted in this area.	Inspection of this area noted similar construction to Building 70D.
Building 72/ DHBM Loading Dock	This one-story 3,100 square foot loading dock structure is reported to have been built in 1962. Building 72 is not actually a building as it does not maintain any exterior walls. The north side of the structure is bounded by the southern wall of Building 70A. The southern side is open to allow for the loading and unloading of materials associated with the making of the Duncan Hines Bake Mixes.	The structure was constructed of concrete. No indications of staining were noted with regard to the concrete loading dock.
Building 74/ Warehouse Building	This one-story 103,400 square foot building was constructed in 1980 and is reported to have been utilized for the warehousing of various P&G manufactured (finished) products.	This building was noted to be constructed with a concrete floor, masonry walls and a metal deck ceiling. Three overhead doors, providing access to the adjacent warehouse building to the east (i.e., Building 75), are located along the eastern wall of this building. An elevated mezzanine area is located in the western portion of this building. In addition, a raised concrete pad with a masonry room is located immediately to the east of this mezzanine area. These areas are reported to have been associated with the packaging operation of the Citrus Hill orange juice conducted in the adjacent Buildings 70C and 70D. Inspection of these areas noted the presence of air chilling/handling equipment to be located on the second floor mezzanine area. This equipment appeared to have been utilized to supply cold air to the aforementioned masonry room. A large switch box/breaker box is located west of the masonry/cold room. Floor drains were noted to be present in a concrete diked area in the northeastern corner of the raised concrete area. The floor drains are reportedly tied to the sanitary system.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 75/ Warehouse Building	This one-story 103,400 square foot building was constructed in 1980 and is reported to have been utilized for the warehousing and distribution of the various P&G manufactured products.	This building is constructed with a concrete floor, masonry walls and a metal deck ceiling. Approximately twenty overhead loading dock doors are located along the eastern wall of this building. These doors provide access to the loading/unloading dock area located to the east of Building 75. In addition, three overhead doors are located along the western wall of this building and provide access to the adjacent warehouse building (i.e., Building 74). A transformer unit is mounted on a metal support bracket in the southwestern corner of this building. A masonry room is located in the northeastern corner of this building. According to P&G, this room was utilized as a climate control room in the Crisco food oils manufacturing process. A concrete sub-level is located in the southwestern corner of Building 75. Inspection of this area noted the presence of an electric hot water heater, an approximately 3,000-gallon AST and a sump and pump system servicing an adjacent bathroom facility. The AST is utilized to store hot water heated by a solar panel on the roof of the building.
Building 78/ Compressor Building	This one-story 384 square foot structure, was built in 1984 and was utilized to house a former air compressor.	Building 78 is constructed with a concrete floor, masonry walls and a metal deck ceiling. A large pad-mounted transformer unit is located along the northern exterior of this building. Electrical service from this transformer unit is reported to have been utilized to power the former compressor unit.
Building 79/ Office	This one-story 2,040 square foot building was constructed in 1981 and was utilized as a loading dock for incoming freight. The freight was formerly transferred to the "forty series" building by an elevated conveyor belt system which extended across Western Avenue from this location.	This building is constructed with vinyl tile floors (12"x 12" tiles), sheet rock walls and a drop panel ceiling (2 'x 2' tiles). Three former (currently sealed) overhead loading dock doors are located along the southern side of the building. The doors formerly provided access to a concrete loading dock area situated to the south of this building. This building is currently utilized as an office area for RPM Trucking, Inc.. This tenant also occupies Buildings 67N, 67S, 80 and the northern portion of the first floor of Building 60. Two additional office trailers were noted to the south of this building. These trailers are also utilized by RPM Trucking for administrative office areas.

Table 1
Summary of Site Buildings
Operable Unit 1 HHMT - Port Ivory Facility

Building Identification	Reported Information	Observations/Comments
Building 80/ Warehouse Building	This one-story 87,890 square foot structure was built in 1969 and was reported to have been utilized for a variety of warehousing activities.	This building is constructed with concrete floors, masonry walls and metal deck ceilings. Nine overhead loading dock door are located along the southern exterior wall of this building and supply access to the exterior concrete loading dock area. The building is currently occupied by RPM Trucking which utilizes same for the warehousing and distribution of imported items such as cocoa beans, coffee beans, marinated mushrooms, liquors and wines, candy, containers, etc. These items were noted to be stored on pallets placed on metal racks or directly on the underlying concrete floor. The building is not equipped with a heating system. A fenced maintenance area is located along the western side of this building. Visual inspection of this area noted various tools, equipment and parts associated with the maintenance of the forklifts utilized in this area. In addition, four five-gallon containers of hydraulic oil, and propane (empty and full cylinders), utilized to power the facility's forklifts were stored in a secured bin located along the exterior of the southwestern of this building.

NOTES:

(1) All facility buildings are reported to have been heated by steam fired heating units. Steam was provided to the individual buildings by the facility's boiler houses.

(2) Several of the facility buildings contain freight elevators. All of the facility elevators are reported to be cable operated and do not contain any hydraulic pistons. The cable operation system is reported to be located on the roofs of the respective buildings.

(3) Several floor drains and trench drain system were noted in several of the on-site buildings. According to P&G, all floor/trench drain systems are either connected into the sanitary sewer system servicing the subject site or direct collected materials back (recycled) into the process operations.

(4) All bathrooms are reported to be connected into the sanitary sewer system servicing the subject site. According to P&G, no septic systems or dry wells are currently or have ever been located on the subject site.

(5) The subject site buildings are to be serviced via sprinkler systems for fire protection. According to a representative of P&G, the fire suppression system is a "water-only" system. Water utilized in this system is stored in two reservoirs located adjacent to Building 19 and Building 30. The reservoirs are supplied with water via the New York City water supply system.

(6) The P&G representative who accompanied HMM on the site inspection was unable to provide any information with regard to the storage and/or usage of petroleum products and/or hazardous materials in subject site buildings.

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Phase II Environmental Assessment - Wood Yard, **McLaren Hart/Hart Environmental Engineering Corp., prepared for Owl Energy Resources, Inc., November 19, 1991**	**A 1 to 2 acre wood yard is reported to have been present at the site prior to the 1950s. Further, a water gas holder, four gas purifiers and a coke storage area are reported to have been located at the wood yard. The area is reported to contain coal tars and residues. This report describes an investigation of soil and groundwater at the former wood yard and an attempt to identify the presence of an underlying clay "liner/layer" at this portion of the site.**	**The investigation included the installation and sampling of four soil borings and the completion of three of the four borings as monitoring wells. Also, four borings were installed for geotechnical purposes. The soil borings did not identify the presence of a clay "liner" beneath the Wood Yard area.** **TPHC and BN compounds, mostly TICs, are reported to have been detected in one or more soil samples one from soil boring. Also, VO compounds and/or VO TICs, below regulatory criteria were detected in samples from this boring. The report references that the TPHC detected in soil may be from a leaking hydraulic lift. Di-n-butyl phthalate is reported to have been detected in all soil samples. *According to the report, this compound is often detected in soils high in organics* and therefore does not pose a threat. The investigation revealed the presence of wood as well as cinder fill. Some elevated readings were recorded on field instrumentation.** ***Analytical results from groundwater samples identify* TPHC and BN TICs in the sample from one well; the same location as the elevated soil results. A sheen was noted on water in this well and samples are reported to have revealed elevated concentrations of phenols.**	**The levels of contaminants detected in soil and groundwater were not regarded as an area of concern. Elevated field readings were attributed to the presence of marshlands and underlying peat. The report noted a potential reporting requirement with regard to TPHC. No additional actions are proposed with regard to soil and additional sampling is recommended to further evaluate phenols in groundwater.**
Final Report, Tax Block 1400, **Dames & Moore, January 24, 1992**	This report presents a summary of investigative activities performed to address nine AOCs identified on this parcel: **Area A West Tank Field (southwest of Building 16)**, Area B S&S Tank Field, **Area C Oleum Tank Field**, Area E S&S Fat Trap, **Area F1 Spent Nickel Catalyst**, Area F2 Waste Oil Drum Storage, **Area H Former Rosin Area, Area R Northwest Corner of Soap Manufacturing Area (suspected calcium carbonate fill area)**, and Area P Former Product Unloading Pit. This report also provides information pertaining to the placement of fill materials at Block 1400. **The by-products identified at this parcel include the following: spent zinc and nickel catalyst recovered from fat processing operations (hydrolyzer); spent carbonaceous filter material from glycerine purification; turpentine from recovery of resin from tree soap; coke ash from hydrogen making operations; waste oils from servicing vehicles, locomotives and equipment, and, kettle bottoms. The report also identifies that a site plan notes a "rosin storage area" at the northwest corner of the soap manufacturing area. *The area identified as the "rosin storage area" is noted to be* unpaved at the time of the investigation.** Waste oil is reported to have been used to lubricate rail switches on this parcel. There is some reference but no resolution to UST issues.	**Installed and sampled soil borings and wells to investigate the listed areas. The investigation is reported to have revealed the presence of fill material from 2 to 17 feet at areas on this Block 1400 portion of the site. A geophysical survey is reported to have been unsuccessful due to metal interference. A groundwater mound is noted along the northwest portion of this parcel in the area of GW-8, GW-14, CS1 and CS3. Groundwater flows radially off the mound. The mounding is attributed to the presence of a thick layer of low permeability calcium carbonate.**	**No specific conclusions are provided in report.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Final Report, Tax Block 1400, **Dames & Moore, January 24, 1992**	**Area A: ASTs containing caustics and vegetable oil were formerly located southwest of Building #16.**	**Installed and sampled soil borings and one well to evaluate this area. During drilling, indications of fat, oil, grease (FOG) and TPHC are noted to extend to the groundwater table. Analytical results confirm the presence of varying concentrations of FOG and TPHC in soil. pH was recorded at levels ranging from above 9 to almost 12. pH of the calcium carbonate material was recorded at 9.99 for all sampled intervals.**	**No specific conclusions are provided in report.**
	Area B: ASTs containing vegetable oils, tallow and tailings/soap bottoms from hydrolyzer were located south of hydrolyzer and east of west tank field. The tank field area was not equipped with a containment berm and surface runoff from this area flowed to unpaved areas including overflowing of a zipper drain located along the western boundary. An AST containing phenol alkane was formerly located southwest of the S&S tank field.	Installed and sampled 6 soil borings and one well to evaluate this area. Elevated levels of FOG and TPHC are reported to have been detected in all borings, extending to groundwater. A floating hydrocarbon layer is was noted at GW-14 and a sheen was noted with regard to GW-7. Zinc is reported to have been detected in soil samples. No calcium carbonate materials is reported to have been identified in borings from this area.	Report identifies a railroad siding and former oil tanks as potential sources of petroleum in soil. Catalyst material is identified as the likely source of the zinc.
	Area C: An AST used for oleum, waste sulfuric acid and acid wastewater was located northwest of Building #17. A former toluene tank (closed in place in December 1989) is reported to be located in the vicinity of Area C.	**Installed and sampled 2 soil borings and 1 well to evaluate this area. Calcium carbonate detected at this area. pH levels are reported to increase with depth, over 8 to over 12.**	**Conclude washwater did not impact area. pH levels are attributed to migration from upgradient sources.**
	Area E: A steel UST designed to collect and trap oil and grease present in wastewater stream is located southwest of the S&S Tank Field, near the phenol storage area. Historical information indicates elevated zinc concentrations in wastewater flowing to this trap.	Installed and sampled 3 borings and a well. Investigation indicates that vegetable oil is visibly present in the saturated zone and that FOG and TPHC were detected at varying concentrations in soil samples. Nickel and zinc were detected above background concentrations in soil samples. pH is reported to have been recorded at slightly acidic levels in soil samples.	Conclude that FOG, TPHC and metals are likely to be associated with trap usage. No conclusion is provided for slightly acidic pH.
	Area F1: Open drums containing spent nickel catalyst and an unknown liquid were noted northwest of Building #16. The asphalt surface in this area was noted to be cracked, stained and deteriorated. A paint shed is reported to have been located west of the drum storage pad.	**Miscellaneous fill including calcium carbonate fill is reported to have been identified at this area. pH is recorded between 9 and slightly over 12. FOG and TPHC are reported to have been detected in samples from unsaturated zone. PCBs are reported to have been detected in at least one soil sample.**	**FOG, TPHC, pH attributed to former activities including caustics/alkaline zones found in the calcium carbonate. Recommend excavation to address PCBs.**
	Area F2: Open drums were noted to be present on an asphalt storage pad located east of product unloading terminal and south of fatty acid storage tanks. The asphalt surface in this area was noted to be cracked, stained and deteriorated.	Investigation revealed black staining of soil and elevated readings were recorded during field screening. FOG and TPHC are reported to have been detected in soil samples from the unsaturated zone.	The report concludes that waste oil storage may have impacted this area.
	Area H and Area R (Area H/R): Site plans reportedly identified an area at the northeast corner of the main soap manufacturing area as a rosin storage area. Rosin was produced through the separation of resin from turpentine. A surface water body was originally located at this area and filled with calcium carbonate.	**Calcium carbonate material was identified ranging in thickness from 15.5 to 17 feet. Elevated pH levels were recorded in samples and were noted to increase with depth. No turpentine related compounds are reported to have been detected and nickel concentrations are reported to be consistent with background.**	**Conclude that the highly alkaline zones were the cause of the elevated pH.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Final Report, Tax Block 1400, **Dames & Moore, January 24, 1992**	Area P: Pits, used for unloading raw materials from tankers and rail cars, are reported to have been located in alleyways next to the main soap building. The pits are reported to have been closed.	FOG is reported to have been detected and slightly elevated pH levels (approximately 9) recorded in soil samples.	Conclude that the levels of FOG and pH may be from former transfer operations conducted at this area.
	Groundwater: Groundwater was identified as an issue with regard to the southern portion of Block 1400.	**Installed and sampled monitoring wells at various locations on Block 1400. FOG and TPHC reported to have been detected in samples from Areas A**, B, **C**, E, **F1**, F2 **& H/R.** Free product is reported to have been noted at GW-14 and a sheen was noted on the water surface of GW-10, 13, 14, 17 and **CS-1.** An elevated pH level was recorded in the sample from CS-1. Lead, nickel and zinc were reported to have been detected in samples from certain wells.	Recommend a groundwater treatment system including pH adjustment, oil/water separation to remove free product, clarification and settling to remove solids and precipitates, and liquid phase carbon adsorption to reduce PHC levels.
Final Report Soil Environmental Investigation, Tax Block 1309, Dames & Moore, April 20, 1992	This report presents a summary of investigative activities performed to address two AOCs identified on this parcel: Area D Oil Pump House (Bldg S-29) and Area I Fly Ash Storage Area. This report also identifies a 1988 Memorandum of Understanding (MOU) which was executed between Procter & Gamble and the NYSDEC regarding the discharge from the pipe rupture and the referenced "oil lens". This report also provides historical information including information pertaining to the placement of fill materials at Block 1309, Lot 1.	Installed and sampled soil borings installed at Area D and test pits at Area I. Analytical results are compared to "background levels". Groundwater encountered from 2.2 to 9 ft bsg. Generally the groundwater noted to exist in fill material and silt layers.	No specific conclusions provided in report.
	Area D is located south of two fuel oil ASTs in dock area. The ASTs are located in a diked area described as being lined with a synthetic geotextile material. Area D is in the vicinity of previously performed investigation associated with a leak in fuel oil transfer piping at the eastern portion of dock. This report references a BB&L Report describing the efforts undertaken to address the fuel oil rupture. The pipe is reported to have been repaired and the contamination associated with the pipe rupture to have been addressed.	Area D: Samples were analyzed for TPHC, FOG, nickel and pH. Nickel and pH were included in the analyses due to information indicating that the pump house area was filled with diatomaceious earth from vegetable oil operations at the site. Results indicated varying concentrations of FOG and TPHC in both unsaturated and saturated zone. Nickel detected in samples. pH recorded at the 8 to 9 range.	Report noted higher concentrations of TPHC and FOG present in upper two feet. Nickel referenced as being at concentrations below levels of concern.
	Area I is located at the northern portion of this parcel and is the location of a temporary fly ash stockpile area. Investigation initiated in response to elevated concentrations of lead (exceeded extraction procedure toxicity) in samples from fly ash. Assert that the elevated lead is from demolition debris containing lead based paint.	Test pits were installed from surface to 3 ft bsg. Fill material (silt, sand mixed with ash, gravel, bricks overlying calcium carbonate) was noted in test pits from this area. Samples from the test pits were analyzed for pH, zinc and lead. pH was recorded at levels of 9 to 10 in fill samples. Zinc and lead also were detected in soil samples.	Zinc and lead referenced as being at concentrations below levels of concern. Elevated pH attributed to fill, including calcium carbonate.

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338S, Dames & Moore, April 20, 1992	This report presents a summary of investigative activities performed to address 6 AOCs identified on the southern portion of the Block 1338 parcel: Area G Former Vegetable Oil Tank Farm, Area K Fill Area and Coal Storage, Area M Area East of Edible Oils Buildings #52-56, Area N Former Vegetable Oil Fat Trap, Area P1 Former Product Unloading Pit and Area Q1 Existing Scale Pit. The report also provides historical information including information pertaining to the placement of fill materials at the southern portion of Block 1338 and identifies that spent diatomaceous earth from edible oil refining and spent nickel catalyst from edible oils are the by-products of the "food area". The report references a geophysical survey performed by Blackhawk Geosciences which identified USTs at Area M, specifically east of Buildings #53/54 and east of Building #56.	Soil and groundwater investigation consisting of the installation and sampling of soil borings and wells is reported to have been performed at each of these AOCs. Based on the groundwater investigation performed at the southern portion of Block 1338, groundwater at this portion of the site is reported to exist at depths ranging from 2.2 to 9 feet bsg and to flow toward Bridge Creek	No specific conclusions provided in report.
	Area G: ASTs containing vegetable oil and caustics were formerly located at this area. Nickel catalyst was stored in this area after tanks were dismantled. An investigation is reported to have been undertaken due to cracking and expansion joints in the concrete pad at this area.	Investigative efforts did not reveal any free phase vegetable oil but did identify black staining of soil in this area. Nickel, lead and zinc are reported to have been detected below background levels. pH was recorded at levels of 9 to 10 in surface and subsurface samples.	No specific conclusions provided in report.
	Area K: Fill is reported to have been placed in the southeastern portion of this parcel in the area of Buildings #74 and #75. In addition, this area is reported to have been used for coal storage. Also, an unknown black material was found during the foundation investigation for Buildings #74 and #75.	Installed and sampled soil borings and wells.	No specific conclusions provided in report.
	Area M: ASTs containing vegetable oil and caustics were present at the area east and southeast of Buildings #52 and #56. Also, unloading pits and railroad sidings are reported to have been present at this area. Fill is reported to have been placed at this area. UST(s) may also have been present in this area.	Installed and sampled 5 soil borings and 1 well at this area. Analytical results revealed the presence of low levels of TPHC and FOG in soil samples. Nickel is not reported to have been detected at an elevated concentration and pH was recorded at levels ranging from 8 to above 10. The report does not identify the location(s) of any UST(s) at this area.	No specific conclusions provided in report.
	Area N: A vegetable oil fat trap, "super fat trap", is located south of Building #56. An oil/water separator system including a UST, now filled with coarse aggregate, also is located in this area.	Installed and sampled soil borings which revealed the presence of black staining of soil. FOG was detected in soil samples and pH was recorded at relatively neutral levels. Nickel was detected below background.	No specific conclusions provided in report.
	Area P1 - Concrete pits were formerly located at the bottom of the rail siding unloading area, east of the Edible Oils Building. The pits were filled in and capped with asphalt/concrete.	Area P1: Low concentrations of TPHC and FOG were detected in soil samples. pH was recorded at levels ranging from almost 7 to slightly over 9.	No specific conclusions provided in report.
	Area O: This area is an existing scale pit and includes equipment for weighing trailers and rail cars at the site. Construction records indicate that the pit is constructed of concrete and is 10 feet deep.	Area O: TPHC and FOG were detected in soil samples and pH was generally recorded in the 7 to slightly above 8 range.	No specific conclusions provided in report.

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338S, Dames & Moore, April 20, 1992	Groundwater was considered of concern with regard to the southern portion of Block 1338.	Groundwater: Installed and sampled 5 wells at the southern portion of Block 1338. Samples were analyzed for TPHC, FOG, zinc, lead, nickel, and pH. Report identifies isolated incidences of elevated TPHC concentrations and notes that higher concentrations are away from the production areas of this portion of Block 1338. Elevated concentration of lead and zinc.	States that the presence of TPHC in wells upgradient of production areas suggests that contaminants may be from off -site sources. State that TPHC has had a limited impact on groundwater. Overall Remedial Approach included in report states that the tar-like material with elevated levels of TPHC may be impacting groundwater.
Final Report Soil and Groundwater Environmental Investigation, Tax Block 1338N, Dames & Moore, April 20, 1992	This report presents investigative actions performed at two AOCs: Area L Filled Area (southeast of Building #64) and Area Q2 Former Scale Pit located at the northern portion of Block 1338. The report indicates that paints and solvents were likely used in refurbishing operations at an old copper shop. Recent operations are identified as warehousing in Buildings #80, #60, #67N and #67S.	Investigation included the installation and sampling of soil borings and wells. Also performed a geophysical survey to identify USTs. The survey is not successful due to metallic interference from railroad tracks, metal piping, etc. Groundwater at the portion of the site occurs at 5.5-8.5 feet bsg and primarily in miscellaneous fill. Groundwater flow is reported to be to the southwest.	No remedial action is proposed to address either AOC or the northern portion of Block 1338.
	Area L: A sludge pond is reported to have been located south of Building #67 and southeast of Building #64. The report indicated that investigation was necessary to evaluate the type of materials utilized to fill the sludge pond. Also, investigation efforts were undertaken to evaluate impacts from a copper shop.	Installed and sampled two soil borings and a monitoring well. Some petroleum staining of soil is noted in one boring. The report references the recording of elevated pH levels in soil samples.	The report concludes that the investigation did not identify impacts to the area from former uses and did not support that the areas had been used as a sludge pond. Also concludes that the elevated pH may be associated with caustics.
	Area Q2: A truck scale was previously operated at the area west of Building #60. The scale is reported to be constructed of concrete.	Results do not identify the presence of TPHC or FOG and pH was recorded in the 6 to 8 range.	No remedial action is proposed based on analytical results.
	Groundwater was considered an area of concern with regard to the northern portion of Block 1338.	Wells were installed and sampled. TPHC and FOG were not detected at elevated concentrations in groundwater. Nickel, lead and zinc were detected in one site monitoring well (GW-5) from this area.	No remedial action proposed for groundwater.

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Results of Sampling for Toluene and Metals, **Recon Systems, Inc., December 11, 1992**	The report presents and summarizes sampling performed to delineate toluene and TPHC contamination in groundwater and to supplement a previously completed feasibility study.	In December 1992 samples were collected from 10 wells: GW-7, GW-10, GW-11R, GW-12, GW-14, GW-17, RS-1, CS-3, Code Well and MW-5 (across Richmond Terrace). Samples from 5 wells (GW-10, GW-11R, RS-1, Code Well and MW-5) were analyzed for VO. Field measurements (pH, temperature and conductivity) were recorded for all 10 wells and dissolved oxygen was recorded for five wells.	This report concludes that this round of sampling confirms the results of previous sampling rounds and states that the presence of toluene will be addressed as part of the groundwater treatability study. No further action is proposed for metals as concentrations are below NYC sewer discharge levels.
	VO analysis of groundwater samples.	Toluene was detected in samples from 3 of the well samples tested for VO compounds.	The report states that the December 1992 sampling round indicates that toluene contamination is centered at GW-11R.
	Metals analysis of groundwater samples.	Samples from all 10 wells were analyzed for cadmium, chromium, copper, cyanide, lead, mercury, nickel and zinc. Low concentrations of copper and zinc are reported to have been detected in all wells. Chromium and nickel are reported to have been detected in some of the wells.	All concentrations of metals are reported to have been below NYC sewer discharge levels.
	pH assessment of groundwater samples.	The level of pH is reported to have been outside the acceptable federal drinking water range of 6.5-8.5 in four wells: Code Well, RS-1, CS-3 and GW-14.	The results are reported to confirm previous sampling rounds with regard to pH.
	TPHC analysis of groundwater samples.	Samples from two wells, GW-12 and GW-17 were analyzed for TPHC. TPHC was detected in the sample from GW-12 and was not detected in the sample from GW-17.	The level and extent of the TPHC is reported to be consistent with results of previous investigations.
		(NOTE): Insufficient information was made available to identify the locations on former locations of all above listed wells. Generally, wells are/were located on the northern portion of Operable Unit 1, northwestern portion of Operable Unit 2 and southwestern portion of Operable Unit 4.	

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
UST Storage Tank Removal and Site Assessment Report, **Recon Systems, Inc., February 19, 1993 (Draft Version)**	This report provides a summary of removal efforts for nine USTs. The report also includes an Appendix which consists of information associated with five of the nine tank removals performed by CODE Environmental. The CODE report is listed as a separate report in this table. The Recon report also includes a letter from Recon to the NYSDEC informing them of the intended removal of three tanks (one 8,000 gallon tank at Building #20 and two 10,000 gallon tanks at Building #56) which had never been included on the tank registration for the facility. These tanks are reported to have been identified through a review of historical site plans. It appears likely that these tanks identified in the letter were removed as part of the closure effort described in this report. It should be noted that the two 10,000 gallon tanks identified in the letter to NYSDEC were the 12,500 gallons described in this report. According to the report a representative of the NYSDEC Water Program witnessed the closure efforts for all tanks.	The following USTs are reported to have been closed: one 8,000 gallon No. 6 oil UST at Building #20; two 8,000 gallon No. 6 oil USTs and one 8,000 gallon No. 2 oil UST at Building #56; **one 1,000 gallon diesel fuel UST at Building #1B (Excavation A);** one 2,000 gallon unleaded gas UST at Building #12 (Excavation B); one 3,000 gallon diesel UST at Building #32 (Excavation C); and, one 12,500 gallon No. 6 oil UST and one 12,500 gallon No. 2 oil UST at Building #32A (Excavation D). The closure included removal of tanks, removal of soil (based on field screening), the collection and analysis of post-excavation samples and the restoration of each tank area via the placement of clean fill. Some dewatering is reported to have been performed and resultant materials collected and transported from the site for disposal at an appropriate facility.	**The report states that all accessible contaminated soil was removed from tank areas. No exceedences are reported with regard to VO compounds and only a few exceedences are reported with regard to CPAH compounds.**
	Removal of one 8,000 gallon UST containing No. 6 oil from the Building #20 Area.	Building #20 Excavation: A 8,000 gallon UST formerly containing No. 6 oil located in a concrete vault was removed. Based on the presence of stained soil and free product around the supply line, 200 tons of soil were removed from the tank area. Soil was excavated to groundwater but due to the proximity of the building, a portion of the vault and some contaminated soil was left in place. The matter was assigned NYSDEC Number 920-3451. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15. Analytical results revealed the presence of CPAH compounds in excess of NYSDEC standards in three of the four samples.	No additional actions were recommended for this area.
	Removal of two 8,000 gallon UST containing No. 6 oil and one 8,000 gallon tank containing No. 2 oil from the Building #56 Area.	Building #56 Excavation: Two 8,000 gallon USTs containing No. 6 oil and one 8,000 gallon UST containing No. 2 oil were removed. Based on the presence of stained soil and oil sheen on the groundwater, 325 tons of soil were removed from the tank area. Due to the presence of electric lines, some contaminated soil was left in place. The matter was assigned NYSDEC Number 920-3754. Six post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15. Analytical results from the sample collected below the electric line revealed the presence of CPAH compounds in excess of NYSDEC standards. BN compounds were either not detected or were detected below cleanup standards in the other samples.	No additional actions were recommended for this area.
	Removal of one 1,000 gallon UST containing diesel fuel from the Building #1B Area.	**Building #1B Excavation: A 1,000 gallon UST containing diesel fuel was removed. Contaminated soil was encountered during the removal effort and approximately 50 tons of soil is reported to have been removed from the tank area. The matter was assigned NYSDEC Number 920-3697. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. Analytical results revealed the presence of CPAH compounds in excess of NYSDEC standards in two of the four samples.**	**No additional actions were recommended for this area.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - UST Storage Tank Removal and Site Assessment Report, Recon Systems, Inc., February 19, 1993 (Draft Version)	Removal of one 2,000 gallon UST containing unleaded gas from the Building #12 Area.	Building #12 Excavation: A 2,000 gallon UST containing unleaded gasoline was removed. No contaminated soil or holes were observed during the removal. Four post-excavation samples were collected (three from the excavation and one from along the supply line) and analyzed for VO. The concentrations are reported to have been below cleanup standards.	No additional actions were recommended for this area.
	Removal of one 3,000 gallon UST containing diesel fuel from the Building #32 Area.	Building #32 Excavation: A 3,000 gallon UST enclosed in a vault was removed and approximately 50 tons of soil were removed from the tank area. The matter was assigned NYSDEC Number 920-3697 (same number as Building 1 Excavation). The excavation was extended to groundwater and is reported to have been limited by the presence of an electric line along the eastern portion of the tank area. Two post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. No targeted BN or VO compounds were detected. Low concentrations of VO TICs were detected.	No additional actions were recommended for this area.
	Removal of one 12,500 gallon UST containing No. 6 oil and one 12,500 gallon UST containing No. 2 oil from the Building #32A Area.	Building #32A Excavation: Two 12,500 gallon USTs were removed and approximately 75 tons of soil were removed from the area surrounding the tank. The matter was assigned NYSDEC Number 920-4269. The excavation was extended to groundwater and is reported to have been limited by the presence of buildings on three sides and an electric line. All accessible contaminated soil is reported to have been removed. Four post-excavation samples were collected from the interval immediately above groundwater and analyzed for BN+15 and VO+15. No targeted BN compounds were detected. Low concentrations of target VO compounds, below regulatory levels, were detected in one sample.	No additional actions were recommended for this area.

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
***Site Assessment Summary Report Closure of Underground Storage Tank Systems,* CODE Environmental Services, September 1992 (included in Appendix 1 of Recon UST Report, dated February 19, 1993)**	This report provides a summary of the removal efforts undertaken for 5 USTs: **one 1,000 gallon UST formerly used to store diesel oil;** one 2,000 gallon UST storing gasoline; one 3,000 gallon UST containing diesel oil; one 12,500 gallon UST containing fuel oil; and one 12,500 gallon UST containing fuel oil. This report references a different sampling regime than described in the February 1993 Recon report. The report identifies a closure approval dated June 22, 1992. This report is provided as an appendix to the February 1993 Recon report.	Tanks and impacted soil, if any, were removed from five site locations in June/July 1992. **One 1,000 gallon steel tank formerly used to store diesel fuel was removed. Approximately 160-170 gallons of diesel fuel and sludge present in the vault encasing the UST were removed and drummed for disposal. Samples are reported to have been collected from the sides and bottom of the excavation and analyzed for TPHC.** One 2,000 gallon steel tank located at Building #12 and used to store gasoline was removed. The tank was encased in concrete with concrete and soil overlying same. Samples are reported to have been collected from the sides and bottom of the excavation and analyzed for TPHC and BTEX. The NYSDEC ordered the excavation backfilled in July 1992. One 3,000 gallon steel tank located at Building #32 and used to store diesel fuel was removed. During excavation activities, it was determined that a leak from the feed lines had impacted surrounding soil. The NYSDEC was notified (920-3697) of the discharge and the excavation was backfilled at the direction of the NYSDEC No reference to sampling is included in the discussion. Two 12,500 gallon steel tanks, one used to store No. 2 fuel oil and one used to store No. 6 oil, were removed. The tanks were encased as well as being horizontally cross-braced with large steel I beams. The No. 6 oil tank was grouted and embedded in the building abutment.	No conclusions were provided in the report.
***Area F Soil Remediation Report,* Recon Systems, Inc., March 16, 1993**	**This report describes soil excavation and sampling performed to address previously delineated PCB contamination in soil at Area F. The report states that Area F was first identified as an area of concern during a SI performed by Dames & Moore and subsequently the extent of the PCB contamination was delineated through a soil boring investigation performed by Recon in 1992. A report documenting the delineation activities is reported to have been prepared and submitted to P&G in June 1992.**	**Excavation activities were performed in February 1993. The excavation boundaries are reported to have been based upon the results of a soil boring investigation performed in 1992 and to have been centered about sample FB-3 which reported the highest PCB concentration of 150 ppm. The excavation was extended to a depth of approximately 3 feet bsg. Approximately 150 cubic yards (221 tons) of soil was excavated and nine post-excavation samples were collected from the resultant excavation area. PCBs were either not detected or were detected below the minimum detection limit in 5 samples. Detectable levels of Aroclor-1254 were identified in the remaining four samples with the highest concentration recorded at 0.49 ppm, below the NYSDEC standard for PCBs of 1 ppm.**	**No further action was proposed for Area F.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Site Assessment, Soils Delineation and Impact to Groundwater in Area K at the Port Ivory Facility, Recon Systems, Inc., October 15, 1993	Report describes a groundwater investigation undertaken to determine if groundwater in monitoring wells (GW-16 and GW-1) near Area K had been impacted by industrial activities. The report states that soil investigations performed by Dames & Moore and Recon identified the presence of TPHC, VO compounds and BN compounds in soil samples from Area K. This report references a November 1992 report by Recon *Results of Soil Investigation in Areas F and K.* This report was not included in the materials provided for HMM's review. However, the October 1993 report states that the November 1992 report provides a summary of delineation efforts at Area K. With regard to the delineation efforts at Area K, Recon is reported to have installed 54 test pits, performed field screening and collected and analyzed 17 soil samples. The delineation effort reportedly revealed the presence of "elevated" levels of TPHC in soil samples collected from areas exhibiting a black tar-like substance. The October 1993 report reiterated the conclusion of the 1992 report and stated that the noted hydrocarbons were likely to be immobile due to their high viscosity but indicated that a groundwater investigation was necessary to confirm this conclusion.	In December 1992, Recon obtained samples from wells GW-16 and GW-1. Samples were analyzed for PP+40 including cyanides and phenols. Analytical results are reported to have been below NYSDEC action levels except for cyanides, 2(1,1-dimethyl)phenol, arsenic, chromium, copper, lead and zinc. The levels of the above listed contaminants are reported to have been within one order of magnitude of corresponding NYSDEC action levels. To confirm results, the wells were re-sampled in March 1993 for cyanide, arsenic, chromium, copper, lead and zinc. Analytical results revealed similar levels of the noted contaminants.	The report asserted that residential exposure from the subsurface contamination would be minimal so long as the soil was not disturbed. Also, stated that soil bound petroleum hydrocarbons have not impacted groundwater at this portion of the site. Further, states that the metals in groundwater may be from fill rather than industrial activities. No further action is proposed for groundwater since it is not used for potable purposes.
***Environmental Site Assessment Summary Report of Tax Block 1400,* Recon Environmental Group, October 18, 1994**	**According to this report, environmental due diligence studies were performed to characterize environmental conditions of this parcel and that all issues have been addressed at this parcel. The report states that P&G has completed several projects to eliminate site contamination and that the one remaining active project is a groundwater remediation project which is described in this report. The report indicates that the proposed groundwater recovery system would induce a constant flow across the site thereby mobilizing compounds that are adsorbed to soil. These mobilized compounds can be recovered and treated thereby remediating soil.**	The previously identified concerns and response actions, as presented and described in this report, are as follows: **Bridge Creek Calcium Deposits;** Former Raw Product and By-product AST Areas; Wastewater Treatment; **Drum Storage; Former Rosin Storage Area;** Representative Railroad Switch and Equipment Areas; Product Unloading Areas; **Closure of UST Systems; Wood Yard;** Building 20; and **Groundwater Sampling and Analysis.**	Groundwater remediation is the only proposed action.
	Bridge Creek Calcium Deposits	**Two investigations were performed to determine the sources and extent of the white precipitate in Bridge Creek. Studies involved sediment and groundwater sampling and analysis. Results of both studies revealed high pH levels and the conclusion was that the material was calcium carbonate.**	**This report states that the high pH will be addressed through the proposed groundwater remediation program.**
	Former Raw Product and By-product AST Areas	**Three AST Areas (Areas A, B & C) were investigated by Dames & Moore in 1992. Each area is reported to have been investigated with soil borings and at least one monitoring well. Analytical results from soil samples are reported to have indicated levels of FOG, TPHC, pH and zinc. Groundwater results are reported to have indicated elevated levels of FOG, TPHC, pH, zinc and lead. All ASTs are reported to have been removed. This report also comments that a UST used to hold toluene near Area C was closed in place and filled with concrete in 1989.**	**The report states that elevated concentrations of contaminants in groundwater will be addressed through the proposed groundwater remediation program.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Environmental Site Assessment Summary Report of Tax Block 1400, **Recon Environmental Group, October 18, 1994**	Wastewater Treatment Drum Storage	The S&S Fat Trap (Area E) handled wastewater from the hydrolyzer building. Soil borings and a well were installed at this area. Analytical results revealed the presence of elevated concentrations of FOG, TPHC, nickel and zinc.	The report states that elevated concentrations of contaminants in groundwater will be addressed through the proposed groundwater remediation program.
	Drum Storage	**Area F1 (Spent Nickel Catalyze Drum Storage Area)** and Area F2 (Waste Oil Drum Storage Area) were evaluated through the installation and sampling of soil borings and wells. **Analytical results from Area F1 revealed the presence of elevated levels of pH, TPHC, FOG, zinc and PCBs.** Analytical results from Area F2 revealed elevated levels of FOG and TPHC. **Additional sampling was performed to delineate the extent of the PCBs detected in soil at Area F1. Subsequently, soil excavation was performed to address the PCBs.**	**PCB contaminated soil was removed and no further action is necessary based on post-excavation sampling.**
	Former Rosin Storage Area	***This area, Area H, was investigated through the installation and sampling of soil borings and a well. Elevated pH is reported to have been recorded in soil and groundwater.***	**This report states that the high pH will be addressed through the proposed groundwater remediation program.**
	Representative Railroad Switch and Equipment Areas	***Representative railroad switch, tie and equipment (Area O) is reported to have been sampled by Dames & Moore. Reportedly, the investigation did not identify any negative impact associated with the railroad equipment.*** **The specific sample location was not identified.**	***No actions are proposed for railroad equipment on this parcel.***
	Product Unloading Areas	Concrete lined pits which have been filled in and capped with asphalt or concrete were formerly used for unloading raw product from tankers and rail cars. These pits were evaluated through the collection of soil samples. Analytical results indicated elevated levels of FOG and pH.	Conclude that induced groundwater flow from the groundwater treatment system will remediate these soils.
	Closure of UST Systems	**The report states that Recon and CODE supervised and documented the decommissioning of the following USTs: 1,000 gallon diesel (B1B),** 2,000 gallon gasoline (B12), 3,000 gallon diesel (B32), 12,500 gallon #2 (353) 12,500 gallon #6 (354) and a 8,000 gallon #6 (Building #20). **Impacted soil is reported to have been removed from the former B1B,** B32, 353, and 354 and some impacted soil is reported to have been left in place adjacent to Buildings #20, #32, #32A and #56 due to the presence of buildings and/or utilities.	**Conclude that no further action is necessary given that the source(s) and the majority of the contaminated soil was removed.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Continued - Environmental Site Assessment Summary Report of Tax Block 1400, **Recon Environmental Group, October 18, 1994**	**Wood Yard**	**Historical maps are reported to identify a 1 to 2 acre wood yard which had contained a coal gasification raw material storage area prior to the 1950s. This is reported to be discussed in a 1991 McLaren Hart report which was not provided to HMM during the document review. The area is reported to have been investigated to determine if any coal tar residue had impacted soil or groundwater. The investigation revealed elevated levels of TPHC, VO and BN in soil and TPHC, BN and phenols in groundwater.**	**Groundwater quality will be addressed in the proposed groundwater remediation program.**
	Building #20	Building 20 is reported to have been utilized as a locomotive repair shop. Analysis of samples from the stained soil floor indicated elevated levels of TPHC, VO, BN, metals and low levels of PCBs. A McLaren Hart report (1992) is reported to have concluded that the sampling results did not contain any contaminants above cleanup guidance values or that would pose a threat to human health. The 1992 McLaren Hart report was not provided to HMM during the document review.	No actions were proposed for this area.
	Groundwater Sampling and Analysis	**Floating product is reported to have been observed on the water surface of wells on Block 1400 and elevated levels of pH are reported to have been recorded with regard to groundwater samples. Reportedly, Dames & Moore and McLaren Hart recommended a groundwater investigation and remediation program (free-phase product removal and pH neutralization) and, Recon performed an investigation which included testing to delineate the high pH, toluene and product plumes on this parcel and a pump test to evaluate hydraulic parameters for use in a preliminary design.**	**Conclude that groundwater remediation (coalescing oil/water separator, air stripper and acid addition to address TPHC, toluene and high pH) is warranted.**
	Groundwater Contamination	**Groundwater remediation: This report states that Recon was going to develop a preliminary treatment design to be utilized in permit negotiations with New York City. The proposed design scheme was to include 10 recovery wells pumping water to 3 input wells in the treatment system. Water from three wells contaminated with TPHC was to be pumped to an oil/water separator and water from the two wells exhibiting elevated levels of toluene was to be pump to an equalization tank. The effluent from the oil/water separator and the air stripper was to be mixed, in an equalization tank, with water from the wells from the area with high pH. From the equalization tank, the water was to be pumped to an existing pH control system. An inline static mixer was to be added along with an acid addition system as the primary pH control and the existing pH control system was to be used as a backup. It was proposed to discharge the treated effluent to the sewer.**	**Report concludes that groundwater remediation is needed to address PHC, toluene and pH.**

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Landfill Closure Construction Certification Report, Levine-Fricke-Recon (LFR), July 18, 1997	Documents the field procedures implemented to achieve physical closure of the P&G landfill in accordance with 6 NYCRR Part 360 and the landfill closure plan dated January 1997. This report also includes permits, correspondence, disposal documentation and cover material certification associated with the landfill closure. The report states that P&G previously demonstrated the non-hazardous condition of the landfill and, as allowed on a case-by-case basis, P&G had demonstrated that specific landfill closure requirements in Section 360-2.15 Landfill Closure and Post Closure Criteria were not applicable. Therefore, NYSDEC is reported to have addressed the closure according to Section 360-2.14 Industrial/Commercial Waste Monofills which allows for closure requirements to be modified based on pollution potential of waste.	The approved closure activities included site clearing to remove surface debris, brush clearing, placement of one foot of cover and the establishment of vegetation. Materials removed from the landfill area included the following: scrap metal, tires, telephone poles, railroad ties, vegetative debris and one box of sharps.	No additional actions are proposed for the landfill with the exception of the post-closure groundwater monitoring and maintenance.
Landfill Cover Maintenance Manual and Groundwater Monitoring Plan, LFR, April 14, 1998	Describes maintenance and groundwater monitoring for closure of the C&D Landfill located on Block 1309. This report provides maps which depict the landfill area, the locations of 7 wells and groundwater contours.	No investigative actions are included in this report. The report sets forth a five year sampling and maintenance program including all 7 monitoring wells (MW-1,2,3,4,5,6 and DW-1) located within the landfill. The proposed maintenance plan includes a semi-annual inspection to ensure the integrity of soil cover and vegetation.	No conclusions are provided in this report.
Landfill Closure Plan, LFR, April 14, 1998	This report documents the closure of the landfill at the Port Ivory facility in accordance with NYCRR Part 360. The report states previous investigation(s) revealed that soil and groundwater are free of significant contamination and therefore do not pose a threat to human health or the environment.	No activities performed in conjunction with this report.	Closure will include a deed restriction

Table 2
Historical Environmental Reports and Information
Operable Unit 1 HHMT - Port Ivory Facility[1]

Report Identification	Report Topic Area(s) Of Concern	Description of Activities and Analytical Results(2)	Report Conclusions
Update on the Report on the Recommended Treatment System for Groundwater Contaminated with NAPL, Toluene and High pH, Recon Systems, Inc. March 28, 1995 *Amendment to Remove Economic Information*, May 13, 1999	The report presents updated information pertaining to the proposed treatment system for groundwater contaminated with NAPL, toluene and high pH.	The report does not include any additional testing activities. Rather, the report provides an updated design based on data generated since issuance of previous design report in 1993. The changes to the design system include fewer recovery wells due to a reported NAPL dissipation (one area of concern remaining) and diminished extent of the high pH area as well as increased water hardness.	The report concludes that recent sampling results necessitate revision to the previously described treatment system. The revised design calls for fewer recovery wells, elimination of the oil/water separator , addition of a sludge thickening system (if needed due to recent high hardness measurements) and a scaled down stripper system. Also, economic information is referenced as having been removed from this report.
Investigation of Calcium Deposits, Blasland, Bouck & Lee, September 1999	According to this report an area on the western side of the site, along Bridge Creek, was formerly occupied by calcium carbonate drying beds. In addition, several ASTs containing caustic materials were located approximately 250 feet east of Outfall G. White precipitate is reported to have been noticed several times along the banks. In response to the noted precipitate, P&G is reported to have initiated a pH level monitoring program. The purpose of this investigation was to identify and map the extent of the precipitate occurrences in Bridge Creek and attempt to determine the source area of the precipitate.	The investigation/study included the following: collection and analysis of sediment samples from the bed of Bridge Creek; collection of water samples from selected outfalls that intermittently discharge to the creek; installation and sampling of 7 wells; water table measurements hydraulic conductivity testing; hydrochemical sampling (pH, conductivity and temperature); and review of previously recorded pH values. Samples collected as part of this investigation were analyzed for indicator inorganic constituents (chloride, sulfate, nitrate, fluoride, chromium, arsenic, barium, cadmium, calcium, cyanide, iron, lead, manganese, mercury, copper, silver, sodium, zinc and selenium). The report also includes calculations estimating potential rate of discharge to groundwater into Bridge Creek. Two areas of elevated pH were identified through this study, Outfall G Area and an area 500 feet north of Outfall G. The second area is presumed to be associated with a groundwater seepage point. The levels of pH recorded between 1986 and 1989 were generally similar. Investigation revealed that pH of Bridge Creek was historically elevated and that the levels had been declining since 1985/6 due to a delayed response to the installation of an underground piping system at the AST area in 1984. Given the similarity in pH levels between 1986 and 1989, it was concluded that the precipitate either stabilized or is forming at a slow rate.	The report concludes that groundwater with an elevated pH exists over much of the study area and that the flow of the high pH groundwater through the subsurface lime deposits has resulted in the dissolution of the deposits and the release of calcium products. The discharging of this calcium enriched groundwater into surface water exhibiting a lower pH may cause the precipitation and deposition of calcium salts. Furthermore, the soils and groundwater reflect many of the chemical parameters indicative of the saline to brackish waters natural to Bridge Creek.

(1) Information provided in this table is as presented in the listed reports.
(2) Activities and results are as described in the reports. All activities were performed by or on behalf of P&G.

Table 3
Summary of Environmental Database Listings
Operable Unit 1 HHMT - Port Ivory Facility

Database	Database Date	Additional Information
USEPA, Resource Conservation Recovery Information System (RCRIS) Facilities - Large Quantity Generators (LQG) List	December 12, 1999	The subject site is listed on the USEPA, RCRIS Facilities - LQG List dated December 12, 1999. Review of this site listing notes that P&G is permitted as a LQG (Record Date August 13, 1980) and assigned USEPA ID Number NYD000249961. One violation appears to be associated with this site listing and is associated with the requirements Compliance Evaluation Inspection. P&G is reported to have complied with these requirements on September 25, 1986. Based on review of the site listing, it appears that no outstanding violations are associated with the site's listing as a LQG.
The NYSDEC Inventory of Hazardous Disposal Sites (SHWS) List	April 1999	The subject site's inclusion on NYSDEC, HSWDS List dated April 1999 is associated with the presence of the C&D Landfill on Block 1309. This listing also identifies that P&G maintains an USEPA Identification Number NYD980507537 and operates a wastewater treatment system to control pH in the sanitary waste stream. After some acidulation occurs, the sludge from the treatment system is reported to be removed from the subject site. No other off-site disposal activities are identified in this listing. The listing comments that the abandoned landfill reported to be on-site does not have a liner or a leachate collection system and that P&G disposed of wastes, generated from their manufacturing processes, on-site. A consent order, executed in March 1992, is identified in this listing. Further, the consent order is reported to have required site investigation and closure (in accordance with Part 360) of the landfill. This investigation is reported to be currently under review. Although information provided by representatives of DEC have confirmed that the landfill was closed in accordance with prevailing regulations and that the case is considered closed by the Department. Post-monitoring requirements were performed by P&G and are currently being performed by the Port Authority. HMM has contacted the NYSDEC regarding the site's inclusion on this list and has been informed that the site should no longer be included in the SHWS Inventory. At the request of HMM, the NYSDEC has issued a letter stating that the site should be de-listed.
NYSDEC, Petroleum Bulk Storage Database (UST) List	April 2000	The listing identifies three USTs (PBS Number 2-600767) formerly located on the subject site. One 8,000 gallon and two 10,000 gallon USTs containing 1,2 or 4 fuel oil are reported to have been closed/removed in August 1992. Tanks are reported to have been constructed of steel/carbon and associated piping is reported to have been constructed of steel/iron.
NYSDEC, Chemical Bulk Storage Database (CBS UST) List	January 2000	This listing notes that P&G formerly utilized one 10,000-gallon UST, was registered under CBS Registration Number 2-000128, for the storage of toluene. The tank is reported to have been installed in January 1950 and its current status is noted as "temporarily out of service/closed in place". No date for the closing of the tank was provided in the EDR Listing. The tank and piping are reported to be constructed of steel/carbon steel and situated within a secondary containment vault. According to P&G, contamination was identified in conjunction with the former toluene tank area. Please note, the toluene tank was not specifically evaluated as part of the site investigation since P&G indicated it was a closed issue with the NYSDEC. However, investigation actions were performed in the vicinity of the former toluene tank.
NYSDEC, Chemical Bulk Storage Database (CBS AST) List	January 2000	This listing notes the subject site formerly maintained nine ASTs under CBS Registration Number 2-000128. All tanks are reported to have been closed.

Table 3
Summary of Environmental Database Listings
Operable Unit 1 HHMT - Port Ivory Facility

Database	Database Date	Additional Information
NYSDEC, Major Oil Storage Facilities Database (MOSF UST) List	January 2000	This listing notes the subject site formerly maintained eight USTs under MOSF Facility Identification Number 2-2160. The facility status is listed as inactive. The tanks ranged in size from 550 gallons to 12,000 gallons and all are reported to have contained petroleum products (fuel oil, diesel or unleaded gasoline). The listing indicates that all of the USTs were removed with NYSDEC oversight and does not identify any outstanding required actions.
YSDEC, Major Oil Storage Facilities Database (MOSF AST) List	January 2000	This listing notes the subject site formerly maintained five ASTs under MOSF Facility Identification Number 2-2160. The facility status is listed as inactive. Three tanks with capacities of 550, 275 and 250 gallons are reported to have contained diesel fuel and two tanks, each with a capacity of 42,000 gallons are reported to have contained No. 1, 2 and 4 fuel oil.
USEPA Facility Index System (FINDS) List	October 1999	The FINDS List typically contains "pointers" and information indicating that the site is listed on other database sources within RCRIS. Review of this site listing notes other pertinent environmental site listings to include listings on the Aerometric Information Retrieval System , Facility System (AIRS/FS), Enforcement Docket System (DOCKET), National Compliance Database (NCDB) and Section Seven Tracking System (SSTS).
NYSDEC Spills Information Database (Spills) List	January 2000	The site is listed on the NYSDEC SPILLS three times. **The first case, Spill Number 8907474, is associated with a discharge that occurred on October 26, 1989. The spill is reported to be associated with the detection of toluene contamination discovered during the analysis of soil samples obtained from the toluene tank area during closure of the UST. The listing identifies that the NYSDEC was informed of the discharge and that this agency closed the spill case citing that same did not pose an immediate danger to health and the environment; the spill case was closed on August 14, 1990. The listing comments that P&G asserted that the contamination was confined to an upper aquifer situated on top of a limestone layer**. The second spill, Spill Number 8605160, occurred on November 28, 1986 and involved the discharge of an unreported amount of an unreported material from a vessel into the Kill Van Kull. A cleanup contractor is reported to have been called to the site and handled the remediation of same. The spill case was closed by the NYSDEC on November 28, 1986. The third spill, Spill Number 8906834, was noted to be associated with a simulated exercise involving P&G, the New York City Police Department and the NYSDEC conducted on October 12, 1989. No actual materials are reported to have been discharged to environmental media. The spill case was closed the same day. As all three of the above spill cases were reported to the NYSDEC, investigated by same and eventually closed by this agency, no site investigation activities appear to be warranted with regard to the spills. Please note, this workplan includes the performance of investigative activities in the area of the former toluene tank.

Notes: Database information is provided in an electronic database search, performed by EDR in May 2000.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9564 • **FAX:** (518) 402-9557
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

March 25, 2002

Mr. Charles Springer
Killam Associates
27 Bleeker Street
PO Box 1008
Millburn, NJ 07041-1008

Dear Mr. Springer:

Re: Proctor & Gamble Site, Western Ave.
Staten Island, Richmond County, NY

This letter is to confirm our phone conversation of earlier today regarding the Proctor and Gamble Site located on Western Avenue in Staten Island, New York. The site was formerly listed on the *New York State Registry of Inactive Hazardous Waste Disposal Sites* (site # 243002). It was removed from the registry due to the lack of disposal of a consequential amount hazardous waste. In addition, the site is currently not designated a site on the *Inventory of Hazardous Substance Waste Disposal Sites.* The Proctor & Gamble site was considered for, but not included in this inventory.

Please feel free to call me at the above number or e-mail me at emzuk@gw.dec.state.ny.us. if you have any further questions.

Sincerely,

Elaine M. Zuk
Senior Engineering Geologist
Eastern Investigation Section

HAGER-RICHTER
GEOSCIENCE, INC.

GEOPHYSICAL SURVEY
PROCTOR & GAMBLE
PORT IVORY FACILITY
STATEN ISLAND, NEW YORK

Prepared for:

Killam Associates
27 Bleeker Street
PO Box 1008
Millburn, New Jersey 07041-1008

Prepared by:

Hager-Richter Geoscience, Inc.
8 Industrial Way - D10
Salem, New Hampshire 03079

File 00D59
December, 2000

Geophysical Survey
Proctor & Gamble Port Ivory Facility
Staten Island, New York
File 00D59 December, 2000

0. EXECUTIVE SUMMARY

Hager-Richter Geoscience, Inc. conducted a geophysical survey at the Proctor & Gamble Port Ivory Facility located on Staten Island, New York for Killam Associates (Killam)in October and November, 2000. The scope of the project and areas of interest were specified by Killam. The geophysical survey is part of a environmental investigation of the site being conducted by Killam on behalf of the Port Authority of New York and New Jersey.

The site is a large inactive industrial facility located in the northwestern portion of Staten Island. The Site consists of several buildings, gravel and paved parking areas, rail spurs, foundations and slabs of demolished buildings, and open areas. Hager-Richter was contracted by Killam to locate utilities in the vicinity of as many as 210 proposed boring locations and to locate possible USTs that may be present at nine locations identified at the Site by Killam. The locations of utilities detected as part of the boring program were marked on site as specified by Killam, and are not discussed further.

According to information provided by Killam, as many as 19 USTs might be present in nine areas of the site, designated by Killam UST Area 1 through UST Area 9. Four of the nine areas may contain multiple USTs, and five areas may contain a single UST.

The objective of the geophysical survey was to detect possible USTs in each of the nine areas of interest specified by Killam, and if any were detected, to determine the locations of each.

The geophysical survey consisted of time domain electromagnetic induction metal detector (EM61) surveys followed by focused GPR surveys in each of the areas of interest. The EM61 data were acquired at approximately 8-inch intervals along profile lines spaced 5 feet apart across the accessible portions of the areas of interest. In order to aid in the identification of the objects, a focused GPR survey was conducted at the locations of anomalies detected with the EM.

The results of the geophysical survey conducted at the Proctor & Gamble Port Ivory Facility can be summarized as follows:

- Several areas of buried metal were detected in the nine areas of interest at the site on the basis of the EM61 data. None of the identified areas of buried metal could be definitively identified as a UST due to the limited GPR signal penetration and/or surface features such as concrete slabs, metal piping, and rail spurs. Whether the buried metal is a UST is present cannot be determined on the basis of the geophysical data alone.

- Several other EM61 anomalies are interpreted as possible utilities.

Geophysical Survey
Proctor & Gamble Port Ivory Facility
Staten Island, New York
File 00D59 December, 2000

TABLE OF CONTENTS

FIGURES

PLATE

APPENDIX

Geophysical Survey
Proctor & Gamble Port Ivory Facility
Staten Island, New York
File 00D59 December, 2000

1. INTRODUCTION

Hager-Richter Geoscience, Inc. conducted a geophysical survey at the Proctor & Gamble Port Ivory Facility located on Staten Island, New York for Killam Associates (Killam) October 25 - November 15, 2000. The scope of the project and areas of interest were specified by Killam. The geophysical survey is part of a environmental investigation of the site being conducted by Killam on behalf of the Port Authority of New York and New Jersey.

The site is a large inactive industrial facility located in the northwestern portion of Staten Island. The general location of the Site is shown in Figure 1, and Plate 1 is a site plan. The Site consists of several buildings, gravel and paved parking areas, rail spurs, foundations and slabs of demolished buildings, and open areas. Hager-Richter was contracted by Killam to locate utilities in the vicinity of as many as 210 proposed boring locations and to locate possible USTs that may be present at nine locations identified at the Site by Killam. The locations of utilities detected as part of the boring program were marked on site as specified by Killam, and are not discussed further.

According to information provided by Killam, as many as 19 USTs might be present in nine areas of the site, designated by Killam as UST Area 1 through UST Area 9. Four of the nine areas may contain multiple USTs, and five areas may contain a single UST. The locations of the nine areas specified by Killam are shown as hatched areas on Plate 1.

The objective of the geophysical survey was to detect possible USTs in each of the nine areas of interest specified by Killam, and if any were detected, to determine the locations of each.

The geophysical survey consisted of time domain electromagnetic induction metal detector (EM61) surveys followed by focused GPR surveys in each of the areas of interest. The EM61 survey detects and outlines areas containing buried metal. However, the EM method cannot provide information on the type of objects causing the EM anomaly. In order to aid in the identification of the objects, a focused GPR survey was conducted at the locations of anomalies detected with the EM61.

James Coffman, Jeffrey Reid, P.G., and Jeffrey Sullivan of Hager-Richter conducted the field operations on October 30, November 8, 9, 14, and 15, 2000. The project was coordinated with Ms. Jennifer Kohlsaat of Killam. Mr. Daniel Davis and Mr. Charles Springer, both of Killam, specified the areas of interest for the survey and were present for portions of the field work.

2. EQUIPMENT AND PROCEDURES

2.1 General

The equipment, limitations, and general procedures of EM61 high sensitivity metal detector and GPR surveys are described below. Details specific to this project are given in the Site Specific section below.

2.2 EM61

Equipment. The EM survey was conducted using a Geonics Model EM61 time domain electromagnetic induction metal detector, the industry standard for this type of geophysical survey. The EM61 produces a pulsed primary magnetic field in the earth that induces eddy currents in the ground and in nearby metal objects. The receiver is timed to measure the secondary magnetic field produced by eddy currents after those in the ground have dissipated, i.e., only the current in the metal objects. The data are recorded on a digital data logger. The EM61 is relatively insensitive to nearby cultural interferences such as buildings.

Limitations of the Method. The data from an EM61 survey are affected by surface metal debris in the survey area, and its depth sensitivity is limited to about 15 feet. The instrument is relatively cumbersome, and works best where the 1-meter square transmit and receive coils can be hand pulled in a small trailer.

Detection and identification should be clearly differentiated. Detection is the recognition of the presence of a metal object, and the electromagnetic method is excellent for such purposes. Identification, on the other hand, is determination of the nature of the causative body (i.e., what is the body -- a cache of drums, UST, automobile, white goods, etc.?). Although the EM61 data cannot be used to *identify* all buried metal objects, they provide excellent guides to the identification of some objects. For example, buried metal utilities produce anomalies with lengths many times their widths.

2.3 GPR

Equipment. The GPR survey was conducted using a Geophysical Survey Systems SIR-2 digital GPR system equipped with a survey wheel to trigger recording of data at equal horizontal distances. The GPR system was used with a 500 MHz antenna and a 60 nsec time window. The GPR traverses were spaced approximately 5 feet apart, and were conducted at the locations of EM61 anomalies.

Limitations of the Method. There are limitations of the GPR technique as used to detect and/or locate targets such as those of the subject Site: (1) surface conditions, (2) electrical conductivity of the ground, (3) contrast of the electrical conductivities of the targets and the ground, and (4) spacing between lines. Of these limitations, only the fourth, line spacing, is controlled by the operator.

The condition of the ground surface can affect the quality of the GPR data and the depth of penetration of the GPR signal. Sites covered with high grass, bushes, landscape structures, debris, obstacles, soil mounds, etc. limit the survey access and the coupling of the GPR antenna with the ground. In many cases, the GPR signal will not penetrate below concrete pavement, especially inside of buildings, and a target may not be detectable.

The electrical conductivity of the ground determines the attenuation of the GPR signals, and thereby limits the maximum depth of exploration. The GPR signal does not penetrate clay-rich soils, and targets buried in clay can be missed.

A definite contrast in the electrical conductivities of the ground and the target is required to obtain a reflection of the GPR signal. If the contrast is too small, possibly due to construction details or extremely corroded conditions of metal targets, then the reflection may be too weak to recognize, and the target can be missed.

The spacing between lines is under control of the GPR operator, and the design of the survey is based on the dimensions of the smallest feature of interest. Targets with dimensions smaller than the spacing between GPR survey lines can be missed.

2.4 Site Specific

As noted in the Introduction, Killam specified nine areas of interest for the geophysical survey. A local survey grid was established in each of the UST survey areas and tied to fixed landmarks.

EM61 data were acquired at approximately 8-inch intervals along lines spaced 5 feet apart in the accessible portions of each area. The EM61 was operated with the 1-meter square transmit/receive coils mounted on a hand-drawn trailer with a survey wheel that measures distance and triggers data collection at equal intervals. The EM61 data were recorded digitally and processed in the field using software provided by the manufacturer. A color contour plot of the data was generated using commercially available software (Geosoft).

A focused GPR survey was conducted at the locations of anomalies detected by the EM61 survey to attempt to identify the causative body(ies). GPR traverses were located along the same

lines as the EM61 survey and spacing was variable based on the size of the EM anomalies and surface conditions. The GPR antenna was pulled by hand for all traverses.

GPR data were acquired with a 300 MHz antenna and a 60 nsec time window. GPR signal penetration varied significantly at the Site. Based on handbook values of time-to-depth conversions for the GPR signal in average soils, the GPR signal penetration is estimated to have varied from about 1 foot to about 5 feet.

3. RESULTS AND DISCUSSION

3.1 General

The geophysical survey consisted of a time domain electromagnetic induction metal detector (EM61) survey followed by a focused GPR survey where the EM61 survey indicated possible buried metal. Plate 1 is a Site Plan provided by Killam showing the locations of the survey areas.

Interpretation of EM61 data is based on the *relative* response (in millivolts) of the top and bottom instrument coils to local conditions. The differential response, the difference between the top and bottom coils, is typically used as the best indication of the location of buried metal objects, and is shown in the figures for this report. The instrument is not calibrated to provide an absolute measure of a particular property, such as the conductivity of the soil or of buried metal objects. Subsurface metal objects produce sharply defined positive anomalies when the EM61 is positioned directly over them. Such anomalies are colored red and pink on the color plots presented herein. Acquiring data at short intervals along closely spaced lines, as was done at the present site, provides high spatial resolution of the location and footprint of the targets. Thus, buried metal is recognized in contour plots of EM61 data by positive anomalies (red or pink zones) roughly corresponding to the dimensions of the buried metal.

Many surface metal objects and objects containing metal are present in the UST survey areas such as manhole covers, railroad tracks, fences, and reinforced concrete. The locations of such objects are shown on the figures for each of the areas. Because these objects contain metal, they can produce significant EM anomalies. The presence or absence of buried metal in these areas cannot be determined due to the anomalies caused by such surface objects.

In general, GPR signal penetration at the site was limited, with reflections received for less than about 30 nsec. The limited signal penetration is likely due to conductive soils, and in many places, concrete at the surface. Based on handbook time-to-depth conversions for the GPR signal in average soils, the GPR signal penetration is estimated to have been no more than about 2 to 3 feet for most of the areas of interest.

3.2 UST Area 1

UST Area 1 is located on the north side of Building 20, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 2 is a color contour plot of the EM61 data for UST Area 1, and Figure 3 shows the locations of the GPR traverses and the

interpretation of both the EM61 and GPR data. Five areas of possible buried metal were detected within the survey area, and their locations are shown on Figure 3. GPR traverses were conducted in the central portion of the area. GPR signal penetration was limited to less than 2 feet. Therefore, no additional information regarding the causative bodies was determined for this area with the GPR traverse.

Based on the shapes and sizes of the EM anomalies for UST Area 1, we infer that a utility and several other buried objects are present. Whether the objects are USTs cannot be determined on the basis of the geophysical data alone. If any of the buried metal objects is a UST, its capacity is likely 1000 gallons or less.

3.3 UST Area 2

UST Area 2 is located south of a wood shavings stockpile area, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 4 is a color contour plot of the EM61 data for UST Area 2, and Figure 5 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. One area of possible buried metal was detected within the survey area. The area is located about 35 feet south of a concrete pad. GPR traverses were conducted over the location of the EM anomaly. GPR signal penetration is estimated to have been about 4 to 5 feet for this area, but GPR reflections typical of a UST were not detected in the area included in the GPR survey.

Based on the presence of the EM anomaly in UST Area 2, we infer that a buried metal object is present. Whether the object is a UST cannot be determined on the basis of the geophysical data alone. Because no GPR reflections typical of a UST were observed in the records for the effective depth of penetration of the GPR signal (about 5 feet), and the EM anomaly is small in amplitude, we conclude that if a UST is present, it would likely be located at a depth greater than 5 feet.

3.4 UST Area 3

UST Area 3 is located north of the northeast corner of Building 13, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 6 is a color contour plot of the EM61 data for UST Area 3, and Figure 7 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. Two areas of possible buried metal were detected within the survey area as well as a possible utility. One buried metal object is located about 25 feet east of a trailer, the other is located about 60 feet east of the trailer, and the locations of both are shown on Figure 7.

GPR signal penetration is estimated to have been about 2 to 3 feet for this area. GPR reflections typical of a UST were not detected in the area included in the GPR survey. GPR reflections typical of a flat structure, such as a concrete pad, are present at the location of the southern end of the EM anomaly closer to the trailer.

Based on the presence of the EM anomalies in UST Area 2, we infer that two buried metal objects are present. The GPR data indicate that at least part of one of the EM anomalies may be related to a flat concrete-like structure. Whether the concrete object is a UST cannot be determined on the basis of the geophysical data alone.

3.5 UST Area 4

UST Area 4 is located west of Buildings 34 and 38 and north of a former floor slab for a demolished building, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 8 is a color contour plot of the EM61 data for UST Area 4, and Figure 9 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data.

The western portion of the survey area is covered by a concrete pad. Three significant EM anomalies are present in this portion of the survey area and one large EM anomaly is present along the southeast edge of the survey area. The areas of the EM anomalies are shown as areas of buried metal on Figure 9. The large EM anomalies may be caused by structures located under the concrete slab. The GPR signal penetration over the concrete slab is limited to less than about 1 foot and GPR reflections typical of USTs were not detected. Whether USTs are located under the slab cannot be determined on the basis of the geophysical data alone. The remaining portion of UST Area 4 is generally free of buried metal.

3.6 UST Area 5

UST Area 5 is located along a rail spur southwest of Building 17, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 10 is a color contour plot of the EM61 data for UST Area 5, and Figure 11 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. Two rail spurs and a reinforced concrete surface drainage swale are present in the area. High amplitude EM anomalies are present near the concrete drainage swale and low amplitude negative EM anomalies are observed for the rail spurs.

GPR traverses were conducted in the northwest corner of the survey area, but the GPR signal penetration was limited to less than about 1 foot and no GPR reflection typical for a UST were detected.

3.7 UST Area 6

UST Area 6 is located along a rail spur west of Building 17, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 12 is a color contour plot of the EM61 data for UST Area 6, and Figure 13 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. A rail spur and iron rimmed surface drain are present along the east side of the survey area.

Five EM anomalies not related to the surface features were identified, and their locations are shown on Figure 13. The two large circular anomalies located in the northeast portion of the survey area are likely caused by buried concrete. A small portion of a slab was visible on site and its presence was confirmed with the GPR. The remaining three anomalies are low amplitude and small in extent and are likely too small to be caused by USTs.

3.8 UST Area 7

UST Area 7 is located south of Building S-#35, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 14 is a color contour plot of the EM61 data for UST Area 7, and Figure 15 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. Surface objects such as a rail spur, a concrete loading dock, a steel plate, transformers, and a tower are present in the survey area. The EM data were adversely affected at such locations.

Four EM anomalies not related to the surface features were identified, and their locations are shown on Figure 15. A large EM anomaly is present in the central portion of the survey area. The GPR data for the area of the large anomaly indicate the presence of a shallow buried reinforced concrete slab or structure at a depth of about 1 foot in the southern part of the anomaly. GPR records for the traverses conducted in the vicinity of the remaining anomalies contain no reflections characteristic of USTs. Such areas are shown as areas of buried metal. Whether the buried metal objects are USTs cannot be determined on the basis of the geophysical data alone.

3.9 UST Area 8

UST Area 8 is located at the northeast corner of Building 55, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 16 is a color contour plot of the EM61 data for UST Area 8, and Figure 17 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data. Surface objects such as a concrete pad and vertical pipes cut at grade are present in the survey area and such objects are shown on Figure 17.

Three anomalies attributed to buried metal objects were identified by the EM survey and their locations are shown on Figure 17. EM anomalies attributed to subsurface utilities were also identified. GPR signal penetration in the areas of the EM anomalies was limited to a depth of about 1 foot and no GPR reflections typical of a UST were detected. Therefore, no information regarding the causative bodies could be determined. Whether the buried metal objects are USTs cannot be determined on the basis of the geophysical data alone.

3.10 UST Area 9

UST Area 9 is located between Buildings 52 and 53, and its location is shown on Plate 1. EM61 data were acquired along survey lines spaced 5 feet apart, and GPR data were acquired at most locations where the EM data indicated the presence of buried metal. Figure 18 is a color contour plot of the EM61 data for UST Area 9, and Figure 19 shows the locations of the GPR traverses and the interpretation of both the EM61 and GPR data.

Several surface metal objects, such as valve box covers, transformers, and overhead pipes are present in the survey area. Four 4-inch pipes, cut at the surface, are present in the southeast corner of the survey area. Significant EM anomalies are present at the locations of the surface features and may mask the presence of buried metal objects, if any, at such locations.

Three anomalies not associated with surface metal were identified by the EM survey. These anomalies have been attributed to buried metal objects. GPR signal penetration in the areas of the EM anomalies was limited to a depth of about 1 foot and no GPR reflections typical of a UST were detected. Therefore, no information regarding the causative bodies could be determined. Whether the buried metal objects are USTs cannot be determined on the basis of the geophysical data alone.

4. CONCLUSIONS

Based on the geophysical survey conducted at the Proctor & Gamble Port Ivory Facility located on Staten Island, New York, we conclude:

- Several areas of buried metal were detected in the nine areas of interest at the site on the basis of the EM61 data. None of the identified areas of buried metal could be definitively identified as a UST due to the limited GPR signal penetration and/or surface features such as concrete slabs, metal piping, and rail spurs. Whether the buried metal is a UST is present cannot be determined on the basis of the geophysical data alone.

- Several other EM61 anomalies are interpreted as possible utilities.

5. LIMITATIONS

This letter report was prepared for the exclusive use of Killam Associates and the Port Authority of New York and New Jersey (Client). No other party shall be entitled to rely on this Report or any information, documents, records, data, interpretations, advice or opinions given to Client by Hager-Richter Geoscience, Inc. (H-R) in the performance of its work. The Report relates solely to the specific project for which H-R has been retained and shall not be used or relied upon by Client or any third party for any variation or extension of this project, any other project or any other purpose without the express written permission of H-R. Any unpermitted use by Client or any third party shall be at Client's or such third party's own risk and without any liability to H-R.

H-R has used reasonable care, skill, competence and judgment in the performance of its services for this project consistent with professional standards for those providing similar services at the same time, in the same locale, and under like circumstances. Unless otherwise stated, the work performed by H-R should be understood to be exploratory and interpretational in character and any results, findings or recommendations contained in this Report or resulting from the work proposed may include decisions which are judgmental in nature and not necessarily based solely on pure science or engineering. It should be noted that our conclusions might be modified if subsurface conditions were better delineated with additional subsurface exploration including, but not limited to, test pits, soil borings with collection of soil and water samples, and laboratory testing.

The detection of subsurface utilities and/or other subsurface objects was not an objective of this portion of the geophysical survey, and the survey was not designed to detect such. However, some utilities and/or other subsurface objects were detected and their locations are provided as a courtesy. Other utilities and/or other subsurface objects may be present and the Client or any third party shall not rely on this report for information on such.

Except as expressly provided in this limitations section, H-R makes no other representation or warranty of any kind whatsoever, oral or written, expressed or implied; and all implied warranties of merchantability and fitness for a particular purpose, are hereby disclaimed.

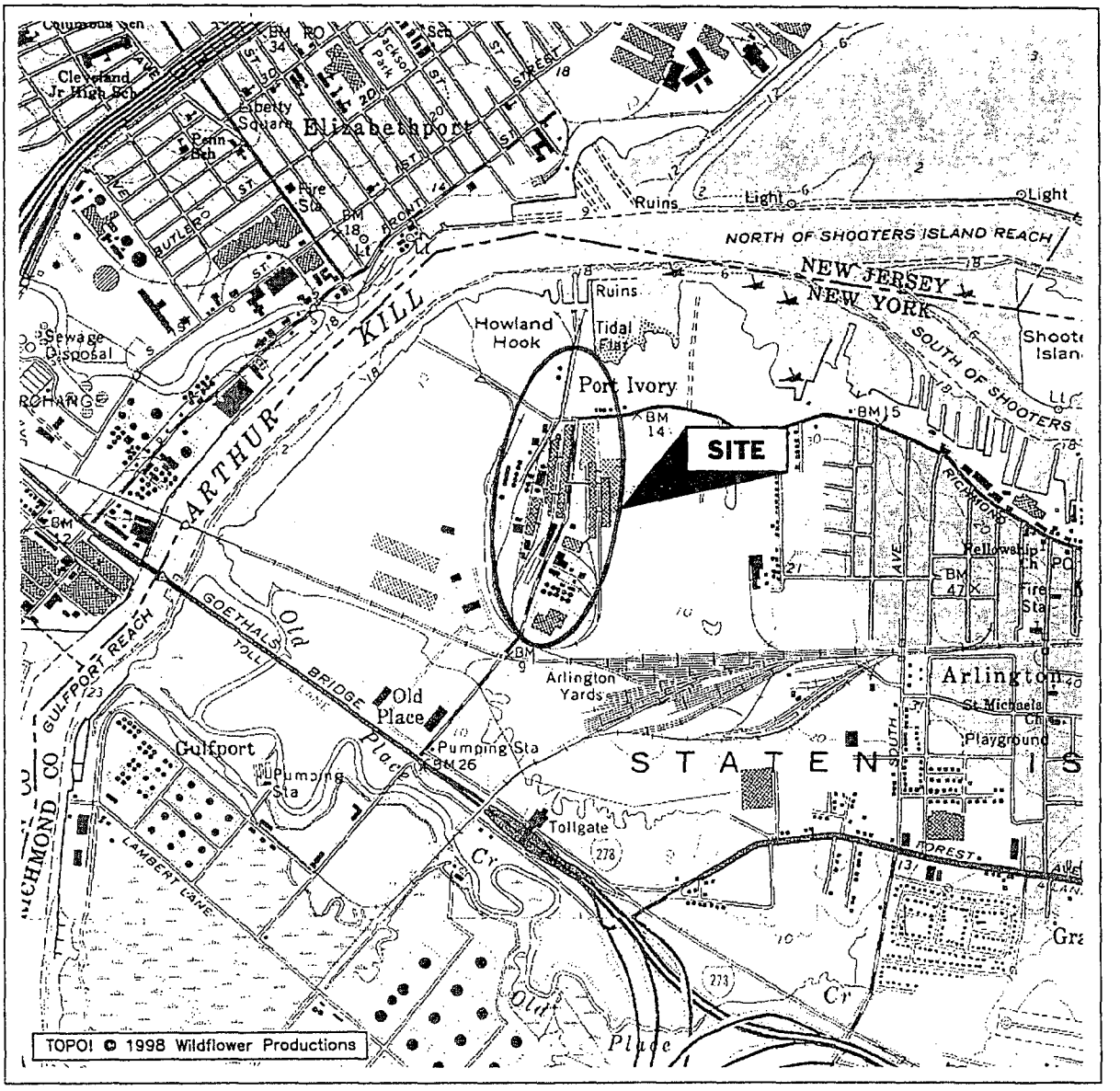
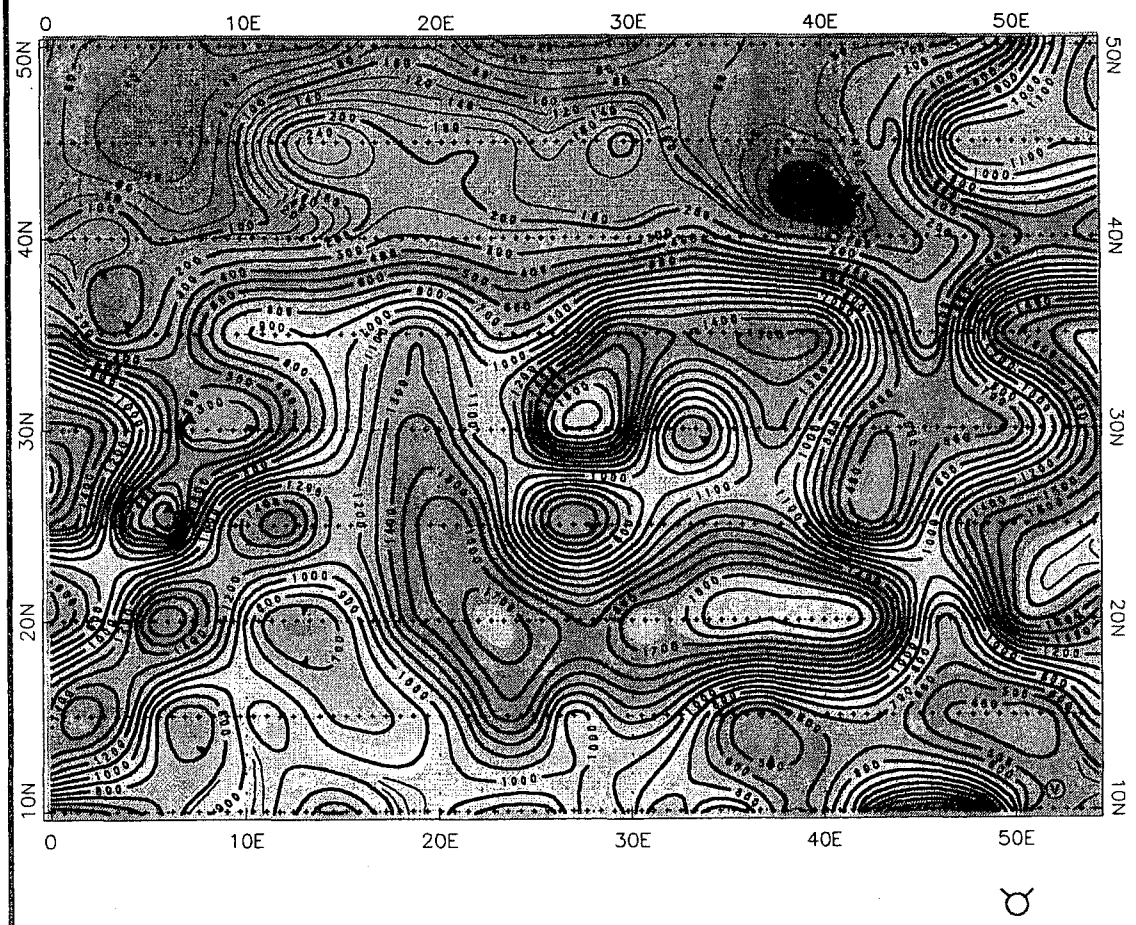


Figure 1
General Site Location
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



BUILDING #20

NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

LEGEND

- EM DATA STATION
- WATER VALVE
- HYDRANT

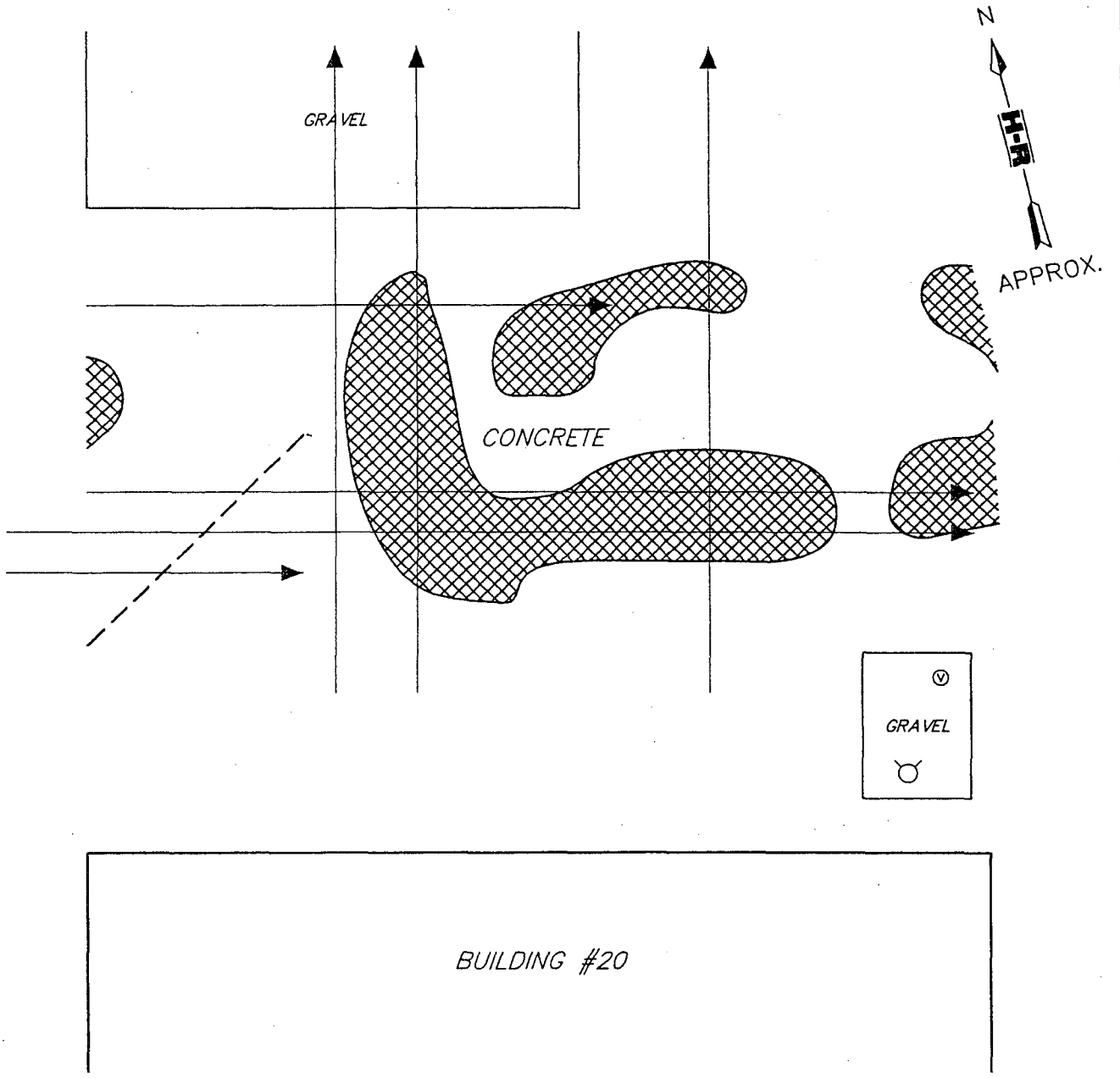
SCALE (feet)

0 10 20

Figure 2
EM61 Survey – UST Area 1
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- POSSIBLE UTILITY
- WATER VALVE
- HYDRANT

SCALE (feet)

0 10 20

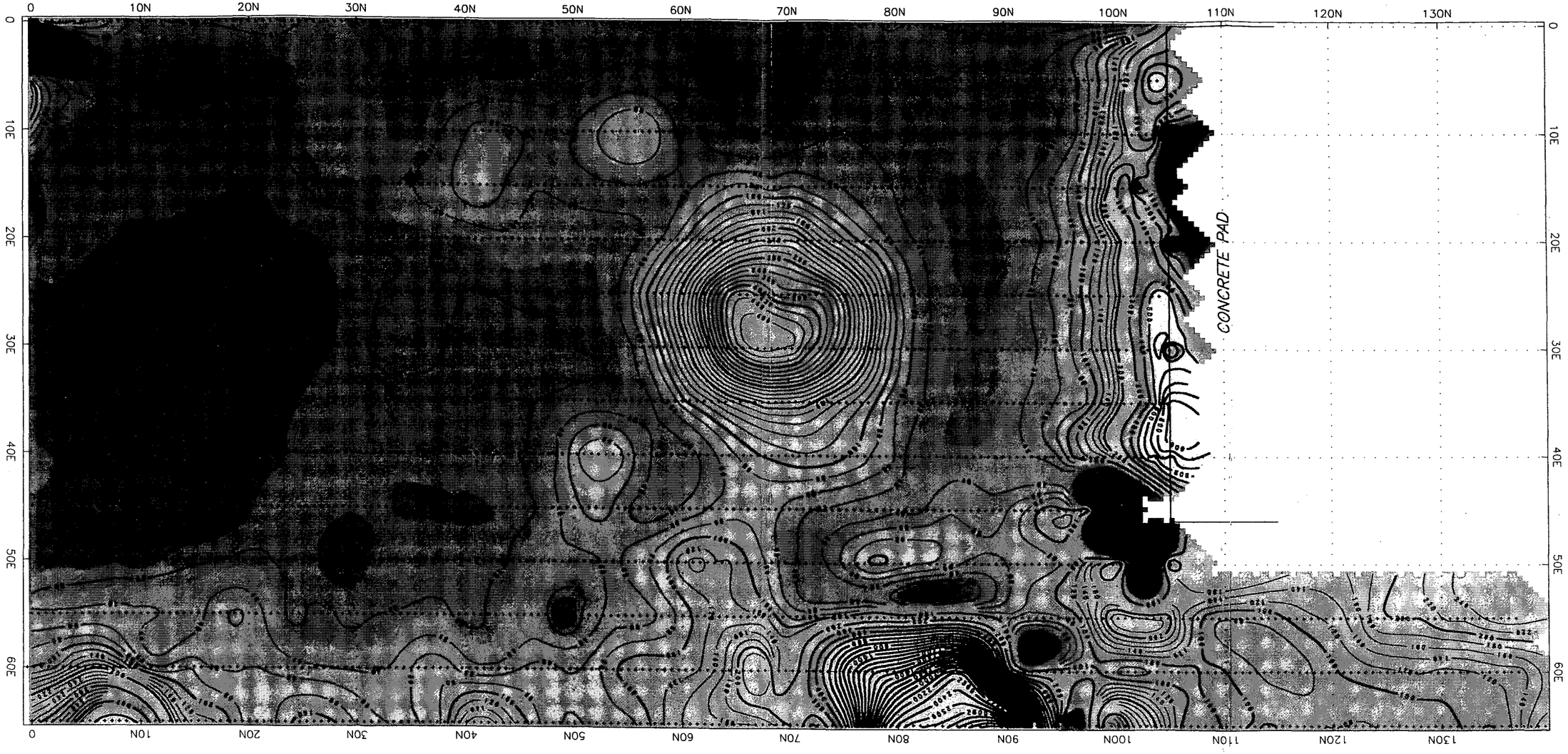
NOTES:

1. Site sketch generated from field notes.
2. Concrete covers survey area except for the areas shown as gravel-covered.

Figure 3
GPR Survey & Integrated Interpretation – UST Area 1
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



LEGEND

- EM DATA STATION
- WATER VALVE
- MONITORING WELL

SCALE (feet)

0 10 20

APPROX. N H-R

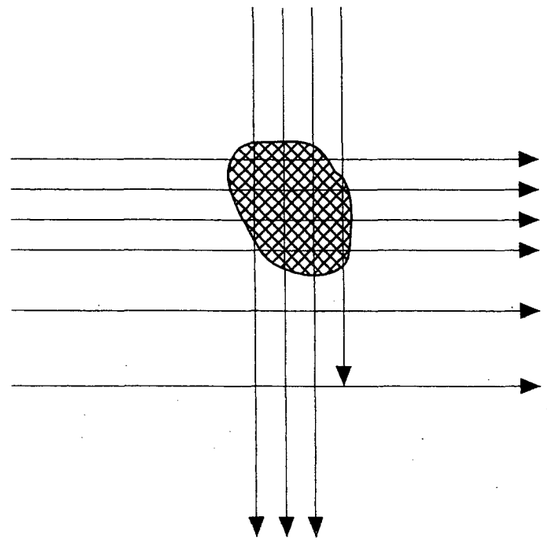
NOTES:

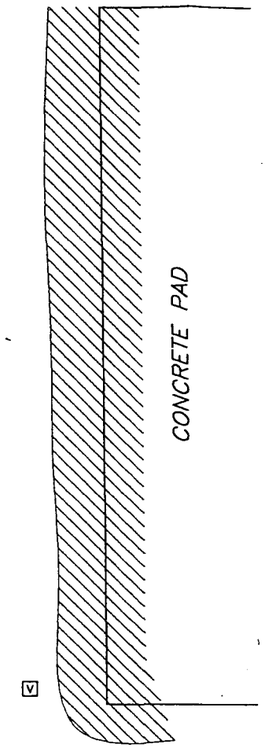
1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

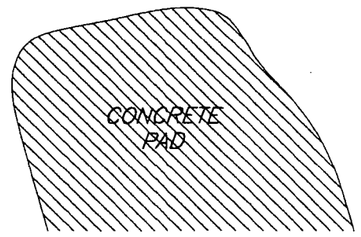
Figure 4
EM61 Survey – UST Area 2
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire







LEGEND

GPR TRAVERSE

AREA OF POSSIBLE BURIED METAL

EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.

V WATER VALVE

MONITORING WELL

SCALE (feet)

0 10 20

APPROX. N H-R

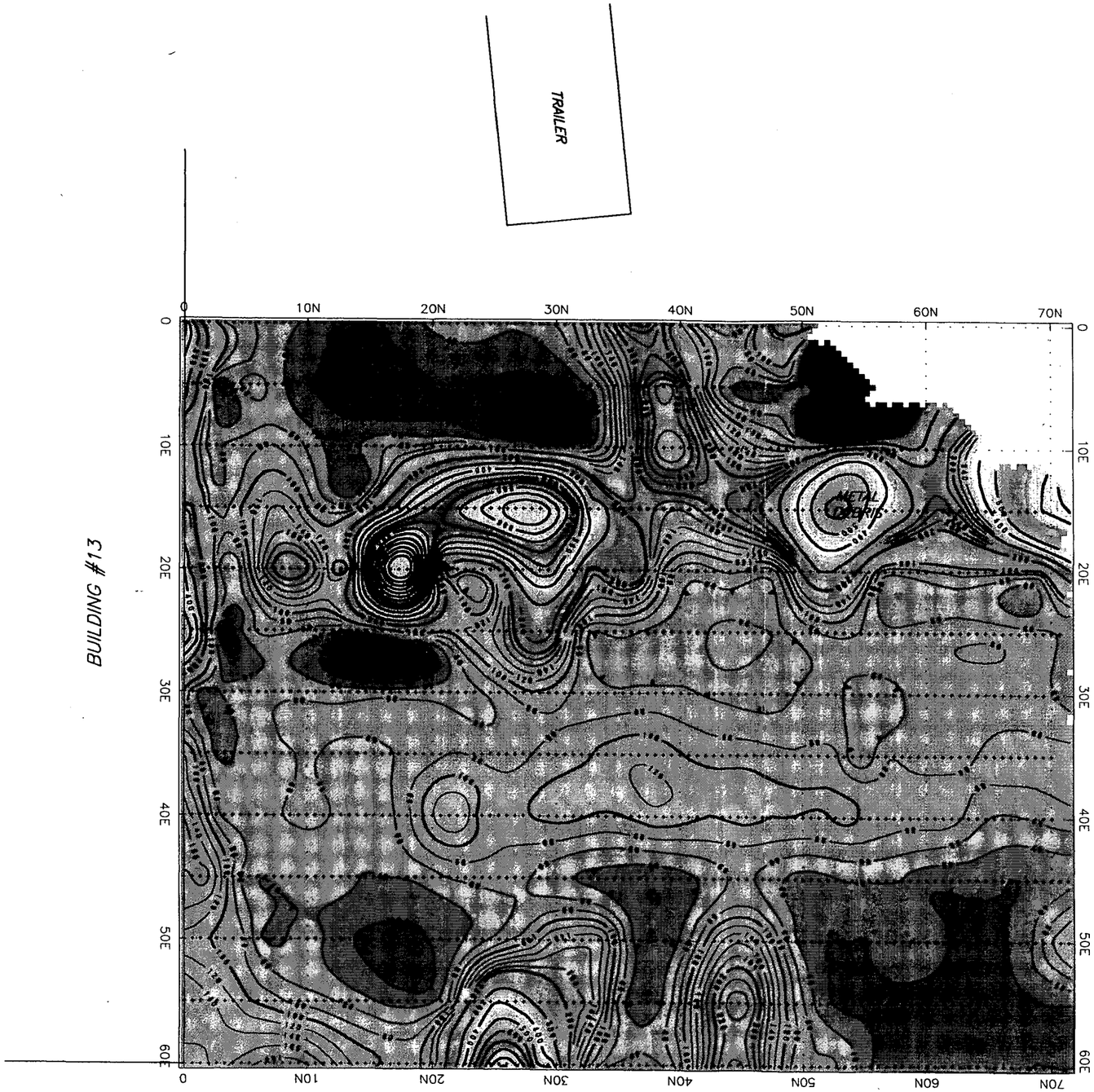
NOTE:

Site sketch generated from field notes.

Figure 5
GPR Survey & Integrated Interpretation – UST Area 2
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX.

N

LEGEND

• EM DATA STATION

SCALE (feet)

0 10 20

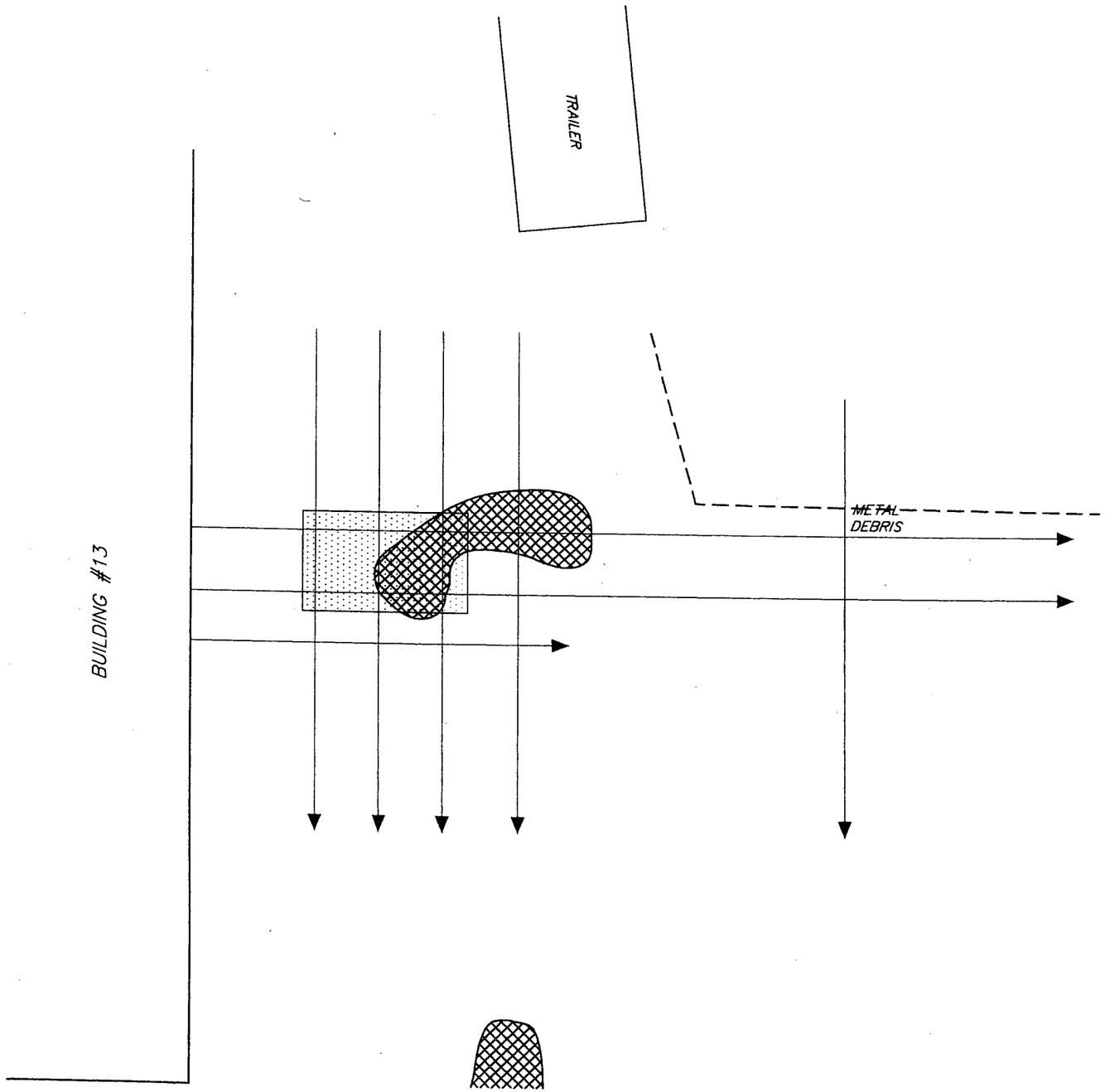
NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

Figure 6
EM61 Survey – UST Area 3
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX. N

H-R

LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- POSSIBLE STRUCTURE
- POSSIBLE UTILITY

SCALE (feet)

0 10 20

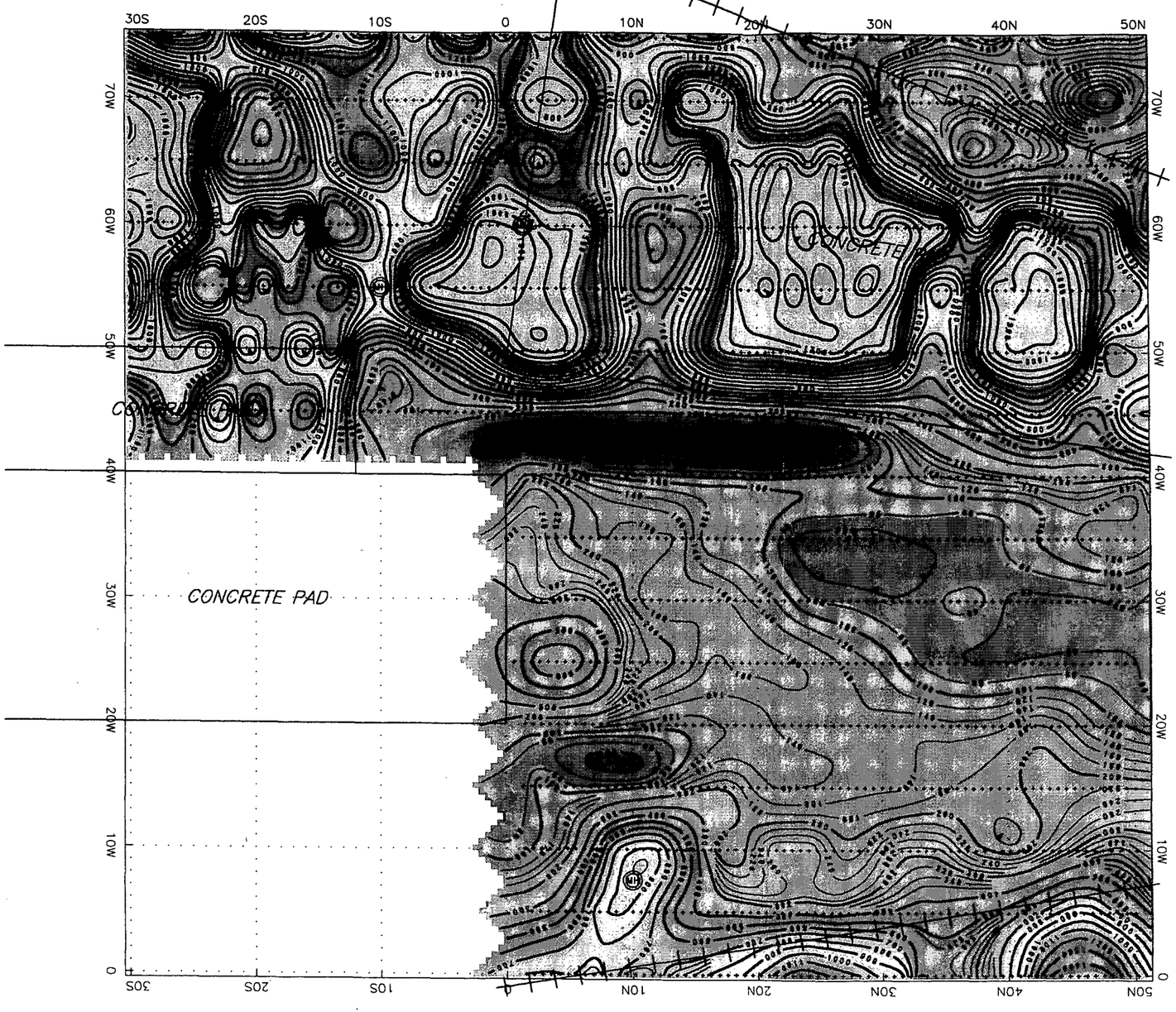
NOTE:

Site sketch generated from field notes.

Figure 7
GPR Survey & Integrated Interpretation – UST Area 3
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX. N

H-R

LEGEND

- EM DATA STATION
- MANHOLE
- RAILROAD TRACK

SCALE (feet)

0 10 20

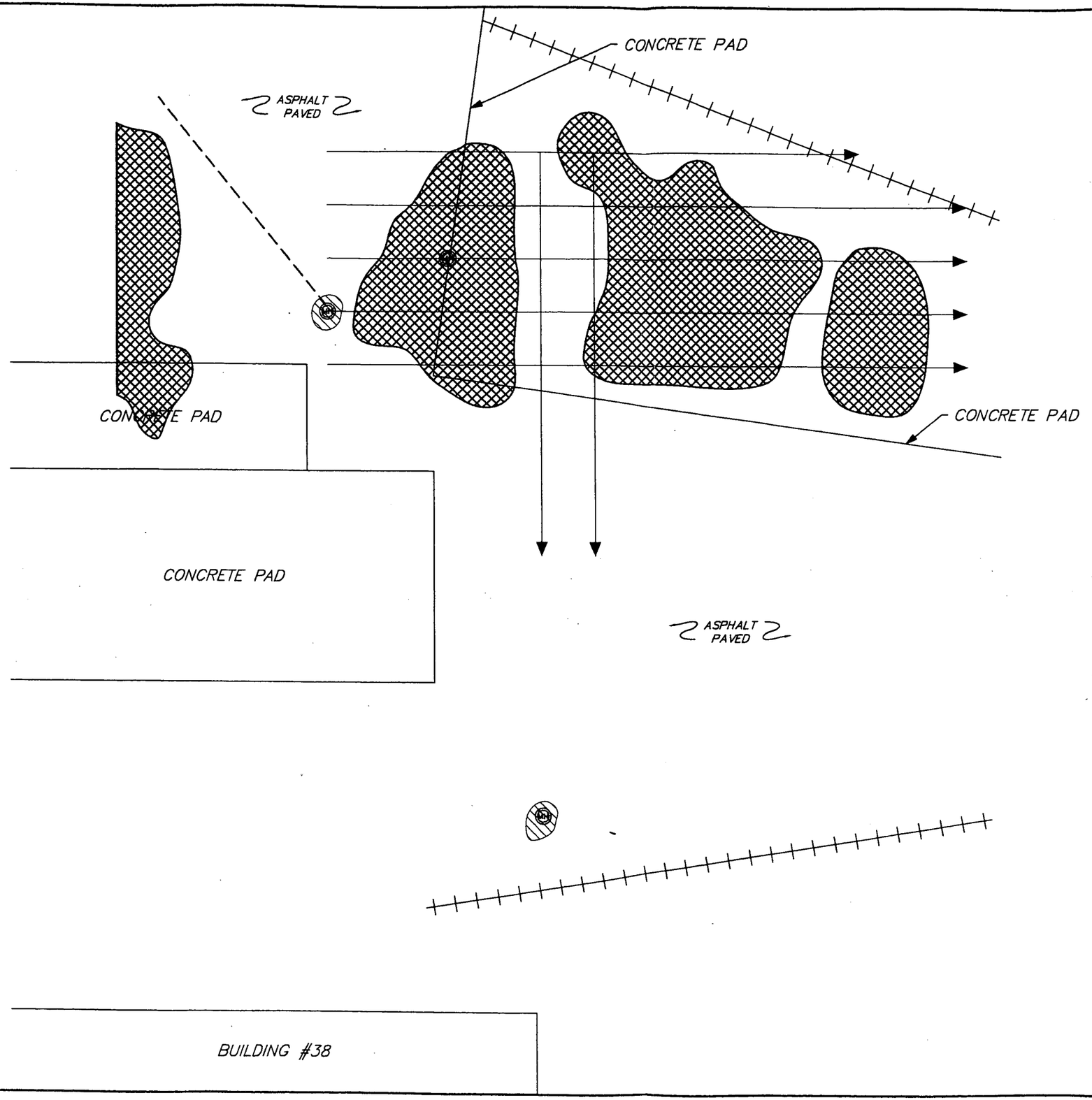
NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

Figure 8
EM61 Survey - UST Area 4
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX. H-R N

LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.
- POSSIBLE UTILITY
- MANHOLE
- RAILROAD TRACK

SCALE (feet)

0 10 20

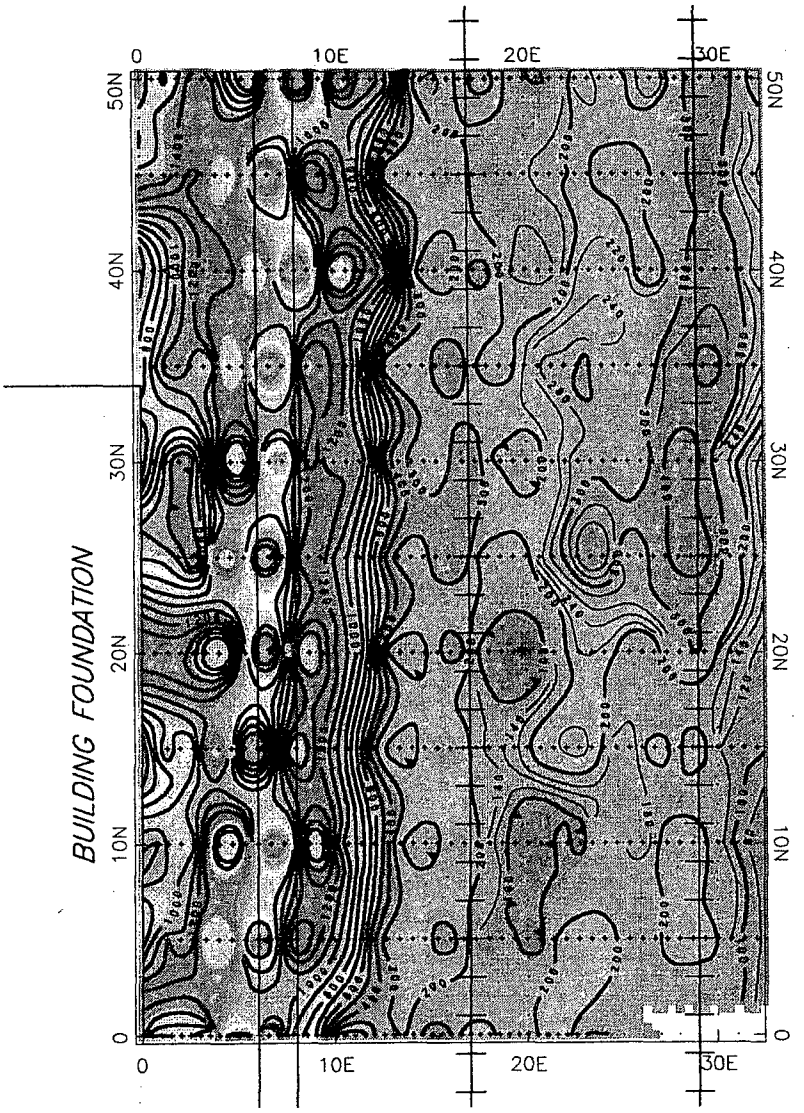
NOTE:

Site sketch generated from field notes.

Figure 9
GPR Survey & Integrated Interpretation – UST Area 4
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

LEGEND

EM DATA STATION

RAILROAD TRACK

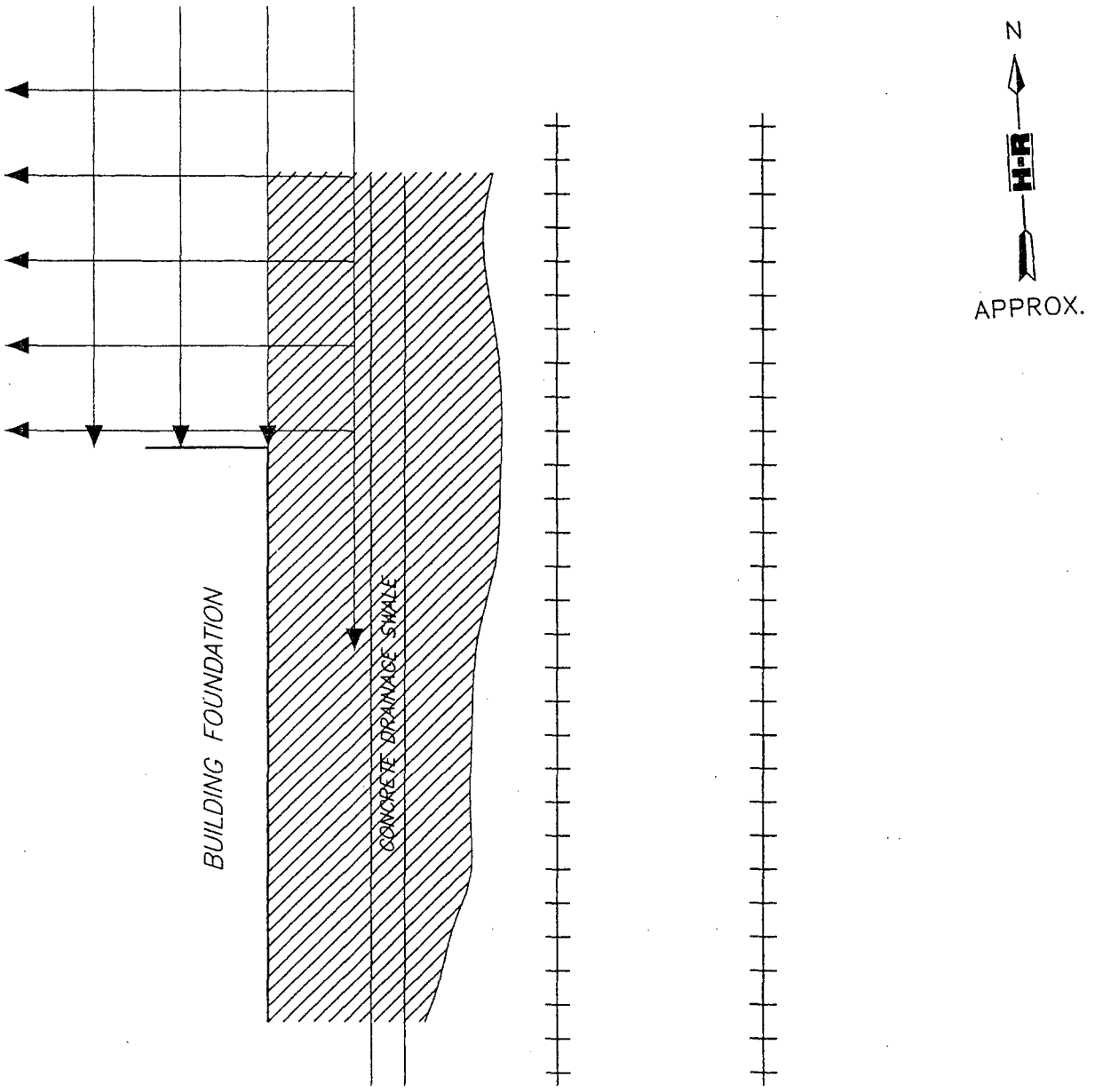
SCALE (feet)

0 10 20

Figure 10
EM61 Survey – UST Area 5
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



LEGEND

GPR TRAVERSE

EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.

RAILROAD TRACK

SCALE (feet)

0 10 20

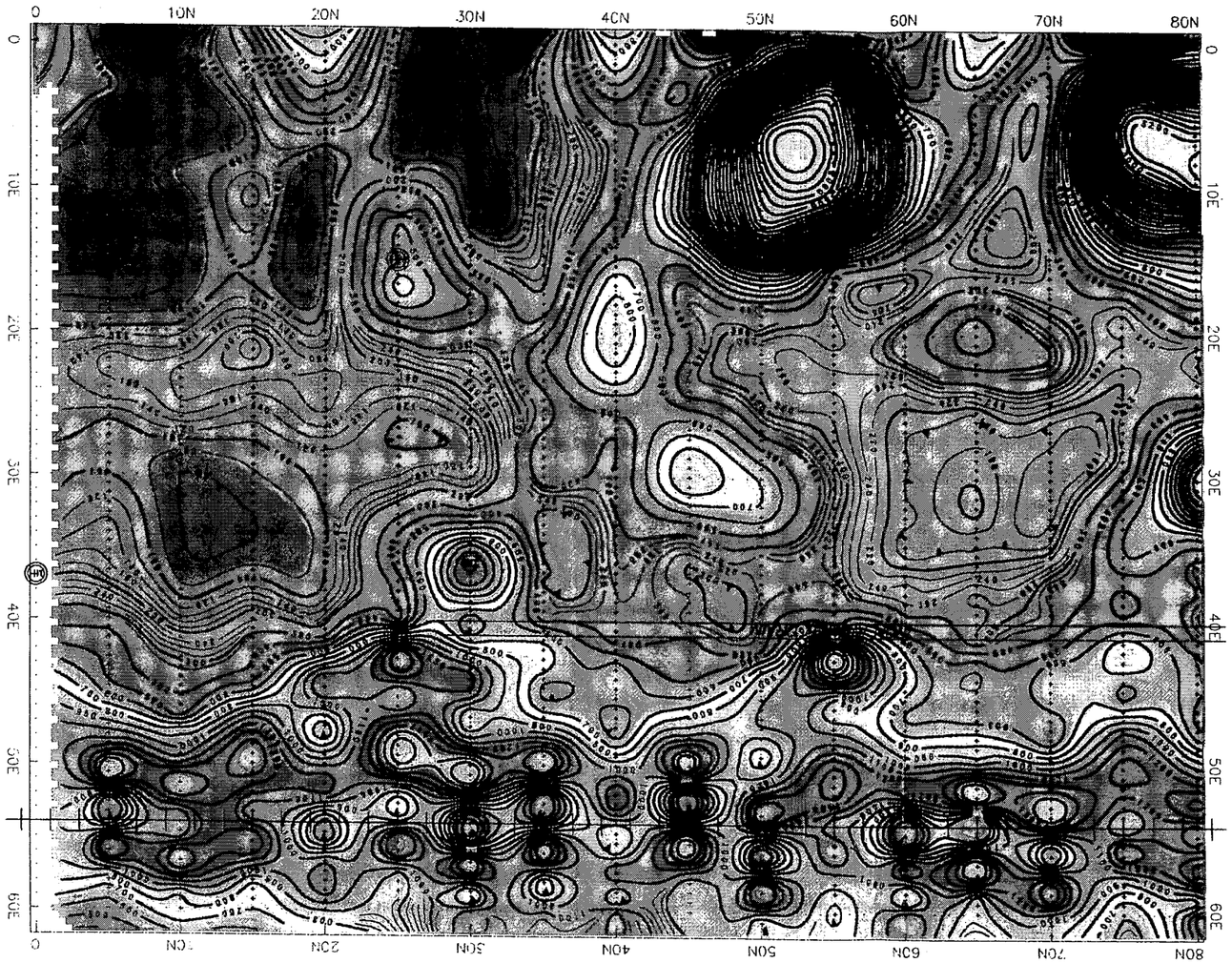
NOTE:

Site sketch generated from field notes.

Figure 11
GPR Survey & Integrated Interpretation – UST Area 5
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX. N

LEGEND

- EM DATA STATION
- MANHOLE
- CATCH BASIN
- RAILROAD TRACK

SCALE (feet)

0 10 20

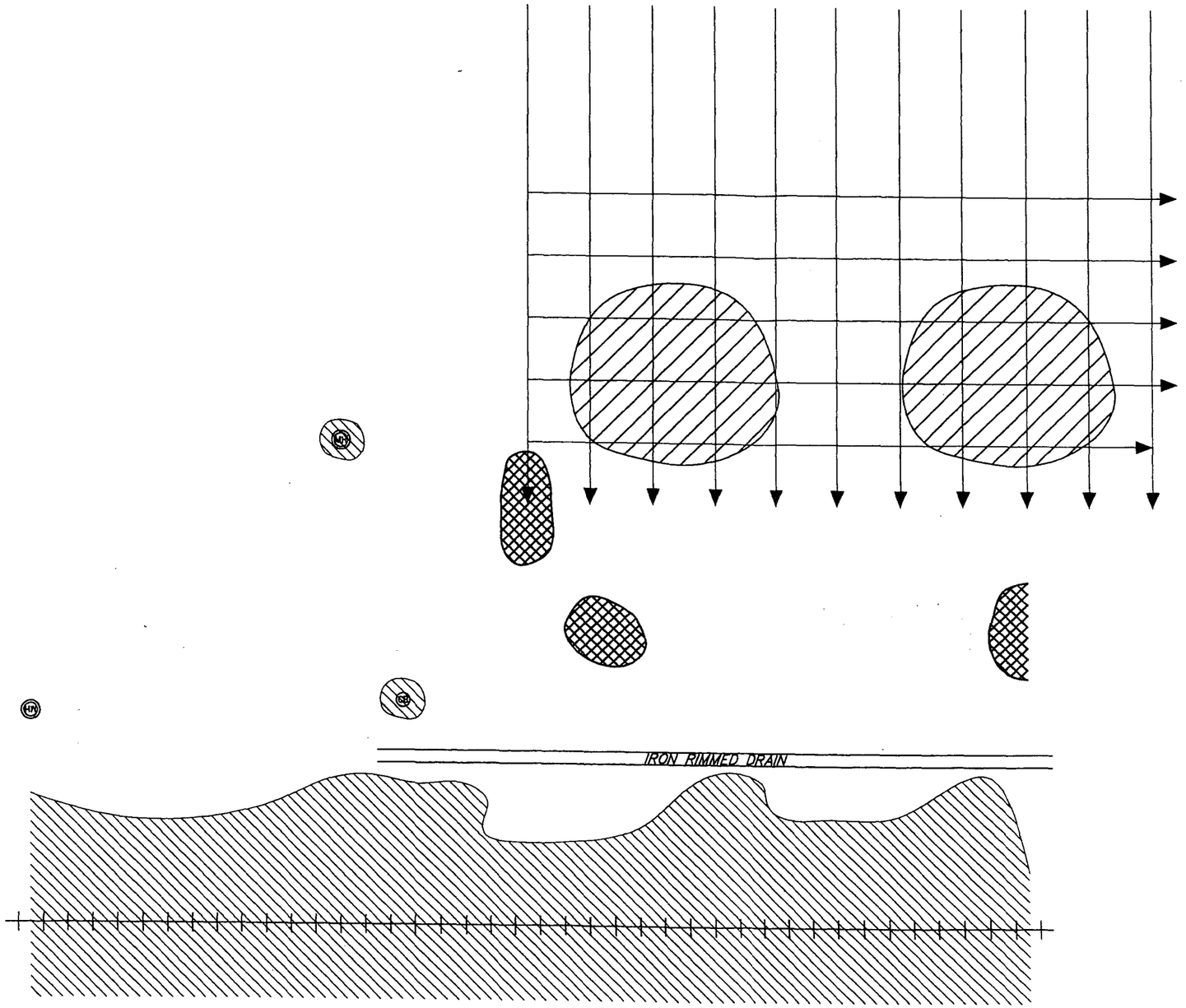
NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

Figure 12
EM61 Survey - UST Area 6
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX.

H-R

N

LEGEND

GPR TRAVERSE

AREA OF POSSIBLE BURIED METAL

EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.

POSSIBLE BURIED CONCRETE

MH MANHOLE

CB CATCH BASIN

RAILROAD TRACK

SCALE (feet)

0 10 20

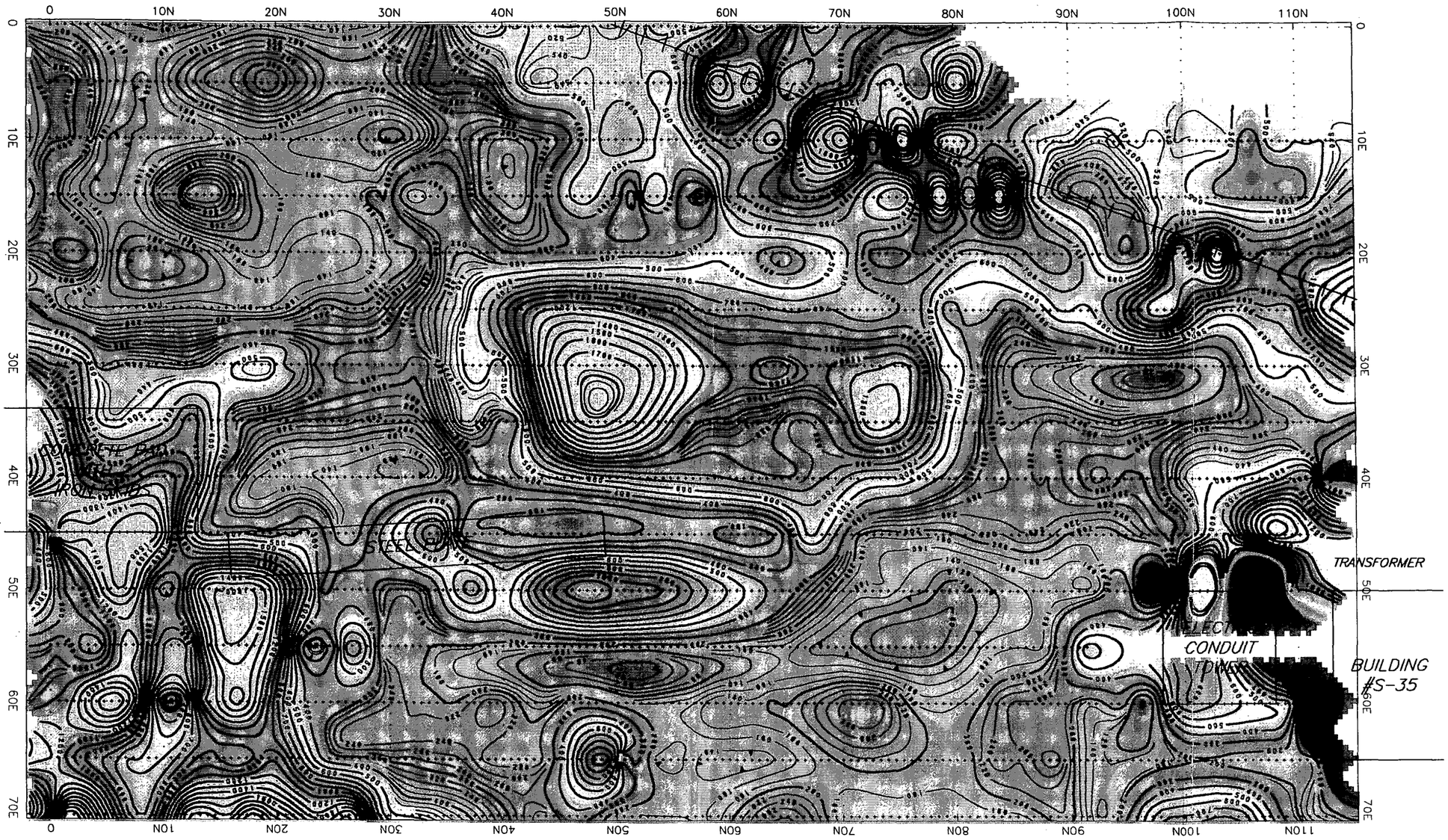
NOTE:

Site sketch generated from field notes.

Figure 13
GPR Survey & Integrated Interpretation – UST Area 6
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



LEGEND

- EM DATA STATION
- MANHOLE
- HYDRANT
- RAILROAD TRACK

NOTES:

1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

SCALE (feet)

0 10 20

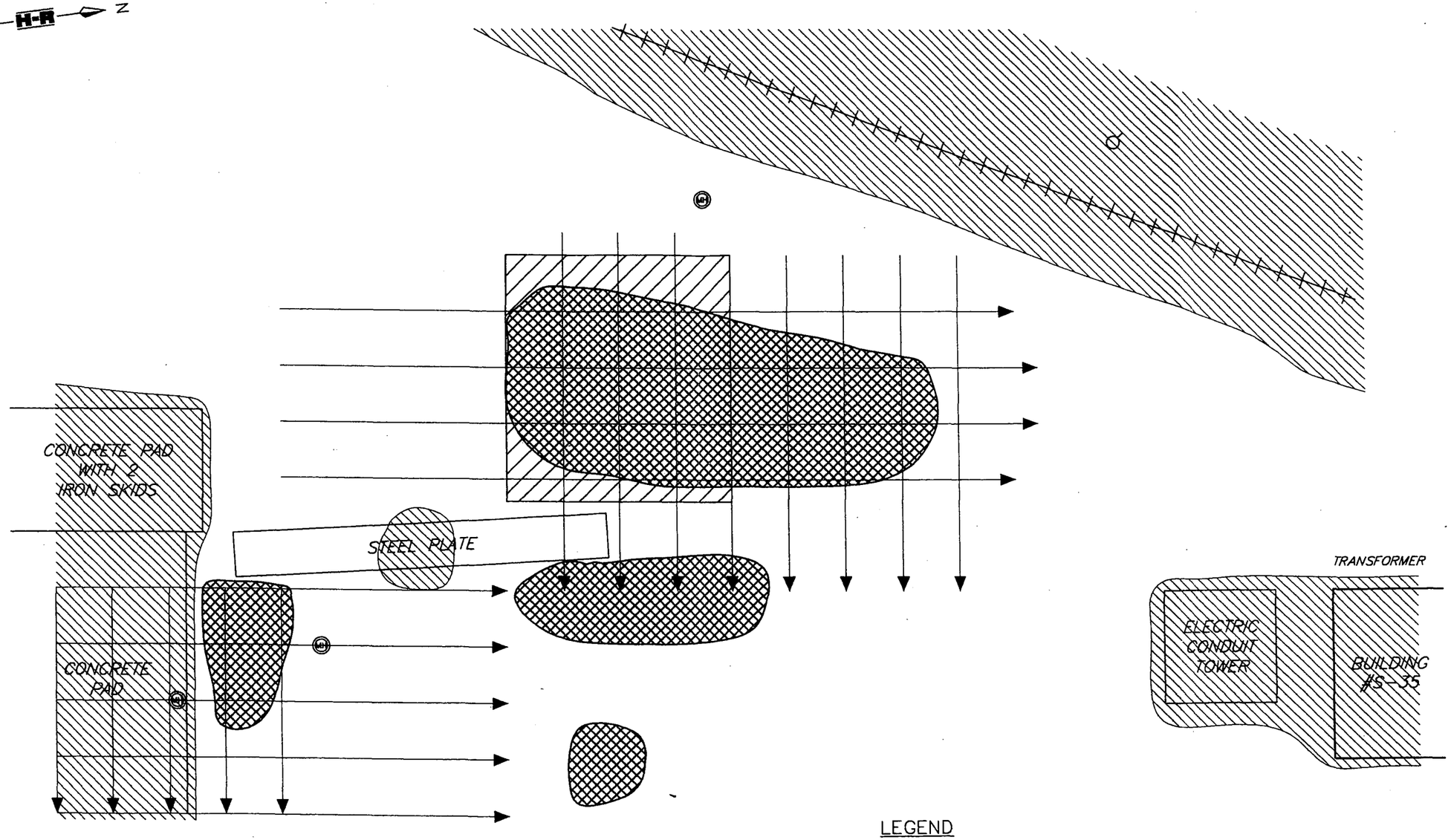
APPROX. H-R N

Figure 14
EM61 Survey - UST Area 7
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59	December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire

APPROX. H-R N



LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.
- POSSIBLE BURIED CONCRETE
- MANHOLE
- HYDRANT
- RAILROAD TRACK

SCALE (feet)

0 10 20

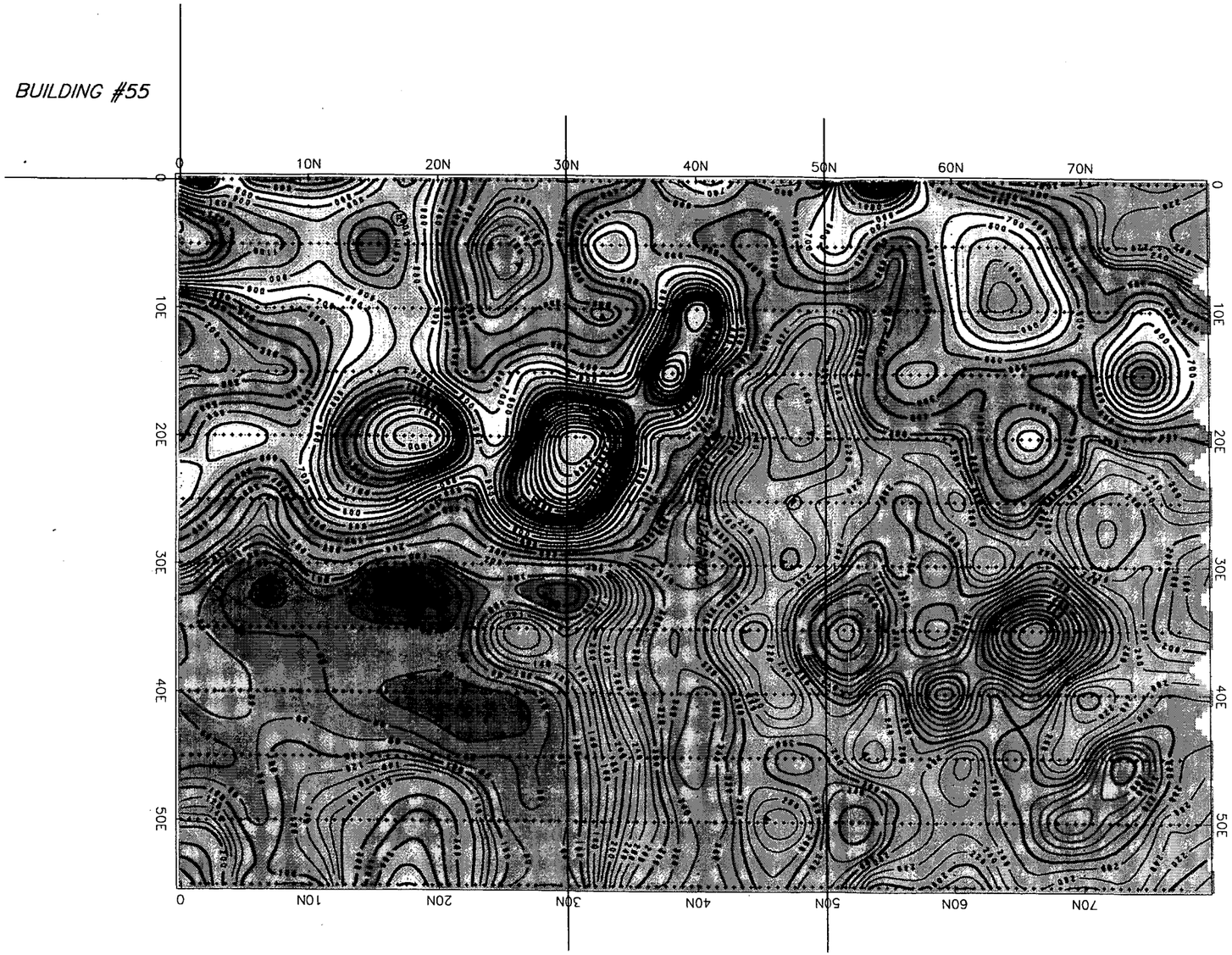
NOTE:

Site sketch generated from field notes.

Figure 15
GPR Survey & Integrated Interpretation – UST Area 7
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



APPROX. N

H+R

LEGEND

- EM DATA STATION
- Ⓟ PIPE

SCALE (feet)

0 10 20

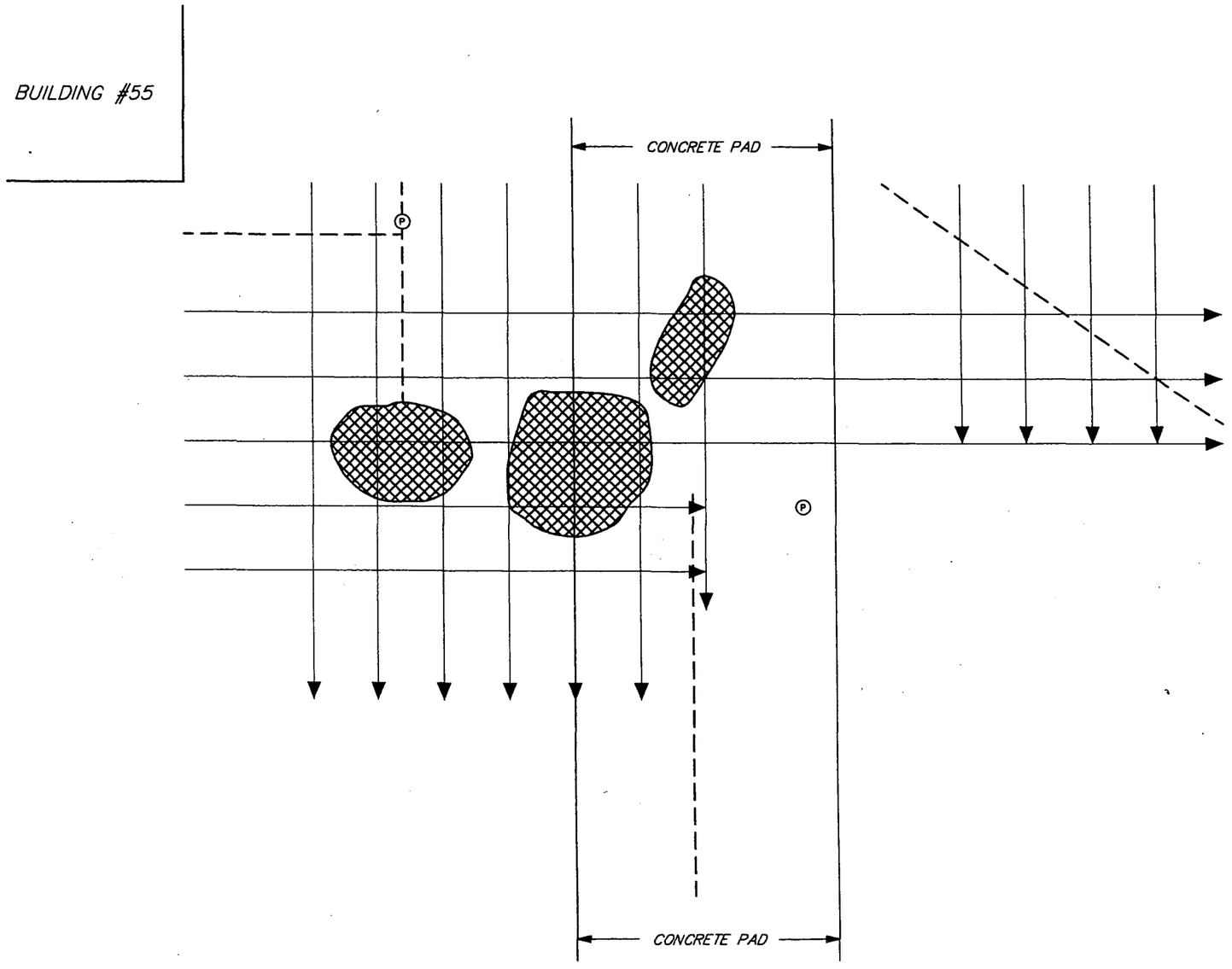
NOTES:

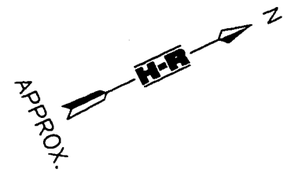
1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

Figure 16
EM61 Survey – UST Area 8
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire





LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- POSSIBLE UTILITY
- Ⓟ VERTICAL PIPE, CUT AT GRADE

SCALE (feet)

0 10 20

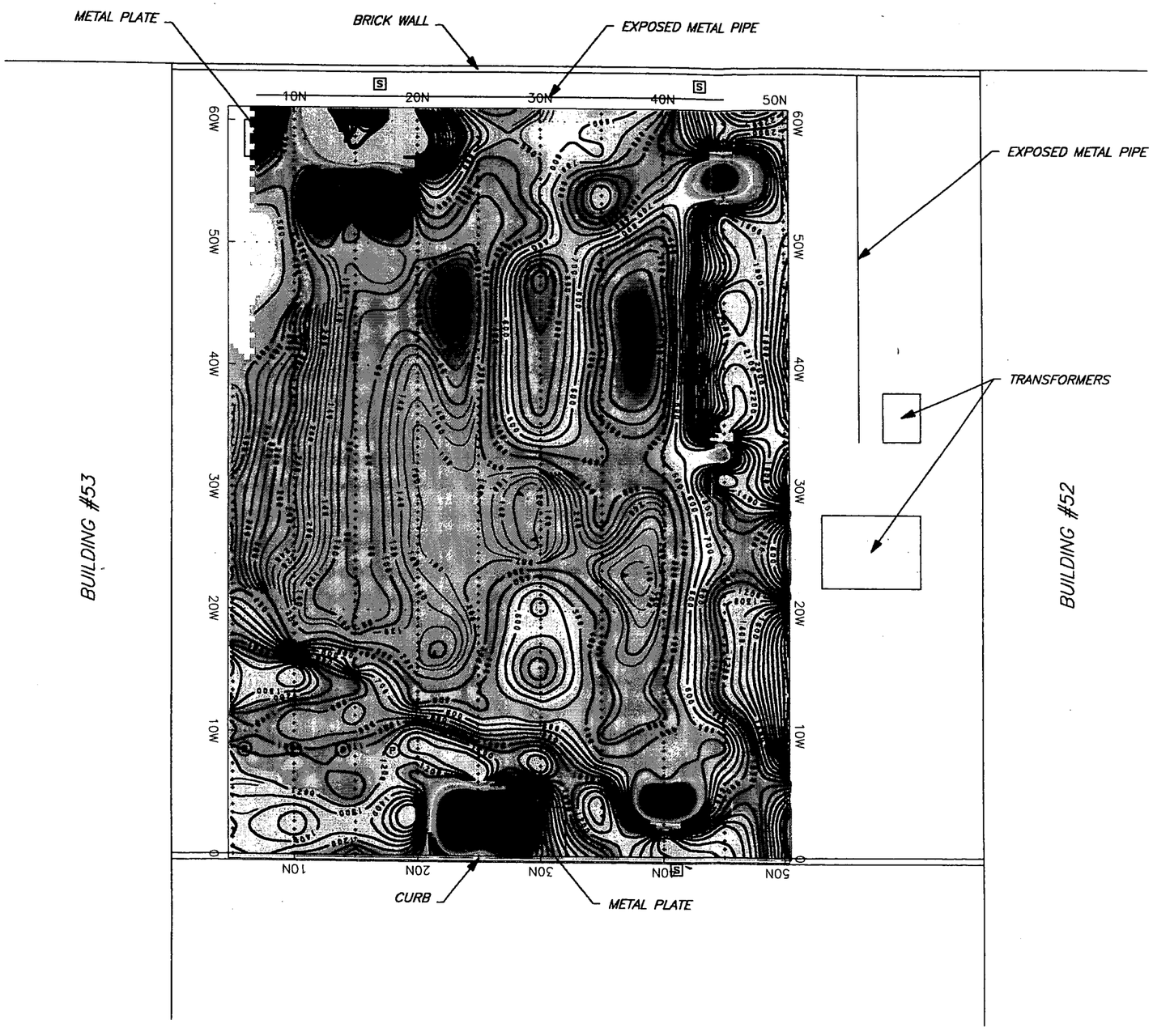
NOTE:

Site sketch generated from field notes.

Figure 17
GPR Survey & Integrated Interpretation – UST Area 8
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



LEGEND

- EM DATA STATION
- (P) PIPE
- [S] OVERHEAD SUPPORT

SCALE (feet)

0 10 20

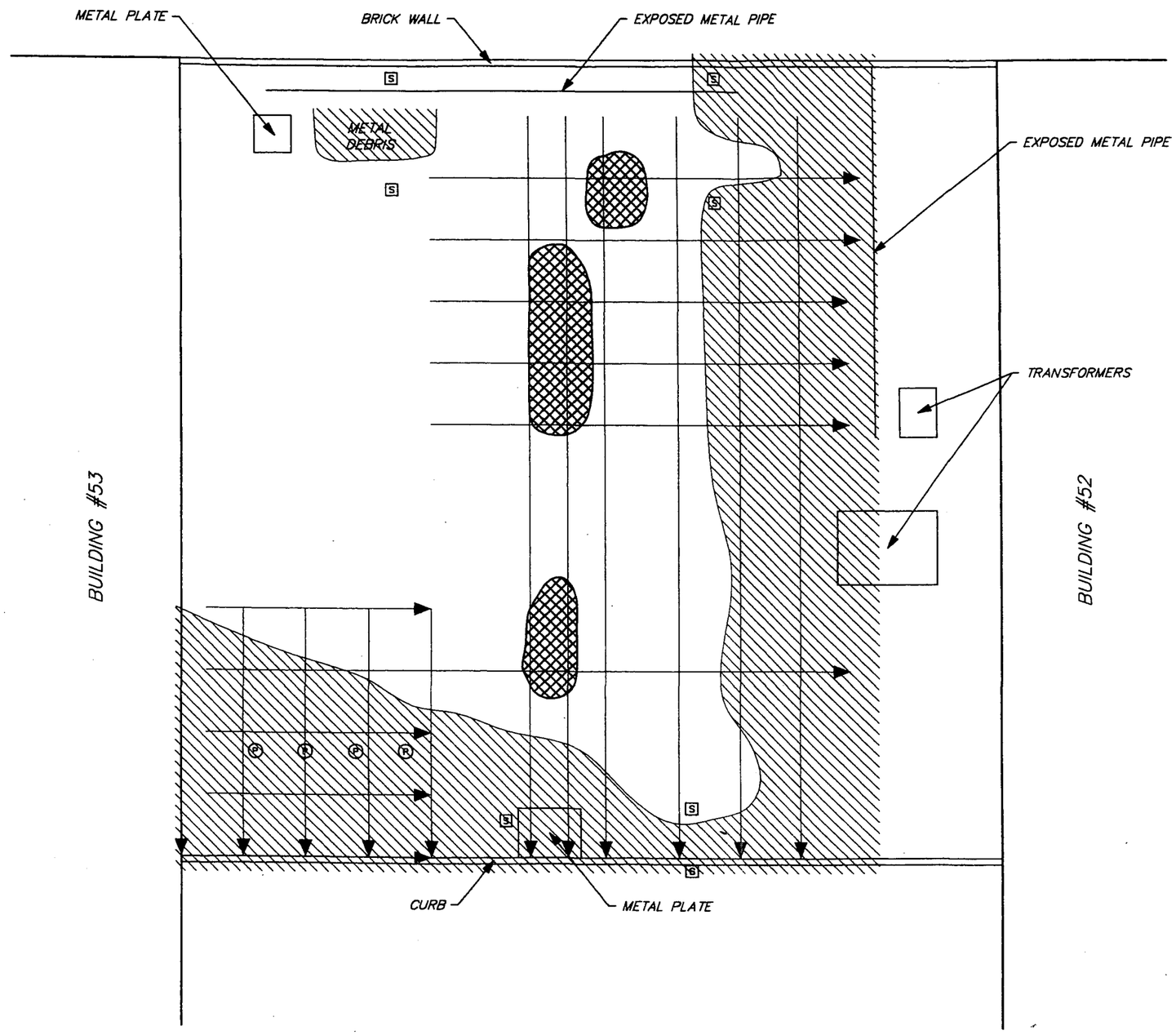
NOTES:

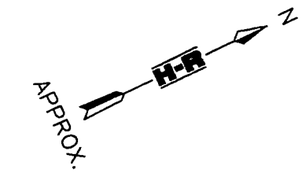
1. Site sketch generated from field notes.
2. Contour Interval = 20 mV.

Figure 18
EM61 Survey - UST Area 9
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire





LEGEND

- GPR TRAVERSE
- AREA OF POSSIBLE BURIED METAL
- EM ANOMALY ATTRIBUTED TO EFFECTS OF SURFACE OBJECTS. THE PRESENCE OR ABSENCE OF BURIED METAL WITHIN THIS AREA CANNOT BE DETERMINED ON THE BASIS OF THE GEOPHYSICAL DATA ALONE.
- Ⓟ VERTICAL PIPE, CUT AT GRADE
- [S] OVERHEAD SUPPORT

SCALE (feet)

0 10 20

NOTE:

Site sketch generated from field notes.

Figure 19
GPR Survey & Integrated Interpretation – UST Area 9
Procter & Gamble Port Ivory Facility
Staten Island, New York

File 00D59 | December, 2000

HAGER–RICHTER GEOSCIENCE, INC.
Salem, New Hampshire

APPENDIX
GROUND PENETRATING RADAR SURVEYS

Field Work. A Geophysical Survey Systems, Inc. Model SIR-2 ground penetrating radar system was used for this survey. The SIR-2 is a fully digital system and includes a color monitor, grey-scale thermal printer, and 10-Gbyte digital tape backup system. The transmit/receive antenna is housed in a box that is moved across the surface. The antenna transmits electromagnetic signals into the subsurface and then detects, amplifies, and displays reflections of the signals in real-time on the color monitor. The result is a radar record of the subsurface.

The maximum depth of penetration of the GPR signal and the resolution of the reflections are controlled in part by the frequency of the antenna used and in part by the electrical properties of the subsurface. Hager-Richter owns antennas with the following center frequencies: 120 MHz, 300 MHz, 500 MHz, and 1000 MHz. The total time during which radar signals are recorded can be varied from a few to 1,000 nanoseconds (nsec). However, there is a trade-off between total time, corresponding to depth range, and resolution. As the total time of recording is increased, the resolution of the GPR records decreases. For a given site, the total time window is set to detect features located somewhat below the maximum expected target depths.

Interpretation. The horizontal axis of a GPR record represents distance across the surface and the vertical axis represents round-trip travel time of the radar signal. The round-trip travel time can be converted to approximate depth by correlating with reflections from targets of known depth or by using handbook values of velocities for materials in the subsurface. For those sites where the subsurface is electrically heterogeneous, the travel times of the radar signal may be different in the various materials, and the vertical scale for the radar records is not necessarily uniform with depth.

The reflections in a GPR record are produced by spatial changes in the physical properties (e.g., type of material, subsurface fluids, porosity, etc.) and related changes in the electrical properties (dielectric constant) of the subsurface materials in the path of the signals. The greater the difference in electrical properties between two materials in the subsurface, the stronger the reflection observed in the GPR record.

The size, shape, and amplitude of the GPR reflections are the characteristics that are considered in the interpretation of the data from any site. Because the electrical properties of metal USTs, utilities, and conduits different significantly from those of the soils in which they are buried, such objects produce GPR reflections with high amplitude and distinctive shapes that permit identification with a high degree of reliability. Most other objects, although readily detectable, require "ground truth" for identification. Only excavations provide positive identification for most objects identified in GPR surveys.

For GPR profiles oriented perpendicular to the long axis of a tank, the signature is similar to a hyperbola, the shape of which is a function of the diameter and depth of burial of the tank. For GPR profiles oriented parallel to the long axis of a tank, the signature is a set of parallel, high amplitude reflections that terminate sharply at the ends of the tank. GPR, then, is useful for determining the exact location and dimensions of USTs.

Limitations of the Method. The maximum depth to which GPR signals can penetrate depends on the electrical properties of the subsurface materials. The higher the electrical conductivity of the subsurface materials, the lower the radar signal penetration. Clay minerals and/or brackish water in the subsurface, for example, attenuate the GPR signal, so reflections are not received from materials at greater depths.

There are limitations of the GPR technique as used to detect and/or locate particular targets: (1) surface conditions, (2) electrical conductivity of the ground, (3) contrast of the electrical conductivities of the targets and the ground, and (4) spacing between lines. Of these limitations, only the fourth, line spacing, is controlled by the operator.

The condition of the ground surface can affect the quality of the GPR data and the depth of penetration of the GPR signal. Sites covered with high grass, bushes, landscape structures, debris, obstacles, soil mounds, etc. limit the survey access and the coupling of the GPR antenna with the ground. In many cases, the GPR signal will not penetrate below concrete pavement, and a target may not be detectable.

The electrical conductivity of the ground determines the attenuation of the GPR signals, and thereby limits the maximum depth of exploration. The GPR signal does not penetrate clay-rich soils, and targets buried in clay can be missed.

A contrast in the electrical conductivities of the ground and the target is required to obtain a reflection of the GPR signal. If the contrast is too small, possibly due to extremely corroded conditions of a metal target, then the reflection may be too weak to recognize, and the target can be missed.

The spacing between lines is under control of the GPR operator, and the design of the survey is based on the dimensions of the smallest target of interest. Targets with dimensions smaller than the spacing between GPR survey lines can be missed.

Accurate determination of the depth to any interface requires calibration of the site specific GPR signal velocity. Where targets of a known depth are not available at a site, the time-to-depth conversion of the GPR signal can be estimated from handbook values, but such depth estimations might contain significant error.

Interpretation of GPR data is subjective. As noted above, "ground truth" through correlation with borings and excavations is required for positive identification of most objects detected on the basis of GPR data.

APPENDIX
EM61 Metal Detector Surveys

Equipment. The Geonics EM61Metal Detector is a time-domain electromagnetic induction type instrument designed solely for detecting buried metal objects. The manufacturer's specifications are attached. An air-cored 1-meter square transmitter coil generates a pulsed primary magnetic field in the earth, thereby inducing eddy currents in nearby metal objects. The decay of the eddy current produces a secondary magnetic field that is sensed by two receiver coils, one coincident with the transmitter and one positioned 40 cm above the main coil. By measuring the secondary magnetic field after the current in the ground has dissipated but before the current in metal objects has dissipated, the instrument responds only to the secondary magnetic field produced by metal objects. Two channels of secondary response are measured in mV and are recorded on a digital data logger. The system is generally operated by pulling the coils as a trailer with an odometer mounted on the axle to trigger the data logger automatically at 20-cm intervals.

Data Analysis and Interpretation. EM61survey data are most commonly plotted as color contour plots of Channel 2, the lower of the two receiver coils, and the difference between Channel 1 and Channel 2. The differential plot suppresses the effects of surface metal objects.

A buried metal object produces a single, sharply defined, positive peak response when the EM61 is located directly over the object. Thus, the interpretation of the plotted data is relatively straightforward in terms of the presence and location of buried metal objects. The depth of metal objects can be estimated by the width or "footprint" of the peak response.

According to the manufacturer's literature, the EM61 can detect a single 55-gallon drum buried at a depth of 10 feet. The instrument provides excellent lateral location accuracy and discrimination of multiple targets due to the data density (20 cm) possible along each traverse. The EM61 is not as affected by interference from surface metal and electrical objects as other geophysical methods and has the advantage of detecting both ferrous and non-ferrous metal objects.

Limitations of the Method. The EM61 detects metal objects that are present below the 1-meter square coils of the instrument, but it is not very sensitive to the presence of small metal objects located to the sides of the coils. It is possible, then, that metal objects could be missed in an EM61 survey if the survey data are collected at intervals greater than 1 meter.

Detection and identification should be clearly differentiated. Detection in this context is the recognition of the presence of a metal object, and the EM61 is excellent for such purposes. Identification, on the other hand, is determination of the nature of the causative body (i.e., what is the body -- a cache of drums, UST, automobile, white goods, etc.?), and the EM61 cannot identify the buried metal object.

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

AOC	Description of Issues	Description of Actions and Sampling	Sampling Methodology
Potential USTs (UST1 to UST9)	Sanborn Maps identified nine areas which may include USTs.	GPR/EM Survey performed at each area to attempt to identify tanks. 16 soil borings were installed at the site with 8 soil borings in Operable Unit 1: UST1-2, **UST2-1, UST2-1A, UST2-1B, UST2-2, UST2-3,** UST4-1, UST4-2, **UST5-2, UST6-2, UST6-3,** UST7-1, UST7-1A, UST7-1B, UST7-2 and UST9-1. 30 soil samples from the site with 16 samples from Operable Unit 1were submitted for laboratory analysis: UST1-2(12-14), UST1-2(2-4), **UST2-1(6-7), UST2-1(8-10), UST2-1A(0-2), UST2-1B(2-4), UST2-1B(4-6), UST2-2(4-6), UST2-2(10-12), UST2-3(2-4), UST2-3(12-14), UST2-3(8-9),** UST4-1(14-15), UST4-12-4), UST4-1(10-11), UST4-2(12-14), UST4-2(4-6), **UST5-2(4-6), UST6-2(4-6), UST6-2(8-10), UST6-2(16-18), UST6-3(14-16), UST6-3(1.5-2),** UST7-1(8-10), UST7-1A(0-2), UST7-1B(2-3.5), UST7-2(8-10), UST7-2(10-12), UST9-1(8-10) and UST9-1(2-4). 2 temporary wells from the site with one temporary well from Operable Unit 1 were installed and sampled. TMW-01 and **TMW-02**	Soil E418.1, SW6010, SW7471, SW8081, SW8082, SW8260, SW8270, SW9014, SW9045 SW9065, SW9071 Groundwater E624, E625, E200.7, E245.2 E150.1, E418.1, E1664, E335.2, E420.1, E608
Precipitate at Bridge Creek	Investigative efforts by P&G identified the presence of a precipitate material along the banks of Bridge Creek.	The portion of Bridge Creek located along the western side of the site was visually reviewed during two low tide and two high tide periods. Sediment/precipitate samples and surface water samples were collected and analyzed. 5 sediment samples were submitted for laboratory analysis: **SED-1, SED-2, SED-3, SED-4 and SED-5.** 3 surface water samples were submitted for laboratory analysis: **SW-1, SW-2 and SW-3.**	Sediment SW6010, SW7471 Surface Water 200.7, E245.2, 335.2

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

AOC	Description of Issues	Description of Actions and Sampling	Sampling Methodology
P&G AOCs	Historical reports identified AOCs at the subject site which had been evaluated, to some degree, by P&G. Information pertaining to AOCs (Areas A through I, Areas K through R and the Wood Yard) is described in Table 2. Soil borings were installed and sampled at these areas. The soil boring and sample references for each AOC are listed below. Groundwater actions are described under the groundwater AOC.	Soil borings were installed and sampled. 58 soil borings were installed at the site with 13 soil borings at Operable Unit 1: **A-1, A-2, A-3,** A-4, A-5, **A-6,** B-02, B-2, B-1, B-3, B-4, **PAMW-1,** PAMW-1D (not sampled), D-1, D-2, D-3, D-4, D-4A, E-1, **F1-3,** F2-2, G-2, G-3, G-4, G-5, G-5A, G-6, G-7(N), G-8, G-9, G-10, **H/R-1, H/R-2, H/R-3,** I-1, K-1, K-2, L-1, L-2, L3(FILL), L-4, L-5, L-6, M-01, M-2, M-3, M-4, M-5, MW-04, PAMW-4, P-1, P-2, P-3, Q1-1, **WOOD-01C, WOOD-3, WOOD-03, WOOD-5.** 106 soil samples from the site with 30 samples from Operable Unit 1 that were submitted for laboratory analysis: **A-1(2-4), A-2(6-8), A-2(2-4), A-2(0-2), A-3(10-12), A-3(6-8), A-3(2-4),** A-4(12-14), A-4(6-8), A-5(2-4), **A-6(01-3),** B-1(2-4), B-1(6-8), B-1(9-10), B-02(2-4), B-2(8-10), B-3(2-4), B-3(6-8), **PAMW-1(3-4.5), PAMW-1(0-2), PAMW-1(2-4), PAMW-1(8-10),** D-1(0-2), D-1(6-8), D-1(18-20), D-2(0-2), D-2(6-8), D-3(0-2), D-4(0-2), D-4A(6-8), E-1(0.2-2), E-1(4-6), E-1(10-12), **F1-3(1-3), F1-3(3-5),** F2-2(2-4), F2-2(8-10), G-2(0-2), G-2(4-6), G-2(6-8), G-3(0-2), G-4(6-8), G-5(4-6), G-5A(8-10),G-6(4-6),G-6(6-8),G-7(N)(8-10), G-7(N)(10-12), G-8(1-2), G-8(6-7), G-9(4-6), G-10(2-4), **H/R-1(1-3), H/R-1(3-4.5), H/R-2(0-1.5), H/R-2(1.5-3.5), H/R-3(0.3-1), H/R-3(1-3),** I-1(0-2), I-1(2-4), K-1(2-4), K-1(5-6), K-2(0-2), K-2(2-4), L-1(2-4), L-1(6-8), L-2(8-10), L-2(10-12), L3FILL(2-4), L3FILL(8-10), L3FILL(12-14), L-4(0-2), L-4(6-8), L-5(2-4), L-5(8-10), L-6(6-7.5), L-6(7.5-8), M-01(0-2), M-01(2-4), M-2(2-4), M-2(4-6), M-3(2-4), M-4(2-4), M-4(6-8), M-5(6-6.5), MW-04(1-2), PAMW-4(0-2), PAMW-4(4-6), P-1(2-4), P-1(8-10), P-2(2-4), P-2(4-6), P-3(2-4), P-3(4-6), Q1-1(2-4), Q1-1(4-6), **WOOD-01C(10-12), WOOD-03(0.5-2), WOOD-03 (2-4), WOOD-3(2-4), WOOD-3(4-6), WOOD-3(6-8), WOOD-5(0-2), WOOD-5(2-4), WOOD-5(4-6), WOOD-5(6-8), and WOOD-5(8-10).**	Soil E418.1, SW6010, SW7471, SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area A West Tank Field (Southwest of Building 16)/Block 1400		6 soil borings at the site with 4 at Operable Unit 1 were installed: **A-1, A-2, A-3,** A-4, A-5, **A-6,** 11 samples from the site with 8 samples from Operable Unit 1 were submitted for laboratory analysis: **A-1(2-4), A-2(0-2), A-2(2-4), A-3(2-4), A-2 (6-8), A-3(6-8), A-3(10-12),** A-4(6-8), A-4(12-14), A-5(2-4) **and A-6(1-3)**	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area B Former Raw Product and By-product AST Areas/Block 1400		5 soil borings were installed: B-1, B-02, B-3, B-4 11 samples were submitted for laboratory analysis: B-1(2-4), B-1(6-8), B-1(9-10), B-02(2-4), B-02(6-8), B-02(8-10), B-3(2-4), B-3(6-8), B-4(2-4), B-4(5-6), and B-4(6-7).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Area C Former Oleum AST and Acid Wastewater Area/Block 1400		2 soil borings were installed: **PAMW-1** and **PAMW-1D** 4 samples were submitted for laboratory analysis: **PAMW-1(2-4), PAMW-1 (0-2), PAMW-1(3-4.5) and PAMW-1(8-10).** All samples submitted for analysis were from PAMW-1.	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area D Fuel Oil AST Area/Block 1309		5 soil borings were installed: D-1, D-2, D-3, D-4 and D-4A). 8 samples were submitted for laboratory analysis: D-1(0-2), D-1(6-8), D-1(18-20), D-2(0-2), D-2(6-8), D-3(1-3), D-4(0-2) and D-4A(6-8).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area E S&S Tank Field, Super Fat Trap/Block 1400		1 soil boring was installed: E-1. 3 samples were submitted for laboratory analysis: E-1(0.2-2), E-1(4-6) and E-1(10-12).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area F1 Spent Nickel Catalyst Drum Storage Area/Block 1400		1 soil boring at the site was installed and is located in Operable Unit 1: **F1-3** 2 samples from the site in Operable Unit 1 were submitted for laboratory analysis: **F1-3(1-3), F1-3(3-5).**	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area F2 Waste Oil Drum Storage Area/Block 1400		1 soil boring was installed: F2-2(2-4) and F2-2(8-10). 2 samples were submitted for laboratory analysis: F2-2(2-4) and F2-2(8-10).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area G Former Vegetable AST Area/Block 1338		10 soil borings were installed: G-2, G-3, G-4, G-5, G-5A, G-6, G-7(N), G-8, G-9 and G-10. 15 samples were submitted for laboratory analysis: G-2(0-2), G-2(4-6), G-2(6-8), G-3(0-2), G-4(6-8), G-5(4-6), G-5A(8-10), G-6(4-6), G-6(6-8), G-7(N)(8-10), G-7(N)(10-12), G-8(1-2), G-8(6-7), G-9(4-6) and G-10(2-4).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area H and Area R (Area H/R) Former Rosin Storage Area/Block 1400		3 soil borings at the site, all located in Operable Unit 1, were installed: **H/R-1, H/R-2 and H/R-3.** 6 samples, all from borings located in Operable Unit 1, were submitted for laboratory analysis: **H/R-1(1-3), H/R-1(3-4.5), H/R-2(0-1.5), H/R-2(1.5-3.5), H/R-3(0.3-1) and H/R-3(1-3).**	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area I Temporary Fly Ash Storage Area/Block 1309		1 soil boring was installed: I-1. 2 samples were submitted for laboratory analysis: I-1(0-2) and I-1(2-4).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area K /Block 1338		2 soil borings were installed: K-1 and K-2. 3 samples were submitted for laboratory analysis: K-1(2-4), K-1(5-6), K-2(0-2) and K-2(2-4).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Area L Filled Area (southeast of Building 64)/Block 1338		6 soil borings were installed: L-1, L-2, L3(FILL), L-4, L-5 and L-6. 13 samples were submitted for laboratory analysis: L-1(2-4), L-1(6-8), L-2(8-10), L-2(10-12), L3(FILL)(2-4), L3(FILL)(8-10), L3(FILL)(12-14), L-4(0-2), L-4(6-8), L-5(2-4), L-5(8-10), L-6(6-7.5) and L-6(7.5-8).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area M Area East of Edible Oils Buildings 52-56/Block 1338		7 soil borings were installed: M-01, M-2, M-3, M-4, M-5, MW-04 and PAMW-4. 11 samples were submitted for laboratory analysis: M-01 (2-4), M-01 (0-2,) M-2 (2-4), M-2 (4-6), M-3 (2-4), M-4 (1-2), M-4 (2-4), M-4 (6-8), M-5 (6-6.5), PAMW-4 (0-2) and PA-MW-04 (4-6).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area N Super Fat Trap Area/Block 1338		Evaluation of this area has been included with evaluation of Area G. Soil boring - G-7(N) and samples G-7(N)(8-10) and G-7(10-12).	See sampling methodology for Area G.
Area P Former Product Unloading Pit/Block 1400		3 soil borings were installed: P-1, P-2 and P-3. 6 soil samples were submitted for laboratory analysis: P-1(2-4), P-1(8-10), P-2(2-4), P-2(4-6), P-3(2-4) and P-3(4-6).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area Q1 Existing Scale Pit/Block 1338		1 soil boring was installed, Q1-1. 2 samples were submitted for laboratory analysis: Q1-1(2-4) and Q1-1(4-6).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Area R Northwest Corner of Soap Manufacturing Area (suspected calcium carbonate fill area)/Block 1400		**Evaluation of this area has been included with evaluation of Area H**	**See sampling methodology for Area H.**
Wood Yard		4 soil borings at the site, all located in Operable Unit 1, were installed: **WOOD-01C, WOOD-03, WOOD-3 and WOOD-05.** 11 samples, all from boring located in Operable Unit 1, were submitted for laboratory analysis: **WOOD-01C(10-12), WOOD-03(0.5-2), WOOD-03(2-4), WOOD-3(2-4), WOOD-3(6-8), WOOD-5(0-2), WOOD-5(2-4), WOOD-5(4-6), WOOD-5(6-8), WOOD-5(8-10) and WOOD-5(14-16).**	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Closed C&D Landfill	P&G operated a construction and demolition (C&D) waste landfill at Block 1309. The landfill has been closed in accordance with applicable regulations. Post-closure requirements include both groundwater monitoring and landfill cap maintenance.	No actions were undertaken as part of the site investigation.	Not Applicable
Railroad Tracks and Sidings	Visual inspection of the site identified the presence of railroad tracks, sidings and equipment throughout the subject site. Investigative efforts were undertaken to document environmental quality.	Soil borings were installed and sampled. 26 soil borings at the site with 7 soil borings at Operable Unit 1 were installed: RR-01, RR-02, RR-03, RR-04, RR-05, RR-06, RR-07, **RR-8, RR-10,** RR-15, **PAMW-5, PAMW-6,** A-4, A-5, B-4, G-8, **H/R-3**, L-1, PAMW-4, MW-04, M-3, P-1, P-3, P-2, Q1-1 and **WOOD-01C.** 47 samples from the site with 12 samples from Operable Unit 1 were submitted for laboratory analysis: RR-01(0-1.2), RR-01(1.2-2), RR-02(0-2), RR-03(1.5-2), RR-04(0-2), RR-04(2-4), RR-05(0-2), RR-05(2-4), RR-06(0-2), RR-06(2-4), RR-07(0-2), RR-07(2-4), **RR-8(2-4), RR-8(6-8), RR-10(2-4), RR-10(8-10),** RR-15(4-6), RR-15(0-2), **PAMW-5(0-2), PAMW-6(0-2), PAMW-6(2-4), PAMW-6(4-6), PAMW-6(6-8), PAMW-6(8-10),** A-4(6-8), A-4(6-8), A-4(12-14), A-4(12-14), A-5(2-4),B-4(2-4), G-8(1-2), G-8(6-7**), H/R-3(0-2)**, L-1(2-4), L-1(6-8), M-4(2-4), PA-MW-04(6-8), M-3(2-4), P-1(2-4), P-1(8-10), P-3(2-4), P-3(4-6), P-2(0-2), P-2(2-4), Q1-1(2-4), Q1-1(4-6) and **WOOD-01C(10-12)**.	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Surface Staining	Staining was noted on the soil flooring in two bays of Building #20 as well as south of Building 60B.	Soil borings were installed and sampled. 6 soil borings were installed: STAIN-1, ST-02, ST-03, ST-3B, RR-06 and RR-07. 12 samples were submitted for laboratory analysis: STAIN-1(0-2), STAIN-1(4-6), ST-02(1-2), ST-02(2-3), ST-03(1-1.5), ST-03(1.5-2.5), ST-3B(0-2), ST-3B(2-4), RR-06(0-2) RR-06(2-4), RR-07(0-2) and RR-07(2-4).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Pits and Drains	Pits and drains, some sealed with gravel, were noted at both interior and exterior site locations. In addition, reports identify the presence of oil/water separator systems. .	A visual inspection was performed, as feasible, to assess conditions at pits and drains. Soil borings were installed and sampled at and adjacent to current and former pits and drains. 19 soil borings were installed at the site with 6 soil borings at Operable Unit 1: PD-1, PD-3, PD-4, PD-5, **PD-6, PD-8, PD-9, PD-10, PD-11**, PD-14, A-4, A-5, P-1, P-3, P-2, RR-03, RR-15, **PAMW-5** and ST-02. 33 samples, with 11 samples collected from soil borings installed at Operable Unit 1 were submitted for laboratory analysis: PD-1(2-4), PD-1(10-12), PD-3(4-6), PD-4(8-10), PD-5(0-2), PD-5(2-4), **PD-6(6-8), PD-6(12-14), PD-8(2-4), PD-8(8-10), PD-8(16-17), PD-9(4-6), PD-9(8-10), PD-10(2-4), PD-10(6-8), PD-11(4-6),** PD-14(2-4), PD-14(6-8), A-4(6-8), A-4(12-14), A-5(2-4), P-1(2-4), P-1(8-10), P-2(0-2), P-2(2-4), P-3(2-4), P-3(6-8), RR-03(0-2), RR-15(0-2), RR-15(4-6), **PAMW-5(0-2),** ST-02(0-2) and ST-02(2-4).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071
Former Structures	Review of Sanborn Maps and aerial photographs reveal the presence of former structures, ASTs, railroad tracks and sidings, at various locations throughout the subject site. Review of some of the historical sources also revealed the presence of discolored areas and/or debris piles.	Soil borings were installed and sampled at areas formerly occupied by structures, debris piles and discolored areas. 24 soil borings were installed at the site with 9 soil borings at Operable Unit 1: **FS-1B,** FS-2, FS-3, **FS-4,** FS-6, FS-7, FS-8, PAMW-4, PA-MW-7, PAMW-8, **A-3,** M-3, **WOOD-01C, WOOD-3, WOOD-5,** RR-01, RR-04, RR-05, PD-1, PD-3, **PD-8, PD-9 and PD-11.** 54 samples, with 26 samples collected from soil borings installed at Operable Unit 1 were submitted for laboratory analysis: **FS-1B(0-2), FS-1B(6-7), FS-1B(12-13.5),** FS-2(2-4), FS-2(8-10), FS-2(17-18), FS-3(2-4), FS-03(6-8), **FS-4(0-2), FS-4(2-4),** FS-6(0-2), FS-6(4-6), FS-7(2-4), FS-7(8-10), FS-8(0-2), PAMW-4(0-2), PAMW-4(4-6), PAMW-7(0-2), PAMW-7(2-4), PAMW-7(4-6), PAMW-7(6-8), PAMW-8(0-2), PAMW-8(4-6), **A-3(2-4), A-3(6-8), A-3(10-12),** M-3(2-4), **WOOD-01C(10-12), WOOD-3(0-2), WOOD-3(2-4), WOOD-5(0-2), WOOD-5(2-4), WOOD-5(4-6), WOOD-5(6-8), WOOD-5(8-10), WOOD-5(8-10), WOOD-5(14-16), WOOD-3(2-4), WOOD-3(6-8),** RR-01(0-2), RR-01(2-4), RR-04(0-2), RR-04(2-4), RR-05(0-2), RR-05(8-10), PD-1(2-4), PD-1(10-12), PD-3(4-6), **PD-8(2-4), PD-8(8-10), PD-8(16-17), PD-9(4-6), PD-9(8-10) and PD-11(4-6).**	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Fill Material	P&G placed a variety of fill material at the subject site. The fill materials present at the site include soil/sand, construction debris (wood, bricks, glass, concrete), ash from boiler operations, slag, vegetative debris and by-products from production activities (calcium carbonate, spent diatomaceous filter earth, and spent carbonaceous filter material). The presence of black staining of site soil was noted in P&G reports.	Soil borings were installed throughout the site to characterize the type and extent of fill material. Representative samples were submitted for laboratory analysis to determine the presence/absence of contaminants in fill materials. All soil borings were evaluated for the presence of fill material. The following additional soil borings were installed to complete the site-wide fill characterization. 17 soil borings with 2 soil borings at Operable Unit 1 were installed: Fill-2, Fill-3, Fill-4, Fill-5, **Fill-7, Fill-8**, Fill-10, Fill-11, Fill-12, Fill-13, Fill-14, Fill-15, Fill-16, Fill-17, Fill-20 Fill-21 and Fill-25. 53 samples, with 5 samples from soil borings installed at Operable Unit 1 were submitted for laboratory analysis: Fill-2(0.7-3.), Fill-3(0-2), Fill-3(2-4), Fill-3(4-6), Fill-4(0-2), Fill-4(2-4), Fill-4(4-6), Fill-4(6-8), Fill-5(2-4), Fill-5(6-8), **Fill-7(1.5-2.5), Fill-7(2.5-4), Fill-7(10-12), Fill-8(0-2), Fill-8(6-8),** Fill-10(3-4), Fill-10(6-8), Fill-11(0-2), Fill-11(2-4), Fill-12(0-2), Fill-13(1-3), Fill-13(3-5), Fill-14(4-6), Fill-14(6-8), Fill-15(4-6), Fill-15(12-13), Fill-16(2-4), Fill-17(0-2), Fill-17(2-4), Fill-20(0.2-2), Fill-20(2-4), Fill-20(4-6), Fill-20(6-8), Fill-20(8-10), Fill-20(10-12), Fill-20(12-14), Fill-20(14-15.5), Fill-20(15.5-16), Fill-21(2-4), Fill-21(8-10), Fill-25(0-2), Fill-25(4-6), Fill-25(8-10), PA-MW-12(0-2), PA-MW-12(2-4), PA-MW-12(4-6), PA-MW-12(6-8), PA-MW-10D(4-6), PA-MW-13(0-2), PA-MW-13(2-4), PA-MW-14D(0-2) and PA-MW-14D(4-6).	Soil E418.1, SW6010, SW7471 SW8081, SW8082, SW8260 SW8270, SW9014, SW9045 SW9065, SW9071

Hatch Mott MacDonald

Table 4
Summary of SI Investigative Actions and Sampling
Operable Unit 1 HHMT - Port Ivory Facility [1]

Groundwater	P&G reports identified the presence of contaminants, elevated pH and free phase product in site monitoring wells.	Samples were obtained from a representative number of existing wells and additional wells were installed and sampled to evaluate current groundwater quality. All wells were examined for the presence of free product and samples of identified free product were submitted for fingerprinting. 17 wells at the site with 5 wells at Operable Unit 1 were installed and sampled: PAMW-14D, PAMW-15, PAMW-15D (two rounds of samples submitted for laboratory analysis), **PAMW-1, PAMW-1D**, PAMW-4, PAMW-04D, **PAMW-5, PAMW-6, PAMW-6D**, PAMW-7, PAMW-7D, PAMW-8, PAMW-10D, PAMW-11D, PAMW-12 and PAMW-13. 2 temporary wells at the site, 1 at Operable Unit 1 were installed and sampled: TMW-01 **and TMW-02.** The following 14 existing wells at the site, 5 of which are located in Operable Unit 1, were included in the sampling effort: BW-13, **CS-7, EW-3, EW-6,** GW-10, GW-3, GW-5, GW-7, GW-9, MW-3, MW-04 (duplicate samples submitted), PZ-1, **RS-1, and RS-2.** Finger printing was performed on free product material from 4 wells: GW-14, OP-1, GW-16 and EW-18.	Groundwater E624, E625, E200.7 E245.2, E150.1, E418.1 E1664, E335.2, E420.1 E608 Free Product/Fingerprint GCFID

(1): This table identifies samples collected to identify individual AOCs. Given that samples were utilized to address multiple AOCs, samples may be listed under more than one AOC. Thus, this table should **not** be utilized to calculate the total number of samples collected through the SI.
(2). Soil borings, wells and sample designations for Operable Unit 1 are presented in bold type.
(3): The prefix "PG" has not been included for well designations.

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-A-1	PG-A-2	PG-A-2	PG-A-3	PG-A-3	PG-A-3
Sample Date	12/2/2000	11/29/2000	11/29/2000	11/16/2000	11/16/2000	11/16/2000
Sample ID	PG-A-01	PG-A-02	PG-A-02	PG-A-03	PG-A-03	PG-A-03
Sample Depth	2-4'	0-2'	2-4'	2.4-4'	6-8'	10-12'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,1,2,2-TETRACHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,1,2-TRICHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,1-DICHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,1-DICHLOROETHYLENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,2-DICHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
1,2-DICHLOROPROPANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
2-CHLOROETHYL VINYL ETHER	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
ACROLEIN	0.019 U	0.016 U	0.028 U	4.7 U	3.7 U	3.2 U
ACRYLONITRILE	0.0087 U	0.0073 U	0.013 U	0.58 U	0.45 U	0.39 U
BENZENE	0.0012 U	0.0011 U	0.0019 U	0.31 U	0.25 U	0.21 U
BROMODICHLOROMETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
BROMOFORM	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
BROMOMETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CARBON TETRACHLORIDE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CHLOROBENZENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CHLOROETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CHLOROFORM	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CHLOROMETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
CIS-1,3-DICHLOROPROPENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
DIBROMOCHLOROMETHANE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
DICHLOROMETHANE	0.0096 B	0.0047 JB	0.0047 JB	1.6 U	1.2 U	1.1 U
ETHYLBENZENE	0.0012 U	0.0011 U	0.0019 U	0.31 U	0.25 U	0.21 U
M&P-XYLENES	0.0025 U	0.0021 U	0.0038 U	0.63 U	0.49 U	0.42 U
METHYLBENZENE	0.0012 U	0.0011 U	0.0019 U	0.31 U	0.25 U	0.21 U
O-XYLENE	0.0012 U	0.0011 U	0.0019 U	0.31 U	0.25 U	0.21 U
TETRACHLOROETHYLENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
TRANS-1,2-DICHLOROETHYLENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
TRANS-1,3-DICHLOROPROPENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
TRICHLOROETHYLENE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U
VINYL CHLORIDE	0.0062 U	0.0053 U	0.0094 U	1.6 U	1.2 U	1.1 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-A-6	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-4	PG-FS-4
Sample Date	11/10/2000	11/17/2000	11/17/2000	11/17/2000	11/15/2000	11/15/2000
Sample ID	PG-A-06	PG-FS-01B	PG-FS-01B	PG-FS-01B	PG-FS04	PG-FS04
Sample Depth	1-3'	1-2'	6-7'	12-13.5'	0-2'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,1,2,2-TETRACHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,1,2-TRICHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,1-DICHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,1-DICHLOROETHYLENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,2-DICHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
1,2-DICHLOROPROPANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
2-CHLOROETHYL VINYL ETHER	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
ACROLEIN	0.020 U	0.15 U	0.024 U	0.029 U	0.020 U	0.022 U
ACRYLONITRILE	0.0094 U	0.069 U	0.011 U	0.013 U	0.0091 U	0.010 U
BENZENE	0.0014 U	0.010 U	0.0016 U	0.0019 U	0.0013 U	0.0015 U
BROMODICHLOROMETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
BROMOFORM	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
BROMOMETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CARBON TETRACHLORIDE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CHLOROBENZENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CHLOROETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CHLOROFORM	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CHLOROMETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
CIS-1,3-DICHLOROPROPENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
DIBROMOCHLOROMETHANE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
DICHLOROMETHANE	0.0068 U	0.080	0.0038 JB	0.0059 JB	0.0050 JB	0.0036 JB
ETHYLBENZENE	0.0014 U	0.010 U	0.0016 U	0.0019 U	0.0013 U	0.0015 U
M&P-XYLENES	0.0027 U	0.011 J	0.0032 U	0.0038 U	0.0026 U	0.0029 U
METHYLBENZENE	0.0014 U	0.078	0.0016 U	0.0019 U	0.0013 U	0.0015 U
O-XYLENE	0.0014 U	0.010 U	0.0016 U	0.0019 U	0.0013 U	0.0015 U
TETRACHLOROETHYLENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
TRANS-1,2-DICHLOROETHYLENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
TRANS-1,3-DICHLOROPROPENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
TRICHLOROETHYLENE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U
VINYL CHLORIDE	0.0068 U	0.050 U	0.0081 U	0.0096 U	0.0066 U	0.0074 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-FILL-7	PG-FILL-7	PG-FILL-7	PG-FILL-8	PG-FILL-8	PG-H/R-1
Sample Date	12/4/2000	12/4/2000	12/4/2000	12/2/2000	12/2/2000	12/2/2000
Sample ID	PG-FILL7	PG-FILL7	PG-FILL7	PG-FILL08	PG-FILL08	PG-H/R-01
Sample Depth	1-2.5'	2.5-4'	10-12'	0-2'	6-8'	1-3'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,1,2,2-TETRACHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,1,2-TRICHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,1-DICHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,1-DICHLOROETHYLENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,2-DICHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
1,2-DICHLOROPROPANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
2-CHLOROETHYL VINYL ETHER	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
ACROLEIN	0.016 U	0.017 U	0.032 U	0.018 U	0.031 U	0.021 U
ACRYLONITRILE	0.0075 U	0.0078 U	0.015 U	0.0082 U	0.014 U	0.0095 U
BENZENE	0.0011 U	0.0011 U	0.0021 U	0.0012 U	0.0021 U	0.0014 U
BROMODICHLOROMETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
BROMOFORM	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
BROMOMETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CARBON TETRACHLORIDE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CHLOROBENZENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CHLOROETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CHLOROFORM	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CHLOROMETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
CIS-1,3-DICHLOROPROPENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
DIBROMOCHLOROMETHANE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
DICHLOROMETHANE	0.0038 JB	0.0019 JB	0.0052 JB	0.0037 JB	0.0069 JB	0.0035 JB
ETHYLBENZENE	0.0011 U	0.0011 U	0.0021 U	0.0012 U	0.0021 U	0.0014 U
M&P-XYLENES	0.0022 U	0.0022 U	0.0043 U	0.0024 U	0.0042 U	0.0027 U
METHYLBENZENE	0.0011 U	0.0011 U	0.0021 U	0.0012 U	0.0021 U	0.0014 U
O-XYLENE	0.0011 U	0.0011 U	0.0021 U	0.0012 U	0.0021 U	0.0014 U
TETRACHLOROETHYLENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
TRANS-1,2-DICHLOROETHYLENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
TRANS-1,3-DICHLOROPROPENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
TRICHLOROETHYLENE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U
VINYL CHLORIDE	0.0054 U	0.0056 U	0.011 U	0.0060 U	0.010 U	0.0068 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-H/R-1	PG-H/R-2	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-F1-3
Sample Date	12/2/2000	11/10/2000	11/10/2000	11/10/2000	11/10/2000	11/10/2000
Sample ID	PG-H/R-01	PG-H/R-2	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-F1-3
Sample Depth	3-4.5'	0-1.5'	1.5-3.5'	0.3-1'	1-3'	1-3'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,1,2,2-TETRACHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,1,2-TRICHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,1-DICHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,1-DICHLOROETHYLENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,2-DICHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
1,2-DICHLOROPROPANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
2-CHLOROETHYL VINYL ETHER	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
ACROLEIN	0.030 U	0.017 U	0.027 U	0.018 U	0.026 U	2.2 U
ACRYLONITRILE	0.014 U	0.0079 U	0.012 U	0.0083 U	0.012 U	1.0 U
BENZENE	0.0020 U	0.0011 U	0.0018 U	0.0012 U	0.0018 U	0.15 U
BROMODICHLOROMETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
BROMOFORM	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
BROMOMETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CARBON TETRACHLORIDE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CHLOROBENZENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CHLOROETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CHLOROFORM	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CHLOROMETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
CIS-1,3-DICHLOROPROPENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
DIBROMOCHLOROMETHANE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
DICHLOROMETHANE	0.0068 JB	0.0021 JB	0.0041 JB	0.0024 JB	0.0088 U	0.22 J
ETHYLBENZENE	0.0020 U	0.0011 U	0.0018 U	0.0012 U	0.0018 U	0.25
M&P-XYLENES	0.0040 U	0.0023 U	0.0036 U	0.0024 U	0.0035 U	0.80
METHYLBENZENE	0.0020 U	0.0011 U	0.0018 U	0.0012 U	0.0018 U	0.33
O-XYLENE	0.0020 U	0.0011 U	0.0018 U	0.0012 U	0.0018 U	0.44
TETRACHLOROETHYLENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
TRANS-1,2-DICHLOROETHYLENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
TRANS-1,3-DICHLOROPROPENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
TRICHLOROETHYLENE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U
VINYL CHLORIDE	0.010 U	0.0057 U	0.0089 U	0.0060 U	0.0088 U	0.74 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-F1-3	PG-PD-6	PG-PD-6	PG-PD-8	PG-PD-8	PG-PD-8
Sample Date	11/10/2000	11/21/2000	11/21/2000	11/29/2000	11/29/2000	11/29/2000
Sample ID	PG-F1-3	PG-PD-06	PG-PD-06	PG-PD-8	PG-PD-8	PG-PD-8
Sample Depth	3-5'	6-8'	12-14'	2-4'	8-10'	16-17'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0016 J	0.066	0.050 U
1,1,2,2-TETRACHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
1,1,2-TRICHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
1,1-DICHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.0072 J	0.050 U
1,1-DICHLOROETHYLENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
1,2-DICHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
1,2-DICHLOROPROPANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
2-CHLOROETHYL VINYL ETHER	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
ACROLEIN	0.030 U	0.16 U	0.058 U	0.021 U	0.10 U	0.15 U
ACRYLONITRILE	0.014 U	0.074 U	0.027 U	0.0096 U	0.046 U	0.069 U
BENZENE	0.0020 U	0.011 U	0.035	0.0068	0.044	0.021
BROMODICHLOROMETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
BROMOFORM	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
BROMOMETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
CARBON TETRACHLORIDE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
CHLOROBENZENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
CHLOROETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
CHLOROFORM	0.010 U	0.053 U	0.019 U	0.028	0.021 J	0.050 U
CHLOROMETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
CIS-1,3-DICHLOROPROPENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
DIBROMOCHLOROMETHANE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
DICHLOROMETHANE	0.0040 JB	0.025 JB	0.010 JB	0.0037 JB	0.019 JB	0.043 JB
ETHYLBENZENE	0.0020 U	0.011 U	0.012	0.0014 U	0.0073	0.010
M&P-XYLENES	0.0040 U	0.021 U	0.029	0.0019 J	0.017	0.019 J
METHYLBENZENE	0.019	0.025	0.28	0.31	3.3	1.8
O-XYLENE	0.0020 U	0.011 U	0.018	0.0014 U	0.0071	0.010 U
TETRACHLOROETHYLENE	0.010 U	0.053 U	0.019 U	0.0031 J	0.0078 J	0.050 U
TRANS-1,2-DICHLOROETHYLENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
TRANS-1,3-DICHLOROPROPENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
TRICHLOROETHYLENE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U
VINYL CHLORIDE	0.010 U	0.053 U	0.019 U	0.0069 U	0.033 U	0.050 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PD-9	PG-PD-9	PG-PD-10	PG-PD-10	PG-PD-11	PG-RR-8
Sample Date	12/4/2000	12/4/2000	11/28/2000	11/28/2000	11/27/2000	12/1/2000
Sample ID	PG-PD-09	PG-PD-09	PG-PD-10	PG-PD-10	PG-PD-11	PG-RR-08
Sample Depth	4-6'	8-10'	2-4'	6-8'	4-6'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,1,2,2-TETRACHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,1,2-TRICHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,1-DICHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,1-DICHLOROETHYLENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,2-DICHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
1,2-DICHLOROPROPANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
2-CHLOROETHYL VINYL ETHER	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
ACROLEIN	0.022 U	0.11 U	0.017 U	0.038 U	0.026 U	0.023 U
ACRYLONITRILE	0.010 U	0.053 U	0.0080 U	0.018 U	0.012 U	0.011 U
BENZENE	0.0015 U	0.0076 U	0.0011 U	0.0026 U	0.0018 U	0.0016 U
BROMODICHLOROMETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
BROMOFORM	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
BROMOMETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CARBON TETRACHLORIDE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CHLOROBENZENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CHLOROETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CHLOROFORM	0.0027 J	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CHLOROMETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
CIS-1,3-DICHLOROPROPENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
DIBROMOCHLOROMETHANE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
DICHLOROMETHANE	0.0046 JB	0.018 JB	0.0068 B	0.022 B	0.0028 JB	0.0026 JB
ETHYLBENZENE	0.0015 U	0.0076 U	0.0020	0.0026 U	0.0018 U	0.0016 U
M&P-XYLENES	0.0029 U	0.015 U	0.0043	0.0051 U	0.0035 U	0.0031 U
METHYLBENZENE	0.0015 U	0.020	0.0017	0.0031	0.0018 U	0.0016 U
O-XYLENE	0.0015 U	0.0076 U	0.0023	0.0026 U	0.0018 U	0.0016 U
TETRACHLOROETHYLENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
TRANS-1,2-DICHLOROETHYLENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
TRANS-1,3-DICHLOROPROPENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
TRICHLOROETHYLENE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U
VINYL CHLORIDE	0.0074 U	0.038 U	0.0057 U	0.013 U	0.0088 U	0.0078 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-RR-8	PG-RR-10	PG-RR-10	PG-UST2-1	PG-UST2-1	PG-UST2-1A
Sample Date	12/1/2000	12/2/2000	12/2/2000	11/30/2000	11/30/2000	11/30/2000
Sample ID	PG-RR-08	PG-RR10	PG-RR10	PG-UST2-1	PG-UST2-1	PG-UST2-1A
Sample Depth	6-8'	2-2.5'	8-10'	6-7'	8-10'	0-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,1,2,2-TETRACHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,1,2-TRICHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,1-DICHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,1-DICHLOROETHYLENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,2-DICHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
1,2-DICHLOROPROPANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
2-CHLOROETHYL VINYL ETHER	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
ACROLEIN	0.021 U	0.020 U	0.020 U	0.018 U	0.090 U	0.068 U
ACRYLONITRILE	0.0096 U	0.0094 U	0.0091 U	0.0082 U	0.042 U	0.032 U
BENZENE	0.0014 U	0.0014 U	0.0013 U	0.0012 U	0.0060 U	0.0045 U
BROMODICHLOROMETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
BROMOFORM	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
BROMOMETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CARBON TETRACHLORIDE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CHLOROBENZENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CHLOROETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CHLOROFORM	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CHLOROMETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
CIS-1,3-DICHLOROPROPENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
DIBROMOCHLOROMETHANE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
DICHLOROMETHANE	0.0022 JB	0.0047 JB	0.0067 B	0.0089 B	0.035 B	0.0091 JB
ETHYLBENZENE	0.0014 U	0.0014 U	0.0013 U	0.0012 U	0.0060 U	0.0045 U
M&P-XYLENES	0.0028 U	0.0027 U	0.0017 J	0.0024 U	0.0082 J	0.0091 U
METHYLBENZENE	0.0014 U	0.0014 U	0.0013 U	0.0012 U	0.0060 U	0.0045 U
O-XYLENE	0.0014 U	0.0014 U	0.0013 U	0.0012 U	0.011	0.0045 U
TETRACHLOROETHYLENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
TRANS-1,2-DICHLOROETHYLENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
TRANS-1,3-DICHLOROPROPENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
TRICHLOROETHYLENE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U
VINYL CHLORIDE	0.0069 U	0.0068 U	0.0066 U	0.0060 U	0.030 U	0.023 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3	PG-UST2-3
Sample Date	11/30/2000	11/30/2000	11/30/2000	11/30/2000	12/1/2000	12/1/2000
Sample ID	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3	PG-UST2-3
Sample Depth	2-4'	4-5.5'	4-5.5'	10-12'	2-4'	7.5-9'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,1,2,2-TETRACHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,1,2-TRICHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,1-DICHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,1-DICHLOROETHYLENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,2-DICHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
1,2-DICHLOROPROPANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
2-CHLOROETHYL VINYL ETHER	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
ACROLEIN	0.021 U	0.017 U	0.017 U	0.019 U	0.019 U	0.12 U
ACRYLONITRILE	*0.0099 U*	*0.0077 U*	*0.0080 U*	*0.0089 U*	*0.0086 U*	*0.058 U*
BENZENE	0.0014 U	0.0011 U	0.0011 U	0.0013 U	0.0012 U	0.0083 U
BROMODICHLOROMETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
BROMOFORM	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
BROMOMETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CARBON TETRACHLORIDE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CHLOROBENZENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CHLOROETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CHLOROFORM	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CHLOROMETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
CIS-1,3-DICHLOROPROPENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
DIBROMOCHLOROMETHANE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
DICHLOROMETHANE	0.0031 JB	0.011 B	0.0030 JB	0.0067 B	0.0057 JB	0.018 JB
ETHYLBENZENE	0.0016	0.0021	0.0011 U	0.0013 U	0.0012 U	0.0083 U
M&P-XYLENES	0.0029 U	0.0032	0.0023 U	0.0026 U	0.0025 U	0.017 U
METHYLBENZENE	0.0014 U	0.0013	0.0011 U	0.0013 U	0.0012 U	0.0083 U
O-XYLENE	0.0014 U	0.0054	0.0011 U	0.0013 U	0.0012 U	0.0083 U
TETRACHLOROETHYLENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
TRANS-1,2-DICHLOROETHYLENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
TRANS-1,3-DICHLOROPROPENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
TRICHLOROETHYLENE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U
VINYL CHLORIDE	0.0071 U	0.0056 U	0.0057 U	0.0064 U	0.0062 U	0.042 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST2-3	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2	PG-UST6-3
Sample Date	12/1/2000	11/27/2000	11/28/2000	11/28/2000	11/28/2000	11/28/2000
Sample ID	PG-UST2-3	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2	PG-UST6-3
Sample Depth	12-14'	4-6'	4-6'	8-10'	16-18'	1.5-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
1,1,2,2-TETRACHLOROETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
1,1,2-TRICHLOROETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
1,1-DICHLOROETHANE	0.0096 U	0.0093 U	0.0048 J	0.0067 J	0.0066 J	0.0059 U
1,1-DICHLOROETHYLENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
1,2-DICHLOROETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
1,2-DICHLOROPROPANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
2-CHLOROETHYL VINYL ETHER	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
ACROLEIN	0.029 U	0.028 U	0.030 U	0.035 U	0.037 U	0.018 U
ACRYLONITRILE	0.013 U	0.013 U	0.014 U	0.016 U	0.017 U	0.0082 U
BENZENE	0.0047	0.0019 U	0.0020 U	0.0023 U	0.0024 U	0.0012 U
BROMODICHLOROMETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
BROMOFORM	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
BROMOMETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CARBON TETRACHLORIDE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CHLOROBENZENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CHLOROETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CHLOROFORM	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CHLOROMETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
CIS-1,3-DICHLOROPROPENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
DIBROMOCHLOROMETHANE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
DICHLOROMETHANE	0.0039 JB	0.0029 JB	0.0098 JB	0.011 JB	0.0094 JB	0.0063 B
ETHYLBENZENE	0.018	0.0019 U	0.0037	0.0027	0.0024 U	0.0012 U
M&P-XYLENES	0.0045	0.0037 U	0.0040 U	0.0047 U	0.0028 J	0.0024 U
METHYLBENZENE	0.0056	0.0019 U	0.0020 U	0.0075	0.0024 U	0.0020
O-XYLENE	0.0041	0.0019 U	0.0020 U	0.0030	0.0024 U	0.0012 U
TETRACHLOROETHYLENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
TRANS-1,2-DICHLOROETHYLENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
TRANS-1,3-DICHLOROPROPENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
TRICHLOROETHYLENE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U
VINYL CHLORIDE	0.0096 U	0.0093 U	0.010 U	0.012 U	0.012 U	0.0059 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST6-3	PG-WOOD-1C	PG-WOOD-03	PG-WOOD-03	PG-WOOD-3	PG-WOOD-3
Sample Date	11/28/2000	11/9/2000	11/10/2000	11/10/2000	11/29/2000	11/29/2000
Sample ID	PG-UST6-3	PG-WD-01C	PG-WD-03	PG-WD-03	PG-WOOD-3	PG-WOOD-3
Sample Depth	14-16'	10-12'	0.5-2'	2-4'	2-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,1,2,2-TETRACHLOROETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,1,2-TRICHLOROETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,1-DICHLOROETHANE	0.019 J	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,1-DICHLOROETHYLENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,2-DICHLOROETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
1,2-DICHLOROPROPANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
2-CHLOROETHYL VINYL ETHER	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
ACROLEIN	0.23 U	0.028 U	0.017 U	0.018 U	0.018 U	0.029 U
ACRYLONITRILE	0.11 U	0.013 U	0.0077 U	0.0082 U	0.0082 U	0.014 U
BENZENE	0.016 U	0.0019 U	0.0011 U	0.0012 U	0.0012 U	0.0020 U
BROMODICHLOROMETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
BROMOFORM	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
BROMOMETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CARBON TETRACHLORIDE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CHLOROBENZENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CHLOROETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CHLOROFORM	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CHLOROMETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
CIS-1,3-DICHLOROPROPENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
DIBROMOCHLOROMETHANE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
DICHLOROMETHANE	0.076 JB	0.0088 JB	0.0028 JB	0.0025 JB	0.0058 JB	0.0089 JB
ETHYLBENZENE	0.016 U	0.0019 U	0.0011 U	0.0012 U	0.0012 U	0.0020 U
M&P-XYLENES	0.031 U	0.0037 U	0.0022 U	0.0024 U	0.0024 U	0.0039 U
METHYLBENZENE	0.016 U	0.0019 U	0.0011 U	0.0012 U	0.0012 U	0.0020 U
O-XYLENE	0.016 U	0.0019 U	0.0011 U	0.0012 U	0.0012 U	0.0020 U
TETRACHLOROETHYLENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
TRANS-1,2-DICHLOROETHYLENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
TRANS-1,3-DICHLOROPROPENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
TRICHLOROETHYLENE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U
VINYL CHLORIDE	0.078 U	0.0093 U	0.0056 U	0.0059 U	0.0059 U	0.0098 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05
Sample Date	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05
Sample Depth	0-2'	2-4'	4-6'	6-8'	8-10'	14-16'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,1,2,2-TETRACHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,1,2-TRICHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,1-DICHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,1-DICHLOROETHYLENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,2-DICHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
1,2-DICHLOROPROPANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
2-CHLOROETHYL VINYL ETHER	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
ACROLEIN	0.018 U	0.018 U	0.018 U	0.021 U	0.025 U	0.052 U
ACRYLONITRILE	0.0083 U	0.0083 U	0.0083 U	0.0095 U	0.012 U	0.024 U
BENZENE	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0017 U	0.0034 U
BROMODICHLOROMETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
BROMOFORM	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
BROMOMETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
CARBON TETRACHLORIDE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
CHLOROBENZENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.018
CHLOROETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
CHLOROFORM	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
CHLOROMETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
CIS-1,3-DICHLOROPROPENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
DIBROMOCHLOROMETHANE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
DICHLOROMETHANE	0.0060 U	0.0060 U	0.0043 J	0.0079	0.0085 U	0.0086 JB
ETHYLBENZENE	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0017 U	0.0084
M&P-XYLENES	0.0024 U	0.0024 U	0.0024 U	0.0027 U	0.0034 U	0.0047 J
METHYLBENZENE	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0017 U	0.024
O-XYLENE	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0017 U	0.0034 U
TETRACHLOROETHYLENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
TRANS-1,2-DICHLOROETHYLENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
TRANS-1,3-DICHLOROPROPENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
TRICHLOROETHYLENE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U
VINYL CHLORIDE	0.0060 U	0.0060 U	0.0060 U	0.0068 U	0.0085 U	0.017 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PA-MW-1	PG-PA-MW-1	PG-PA-MW-1	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6
Sample Date	11/22/2000	11/22/2000	11/22/2000	11/9/2000	11/7/2000	11/7/2000
Sample ID	PG-PAMW1	PG-PAMW1	PG-PAMW1	PG-PAMW-05	PG-MWPA-06	PG-MWPA-06
Sample Depth	3-4.5'	4.5-6'	10-12'	0-2'	1.5-3'	3-4.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,1,2,2-TETRACHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,1,2-TRICHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,1-DICHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,1-DICHLOROETHYLENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,2-DICHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
1,2-DICHLOROPROPANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
2-CHLOROETHYL VINYL ETHER	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
ACROLEIN	0.025 U	0.031 U	0.028 U	0.017 U	0.016 U	0.017 U
ACRYLONITRILE	0.011 U	0.014 U	0.013 U	0.0081 U	0.0075 U	0.0081 U
BENZENE	0.0016 U	0.0021 U	0.0022	0.0012 U	0.0011 U	0.0012 U
BROMODICHLOROMETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
BROMOFORM	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
BROMOMETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CARBON TETRACHLORIDE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CHLOROBENZENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CHLOROETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CHLOROFORM	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CHLOROMETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
CIS-1,3-DICHLOROPROPENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
DIBROMOCHLOROMETHANE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
DICHLOROMETHANE	0.0035 JB	0.0051 JB	0.0045 JB	0.0052 JB	0.0041 J	0.0036 J
ETHYLBENZENE	0.0016 U	0.0021 U	0.0019 U	0.0012 U	0.0011 U	0.0012 U
M&P-XYLENES	0.0033 U	0.0042 U	0.0028 J	0.0023 U	0.0022 U	0.0023 U
METHYLBENZENE	0.0016 U	0.0021 U	0.0041	0.0012 U	0.0011 U	0.0012 U
O-XYLENE	0.0016 U	0.0021 U	0.0019 U	0.0012 U	0.0011 U	0.0012 U
TETRACHLOROETHYLENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
TRANS-1,2-DICHLOROETHYLENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
TRANS-1,3-DICHLOROPROPENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
TRICHLOROETHYLENE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U
VINYL CHLORIDE	0.0082 U	0.010 U	0.0093 U	0.0058 U	0.0054 U	0.0058 U

Table 5A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PA-MW-6	PG-PA-MW-6	PG-PA-MW-6
Sample Date	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06
Sample Depth	4.5-6'	6-8'	8.5-10'
Concentration	MG/KG	MG/KG	MG/KG
1,1,1-TRICHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
1,1,2,2-TETRACHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
1,1,2-TRICHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
1,1-DICHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
1,1-DICHLOROETHYLENE	0.0057 U	0.0062 U	0.0085 U
1,2-DICHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
1,2-DICHLOROPROPANE	0.0057 U	0.0062 U	0.0085 U
2-CHLOROETHYL VINYL ETHER	0.0057 U	0.0062 U	0.0085 U
ACROLEIN	0.017 U	0.019 U	0.025 U
ACRYLONITRILE	0.0080 U	0.0087 U	0.012 U
BENZENE	0.0011 U	0.0012 U	0.0017 U
BROMODICHLOROMETHANE	0.0057 U	0.0062 U	0.0085 U
BROMOFORM	0.0057 U	0.0062 U	0.0085 U
BROMOMETHANE	0.0057 U	0.0062 U	0.0085 U
CARBON TETRACHLORIDE	0.0057 U	0.0062 U	0.0085 U
CHLOROBENZENE	0.0057 U	0.0062 U	0.0085 U
CHLOROETHANE	0.0057 U	0.0062 U	0.0085 U
CHLOROFORM	0.0057 U	0.0062 U	0.0085 U
CHLOROMETHANE	0.0057 U	0.0062 U	0.0085 U
CIS-1,3-DICHLOROPROPENE	0.0057 U	0.0062 U	0.0085 U
DIBROMOCHLOROMETHANE	0.0057 U	0.0062 U	0.0085 U
DICHLOROMETHANE	0.0040 JB	0.0050 J	0.0059 J
ETHYLBENZENE	0.0011 U	0.0012 U	0.0017 U
M&P-XYLENES	0.0023 U	0.0025 U	0.0034 U
METHYLBENZENE	0.0011 U	0.0012 U	0.0017 U
O-XYLENE	0.0011 U	0.0012 U	0.0017 U
TETRACHLOROETHYLENE	0.0057 U	0.0062 U	0.0085 U
TRANS-1,2-DICHLOROETHYLENE	0.0057 U	0.0062 U	0.0085 U
TRANS-1,3-DICHLOROPROPENE	0.0057 U	0.0062 U	0.0085 U
TRICHLOROETHYLENE	0.0057 U	0.0062 U	0.0085 U
VINYL CHLORIDE	0.0057 U	0.0062 U	0.0085 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-A-1	PG-A-2	PG-A-2	PG-A-2	PG-A-3
Sample Date	12/2/2000	11/29/2000	11/29/2000	11/16/2000	11/16/2000
Sample ID	PG-A-01	PG-A-02	PG-A-02	PG-A-02	PG-A-03
Sample Depth	2-4'	0-2'	2-4'	6-8'	2.4-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
1,2-BENZPHENANTHRACENE	0.26	0.18 U	0.31 U	9.3 U	0.42 U
1,2-DICHLOROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
1,2-DIPHENYLHYDRAZINE	0.042 U	0.035 U	0.063 U	NA	0.083 U
1,4-DICHLOROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2,4,6-TRICHLORORPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2,4-DICHLOROPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2,4-DIMETHYLPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2,4-DINITROPHENOL	0.42 U	0.35 U	0.63 U	19 U	0.83 U
2,4-DINITROTOLUENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2,6-DINITROTOLUENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2-CHLORORNAPHTHALENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2-CHLOROPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
2-NITROPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
3,3'-DICHLOROBENZIDINE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
4,6-DINITRO-O-CRESOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
4-BROMOPHENYLPHENYL ETHER	0.21 U	0.18 U	0.31 U	NA	0.42 U
4-CHLORO-3-METHYLPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
4-CHLOROPHENYLPHENYL ETHER	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
4-NITROPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
ACENAPHTHENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
ACENAPHTHYLENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
ANTHRACENE	0.076 J	0.18 U	0.31 U	9.3 U	0.42 U
BENZIDINE	0.42 U	0.35 U	0.63 U	19 U	0.83 U
BENZO[A]ANTHRACENE	0.24	0.18 U	0.31 U	9.3 U	0.42 U
BENZO[A]PYRENE	0.19 J	0.18 U	0.31 U	9.3 U	0.42 U
BENZO[B]FLOURANTHENE	0.28	0.18 U	0.31 U	9.3 U	0.42 U
BENZO[G,H,I]PERYLENE	0.10 J	0.18 U	0.31 U	9.3 U	0.42 U
BENZO[K]FLOURANTHENE	0.14 J	0.18 U	0.31 U	9.3 U	0.42 U
BENZYL BUTYL PHTHALATE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
BIS(2-CHLOROETHOXY)METHANE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
BIS(2-CHLOROETHYL)ETHER	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
BIS(2-CHLOROISOPROPYL)ETHER	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
BIS(2-ETHYHEXYL)PHTHALATE	0.24 B	0.25 B	0.45 B	9.3 U	0.42 U
DI-N-BUTYL PHTHALATE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
DI-N-OCTYL PHTHALATE	0.082 JB	0.18 U	0.074 J	9.3 U	0.25 JB
DIBENZ[A,H]ANTHRACENE	0.063 J	0.18 U	0.31 U	9.3 U	0.42 U
DIETHYL PHTHALATE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
DIMETHYL PHTHALATE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
FLUORANTHENE	0.36	0.18 U	0.31 U	9.3 U	0.42 U
FLUORENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
HEXACHLORO-1,3-BUTADIENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
HEXACHLOROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
HEXACHLOROCYCLOPENTADIENE	0.62 U	0.53 U	0.94 U	9.3 U	1.2 U
HEXACHLOROETHANE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
INDENO[1,2,3-CD]PYRENE	0.10 J	0.18 U	0.31 U	9.3 U	0.42 U
ISOPHORORNE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
M-DICHLOROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
N-NITROSO-DI-N-PROPYLAMINE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
N-NITROSODIMETHYLAMINE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
N-NITROSODIPHENYLAMINE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
NAPHTHALENE	0.16 J	0.18 U	0.31 U	9.3 U	0.42 U
NITROBENZENE	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
PENTACHLOROPHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.42 U
PHENANTHRENE	0.38	0.18 U	0.31 U	9.3 U	0.42 U
PHENOL	0.21 U	0.18 U	0.31 U	9.3 U	0.28 J
PYRENE	0.34	0.18 U	0.31 U	9.3 U	0.42 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-A-3	PG-A-3	PG-A-6	PG-F1-3	PG-F1-3
Sample Date	11/16/2000	11/16/2000	11/10/2000	11/10/2000	11/10/2000
Sample ID	PG-A-03	PG-A-03	PG-A-06	PG-F1-3	PG-F1-3
Sample Depth	6-8'	10-12'	1-3'	1-3'	3-5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
1,2-BENZPHENANTHRACENE	0.33 U	0.28 U	0.72	0.79 J	0.33 U
1,2-DICHLOROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
1,2-DIPHENYLHYDRAZINE	0.065 U	0.056 U	0.045 U	0.20 U	0.067 U
1,4-DICHLOROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2,4,6-TRICHLORORPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2,4-DICHLOROPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2,4-DIMETHYLPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2,4-DINITROPHENOL	0.65 U	0.56 U	0.45 U	2.0 U	0.67 U
2,4-DINITROTOLUENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2,6-DINITROTOLUENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2-CHLORORNAPHTHALENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2-CHLOROPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
2-NITROPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
3,3'-DICHLOROBENZIDINE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
4,6-DINITRO-O-CRESOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
4-BROMOPHENYLPHENYL ETHER	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
4-CHLORO-3-METHYLPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
4-CHLOROPHENYLPHENYL ETHER	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
4-NITROPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
ACENAPHTHENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
ACENAPHTHYLENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
ANTHRACENE	0.33 U	0.28 U	0.15 J	0.26 J	0.33 U
BENZIDINE	0.65 U	0.56 U	0.45 U	2.0 U	0.67 U
BENZO[A]ANTHRACENE	0.33 U	0.28 U	0.65	0.59 J	0.33 U
BENZO[A]PYRENE	0.33 U	0.28 U	0.67	0.42 J	0.33 U
BENZO[B]FLOURANTHENE	0.33 U	0.28 U	1.3	0.48 J	0.33 U
BENZO[G,H,I]PERYLENE	0.33 U	0.28 U	0.24	0.26 J	0.33 U
BENZO[K]FLOURANTHENE	0.33 U	0.28 U	0.23 U	0.20 J	0.33 U
BENZYL BUTYL PHTHALATE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
BIS(2-CHLOROETHOXY)METHANE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
BIS(2-CHLOROETHYL)ETHER	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
BIS(2-CHLOROISOPROPYL)ETHER	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
BIS(2-ETHYHEXYL)PHTHALATE	0.42 B	0.24 JB	0.23 B	0.25 JB	0.28 JB
DI-N-BUTYL PHTHALATE	0.33 U	0.28 U	0.23 U	0.99 U	0.10 J
DI-N-OCTYL PHTHALATE	0.36 B	0.19 JB	0.054 J	0.99 U	0.33 U
DIBENZ[A,H]ANTHRACENE	0.33 U	0.28 U	0.17 J	0.99 U	0.33 U
DIETHYL PHTHALATE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
DIMETHYL PHTHALATE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
FLUORANTHENE	0.33 U	0.28 U	1.2	0.81 J	0.33 U
FLUORENE	0.33 U	0.28 U	0.23 U	0.57 J	0.33 U
HEXACHLORO-1,3-BUTADIENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
HEXACHLOROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
HEXACHLOROCYCLOPENTADIENE	0.98 U	0.85 U	0.68 U	3.0 U	1.0 U
HEXACHLOROETHANE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
INDENO[1,2,3-CD]PYRENE	0.33 U	0.28 U	0.27	0.26 J	0.33 U
ISOPHORORNE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
M-DICHLOROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
N-NITROSO-DI-N-PROPYLAMINE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
N-NITROSODIMETHYLAMINE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
N-NITROSODIPHENYLAMINE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
NAPHTHALENE	0.33 U	0.28 U	0.23 U	4.3	0.41
NITROBENZENE	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
PENTACHLOROPHENOL	0.33 U	0.28 U	0.23 U	0.99 U	0.33 U
PHENANTHRENE	0.073 J	0.28 U	0.66	1.3	0.083 J
PHENOL	0.26 J	0.20 J	0.23 U	0.44 J	0.33 U
PYRENE	0.33 U	0.28 U	1.3	0.92 J	0.33 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-H/R-1	PG-H/R-1	PG-H/R-2	PG-H/R-2	PG-H/R-3
Sample Date	12/2/2000	12/2/2000	11/10/2000	11/10/2000	11/10/2000
Sample ID	PG-H/R-01	PG-H/R-01	PG-H/R-2	PG-H/R-2	PG-H/R-3
Sample Depth	1-3'	3-4.5'	0-1.5'	1.5-3.5'	0.3-1'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
1,2-BENZPHENANTHRACENE	0.086 J	0.33 U	0.20	0.30 U	0.44
1,2-DICHLOROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
1,2-DIPHENYLHYDRAZINE	0.046 U	0.067 U	0.038 U	0.060 U	0.040 U
1,4-DICHLOROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2,4,6-TRICHLORORPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2,4-DICHLOROPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2,4-DIMETHYLPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2,4-DINITROPHENOL	0.46 U	0.67 U	0.38 U	0.60 U	0.40 U
2,4-DINITROTOLUENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2,6-DINITROTOLUENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2-CHLORORNAPHTHALENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2-CHLOROPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
2-NITROPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
3,3'-DICHLOROBENZIDINE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
4,6-DINITRO-O-CRESOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
4-BROMOPHENYLPHENYL ETHER	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
4-CHLORO-3-METHYLPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
4-CHLOROPHENYLPHENYL ETHER	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
4-NITROPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
ACENAPHTHENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
ACENAPHTHYLENE	0.23 U	0.33 U	0.19 U	0.30 U	0.045 J
ANTHRACENE	0.23 U	0.33 U	0.19 U	0.30 U	0.081 J
BENZIDINE	0.46 U	0.67 U	0.38 U	0.60 U	0.40 U
BENZO[A]ANTHRACENE	0.070 J	0.33 U	0.16 J	0.30 U	0.41
BENZO[A]PYRENE	0.066 J	0.33 U	0.18 J	0.30 U	0.38
BENZO[B]FLOURANTHENE	0.10 J	0.33 U	0.26	0.30 U	0.85
BENZO[G,H,I]PERYLENE	0.23 U	0.33 U	0.081 J	0.30 U	0.13 J
BENZO[K]FLOURANTHENE	0.23 U	0.33 U	0.16 J	0.30 U	0.20 U
BENZYL BUTYL PHTHALATE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
BIS(2-CHLOROETHOXY)METHANE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
BIS(2-CHLOROETHYL)ETHER	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
BIS(2-CHLOROISOPROPYL)ETHER	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
BIS(2-ETHYHEXYL)PHTHALATE	0.089 JB	0.21 JB	0.26 B	0.33 B	0.24 B
DI-N-BUTYL PHTHALATE	0.23 U	0.14 JB	0.072 J	0.087 J	0.20 U
DI-N-OCTYL PHTHALATE	0.049 JB	0.19 JB	0.063 J	0.30 U	0.069 J
DIBENZ[A,H]ANTHRACENE	0.23 U	0.33 U	0.052 J	0.30 U	0.082 J
DIETHYL PHTHALATE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
DIMETHYL PHTHALATE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
FLUORANTHENE	0.065 J	0.33 U	0.18 J	0.30 U	0.49
FLUORENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
HEXACHLORO-1,3-BUTADIENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
HEXACHLOROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
HEXACHLOROCYCLOPENTADIENE	0.68 U	1.0 U	0.57 U	0.89 U	0.60 U
HEXACHLOROETHANE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
INDENO[1,2,3-CD]PYRENE	0.23 U	0.33 U	0.088 J	0.30 U	0.15 J
ISOPHORORNE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
M-DICHLOROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
N-NITROSO-DI-N-PROPYLAMINE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
N-NITROSODIMETHYLAMINE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
N-NITROSODIPHENYLAMINE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
NAPHTHALENE	0.11 J	0.33 U	0.19 U	0.30 U	0.14 J
NITROBENZENE	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
PENTACHLOROPHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
PHENANTHRENE	0.10 J	0.33 U	0.064 J	0.30 U	0.33
PHENOL	0.23 U	0.33 U	0.19 U	0.30 U	0.20 U
PYRENE	0.080 J	0.33 U	0.21	0.30 U	0.55

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-H/R-3	PG-PD-6	PG-PD-6	PG-PD-8	PG-PD-8
Sample Date	11/10/2000	11/21/2000	11/21/2000	11/29/2000	11/29/2000
Sample ID	PG-H/R-3	PG-PD-06	PG-PD-06	PG-PD-8	PG-PD-8
Sample Depth	1-3'	6-8'	12-14'	2-4'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
1,2-BENZPHENANTHRACENE	0.29 U	0.095 J	0.33 J	4.6 U	4.4 U
1,2-DICHLOROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
1,2-DIPHENYLHYDRAZINE	0.058 U	0.071 U	0.13 U	0.93 U	0.89 U
1,4-DICHLOROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2,4,6-TRICHLORORPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2,4-DICHLOROPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2,4-DIMETHYLPHENOL	0.29 U	0.63	0.64 U	4.6 U	4.4 U
2,4-DINITROPHENOL	0.58 U	0.71 U	1.3 U	9.3 U	8.9 U
2,4-DINITROTOLUENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2,6-DINITROTOLUENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2-CHLORORNAPHTHALENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2-CHLOROPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
2-NITROPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
3,3'-DICHLOROBENZIDINE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
4,6-DINITRO-O-CRESOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
4-BROMOPHENYLPHENYL ETHER	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
4-CHLORO-3-METHYLPHENOL	0.29 U	0.20 J	0.64 U	4.6 U	4.4 U
4-CHLOROPHENYLPHENYL ETHER	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
4-NITROPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
ACENAPHTHENE	0.29 U	0.084 J	1.2	4.6 U	4.4 U
ACENAPHTHYLENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
ANTHRACENE	0.29 U	0.088 J	1.1	4.6 U	4.4 U
BENZIDINE	0.58 U	0.71 U	1.3 U	9.3 U	8.9 U
BENZO[A]ANTHRACENE	0.29 U	0.11 J	0.42 J	4.6 U	4.4 U
BENZO[A]PYRENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BENZO[B]FLOURANTHENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BENZO[G,H,I]PERYLENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BENZO[K]FLOURANTHENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BENZYL BUTYL PHTHALATE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BIS(2-CHLOROETHOXY)METHANE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BIS(2-CHLOROETHYL)ETHER	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BIS(2-CHLOROISOPROPYL)ETHER	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
BIS(2-ETHYHEXYL)PHTHALATE	0.19 JB	0.43 B	0.65 B	4.6 U	4.4 U
DI-N-BUTYL PHTHALATE	0.29 U	0.35 U	0.15 JB	4.6 U	4.4 U
DI-N-OCTYL PHTHALATE	0.29 U	0.11 J	0.64 U	4.6 U	4.4 U
DIBENZ[A,H]ANTHRACENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
DIETHYL PHTHALATE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
DIMETHYL PHTHALATE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
FLUORANTHENE	0.29 U	0.35 J	2.1	4.6 U	4.4 U
FLUORENE	0.29 U	0.13 J	1.7	4.6 U	4.4 U
HEXACHLORO-1,3-BUTADIENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
HEXACHLOROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
HEXACHLOROCYCLOPENTADIENE	0.88 U	1.1 U	1.9 U	14 U	13 U
HEXACHLOROETHANE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
INDENO[1,2,3-CD]PYRENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
ISOPHORORNE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
M-DICHLOROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
N-NITROSO-DI-N-PROPYLAMINE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
N-NITROSODIMETHYLAMINE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
N-NITROSODIPHENYLAMINE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
NAPHTHALENE	0.29 U	0.35 J	0.48 J	4.6 U	4.4 U
NITROBENZENE	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
PENTACHLOROPHENOL	0.29 U	0.35 U	0.64 U	4.6 U	4.4 U
PHENANTHRENE	0.29 U	0.37	6.5	4.6 U	4.4 U
PHENOL	0.29 U	0.35 U	0.19 J	4.6 U	4.4 U
PYRENE	0.29 U	0.26 J	1.3	4.6 U	4.4 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PD-8	PG-PD-9	PG-PD-9	PG-PD-10	PG-PD-10
Sample Date	11/29/2000	12/4/2000	12/4/2000	11/28/2000	11/28/2000
Sample ID	PG-PD-8	PG-PD-09	PG-PD-09	PG-PD-10	PG-PD-10
Sample Depth	16-17'	4-6'	8-10'	2-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
1,2-BENZPHENANTHRACENE	0.10 J	0.16 J	0.25 U	0.19 U	0.43 U
1,2-DICHLOROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
1,2-DIPHENYLHYDRAZINE	0.067 U	0.049 U	0.051 U	0.038 U	0.085 U
1,4-DICHLOROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2,4,6-TRICHLORORPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2,4-DICHLOROPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2,4-DIMETHYLPHENOL	0.33 U	0.25 U	0.13 J	0.21	0.43 U
2,4-DINITROPHENOL	0.67 U	0.49 U	0.51 U	0.38 U	0.85 U
2,4-DINITROTOLUENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2,6-DINITROTOLUENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2-CHLORORNAPHTHALENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2-CHLOROPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
2-NITROPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
3,3'-DICHLOROBENZIDINE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
4,6-DINITRO-O-CRESOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
4-BROMOPHENYLPHENYL ETHER	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
4-CHLORO-3-METHYLPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
4-CHLOROPHENYLPHENYL ETHER	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
4-NITROPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
ACENAPHTHENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
ACENAPHTHYLENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
ANTHRACENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BENZIDINE	0.67 U	0.49 U	0.51 U	0.38 U	0.85 U
BENZO[A]ANTHRACENE	0.078 J	0.25 U	0.25 U	0.19 U	0.43 U
BENZO[A]PYRENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BENZO[B]FLOURANTHENE	0.33 U	0.064 J	0.058 J	0.19 U	0.43 U
BENZO[G,H,I]PERYLENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BENZO[K]FLOURANTHENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BENZYL BUTYL PHTHALATE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BIS(2-CHLOROETHOXY)METHANE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BIS(2-CHLOROETHYL)ETHER	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BIS(2-CHLOROISOPROPYL)ETHER	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
BIS(2-ETHYHEXYL)PHTHALATE	0.33 B	0.14 JB	0.26 B	0.27	0.17 J
DI-N-BUTYL PHTHALATE	0.33 U	0.25 U	0.11 JB	0.19 U	0.12 J
DI-N-OCTYL PHTHALATE	0.099 J	0.087 JB	0.12 JB	0.076 J	0.11 J
DIBENZ[A,H]ANTHRACENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
DIETHYL PHTHALATE	0.33 U	0.25 U	0.10 J	0.19 U	0.43 U
DIMETHYL PHTHALATE	0.33 U	0.25 U	0.20 J	0.19 U	0.43 U
FLUORANTHENE	0.11 J	0.25 U	0.25 U	0.19 U	0.43 U
FLUORENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
HEXACHLORO-1,3-BUTADIENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
HEXACHLOROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
HEXACHLOROCYCLOPENTADIENE	1.0 U	0.74 U	0.76 U	0.57 U	1.3 U
HEXACHLOROETHANE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
INDENO[1,2,3-CD]PYRENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
ISOPHORORNE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
M-DICHLOROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
N-NITROSO-DI-N-PROPYLAMINE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
N-NITROSODIMETHYLAMINE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
N-NITROSODIPHENYLAMINE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
NAPHTHALENE	0.17 J	0.064 J	0.13 J	0.046 J	0.43 U
NITROBENZENE	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
PENTACHLOROPHENOL	0.33 U	0.25 U	0.25 U	0.19 U	0.43 U
PHENANTHRENE	0.33 U	0.14 J	0.10 J	0.19 U	0.43 U
PHENOL	0.22 J	0.25 U	1.3	0.19 U	0.091 J
PYRENE	0.16 J	0.051 J	0.059 J	0.19 U	0.43 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PD-11	PG-RR-8	PG-RR-8	PG-RR-10	PG-RR-10
Sample Date	11/27/2000	12/1/2000	12/1/2000	12/2/2000	12/2/2000
Sample ID	PG-PD-11	PG-RR-08	PG-RR-08	PG-RR10	PG-RR10
Sample Depth	4-6'	2-4'	6-8'	2-2.5'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
1,2-BENZPHENANTHRACENE	0.29 U	0.058 J	0.084 J	0.47	1.1 U
1,2-DICHLOROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
1,2-DIPHENYLHYDRAZINE	0.058 U	0.052 U	0.046 U	0.045 U	0.22 U
1,4-DICHLOROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2,4,6-TRICHLORORPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2,4-DICHLOROPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2,4-DIMETHYLPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2,4-DINITROPHENOL	0.58 U	0.52 U	0.46 U	0.45 U	2.2 U
2,4-DINITROTOLUENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2,6-DINITROTOLUENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2-CHLORORNAPHTHALENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2-CHLOROPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
2-NITROPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
3,3'-DICHLOROBENZIDINE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
4,6-DINITRO-O-CRESOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
4-BROMOPHENYLPHENYL ETHER	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
4-CHLORO-3-METHYLPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
4-CHLOROPHENYLPHENYL ETHER	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
4-NITROPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
ACENAPHTHENE	0.29 U	0.26 U	0.23 U	1.7	1.1 U
ACENAPHTHYLENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
ANTHRACENE	0.29 U	0.26 U	0.23 U	0.63	1.1 U
BENZIDINE	0.58 U	0.52 U	0.46 U	0.45 U	2.2 U
BENZO[A]ANTHRACENE	0.29 U	0.26 U	0.055 J	0.39	1.1 U
BENZO[A]PYRENE	0.29 U	0.26 U	0.23 U	0.15 J	1.1 U
BENZO[B]FLOURANTHENE	0.29 U	0.059 J	0.047 J	0.25	1.1 U
BENZO[G,H,I]PERYLENE	0.29 U	0.26 U	0.23 U	0.059 J	1.1 U
BENZO[K]FLOURANTHENE	0.29 U	0.26 U	0.23 U	0.079 J	1.1 U
BENZYL BUTYL PHTHALATE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
BIS(2-CHLOROETHOXY)METHANE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
BIS(2-CHLOROETHYL)ETHER	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
BIS(2-CHLOROISOPROPYL)ETHER	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
BIS(2-ETHYHEXYL)PHTHALATE	0.26 JB	0.16 JB	0.30 B	0.12 JB	0.69 JB
DI-N-BUTYL PHTHALATE	0.33 B	0.17 J	0.095 J	0.23 U	1.1 U
DI-N-OCTYL PHTHALATE	0.078 J	0.12 J	0.27	0.086 JB	1.1 U
DIBENZ[A,H]ANTHRACENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
DIETHYL PHTHALATE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
DIMETHYL PHTHALATE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
FLUORANTHENE	0.29 U	0.26 U	0.23 U	1.9	0.26 J
FLUORENE	0.29 U	0.26 U	0.23 U	1.3	1.1 U
HEXACHLORO-1,3-BUTADIENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
HEXACHLOROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
HEXACHLOROCYCLOPENTADIENE	0.88 U	0.78 U	0.69 U	0.68 U	3.3 U
HEXACHLOROETHANE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
INDENO[1,2,3-CD]PYRENE	0.29 U	0.26 U	0.23 U	0.053 J	1.1 U
ISOPHORORNE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
M-DICHLOROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
N-NITROSO-DI-N-PROPYLAMINE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
N-NITROSODIMETHYLAMINE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
N-NITROSODIPHENYLAMINE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
NAPHTHALENE	0.29 U	0.26 U	0.081 J	0.71	1.1 U
NITROBENZENE	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
PENTACHLOROPHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
PHENANTHRENE	0.29 U	0.082 J	0.15 J	3.1	0.44 J
PHENOL	0.29 U	0.26 U	0.23 U	0.23 U	1.1 U
PYRENE	0.29 U	0.26 U	0.076 J	1.4	1.1 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-4	PG-FS-4
Sample Date	11/17/2000	11/17/2000	11/17/2000	11/15/2000	11/15/2000
Sample ID	PG-FS-01B	PG-FS-01B	PG-FS-01B	PG-FS04	PG-FS04
Sample Depth	1-2'	6-6.5'	12-13.5'	0.5-1'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
1,2-BENZPHENANTHRACENE	17 U	0.27 U	0.32 U	0.28	0.091 J
1,2-DICHLOROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
1,2-DIPHENYLHYDRAZINE	3.3 U	0.054 U	0.064 U	0.044 U	0.049 U
1,4-DICHLOROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2,4,6-TRICHLORORPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2,4-DICHLOROPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2,4-DIMETHYLPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2,4-DINITROPHENOL	33 U	0.54 U	0.64 U	0.44 U	0.49 U
2,4-DINITROTOLUENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2,6-DINITROTOLUENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2-CHLORORNAPHTHALENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2-CHLOROPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
2-NITROPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
3,3'-DICHLOROBENZIDINE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
4,6-DINITRO-O-CRESOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
4-BROMOPHENYLPHENYL ETHER	17 U	0.27 U	0.32 U	0.22 U	0.25 U
4-CHLORO-3-METHYLPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
4-CHLOROPHENYLPHENYL ETHER	17 U	0.27 U	0.32 U	0.22 U	0.25 U
4-NITROPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
ACENAPHTHENE	17 U	0.27 U	0.32 U	0.073 J	0.25 U
ACENAPHTHYLENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
ANTHRACENE	17 U	0.27 U	0.32 U	0.066 J	0.25 U
BENZIDINE	33 U	0.54 U	0.64 U	0.44 U	0.49 U
BENZO[A]ANTHRACENE	17 U	0.27 U	0.32 U	0.19 J	0.25 U
BENZO[A]PYRENE	17 U	0.27 U	0.32 U	0.15 J	0.25 U
BENZO[B]FLOURANTHENE	17 U	0.27 U	0.32 U	0.25	0.25 U
BENZO[G,H,I]PERYLENE	17 U	0.27 U	0.32 U	0.060 J	0.25 U
BENZO[K]FLOURANTHENE	17 U	0.27 U	0.32 U	0.24	0.25 U
BENZYL BUTYL PHTHALATE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
BIS(2-CHLOROETHOXY)METHANE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
BIS(2-CHLOROETHYL)ETHER	17 U	0.27 U	0.32 U	0.22 U	0.25 U
BIS(2-CHLOROISOPROPYL)ETHER	17 U	0.27 U	0.32 U	0.22 U	0.25 U
BIS(2-ETHYHEXYL)PHTHALATE	17 U	0.11 J	0.099 J	0.061 JB	0.15 JB
DI-N-BUTYL PHTHALATE	17 U	0.27 U	0.32 U	0.26	0.071 J
DI-N-OCTYL PHTHALATE	17 U	0.27 U	0.32 U	0.092 JB	0.15 JB
DIBENZ[A,H]ANTHRACENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
DIETHYL PHTHALATE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
DIMETHYL PHTHALATE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
FLUORANTHENE	17 U	0.27 U	0.32 U	0.45	0.25 U
FLUORENE	17 U	0.27 U	0.32 U	0.077 J	0.25 U
HEXACHLORO-1,3-BUTADIENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
HEXACHLOROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
HEXACHLOROCYCLOPENTADIENE	50 U	0.81 U	0.96 U	0.66 U	0.74 U
HEXACHLOROETHANE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
INDENO[1,2,3-CD]PYRENE	17 U	0.27 U	0.32 U	0.067 J	0.25 U
ISOPHORORNE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
M-DICHLOROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
N-NITROSO-DI-N-PROPYLAMINE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
N-NITROSODIMETHYLAMINE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
N-NITROSODIPHENYLAMINE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
NAPHTHALENE	17 U	0.27 U	0.32 U	0.093 J	0.25 U
NITROBENZENE	17 U	0.27 U	0.32 U	0.22 U	0.25 U
PENTACHLOROPHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
PHENANTHRENE	17 U	0.27 U	0.32 U	0.38	0.11 J
PHENOL	17 U	0.27 U	0.32 U	0.22 U	0.25 U
PYRENE	17 U	0.27 U	0.32 U	0.41	0.051 J

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-FILL-7	PG-FILL-7	PG-FILL-7	PG-FILL-8	PG-FILL-8
Sample Date	12/4/2000	12/4/2000	12/4/2000	12/2/2000	12/2/2000
Sample ID	PG-FILL7	PG-FILL7	PG-FILL7	PG-FILL08	PG-FILL08
Sample Depth	1-2.5'	2.5-4'	10-12'	0-2'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
1,2-BENZPHENANTHRACENE	0.070 J	0.30	0.35 U	0.33	0.35 U
1,2-DICHLOROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
1,2-DIPHENYLHYDRAZINE	0.036 U	0.037 U	0.071 U	0.040 U	0.069 U
1,4-DICHLOROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2,4,6-TRICHLORORPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2,4-DICHLOROPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2,4-DIMETHYLPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2,4-DINITROPHENOL	0.36 U	0.37 U	0.71 U	0.40 U	0.69 U
2,4-DINITROTOLUENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2,6-DINITROTOLUENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2-CHLORORNAPHTHALENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2-CHLOROPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
2-NITROPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
3,3'-DICHLOROBENZIDINE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
4,6-DINITRO-O-CRESOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
4-BROMOPHENYLPHENYL ETHER	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
4-CHLORO-3-METHYLPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
4-CHLOROPHENYLPHENYL ETHER	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
4-NITROPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
ACENAPHTHENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
ACENAPHTHYLENE	0.18 U	0.039 J	0.35 U	0.065 J	0.35 U
ANTHRACENE	0.18 U	0.045 J	0.35 U	0.11 J	0.35 U
BENZIDINE	0.36 U	0.37 U	0.71 U	0.40 U	0.69 U
BENZO[A]ANTHRACENE	0.060 J	0.21	0.35 U	0.26	0.35 U
BENZO[A]PYRENE	0.053 J	0.23	0.35 U	0.25	0.35 U
BENZO[B]FLOURANTHENE	0.083 J	0.36	0.35 U	0.50	0.35 U
BENZO[G,H,I]PERYLENE	0.041 J	0.20	0.35 U	0.22	0.35 U
BENZO[K]FLOURANTHENE	0.18 U	0.12 J	0.35 U	0.17 J	0.35 U
BENZYL BUTYL PHTHALATE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
BIS(2-CHLOROETHOXY)METHANE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
BIS(2-CHLOROETHYL)ETHER	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
BIS(2-CHLOROISOPROPYL)ETHER	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
BIS(2-ETHYHEXYL)PHTHALATE	0.064 JB	0.095 JB	0.080 JB	0.20 B	0.15 JB
DI-N-BUTYL PHTHALATE	0.076 JB	0.060 JB	0.35 U	0.20 U	0.35 U
DI-N-OCTYL PHTHALATE	0.18 U	0.041 JB	0.35 U	0.078 JB	0.35 U
DIBENZ[A,H]ANTHRACENE	0.18 U	0.059 J	0.35 U	0.075 J	0.35 U
DIETHYL PHTHALATE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
DIMETHYL PHTHALATE	0.18 U	0.19 U	0.35 U	0.048 J	0.35 U
FLUORANTHENE	0.080 J	0.36	0.35 U	0.40	0.35 U
FLUORENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
HEXACHLORO-1,3-BUTADIENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
HEXACHLOROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
HEXACHLOROCYCLOPENTADIENE	0.54 U	0.56 U	1.1 U	0.60 U	1.0 U
HEXACHLOROETHANE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
INDENO[1,2,3-CD]PYRENE	0.18 U	0.16 J	0.35 U	0.20	0.35 U
ISOPHORORNE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
M-DICHLOROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
N-NITROSO-DI-N-PROPYLAMINE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
N-NITROSODIMETHYLAMINE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
N-NITROSODIPHENYLAMINE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
NAPHTHALENE	0.051 J	0.21	0.35 U	0.040 J	0.35 U
NITROBENZENE	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
PENTACHLOROPHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
PHENANTHRENE	0.067 J	0.37	0.35 U	0.14 J	0.35 U
PHENOL	0.18 U	0.19 U	0.35 U	0.20 U	0.35 U
PYRENE	0.076 J	0.42	0.35 U	0.40	0.35 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST2-1	PG-UST2-1	PG-UST2-1A	PG-UST2-1B	PG-UST2-1B
Sample Date	11/30/2000	11/30/2000	11/30/2000	11/30/2000	11/30/2000
Sample ID	PG-UST2-1	PG-UST2-1	PG-UST2-1A	PG-UST2-1B	PG-UST2-1B
Sample Depth	6-7'	8-10'	0-2'	2-4'	4-5.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
1,2-BENZPHENANTHRACENE	0.59	12	1.3	0.28	2.5 J
1,2-DICHLOROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
1,2-DIPHENYLHYDRAZINE	0.040 U	1.2 U	0.15 U	0.048 U	0.74 U
1,4-DICHLOROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2,4,6-TRICHLORORPHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2,4-DICHLOROPHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2,4-DIMETHYLPHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2,4-DINITROPHENOL	0.40 U	12 U	1.5 U	0.48 U	7.4 U
2,4-DINITROTOLUENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2,6-DINITROTOLUENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2-CHLORORNAPHTHALENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2-CHLOROPHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
2-NITROPHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
3,3'-DICHLOROBENZIDINE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
4,6-DINITRO-O-CRESOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
4-BROMOPHENYLPHENYL ETHER	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
4-CHLORO-3-METHYLPHENOL	0.20 U	6.0 U	0.27 J	0.059 J	3.7 U
4-CHLOROPHENYLPHENYL ETHER	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
4-NITROPHENOL	0.20 U	6.0 U	1.5	0.24 U	3.7 U
ACENAPHTHENE	0.18 J	9.2	0.76 U	0.12 J	3.7 U
ACENAPHTHYLENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
ANTHRACENE	0.32	11	0.34 J	0.16 J	3.7 U
BENZIDINE	0.40 U	12 U	1.5 U	0.48 U	7.4 U
BENZO[A]ANTHRACENE	0.47	8.8	1.1	0.23 J	1.7 J
BENZO[A]PYRENE	0.28	5.9 J	0.95	0.19 J	1.5 J
BENZO[B]FLOURANTHENE	0.25	4.1 J	1.4	0.33	1.4 J
BENZO[G,H,I]PERYLENE	0.043 J	4.9 J	0.44 J	0.059 J	1.4 J
BENZO[K]FLOURANTHENE	0.13 J	2.3 J	0.58 J	0.12 J	3.7 U
BENZYL BUTYL PHTHALATE	0.20 U	6.0 U	1.6	0.090 J	3.7 U
BIS(2-CHLOROETHOXY)METHANE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
BIS(2-CHLOROETHYL)ETHER	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
BIS(2-CHLOROISOPROPYL)ETHER	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
BIS(2-ETHYHEXYL)PHTHALATE	0.088 J	6.0 U	24	0.44	3.7 U
DI-N-BUTYL PHTHALATE	0.083 J	6.0 U	0.23 J	0.24 U	3.7 U
DI-N-OCTYL PHTHALATE	0.10 J	6.0 U	0.20 J	0.11 J	3.7 U
DIBENZ[A,H]ANTHRACENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
DIETHYL PHTHALATE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
DIMETHYL PHTHALATE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
FLUORANTHENE	0.28	7.7	1.7	0.63	3.7 U
FLUORENE	0.11 J	10	0.76 U	0.19 J	3.7 U
HEXACHLORO-1,3-BUTADIENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
HEXACHLOROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
HEXACHLOROCYCLOPENTADIENE	0.60 U	18 U	2.3 U	0.71 U	11 U
HEXACHLOROETHANE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
INDENO[1,2,3-CD]PYRENE	0.20 U	6.0 U	0.44 J	0.058 J	3.7 U
ISOPHORORNE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
M-DICHLOROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
N-NITROSO-DI-N-PROPYLAMINE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
N-NITROSODIMETHYLAMINE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
N-NITROSODIPHENYLAMINE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
NAPHTHALENE	0.088 J	6.0 U	0.76 U	0.15 J	0.85 J
NITROBENZENE	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
PENTACHLOROPHENOL	0.20 U	6.0 U	0.48 J	0.24 U	3.7 U
PHENANTHRENE	0.14 J	31	1.0	0.55	2.2 J
PHENOL	0.20 U	6.0 U	0.76 U	0.24 U	3.7 U
PYRENE	0.84	45	1.4	0.53	3.2 J

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST2-2	PG-UST2-2	PG-UST2-3	PG-UST2-3	PG-UST2-3
Sample Date	11/30/2000	11/30/2000	12/1/2000	12/1/2000	12/1/2000
Sample ID	PG-UST2-2	PG-UST2-2	PG-UST2-3	PG-UST2-3	PG-UST2-3
Sample Depth	4-5.5'	10-12'	2-4'	7.5-9	12-14'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
1,2-BENZPHENANTHRACENE	0.11 J	2.6	0.068 J	15	0.24 J
1,2-DICHLOROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
1,2-DIPHENYLHYDRAZINE	0.038 U	0.21 U	0.041 U	0.83 U	0.064 U
1,4-DICHLOROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2,4,6-TRICHLORORPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2,4-DICHLOROPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2,4-DIMETHYLPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2,4-DINITROPHENOL	0.38 U	2.1 U	0.41 U	8.3 U	0.64 U
2,4-DINITROTOLUENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2,6-DINITROTOLUENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2-CHLORORNAPHTHALENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2-CHLOROPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
2-NITROPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
3,3'-DICHLOROBENZIDINE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
4,6-DINITRO-O-CRESOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
4-BROMOPHENYLPHENYL ETHER	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
4-CHLORO-3-METHYLPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
4-CHLOROPHENYLPHENYL ETHER	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
4-NITROPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
ACENAPHTHENE	0.19 U	1.4	0.21 U	5.1	0.083 J
ACENAPHTHYLENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
ANTHRACENE	0.19 U	2.9	0.21 U	4.2 U	0.13 J
BENZIDINE	0.38 U	2.1 U	0.41 U	8.3 U	0.64 U
BENZO[A]ANTHRACENE	*0.066 J*	*2.5*	*0.21 U*	*11*	*0.20 J*
BENZO[A]PYRENE	0.057 J	1.4	0.21 U	5.8	0.099 J
BENZO[B]FLOURANTHENE	0.10 J	0.97 J	0.21 U	6.8	0.084 J
BENZO[G,H,I]PERYLENE	0.19 U	0.39 J	0.21 U	1.1 J	0.32 U
BENZO[K]FLOURANTHENE	0.19 U	0.53 J	0.21 U	2.3 J	0.32 U
BENZYL BUTYL PHTHALATE	0.36	1.1 U	0.21 U	4.2 U	0.32 U
BIS(2-CHLOROETHOXY)METHANE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
BIS(2-CHLOROETHYL)ETHER	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
BIS(2-CHLOROISOPROPYL)ETHER	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
BIS(2-ETHYHEXYL)PHTHALATE	0.13 J	1.1 U	0.086 JB	4.2 U	0.36 B
DI-N-BUTYL PHTHALATE	0.084 J	1.1 U	0.042 J	4.2 U	0.32 U
DI-N-OCTYL PHTHALATE	0.067 J	1.1 U	0.051 J	4.2 U	0.42
DIBENZ[A,H]ANTHRACENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
DIETHYL PHTHALATE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
DIMETHYL PHTHALATE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
FLUORANTHENE	0.066 J	1.6	0.21 U	6.1	0.13 J
FLUORENE	0.19 U	2.3	0.21 U	4.2 U	0.32 U
HEXACHLORO-1,3-BUTADIENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
HEXACHLOROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
HEXACHLOROCYCLOPENTADIENE	0.57 U	3.2 U	0.62 U	13 U	0.96 U
HEXACHLOROETHANE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
INDENO[1,2,3-CD]PYRENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
ISOPHORORNE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
M-DICHLOROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
N-NITROSO-DI-N-PROPYLAMINE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
N-NITROSODIMETHYLAMINE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
N-NITROSODIPHENYLAMINE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
NAPHTHALENE	0.12 J	0.73 J	0.042 J	4.2 U	0.27 J
NITROBENZENE	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
PENTACHLOROPHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
PHENANTHRENE	0.15 J	10	0.099 J	9.2	0.14 J
PHENOL	0.19 U	1.1 U	0.21 U	4.2 U	0.32 U
PYRENE	0.084 J	9.8	0.21 U	31	0.51

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2	PG-UST6-3
Sample Date	11/27/2000	11/28/2000	11/28/2000	11/28/2000	11/28/2000
Sample ID	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2	PG-UST6-3
Sample Depth	4-6'	4-6'	8-10'	16-18'	1.5-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
1,2-BENZPHENANTHRACENE	0.31 U	0.33 U	0.39 U	0.41 U	1
1,2-DICHLOROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
1,2-DIPHENYLHYDRAZINE	0.062 U	0.067 U	0.078 U	0.081 U	0.039 U
1,4-DICHLOROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2,4,6-TRICHLORORPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2,4-DICHLOROPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2,4-DIMETHYLPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2,4-DINITROPHENOL	0.62 U	0.67 U	0.78 U	0.81 U	0.39 U
2,4-DINITROTOLUENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2,6-DINITROTOLUENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2-CHLORORNAPHTHALENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2-CHLOROPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
2-NITROPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
3,3'-DICHLOROBENZIDINE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
4,6-DINITRO-O-CRESOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
4-BROMOPHENYLPHENYL ETHER	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
4-CHLORO-3-METHYLPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
4-CHLOROPHENYLPHENYL ETHER	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
4-NITROPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
ACENAPHTHENE	0.31 U	0.33 U	0.39 U	0.41 U	0.14 J
ACENAPHTHYLENE	0.31 U	0.33 U	0.39 U	0.41 U	0.042 J
ANTHRACENE	0.31 U	0.33 U	0.39 U	0.41 U	0.30
BENZIDINE	0.62 U	0.67 U	0.78 U	0.81 U	0.39 U
BENZO[A]ANTHRACENE	0.073 J	0.33 U	0.39 U	0.41 U	0.99
BENZO[A]PYRENE	0.31 U	0.33 U	0.39 U	0.41 U	0.92
BENZO[B]FLOURANTHENE	0.063 J	0.33 U	0.39 U	0.41 U	1.5
BENZO[G,H,I]PERYLENE	0.24 J	0.33 U	0.39 U	0.41 U	0.28
BENZO[K]FLOURANTHENE	0.31 U	0.33 U	0.39 U	0.41 U	0.59
BENZYL BUTYL PHTHALATE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
BIS(2-CHLOROETHOXY)METHANE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
BIS(2-CHLOROETHYL)ETHER	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
BIS(2-CHLOROISOPROPYL)ETHER	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
BIS(2-ETHYHEXYL)PHTHALATE	0.24 JB	0.16 J	0.28 J	0.34 J	0.20 U
DI-N-BUTYL PHTHALATE	0.16 JB	0.14 JB	0.17 JB	0.16 JB	0.093 JB
DI-N-OCTYL PHTHALATE	0.079 J	0.33 U	0.24 J	0.17 J	0.20 U
DIBENZ[A,H]ANTHRACENE	0.31 U	0.33 U	0.39 U	0.41 U	0.14 J
DIETHYL PHTHALATE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
DIMETHYL PHTHALATE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
FLUORANTHENE	0.088 J	0.33 U	0.39 U	0.17 J	2.1
FLUORENE	0.31 U	0.33 U	0.39 U	0.41 U	0.18 J
HEXACHLORO-1,3-BUTADIENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
HEXACHLOROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
HEXACHLOROCYCLOPENTADIENE	0.93 U	1.0 U	1.2 U	1.2 U	0.59 U
HEXACHLOROETHANE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
INDENO[1,2,3-CD]PYRENE	0.31 U	0.33 U	0.39 U	0.41 U	0.28
ISOPHORORNE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
M-DICHLOROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
N-NITROSO-DI-N-PROPYLAMINE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
N-NITROSODIMETHYLAMINE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
N-NITROSODIPHENYLAMINE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
NAPHTHALENE	0.31 U	0.33 U	0.39 U	0.087 J	0.22
NITROBENZENE	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
PENTACHLOROPHENOL	0.31 U	0.33 U	0.39 U	0.41 U	0.20 U
PHENANTHRENE	0.11 J	0.33 U	0.39 U	0.16 J	0.92
PHENOL	0.21 J	0.33 U	0.086 J	0.51	0.20 U
PYRENE	0.12 J	0.33 U	0.39 U	0.12 J	1.8

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-UST6-3	PG-WOOD-1C	PG-WOOD-03	PG-WOOD-03	PG-WOOD-3
Sample Date	11/28/2000	11/9/2000	11/10/2000	11/10/2000	11/29/2000
Sample ID	PG-UST6-3	PG-WD-01C	PG-WD-03	PG-WD-03	PG-WOOD-3
Sample Depth	14-16'	10-12'	0.5-2'	2-4'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
1,2-BENZPHENANTHRACENE	0.12 J	0.31 U	0.060 J	1.1	0.15 J
1,2-DICHLOROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
1,2-DIPHENYLHYDRAZINE	0.10 U	0.062 U	0.037 U	0.039 U	0.039 U
1,4-DICHLOROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2,4,6-TRICHLORORPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2,4-DICHLOROPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2,4-DIMETHYLPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2,4-DINITROPHENOL	1.0 U	0.62 U	0.37 U	0.39 U	0.39 U
2,4-DINITROTOLUENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2,6-DINITROTOLUENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2-CHLORORNAPHTHALENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2-CHLOROPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
2-NITROPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
3,3'-DICHLOROBENZIDINE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
4,6-DINITRO-O-CRESOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
4-BROMOPHENYLPHENYL ETHER	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
4-CHLORO-3-METHYLPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
4-CHLOROPHENYLPHENYL ETHER	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
4-NITROPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
ACENAPHTHENE	0.52 U	0.31 U	0.19 U	0.088 J	0.20 U
ACENAPHTHYLENE	0.52 U	0.31 U	0.19 U	0.14 J	0.20 U
ANTHRACENE	0.52 U	0.31 U	0.19 U	0.32	0.20 U
BENZIDINE	1.0 U	0.62 U	0.37 U	0.39 U	0.39 U
BENZO[A]ANTHRACENE	0.12 J	0.31 U	0.047 J	0.95	0.10 J
BENZO[A]PYRENE	0.52 U	0.31 U	0.039 J	0.97	0.11 J
BENZO[B]FLOURANTHENE	0.52 U	0.31 U	0.086 J	2.5	0.18 J
BENZO[G,H,I]PERYLENE	0.52 U	0.20 J	0.19 U	0.31	0.11 J
BENZO[K]FLOURANTHENE	0.52 U	0.31 U	0.19 U	0.20 U	0.073 J
BENZYL BUTYL PHTHALATE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
BIS(2-CHLOROETHOXY)METHANE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
BIS(2-CHLOROETHYL)ETHER	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
BIS(2-CHLOROISOPROPYL)ETHER	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
BIS(2-ETHYHEXYL)PHTHALATE	0.24 J	0.28 JB	0.40 B	0.23 B	0.17 JB
DI-N-BUTYL PHTHALATE	0.52 U	0.13 JB	0.19 U	0.20 U	0.20 U
DI-N-OCTYL PHTHALATE	0.14 J	0.13 J	0.052 J	0.089 J	0.20 U
DIBENZ[A,H]ANTHRACENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
DIETHYL PHTHALATE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
DIMETHYL PHTHALATE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
FLUORANTHENE	0.19 J	0.31 U	0.090 J	1.6	0.14 J
FLUORENE	0.52 U	0.31 U	0.19 U	0.11 J	0.20 U
HEXACHLORO-1,3-BUTADIENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
HEXACHLOROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
HEXACHLOROCYCLOPENTADIENE	1.6 U	0.93 U	0.56 U	0.59 U	0.59 U
HEXACHLOROETHANE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
INDENO[1,2,3-CD]PYRENE	0.52 U	0.31 U	0.19 U	0.33	0.096 J
ISOPHORORNE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
M-DICHLOROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
N-NITROSO-DI-N-PROPYLAMINE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
N-NITROSODIMETHYLAMINE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
N-NITROSODIPHENYLAMINE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
NAPHTHALENE	0.52 U	0.31	0.19 U	0.20	0.070 J
NITROBENZENE	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
PENTACHLOROPHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
PHENANTHRENE	0.17 J	0.31 U	0.070 J	1.1	0.12 J
PHENOL	0.52 U	0.31 U	0.19 U	0.20 U	0.20 U
PYRENE	0.18 J	0.31 U	0.10 J	1.5	0.15 J

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-WOOD-3	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05
Sample Date	11/29/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-WOOD-3	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05
Sample Depth	6-8'	0-2'	2-4'	4-6'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
1,2-BENZPHENANTHRACENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
1,2-DICHLOROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
1,2-DIPHENYLHYDRAZINE	0.065 U	0.040 U	0.20 U	0.040 U	0.046 U
1,4-DICHLOROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2,4,6-TRICHLORORPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2,4-DICHLOROPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2,4-DIMETHYLPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2,4-DINITROPHENOL	0.65 U	0.40 U	2.0 U	0.40 U	0.46 U
2,4-DINITROTOLUENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2,6-DINITROTOLUENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2-CHLORORNAPHTHALENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2-CHLOROPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
2-NITROPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
3,3'-DICHLOROBENZIDINE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
4,6-DINITRO-O-CRESOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
4-BROMOPHENYLPHENYL ETHER	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
4-CHLORO-3-METHYLPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
4-CHLOROPHENYLPHENYL ETHER	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
4-NITROPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
ACENAPHTHENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
ACENAPHTHYLENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
ANTHRACENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZIDINE	0.65 U	0.40 U	2.0 U	0.40 U	0.46 U
BENZO[A]ANTHRACENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZO[A]PYRENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZO[B]FLOURANTHENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZO[G,H,I]PERYLENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZO[K]FLOURANTHENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BENZYL BUTYL PHTHALATE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BIS(2-CHLOROETHOXY)METHANE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BIS(2-CHLOROETHYL)ETHER	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BIS(2-CHLOROISOPROPYL)ETHER	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
BIS(2-ETHYHEXYL)PHTHALATE	0.34 B	0.21	1.0 U	0.20 U	0.23 U
DI-N-BUTYL PHTHALATE	0.33 U	0.20	1.0 U	0.20 U	0.23 U
DI-N-OCTYL PHTHALATE	0.067 J	0.097 JB	1.0 U	0.050 JB	0.23 U
DIBENZ[A,H]ANTHRACENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
DIETHYL PHTHALATE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
DIMETHYL PHTHALATE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
FLUORANTHENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
FLUORENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
HEXACHLORO-1,3-BUTADIENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
HEXACHLOROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
HEXACHLOROCYCLOPENTADIENE	0.98 U	0.60 U	3.0 U	0.60 U	0.68 U
HEXACHLOROETHANE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
INDENO[1,2,3-CD]PYRENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
ISOPHORORNE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
M-DICHLOROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
N-NITROSO-DI-N-PROPYLAMINE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
N-NITROSODIMETHYLAMINE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
N-NITROSODIPHENYLAMINE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
NAPHTHALENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
NITROBENZENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
PENTACHLOROPHENOL	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
PHENANTHRENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U
PHENOL	0.33 U	0.20 U	1.2	0.20 U	0.23 U
PYRENE	0.33 U	0.20 U	1.0 U	0.20 U	0.23 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-WOOD-05	PG-WOOD-05	PG-PA-MW-1	PG-PA-MW-1	PG-PA-MW-1
Sample Date	11/7/2000	11/7/2000	11/22/2000	11/22/2000	11/22/2000
Sample ID	PG-WD-05	PG-WD-05	PG-PAMW1	PG-PAMW1	PG-PAMW1
Sample Depth	8-10'	14-16'	3-4.5'	4.5-6'	10-12'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
1,2-BENZPHENANTHRACENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
1,2-DICHLOROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
1,2-DIPHENYLHYDRAZINE	0.056 U	0.11 U	0.055 U	0.069 U	0.062 U
1,4-DICHLOROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2,4,6-TRICHLORORPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2,4-DICHLOROPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2,4-DIMETHYLPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2,4-DINITROPHENOL	0.56 U	1.1 U	0.55 U	0.69 U	0.62 U
2,4-DINITROTOLUENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2,6-DINITROTOLUENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2-CHLORORNAPHTHALENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2-CHLOROPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
2-NITROPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
3,3'-DICHLOROBENZIDINE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
4,6-DINITRO-O-CRESOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
4-BROMOPHENYLPHENYL ETHER	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
4-CHLORO-3-METHYLPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
4-CHLOROPHENYLPHENYL ETHER	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
4-NITROPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
ACENAPHTHENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
ACENAPHTHYLENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
ANTHRACENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZIDINE	0.56 U	1.1 U	0.55 U	0.69 U	0.62 U
BENZO[A]ANTHRACENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZO[A]PYRENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZO[B]FLOURANTHENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZO[G,H,I]PERYLENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZO[K]FLOURANTHENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BENZYL BUTYL PHTHALATE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BIS(2-CHLOROETHOXY)METHANE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BIS(2-CHLOROETHYL)ETHER	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BIS(2-CHLOROISOPROPYL)ETHER	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
BIS(2-ETHYHEXYL)PHTHALATE	0.28 U	0.57 U	0.42 B	0.55 B	0.19 JB
DI-N-BUTYL PHTHALATE	0.16 J	0.29 J	0.067 JB	0.10 JB	0.096 JB
DI-N-OCTYL PHTHALATE	0.28 U	0.16 JB	0.068 J	0.10 J	0.083 J
DIBENZ[A,H]ANTHRACENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
DIETHYL PHTHALATE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
DIMETHYL PHTHALATE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
FLUORANTHENE	0.28 U	0.57 U	0.27 U	0.35 U	0.072 J
FLUORENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
HEXACHLORO-1,3-BUTADIENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
HEXACHLOROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
HEXACHLOROCYCLOPENTADIENE	0.85 U	1.7 U	0.82 U	1.0 U	0.93 U
HEXACHLOROETHANE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
INDENO[1,2,3-CD]PYRENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
ISOPHORORNE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
M-DICHLOROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
N-NITROSO-DI-N-PROPYLAMINE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
N-NITROSODIMETHYLAMINE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
N-NITROSODIPHENYLAMINE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
NAPHTHALENE	0.13 J	0.57 U	0.27 U	0.35 U	0.31 U
NITROBENZENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
PENTACHLOROPHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U
PHENANTHRENE	0.28 U	0.57 U	0.27 U	0.35 U	0.11 J
PHENOL	0.28 U	0.57 U	0.27 U	0.35 U	0.084 J
PYRENE	0.28 U	0.57 U	0.27 U	0.35 U	0.31 U

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6	PG-PA-MW-6	PG-PA-MW-6
Sample Date	11/9/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-PAMW-05	PG-PAMW-6	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06
Sample Depth	0-2'	0-2'	1.5-3'	3-4.5'	4.5-6'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
1,2-BENZPHENANTHRACENE	0.53	1.3	1.3	0.22	0.12 J
1,2-DICHLOROBENZENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
1,2-DIPHENYLHYDRAZINE	0.039 U	NA	0.036 U	0.039 U	0.038 U
1,4-DICHLOROBENZENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2,4,6-TRICHLORORPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2,4-DICHLOROPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2,4-DIMETHYLPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2,4-DINITROPHENOL	0.39 U	0.36 U	0.36 U	0.39 U	0.38 U
2,4-DINITROTOLUENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2,6-DINITROTOLUENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2-CHLORORNAPHTHALENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
2-CHLOROPHENOL	0.19 U	NA	0.18 U	0.19 U	0.19 U
2-NITROPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
3,3'-DICHLOROBENZIDINE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
4,6-DINITRO-O-CRESOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
4-BROMOPHENYLPHENYL ETHER	0.19 U	NA	0.18 U	0.19 U	0.19 U
4-CHLORO-3-METHYLPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
4-CHLOROPHENYLPHENYL ETHER	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
4-NITROPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
ACENAPHTHENE	0.19 U	0.38	0.38	0.19 U	0.19 U
ACENAPHTHYLENE	0.076 J	0.16 J	0.16 J	0.19 U	0.19 U
ANTHRACENE	0.068 J	2.7	2.7	0.052 J	0.19 U
BENZIDINE	0.39 U	0.36 U	0.36 U	0.39 U	0.38 U
BENZO[A]ANTHRACENE	0.33	1.1	1.1	0.14 J	0.072 J
BENZO[A]PYRENE	0.31	1.2	1.2	0.12 J	0.049 J
BENZO[B]FLOURANTHENE	0.48	2.2	2.2	0.20	0.059 J
BENZO[G,H,I]PERYLENE	0.18 J	0.43	0.43	0.065 J	0.19 U
BENZO[K]FLOURANTHENE	0.34	0.18 U	0.18 U	0.19 U	0.049 J
BENZYL BUTYL PHTHALATE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
BIS(2-CHLOROETHOXY)METHANE	0.19 U	NA	0.18 U	0.19 U	0.19 U
BIS(2-CHLOROETHYL)ETHER	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
BIS(2-CHLOROISOPROPYL)ETHER	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
BIS(2-ETHYHEXYL)PHTHALATE	0.17 JB	0.18 U	0.18 U	0.055 J	0.19 U
DI-N-BUTYL PHTHALATE	0.19 U	0.18 U	0.18 U	0.060 J	0.072 J
DI-N-OCTYL PHTHALATE	0.064 J	0.038 J	0.038 J	0.060 J	0.079 J
DIBENZ[A,H]ANTHRACENE	0.12 J	0.28	0.28	0.040 J	0.19 U
DIETHYL PHTHALATE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
DIMETHYL PHTHALATE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
FLUORANTHENE	0.36	2.2	2.2	0.18 J	0.094 J
FLUORENE	0.19 U	0.26	0.26	0.19 U	0.19 U
HEXACHLORO-1,3-BUTADIENE	0.19 U	NA	0.18 U	0.19 U	0.19 U
HEXACHLOROBENZENE	0.19 U	NA	0.18 U	0.19 U	0.19 U
HEXACHLOROCYCLOPENTADIENE	0.58 U	NA	0.54 U	0.58 U	0.57 U
HEXACHLOROETHANE	0.19 U	NA	0.18 U	0.19 U	0.19 U
INDENO[1,2,3-CD]PYRENE	0.22	0.47	0.47	0.059 J	0.19 U
ISOPHORORNE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
M-DICHLOROBENZENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
N-NITROSO-DI-N-PROPYLAMINE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
N-NITROSODIMETHYLAMINE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
N-NITROSODIPHENYLAMINE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
NAPHTHALENE	0.79	0.33	0.33	0.22	0.15 J
NITROBENZENE	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
PENTACHLOROPHENOL	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U
PHENANTHRENE	0.67	1.6	1.6	0.46	0.26
PHENOL	0.19 U	1.4 U	0.18 U	0.19 U	0.19 U
PYRENE	0.40	2	2.0	0.21	0.10 J

Table 5B
Soil Analytical Results
Semi- Volatile Organic Compounds
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PA-MW-6	PG-PA-MW-6
Sample Date	11/7/2000	11/7/2000
Sample ID	PG-MWPA-06	PG-MWPA-06
Sample Depth	6-8'	8.5-10'
Concentration	MG/KG	MG/KG
1,2,4-TRICHLOROBENZENE	0.21 U	0.28 U
1,2-BENZPHENANTHRACENE	0.080 J	0.12 J
1,2-DICHLOROBENZENE	0.21 U	0.28 U
1,2-DIPHENYLHYDRAZINE	0.042 U	0.056 U
1,4-DICHLOROBENZENE	0.21 U	0.28 U
2,4,6-TRICHLORORPHENOL	0.21 U	0.28 U
2,4-DICHLOROPHENOL	0.21 U	0.28 U
2,4-DIMETHYLPHENOL	0.21 U	0.28 U
2,4-DINITROPHENOL	0.42 U	0.56 U
2,4-DINITROTOLUENE	0.21 U	0.28 U
2,6-DINITROTOLUENE	0.21 U	0.28 U
2-CHLORORNAPHTHALENE	0.21 U	0.28 U
2-CHLOROPHENOL	0.21 U	0.28 U
2-NITROPHENOL	0.21 U	0.28 U
3,3'-DICHLOROBENZIDINE	0.21 U	0.28 U
4,6-DINITRO-O-CRESOL	0.21 U	0.28 U
4-BROMOPHENYLPHENYL ETHER	0.21 U	0.28 U
4-CHLORO-3-METHYLPHENOL	0.21 U	0.28 U
4-CHLOROPHENYLPHENYL ETHER	0.21 U	0.28 U
4-NITROPHENOL	0.21 U	0.28 U
ACENAPHTHENE	0.21 U	0.28 U
ACENAPHTHYLENE	0.21 U	0.28 U
ANTHRACENE	0.21 U	0.28 U
BENZIDINE	0.42 U	0.56 U
BENZO[A]ANTHRACENE	0.21 U	0.061 J
BENZO[A]PYRENE	0.21 U	0.28 U
BENZO[B]FLOURANTHENE	0.21 U	0.063 J
BENZO[G,H,I]PERYLENE	0.21 U	0.28 U
BENZO[K]FLOURANTHENE	0.21 U	0.28 U
BENZYL BUTYL PHTHALATE	0.21 U	0.28 U
BIS(2-CHLOROETHOXY)METHANE	0.21 U	0.28 U
BIS(2-CHLOROETHYL)ETHER	0.21 U	0.28 U
BIS(2-CHLOROISOPROPYL)ETHER	0.21 U	0.28 U
BIS(2-ETHYHEXYL)PHTHALATE	0.21 U	0.076 J
DI-N-BUTYL PHTHALATE	0.063 J	0.068 J
DI-N-OCTYL PHTHALATE	0.21 U	0.28 U
DIBENZ[A,H]ANTHRACENE	0.21 U	0.28 U
DIETHYL PHTHALATE	0.21 U	0.28 U
DIMETHYL PHTHALATE	0.21 U	0.28 U
FLUORANTHENE	0.21 U	0.085 J
FLUORENE	0.21 U	0.28 U
HEXACHLORO-1,3-BUTADIENE	0.21 U	0.28 U
HEXACHLOROBENZENE	0.21 U	0.28 U
HEXACHLOROCYCLOPENTADIENE	0.62 U	0.85 U
HEXACHLOROETHANE	0.21 U	0.28 U
INDENO[1,2,3-CD]PYRENE	0.21 U	0.28 U
ISOPHORORNE	0.21 U	0.28 U
M-DICHLOROBENZENE	0.21 U	0.28 U
N-NITROSO-DI-N-PROPYLAMINE	0.21 U	0.28 U
N-NITROSODIMETHYLAMINE	0.21 U	0.28 U
N-NITROSODIPHENYLAMINE	0.21 U	0.28 U
NAPHTHALENE	0.21 U	0.28 U
NITROBENZENE	0.21 U	0.28 U
PENTACHLOROPHENOL	0.21 U	0.28 U
PHENANTHRENE	0.12 J	0.093 J
PHENOL	0.21 U	0.28 U
PYRENE	0.21 U	0.11 J

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-A-1**	**PG-A-2**	**PG-A-2**	**PG-A-2**	**PG-A-3**	**PG-A-3**
Sample Date	12/2/2000	11/29/2000	11/29/2000	11/16/2000	11/16/2000	11/16/2000
Sample ID	PG-A-01	PG-A-02	PG-A-02	PG-A-2	PG-A-03	PG-A-03
Sample Depth	2-4'	0-2'	2-4'	6-8'	2.4-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
4,4'-DDE	0.013	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
4,4'-DDT	0.012	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ALDRIN	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ALPHA-BHC	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
BETA-BHC	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
CHLORDANE	0.0083 U	0.035 U	0.013 U	0.0093 U	0.017 U	0.013 U
DELTA-BHC	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
DIELDRIN	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDOSULFAN I	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDOSULFAN II	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDOSULFAN SULFATE	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDRIN	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDRIN ALDEHYDE	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
ENDRIN KETONE	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
GAMMA-BHC (LINDANE)	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
HEPTACHLOR	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
HEPTACHLOR EPOXIDE	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
METHOXYCHLOR	0.0042 U	0.018 U	0.0063 U	0.0046 U	0.0083 U	0.0065 U
TOXAPHENE	0.042 U	0.18 U	0.063 U	0.063 U	0.083 U	0.065 U
AROCLOR 1016	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1221	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1232	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1242	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1248	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1254	0.021 U	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U
AROCLOR 1260	0.058	0.018 U	0.031 U	0.023 U	0.042 U	0.033 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-A-3**	**PG-A-6**	**PG-F1-3**	**PG-F1-3**	**PG-H/R-1**	**PG-H/R-1**
Sample Date	11/16/2000	11/10/2000	11/10/2000	11/10/2000	12/2/2000	12/2/2000
Sample ID	PG-A-03	PG-A-06	PG-F1-3	PG-F1-3	PG-H/R-01	PG-H/R-01
Sample Depth	10-12'	1-3'	1-3'	3-5'	1-3'	3-4.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
4,4'-DDE	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
4,4'-DDT	0.0056 U	0.01	0.02 U	0.0067 U	0.0046 U	0.0067 U
ALDRIN	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
ALPHA-BHC	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
BETA-BHC	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
CHLORDANE	0.011 U	0.009 U	0.04 U	0.013 U	0.0091 U	0.013 U
DELTA-BHC	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
DIELDRIN	0.0056 U	0.0048	0.02 U	0.0067 U	0.0046 U	0.0067 U
ENDOSULFAN I	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
ENDOSULFAN II	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
ENDOSULFAN SULFATE	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
ENDRIN	0.0056 U	0.0045 U	0.19	0.012	0.0046 U	0.0067 U
ENDRIN ALDEHYDE	0.0056 U	0.0069	0.02 U	0.0067 U	0.0046 U	0.0067 U
ENDRIN KETONE	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
GAMMA-BHC (LINDANE)	0.0056 U	0.0073	0.02 U	0.0067 U	0.0046 U	0.0067 U
HEPTACHLOR	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
HEPTACHLOR EPOXIDE	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
METHOXYCHLOR	0.0056 U	0.0045 U	0.02 U	0.0067 U	0.0046 U	0.0067 U
TOXAPHENE	0.056 U	0.045 U	0.2 U	0.067 U	0.046 U	0.067 U
AROCLOR 1016	0.028 U	0.023 U	0.02 U	0.033 U	0.023 U	0.033 U
AROCLOR 1221	0.028 U	0.023 U	0.02 U	0.033 U	0.023 U	0.033 U
AROCLOR 1232	0.028 U	0.023 U	0.02 U	0.033 U	0.023 U	0.033 U
AROCLOR 1242	0.028 U	0.023 U	0.02 U	0.033 U	0.023 U	0.033 U
AROCLOR 1248	0.028 U	0.023 U	0.02 U	0.033 U	0.023 U	0.033 U
AROCLOR 1254	0.028 U	0.023 U	0.13	0.033 U	0.023 U	0.033 U
AROCLOR 1260	0.028 U	0.079	0.02 U	0.033 U	0.028	0.033 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-H/R-2	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-PD-6	PG-PD-6
Sample Date	11/10/2000	11/10/2000	11/10/2000	11/10/2000	11/21/2000	11/21/2000
Sample ID	PG-H/R-2	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-PD-06	PG-PD-06
Sample Depth	0-1.5'	1.5-3.5'	0.3-1'	1-3'	6-8'	12-14'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0038 U	0.006 U	0.0081	0.0058 U	0.0071 U	0.013 U
4,4'-DDE	0.02	0.006 U	0.094	0.0058 U	0.0071 U	0.013 U
4,4'-DDT	0.016	0.006 U	0.04	0.0058 U	0.0071 U	0.013 U
ALDRIN	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
ALPHA-BHC	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
BETA-BHC	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
CHLORDANE	0.0076 U	0.012 U	0.008 U	0.012 U	0.014 U	0.026 U
DELTA-BHC	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
DIELDRIN	0.0038 U	0.006 U	0.016	0.0058 U	0.0071 U	0.013 U
ENDOSULFAN I	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
ENDOSULFAN II	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
ENDOSULFAN SULFATE	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
ENDRIN	0.0079	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
ENDRIN ALDEHYDE	0.0038 U	0.006 U	.0076	0.0058 U	0.0071 U	0.013 U
ENDRIN KETONE	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
GAMMA-BHC (LINDANE)	0.0038 U	0.006 U	0.0044	0.0058 U	0.0071 U	0.013 U
HEPTACHLOR	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
HEPTACHLOR EPOXIDE	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
METHOXYCHLOR	0.0038 U	0.006 U	0.004 U	0.0058 U	0.0071 U	0.013 U
TOXAPHENE	0.038 U	0.06 U	0.04 U	0.058 U	0.071 U	0.13 U
AROCLOR 1016	0.019 U	0.03 U	0.02 U	0.029 U	0.035 U	0.064 U
AROCLOR 1221	0.019 U	0.03 U	0.02 U	0.029 U	0.035 U	0.064 U
AROCLOR 1232	0.019 U	0.03 U	0.02 U	0.029 U	0.035 U	0.064 U
AROCLOR 1242	0.019 U	0.03 U	0.02 U	0.029 U	0.035 U	0.064 U
AROCLOR 1248	0.019 U	0.03 U	0.02 U	0.029 U	0.035 U	0.064 U
AROCLOR 1254	0.019 U	0.03 U	0.02 U	0.029 U	0.051	0.064 U
AROCLOR 1260	0.15	0.03 U	0.26	0.029 U	0.035 U	0.064 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-PD-8**	**PG-PD-8**	**PG-PD-8**	**PG-PD-9**	**PG-PD-9**	**PG-PD-10**
Sample Date	11/29/2000	11/29/2000	11/29/2000	12/4/2000	12/4/2000	11/28/2000
Sample ID	PG-PD-8	PG-PD-8	PG-PD-8	PG-PD-09	PG-PD-09	PG-PD-10
Sample Depth	2-4'	8-10'	16-17'	4-6'	8-10'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
4,4'-DDE	0.046 U	0.022 U	0.033 U	0.046	0.0051 U	0.0038 U
4,4'-DDT	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ALDRIN	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ALPHA-BHC	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
BETA-BHC	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
CHLORDANE	0.093 U	0.044 U	0.067 U	0.068	0.01 U	0.0077 U
DELTA-BHC	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
DIELDRIN	0.046 U	0.054	0.4	0.04	0.0051 U	0.0038 U
ENDOSULFAN I	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ENDOSULFAN II	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ENDOSULFAN SULFATE	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ENDRIN	0.075	0.16	0.39	0.072	0.0051 U	0.0038 U
ENDRIN ALDEHYDE	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
ENDRIN KETONE	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
GAMMA-BHC (LINDANE)	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
HEPTACHLOR	0.046 U	0.022 U	0.033 U	0.043	0.0051 U	0.0038 U
HEPTACHLOR EPOXIDE	0.046 U	0.022 U	0.09	0.0097	0.0051 U	0.0038 U
METHOXYCHLOR	0.046 U	0.022 U	0.033 U	0.0049 U	0.0051 U	0.0038 U
TOXAPHENE	0.46 U	0.22 U	0.33 U	0.049 U	0.051 U	0.038 U
AROCLOR 1016	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U
AROCLOR 1221	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U
AROCLOR 1232	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U
AROCLOR 1242	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U
AROCLOR 1248	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U
AROCLOR 1254	0.023 U	0.24	0.95	0.67	0.025 U	0.019 U
AROCLOR 1260	0.023 U	0.022 U	0.033 U	0.025 U	0.025 U	0.019 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-PD-10	PG-PD-11	PG-RR-8	PG-RR-8	PG-RR-10	PG-RR-10
Sample Date	11/28/2000	11/27/2000	12/1/2000	12/1/2000	12/2/2000	12/2/2000
Sample ID	PG-PD-10	PG-PD-11	PG-RR-08	PG-RR-08	PG-RR10	PG-RR10
Sample Depth	6-8'	4-6'	2-4'	6-8'	2-2.5'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
4,4'-DDE	0.0085 U	0.0058 U	.0078	0.0046 U	0.0045 U	0.0044 U
4,4'-DDT	0.0085 U	.0073	0.02	0.0046 U	0.0045 U	0.0044 U
ALDRIN	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ALPHA-BHC	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
BETA-BHC	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
CHLORDANE	0.017 U	0.012 U	0.01 U	0.0093 U	0.009 U	0.0088 U
DELTA-BHC	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
DIELDRIN	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDOSULFAN I	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDOSULFAN II	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDOSULFAN SULFATE	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDRIN	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDRIN ALDEHYDE	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
ENDRIN KETONE	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
GAMMA-BHC (LINDANE)	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
HEPTACHLOR	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
HEPTACHLOR EPOXIDE	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
METHOXYCHLOR	0.0085 U	0.0058 U	0.0052 U	0.0046 U	0.0045 U	0.0044 U
TOXAPHENE	0.085 U	0.058 U	0.052 U	0.046 U	0.045 U	0.044 U
AROCLOR 1016	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1221	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1232	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1242	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1248	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1254	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U
AROCLOR 1260	0.043 U	0.029 U	0.026 U	0.023 U	0.023 U	0.022 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-FS-1B**	**PG-FS-1B**	**PG-FS-1B**	**PG-FS-4**	**PG-FS-4**	**PG-FILL-7**
Sample Date	11/17/2000	11/17/2000	11/17/2000	11/15/2000	11/15/2000	12/4/2000
Sample ID	PG-FS-01B	PG-FS-01B	PG-FS-01B	PG-FS04	PG-FS04	PG-FILL7
Sample Depth	1-2'	6-6.5'	12-13.5'	0.5-1'	2-4'	1-2.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
4,4'-DDE	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
4,4'-DDT	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ALDRIN	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ALPHA-BHC	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
BETA-BHC	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
CHLORDANE	0.13 U	0.011 U	0.013 U	0.035	0.0098 U	0.0072 U
DELTA-BHC	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
DIELDRIN	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDOSULFAN I	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDOSULFAN II	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDOSULFAN SULFATE	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDRIN	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDRIN ALDEHYDE	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
ENDRIN KETONE	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
GAMMA-BHC (LINDANE)	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
HEPTACHLOR	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
HEPTACHLOR EPOXIDE	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
METHOXYCHLOR	0.067 U	0.0054 U	0.0064 U	0.0044 U	0.0049 U	0.0036 U
TOXAPHENE	0.67 U	0.054 U	0.064 U	0.044 U	0.049 U	0.036 U
AROCLOR 1016	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1221	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1232	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1242	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1248	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1254	0.17 U	0.027 U	0.032 U	0.022 U	0.025 U	0.018 U
AROCLOR 1260	0.17 U	0.027 U	0.032 U	0.055	0.025 U	0.018 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-FILL-7	PG-FILL-7	PG-FILL-8	PG-FILL-8	PG-UST2-1	PG-UST2-1
Sample Date	12/4/2000	12/4/2000	12/2/2000	12/2/2000	11/30/2000	11/30/2000
Sample ID	PG-FILL7	PG-FILL7	PG-FILL08	PG-FILL08	PG-UST2-1	PG-UST2-1
Sample Depth	2.5-4'	10-12'	0-2'	6-8'	6-7'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
4,4'-DDE	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
4,4'-DDT	0.0037 U	0.02	0.13	0.0069 U	0.02 U	0.02 U
ALDRIN	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
ALPHA-BHC	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
BETA-BHC	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
CHLORDANE	0.0075 U	0.014 U	0.0079 U	0.014 U	0.04 U	0.04 U
DELTA-BHC	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
DIELDRIN	0.0037 U	0.0071 U	0.037	0.0069 U	0.02 U	0.02 U
ENDOSULFAN I	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
ENDOSULFAN II	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
ENDOSULFAN SULFATE	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
ENDRIN	0.0037 U	0.0071 U	0.089	0.0069 U	0.02 U	0.02 U
ENDRIN ALDEHYDE	0.0037 U	0.019	0.11	0.0069 U	0.02 U	0.02 U
ENDRIN KETONE	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
GAMMA-BHC (LINDANE)	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
HEPTACHLOR	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
HEPTACHLOR EPOXIDE	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
METHOXYCHLOR	0.0037 U	0.0071 U	0.004 U	0.0069 U	0.02 U	0.02 U
TOXAPHENE	0.037 U	0.071 U	0.04 U	0.069 U	0.2 U	0.2 U
AROCLOR 1016	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1221	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1232	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1242	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1248	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1254	0.019 U	0.035 U	0.02 U	0.035 U	0.02 U	0.02 U
AROCLOR 1260	0.019 U	0.15	1.5	0.035 U	0.02 U	0.02 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-UST2-1A	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3
Sample Date	11/30/2000	11/30/2000	11/30/2000	11/30/2000	11/30/2000	12/1/2000
Sample ID	PG-UST2-1A	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3
Sample Depth	0-2'	2-4'	4-5.5'	4-5.5'	10-12'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
4,4'-DDE	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
4,4'-DDT	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ALDRIN	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ALPHA-BHC	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
BETA-BHC	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
CHLORDANE	0.03 U	0.048 U	0.037 U	0.0077 U	0.043 U	0.0082 U
DELTA-BHC	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
DIELDRIN	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ENDOSULFAN I	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ENDOSULFAN II	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ENDOSULFAN SULFATE	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ENDRIN	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
ENDRIN ALDEHYDE	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0078
ENDRIN KETONE	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0079
GAMMA-BHC (LINDANE)	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
HEPTACHLOR	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
HEPTACHLOR EPOXIDE	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
METHOXYCHLOR	0.015 U	0.024 U	0.019 U	0.0038 U	0.021 U	0.0041 U
TOXAPHENE	0.15 U	0.24 U	0.19 U	0.038 U	0.21 U	0.041 U
AROCLOR 1016	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1221	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1232	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1242	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1248	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1254	0.076 U	0.024 U	0.019 U	0.019 U	0.021 U	0.021 U
AROCLOR 1260	0.096	0.024 U	0.031	0.019 U	0.021 U	0.056

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-UST2-3**	**PG-UST2-3**	**PG-UST5-2**	**PG-UST6-2**	**PG-UST6-2**	**PG-UST6-2**
Sample Date	12/1/2000	12/1/2000	11/27/2000	11/28/2000	11/28/2000	11/28/2000
Sample ID	PG-UST2-3	PG-UST2-3	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2
Sample Depth	7.5-9'	12-14'	4-6'	4-6'	8-10'	16-18'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
4,4'-DDE	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
4,4'-DDT	0.056 U	0.0064 U	0.022	0.0067 U	0.0078 U	0.0081 U
ALDRIN	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ALPHA-BHC	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
BETA-BHC	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
CHLORDANE	0.11 U	0.013 U	0.012 U	0.013 U	0.016 U	0.016 U
DELTA-BHC	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
DIELDRIN	0.056 U	0.0064 U	0.0077	0.0067 U	0.0078 U	0.0081 U
ENDOSULFAN I	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ENDOSULFAN II	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ENDOSULFAN SULFATE	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ENDRIN	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ENDRIN ALDEHYDE	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
ENDRIN KETONE	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
GAMMA-BHC (LINDANE)	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
HEPTACHLOR	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
HEPTACHLOR EPOXIDE	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
METHOXYCHLOR	0.056 U	0.0064 U	0.0062 U	0.0067 U	0.0078 U	0.0081 U
TOXAPHENE	0.56 U	0.064 U	0.062 U	0.067 U	0.078 U	0.081 U
AROCLOR 1016	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1221	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1232	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1242	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1248	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1254	0.028 U	0.032 U	0.031 U	0.033 U	0.039 U	0.041 U
AROCLOR 1260	0.028 U	0.032 U	0.069	0.033 U	0.039 U	0.041 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-UST6-3	PG-UST6-3	PG-WOOD-1C	PG-WOOD-03	PG-WOOD-3	PG-WOOD-3
Sample Date	11/28/2000	11/28/2000	11/9/2000	11/10/2000	11/29/2000	11/29/2000
Sample ID	PG-UST6-3	PG-UST6-3	PG-WD-01C	PG-WD-03	PG-WOOD-3	PG-WOOD-3
Sample Depth	1.5-2'	14-16'	10-12'	0.5-2'	2-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
4,4'-DDE	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
4,4'-DDT	0.14	0.01 U	0.0062 U	.012	0.02 U	0.0065 U
ALDRIN	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ALPHA-BHC	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
BETA-BHC	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
CHLORDANE	0.0078 U	0.021 U	0.012 U	0.015 U	0.039 U	0.013 U
DELTA-BHC	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
DIELDRIN	0.077	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDOSULFAN I	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDOSULFAN II	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDOSULFAN SULFATE	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDRIN	0.1	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDRIN ALDEHYDE	0.029	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
ENDRIN KETONE	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
GAMMA-BHC (LINDANE)	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
HEPTACHLOR	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
HEPTACHLOR EPOXIDE	0.036	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
METHOXYCHLOR	0.0039 U	0.01 U	0.0062 U	0.0074 U	0.02 U	0.0065 U
TOXAPHENE	0.039 U	0.1 U	0.062 U	0.074 U	0.2 U	0.065 U
AROCLOR 1016	0.02 U	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1221	0.02 U	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1232	0.02 U	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1242	0.02 U	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1248	0.02 U	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1254	0.27	0.052 U	0.031 U	0.019 U	0.02 U	0.033 U
AROCLOR 1260	0.02 U	0.052 U	0.031 U	0.16	0.02 U	0.033 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05	PG-WOOD-05
Sample Date	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05
Sample Depth	0-2'	2-4'	4-6'	6-8'	8-10'	14-16'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
4,4'-DDE	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
4,4'-DDT	0.004 U	.13	0.004 U	0.0046 U	0.0056 U	0.011 U
ALDRIN	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
ALPHA-BHC	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
BETA-BHC	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
CHLORDANE	0.008 U	0.008 U	0.008 U	0.0091 U	0.011 U	0.023 U
DELTA-BHC	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
DIELDRIN	0.004 U	.027	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDOSULFAN I	0.004 U	.0047	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDOSULFAN II	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDOSULFAN SULFATE	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDRIN	0.004 U	.0089	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDRIN ALDEHYDE	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
ENDRIN KETONE	0.004 U	.0099	0.004 U	0.0046 U	0.0056 U	0.011 U
GAMMA-BHC (LINDANE)	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
HEPTACHLOR	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
HEPTACHLOR EPOXIDE	0.004 U	.0065	0.004 U	0.0046 U	0.0056 U	0.011 U
METHOXYCHLOR	0.004 U	0.004 U	0.004 U	0.0046 U	0.0056 U	0.011 U
TOXAPHENE	0.04 U	0.04 U	0.04 U	0.046 U	0.056 U	0.11 U
AROCLOR 1016	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U
AROCLOR 1221	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U
AROCLOR 1232	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U
AROCLOR 1242	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U
AROCLOR 1248	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U
AROCLOR 1254	0.02 U	1.1	0.02 U	0.049	0.028 U	0.057 U
AROCLOR 1260	0.02 U	0.02 U	0.02 U	0.023 U	0.028 U	0.057 U

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-5**	**PG-PA-MW-6**	**PG-PA-MW-6**
Sample Date	11/22/2000	11/22/2000	11/22/2000	11/9/2000	11/7/2000	11/7/2000
Sample ID	PG-PAMW1	PG-PAMW1	PG-PAMW1	PG-PAMW-05	PG-MWPA-06	PG-MWPA-06
Sample Depth	3-4.5'	4.5-6'	10-12'	0-2'	1.5-3'	1.5-3'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0055 U	0.0069 U	0.0062 U	0.023	0.0036 U	0.0036 U
4,4'-DDE	0.0055 U	0.0069 U	0.0062 U	0.12	0.0036 U	0.014
4,4'-DDT	0.0055 U	0.0069 U	0.0062 U	0.14	0.019	0.019
ALDRIN	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
ALPHA-BHC	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
BETA-BHC	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
CHLORDANE	0.011 U	0.014 U	0.012 U	0.0078 U	0.0072 U	0.0072 U
DELTA-BHC	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
DIELDRIN	0.0055 U	0.0069 U	0.0062 U	0.0043	0.0036 U	0.0036 U
ENDOSULFAN I	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
ENDOSULFAN II	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
ENDOSULFAN SULFATE	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
ENDRIN	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
ENDRIN ALDEHYDE	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0054	0.0054
ENDRIN KETONE	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036U	0.006
GAMMA-BHC (LINDANE)	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
HEPTACHLOR	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
HEPTACHLOR EPOXIDE	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036 U	0.0036 U
METHOXYCHLOR	0.0055 U	0.0069 U	0.0062 U	0.0039 U	0.0036U	0.0036 U
TOXAPHENE	0.055 U	0.069 U	0.062 U	0.039 U	0.036 U	0.036 U
AROCLOR 1016	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1221	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1232	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1242	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1248	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1254	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.018 U
AROCLOR 1260	0.027 U	0.035 U	0.031 U	0.019 U	0.019 U	0.095

Table 5C
Soil Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**
Sample Date	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06
Sample Depth	3-4.5'	4.5-6'	6-8'	8.5-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG
4,4'-DDD	0.0039 U	0.0038 U	0.0042 U	0.0056 U
4,4'-DDE	0.0058	0.0038 U	0.0042 U	0.0056 U
4,4'-DDT	0.017	0.0038 U	0.0042 U	0.0056 U
ALDRIN	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ALPHA-BHC	0.0039 U	0.0038 U	0.0042 U	0.0056 U
BETA-BHC	0.0039 U	0.0038 U	0.0042 U	0.0056 U
CHLORDANE	0.0078 U	0.0077 U	0.0083 U	0.011 U
DELTA-BHC	0.0039 U	0.0038 U	0.0042 U	0.0056 U
DIELDRIN	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDOSULFAN I	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDOSULFAN II	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDOSULFAN SULFATE	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDRIN	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDRIN ALDEHYDE	0.0039 U	0.0038 U	0.0042 U	0.0056 U
ENDRIN KETONE	0.0039 U	0.0038 U	0.0042 U	0.0056 U
GAMMA-BHC (LINDANE)	0.0039 U	0.0038 U	0.0042 U	0.0056 U
HEPTACHLOR	0.0039 U	0.0038 U	0.0042 U	0.0056 U
HEPTACHLOR EPOXIDE	0.0039 U	0.0038 U	0.0042 U	0.0056 U
METHOXYCHLOR	0.0039 U	0.0038 U	0.0042 U	0.0056 U
TOXAPHENE	0.039 U	0.038 U	0.042 U	0.056 U
AROCLOR 1016	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1221	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1232	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1242	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1248	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1254	0.019 U	0.019 U	0.021 U	0.028 U
AROCLOR 1260	0.077	0.019 U	0.021 U	0.028 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-A-1**	**PG-A-2**	**PG-A-2**	**PG-A-2**	**PG-A-3**	**PG-A-3**
Sample Date	12/2/2000	11/29/2000	11/29/2000	11/16/2000	11/16/2000	11/16/2000
Sample ID	PG-A-01	PG-A-02	PG-A-02	PG-A-02	PG-A-03	PG-A-03
Sample Depth	2-4'	0-2'	2-4'	6-8'	2.4-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	2400	1400	1600 U	2000	14000	8000
ANTIMONY	3.8	1.5 U	2.7 U	2 U	3.6 U	2.8 U
ARSENIC	73	2.1 U	36	3.6	5 U	5.4
BARIUM	78	11	20	57	97	190
BERYLLIUM	.85	0.42 U	0.75 U	0.56 U	2.2	5.3
CADMIUM	0.37 U	0.32 U	0.57 U	0.42 U	0.75 U	0.59 U
CALCIUM METAL	8100	9800	340000	3800	33000	27000
CHROMIUM	120	5.5	7.5 U	5.6 U	130	39
COBALT	4.7	1.7 U	3.1 U	2.3 U	12	19
COPPER	110	7.4	7.2 U	17	42	25
IRON	38000	4600	4500 U	4800	9600	13000
LEAD	330	10	7.5 U	6.7	21	21
MAGNESIUM	1400	1700	1700	820 U	12000	2800
MANGANESE	170	77	31 U	22 U	230	520
NICKEL	69	4.4	4.6 U	0.2 U	93	44
POTASSIUM	140	190	210 U	7.4	17000	4100
SELENIUM	4.5	2.6 U	4.7 U	560 U	6.2 U	4.9 U
SILVER	0.62 U	0.53 U	0.94 U	3.5 U	1.2 U	0.98 U
SODIUM	500 U	420 U	2900	0.69 U	64000	73000
THALLIUM	1.5 U	1.3 U	2.3 U	560 U	3 U	2.4 U
VANADIUM	62	11 U	19 U	1.7 U	32	31
ZINC	400	17	31	14 U	70	71
MERCURY	0.37	0.15 U	0.27 U	35	0.35 U	0.33

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-A-3**	**PG-A-6**	**PG-F1-3**	**PG-F1-3**	**PG-H/R-1**	**PG-H/R-1**
Sample Date	11/16/2000	11/10/2000	11/10/2000	11/10/2000	12/2/2000	12/2/2000
Sample ID	PG-A-03	PG-A-06	PG-F1-3	PG-F1-3	PG-H/R-01	PG-H/R-01
Sample Depth	10-12'	1-3'	1-3'	3-5'	1-3'	3-4.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	10000	4100	3500	1900	3300	1100
ANTIMONY	2.5 U	4.1	1.7 U	2.9 U	2 U	2.9 U
ARSENIC	3.4 U	52	12	4 U	11	4 U
BARIUM	73	210	100	20 U	72	20 U
BERYLLIUM	1.6	2.1	.82	0.8 U	0.55 U	0.8 U
CADMIUM	0.51 U	0.41 U	2.5	0.6 U	0.41 U	0.6 U
CALCIUM METAL	34000	35000	44000	370000	230000	360000
CHROMIUM	22	33	25	14	5.5 U	8 U
COBALT	61	16	7.5	3.3 U	2.3 U	3.3 U
COPPER	28	360	50	8.3	19	7.6 U
IRON	11000	29000	11000	4700 U	15000	1500
LEAD	22	630	63	8.7	29	8 U
MAGNESIUM	7400	5600	3900	5500	3900	3500
MANGANESE	470	180	240	34	58	57
NICKEL	23	200	99	7.9	33	4.9 U
POTASSIUM	5100	540 U	550	800 U	190	220 U
SELENIUM	4.2 U	4.1	3 U	5 U	3.4 U	5 U
SILVER	0.85 U	0.68 U	0.6 U	1 U	0.68 U	1 U
SODIUM	48000	540 U	480 U	2800	1500	2600
THALLIUM	2 U	1.6 U	1.4 U	4	1.6 U	2.4 U
VANADIUM	19	24	34	20 U	26	20 U
ZINC	54	1800	270	20 U	1100	32
MERCURY	0.24 U	0.75	0.17 U	0.28 U	0.19 U	0.28 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-H/R-2**	**PG-H/R-2**	**PG-H/R-3**	**PG-H/R-3**	**PG-PD-6**	**PG-PD-6**
Sample Date	11/10/2000	11/10/2000	11/10/2000	11/10/2000	11/21/2000	11/21/2000
Sample ID	PG-H/R-2	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-PD-06	PG-PD-06
Sample Depth	0-1.5'	1.5-3.5'	0.3-1'	1-3'	6-8'	12-14'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	4300	1500 U	3700	1500 U	3600	5500
ANTIMONY	1.6 U	2.6 U	1.9	2.5 U	3.1 U	5.6 U
ARSENIC	21	3.6 U	120	3.8	4.3 U	14
BARIUM	120	18 U	180	18 U	27	160
BERYLLIUM	.59	0.71 U	.89	0.7 U	0.85 U	1.5 U
CADMIUM	.35	0.54 U	.44	0.53 U	0.64 U	51
CALCIUM METAL	23000	390000	27000	360000	270000	150000
CHROMIUM	34	7.1 U	46	7 U	10	15 U
COBALT	5.4	2.9 U	5.5	2.9 U	3.5 U	6.3 U
COPPER	57	6.8 U	120	6.7 U	13	560
IRON	16000	4200 U	23000	4100 U	5000 U	9300
LEAD	100	7.1 U	190	7 U	12	340
MAGNESIUM	4100	3100	9300	4100	3000	58000
MANGANESE	200	30	130	62	58	190
NICKEL	62	4.4 U	49	4.3 U	8.8	120
POTASSIUM	450 U	710 U	480 U	700 U	850 U	1500 U
SELENIUM	2.8 U	4.5 U	4	4.4 U	5.3 U	9.6 U
SILVER	0.57 U	0.89 U	0.6 U	0.88 U	1.1 U	1.9 U
SODIUM	970	2400	480 U	2200	2300	9700
THALLIUM	1.4 U	3.4	1.4 U	3.8	2.6 U	4.6 U
VANADIUM	110	130	71	18 U	21 U	38 U
ZINC	330	18 U	390	18 U	46	4500
MERCURY	0.26	0.25 U	0.83	0.25 U	0.3 U	0.55 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PD-8**	**PG-PD-8**	**PG-PD-8**	**PG-PD-9**	**PG-PD-9**	**PG-PD-10**
Sample Date	11/29/2000	11/29/2000	11/29/2000	12/4/2000	12/4/2000	11/28/2000
Sample ID	PG-PD-8	PG-PD-8	PG-PD-8	PG-PD-09	PG-PD-09	PG-PD-10
Sample Depth	2-4'	8-10'	16-17'	4-6'	8-10'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	3200	4100	4200	2000	1400	1700
ANTIMONY	2 U	1.9 U	2.9 U	2.1 U	2.2 U	1.7 U
ARSENIC	3.3	20	13	3.3	22	2.3 U
BARIUM	40	82	72	56	46	17
BERYLLIUM	0.56 U	0.93	0.8 U	0.59 U	0.61 U	0.46 U
CADMIUM	0.42 U	0.4 U	0.6 U	0.44 U	0.45 U	0.34 U
CALCIUM METAL	5200	1300 U	3900	2000	2300	7600
CHROMIUM	7.4	25	16	17	8.4	4.6 U
COBALT	2.3 U	9.1	8.5	3.5	6.1	1.9 U
COPPER	11	52	110	33	28	17
IRON	4100	81000	32000	20000	21000	4100
LEAD	8.5	74	70	68	51	290
MAGNESIUM	820 U	790 U	1200 U	870 U	890 U	780
MANGANESE	22 U	120	150	28	62	19
NICKEL	6.2	24	28	12	22	38
POTASSIUM	150 U	150 U	360	590 U	610 U	460 U
SELENIUM	3.5 U	5.2	5 U	3.7 U	3.8 U	2.9 U
SILVER	0.7	0.67 U	1.1	0.74 U	0.76 U	0.57 U
SODIUM	550 U	590	1100	680	610 U	460 U
THALLIUM	1.7 U	1.6 U	2.4 U	1.8 U	1.8 U	1.4 U
VANADIUM	14 U	26	22	15 U	15 U	11 U
ZINC	14 U	73	90	37	62	2600
MERCURY	0.2 U	0.47	0.28 U	0.21 U	0.22 U	0.16 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	PG-PD-10	PG-PD-11	PG-RR-8	PG-RR-8	PG-RR-10	PG-RR-10
Sample Date	11/28/2000	11/27/2000	12/1/2000	12/1/2000	12/2/2000	12/2/2000
Sample ID	PG-PD-10	PG-PD-11	PG-RR-08	PG-RR-08	PG-RR10	PG-RR10
Sample Depth	6-8'	4-6'	2-4'	6-8'	2-2.5'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	16000	1800	900	590	10000	2300
ANTIMONY	3.7 U	2.5 U	2.3 U	2 U	3.8	1.9 U
ARSENIC	5.1 U	3.5 U	88	32	58	34
BARIUM	180	25	60	26	190	36
BERYLLIUM	2.6	0.7 U	0.62 U	0.56 U	.96	0.8
CADMIUM	0.77 U	0.53 U	0.47 U	0.42 U	0.41 U	0.39 U
CALCIUM METAL	35000	270000	1600	1400 U	120000	9800
CHROMIUM	36	19	6.2 U	5.6 U	5.4 U	5.3 U
COBALT	25	2.9 U	2.6	2.3 U	3.3	7.5
COPPER	44	9.4	17	11	71	27
IRON	10000	4100 U	13000	25000	18000	28000
LEAD	31	9	8.3	7	52	21
MAGNESIUM	5300	3700	570 U	500 U	10000	1600
MANGANESE	210	46	110	22 U	99	27
NICKEL	86	8.7	7	6.7	15	20
POTASSIUM	24000	750	190	350	1100	270
SELENIUM	6.4 U	4.4 U	3.9 U	3.7	3.4 U	4.1
SILVER	1.3 U	0.88	0.78 U	0.69 U	0.68 U	0.87
SODIUM	13000	1900	620 U	550 U	1200	530 U
THALLIUM	3.1 U	2.1 U	1.9 U	1.7 U	1.6 U	1.6 U
VANADIUM	26 U	18 U	16 U	14 U	18	14
ZINC	230	74	150	120	54	760
MERCURY	0.36 U	0.25 U	0.22 U	0.2 U	0.19 U	0.19 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-FS-1B**	**PG-FS-1B**	**PG-FS-1B**	**PG-FS-4**	**PG-FS-4**	**PG-FILL-7**
Sample Date	11/17/2000	11/17/2000	11/17/2000	11/15/2000	11/15/2000	12/4/2000
Sample ID	PG-FS-01B	PG-FS-01B	PG-FS-01B	PG-FS04	PG-FS04	PG-FILL7
Sample Depth	1-2'	6-6.5'	12-13.5'	0.5-1'	2-4'	1-2.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	1700 U	6100	1600 U	1100	1400	4000
ANTIMONY	2.9 U	2.3 U	2.8 U	4.7	2.1 U	1.6
ARSENIC	12	20	3.8 U	6	5.9	24
BARIUM	230	140	19	80	86	65
BERYLLIUM	0.8 U	0.81	0.77 U	1.3	.73	0.43 U
CADMIUM	0.6 U	2	0.58 U	1.1	0.44 U	0.33 U
CALCIUM METAL	12000	240000	340000	3900	2100	18000
CHROMIUM	8 U	6.5 U	7.7 U	13	6.9	71
COBALT	3.3 U	3.1	3.2 U	5.7	3.6	6.1
COPPER	190	180	45	320	130	35
IRON	38000	31000	4500 U	9100	13000	17000
LEAD	130	63	14	370	120	50
MAGNESIUM	1700	7500	6500	1500	870 U	4200
MANGANESE	190	120	43	51	35	370
NICKEL	30	66	4.7 U	68	30	97
POTASSIUM	800 U	650 U	770 U	530 U	590 U	430 U
SELENIUM	5 U	4 U	4.8 U	3.3 U	3.7 U	2.7 U
SILVER	1 U	0.81 U	0.96 U	0.66 U	0.74 U	0.54 U
SODIUM	3400	1700	2700	530 U	590 U	430 U
THALLIUM	2.4 U	1.9 U	2.3 U	1.6 U	1.8 U	1.3 U
VANADIUM	20 U	30	19 U	13 U	15 U	33
ZINC	290	550	30	890	630	66
MERCURY	0.28 U	0.23 U	0.27 U	1.5	0.21 U	0.38

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-FILL-7**	**PG-FILL-7**	**PG-FILL-8**	**PG-FILL-8**	**PG-UST2-1**	**PG-UST2-1**
Sample Date	12/4/2000	12/4/2000	12/2/2000	12/2/2000	11/30/2000	11/30/2000
Sample ID	PG-FILL7	PG-FILL7	PG-FILL08	PG-FILL08	PG-UST2-1	PG-UST2-1
Sample Depth	2.5-4'	10-12'	0-2'	6-8'	6-7'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	4100	3200	4200	1700	2300	3200
ANTIMONY	6.8	3.1 U	1.7 U	3 U	1.7 U	1.7 U
ARSENIC	170	4.3 U	26	4.2 U	4.8	7.9
BARIUM	230	63	130	21 U	32	39
BERYLLIUM	0.45 U	0.85 U	1	0.83 U	0.48 U	0.48 U
CADMIUM	2.4	0.64 U	1.1	0.62 U	0.36 U	0.36 U
CALCIUM METAL	42000	340000	23000	1000 U	750	3200
CHROMIUM	270	8.5 U	31	8.3 U	5.4	4.8 U
COBALT	14	3.5 U	8.3	3.4 U	2 U	2.4
COPPER	670	94	95	8.3	28	35
IRON	82000	5000 U	31000	1300	7600	8500
LEAD	340	8.5 U	320	8.3 U	19	11
MAGNESIUM	7200	12000	11000	10000	710	3100
MANGANESE	1900	38	310	69	48	130
NICKEL	290	5.2 U	95	5.1 U	9.7	5.8
POTASSIUM	450 U	850 U	400	230 U	310	410
SELENIUM	3.4	5.3 U	3 U	5.2 U	3 U	3 U
SILVER	0.56 U	1.1 U	0.6 U	3.1	0.6 U	0.6 U
SODIUM	520	1100	480 U	3900	660	640
THALLIUM	1.3 U	2.6 U	1.4 U	2.5 U	1.4 U	1.4 U
VANADIUM	52	21 U	38	21 U	12 U	12
ZINC	480	21 U	500	54	21	29
MERCURY	0.75	0.3 U	0.32	0.3 U	0.17 U	0.17 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST2-1A**	**PG-UST2-1B**	**PG-UST2-1B**	**PG-UST2-2**	**PG-UST2-2**	**PG-UST2-3**
Sample Date	11/30/2000	11/30/2000	11/30/2000	11/30/2000	11/30/2000	12/1/2000
Sample ID	PG-UST2-1A	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3
Sample Depth	0-2'	2-4'	4-5.5'	4-5.5'	10-12'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	2100	1500	2900	1800	2200	1600
ANTIMONY	6.6 U	2.1 U	1.6 U	1.7 U	1.9 U	1.8 U
ARSENIC	18	5.3	3.7	11	2.9	56
BARIUM	330	200	66	58	26	95
BERYLLIUM	1.8 U	0.57 U	0.44 U	.52	0.51 U	0.49 U
CADMIUM	1.4 U	0.43 U	0.33 U	0.34 U	0.38 U	0.37 U
CALCIUM METAL	8400	2400	14000	6100	3100	3900
CHROMIUM	37	13	5.9	4.7	5.1 U	4.9 U
COBALT	7.5 U	2.4 U	2.5	7.4	2.1	3
COPPER	61	22	21	21	51	21
IRON	11000 U	3500	9600	15000	7600	32000
LEAD	400	250	52	21	12	20
MAGNESIUM	1600 U	600	1100	620	720	510
MANGANESE	250	36	110	50	51	20 U
NICKEL	19	4.4	16	19	3.5	10
POTASSIUM	500 U	170	430	230	380	840
SELENIUM	11 U	3.6 U	2.8 U	2.9 U	3.2 U	4.3
SILVER	2.3 U	0.71 U	0.56 U	0.57 U	0.64 U	.63
SODIUM	1800 U	570 U	440 U	460 U	870	490 U
THALLIUM	5.5 U	1.7 U	1.3 U	1.4 U	1.5 U	1.5 U
VANADIUM	45 U	18	14	11 U	13 U	17
ZINC	350	170	48	16	28	14
MERCURY	0.65 U	0.2 U	0.16 U	0.16 U	0.18 U	0.18 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST2-3**	**PG-UST2-3**	**PG-UST5-2**	**PG-UST6-2**	**PG-UST6-2**	**PG-UST6-2**
Sample Date	12/1/2000	12/1/2000	11/27/2000	11/28/2000	11/28/2000	11/28/2000
Sample ID	PG-UST2-3	PG-UST2-3	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2
Sample Depth	7.5-9'	12-14'	4-6'	4-6'	8-10'	16-18'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	19000	3700	2400	1700 U	2000 U	2000 U
ANTIMONY	2.4 U	2.8 U	2.7 U	2.9 U	3.4 U	3.5 U
ARSENIC	58	9.4	3.7 U	4 U	4.7 U	4.9 U
BARIUM	250	46	56	20 U	23 U	45
BERYLLIUM	1.1	0.77 U	0.74 U	0.8 U	0.93 U	0.98 U
CADMIUM	0.5 U	0.58 U	0.56 U	0.6 U	0.7 U	0.73 U
CALCIUM METAL	240000	73000	240000	300000	320000	330000
CHROMIUM	8.7	7.7 U	7.4 U	8 U	9.3 U	9.8 U
COBALT	3.2	3.2 U	3.1 U	3.3 U	3.8 U	4 U
COPPER	28	37	25	7.6 U	8.8 U	33
IRON	9700	6000	4700	4700 U	5500 U	5800 U
LEAD	38	19	16	8 U	9.3 U	21
MAGNESIUM	10000	3700	2000	4700	8000	16000
MANGANESE	180	66	59	42	38	46
NICKEL	11	7.1	12	4.9 U	5.7 U	8.3
POTASSIUM	2400	590	740 U	800 U	930 U	980 U
SELENIUM	4.2 U	4.8 U	4.6 U	5 U	5.8 U	6.1 U
SILVER	1.2	0.96 U	0.93 U	1 U	1.2 U	1.2 U
SODIUM	4700	5600	1700	2200	3100	12000
THALLIUM	2 U	2.3 U	2.2 U	2.4 U	2.8 U	2.9 U
VANADIUM	38	19 U	25	20 U	23 U	24 U
ZINC	83	67	100	20 U	23 U	240
MERCURY	0.24 U	0.37	0.26 U	0.28 U	0.33 U	0.35 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST6-3**	**PG-UST6-3**	**PG-WOOD-1C**	**PG-WOOD-03**	**PG-WOOD-03**	**PG-WOOD-3**
Sample Date	11/28/2000	11/28/2000	11/9/2000	11/10/2000	11/10/2000	11/29/2000
Sample ID	PG-UST6-3	PG-UST6-3	PG-WD-01C	PG-WD-03	PG-WD-03	PG-WOOD-3
Sample Depth	1.5-2'	14-16'	10-12'	0.5-2'	2-4'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	2400	3300	3100	930 U	4500	3900
ANTIMONY	3.4	4.5 U	2.7 U	1.6 U	2.3	2.6
ARSENIC	10	6.2 U	11	2.8	310	29
BARIUM	420	86	69	15	260	120
BERYLLIUM	0.47 U	1.2 U	0.74 U	0.44 U	1.3	1
CADMIUM	3.9	14	0.56 U	0.33 U	0.47	0.37
CALCIUM METAL	55000	140000	3600	31000	22000	35000
CHROMIUM	34	13 U	7.5	6.3	20	110
COBALT	4	5.2 U	7.6	1.8 U	15	5.2
COPPER	240	480	39	15	210	110
IRON	14000	7400 U	9900	3800	44000	31000
LEAD	460	170	29	20	460	580
MAGNESIUM	16000	40000	1100 U	18000	4700	4200
MANGANESE	160	94	49	47	200	220
NICKEL	39	86	20	3.2	170	53
POTASSIUM	580	1300 U	740 U	440 U	470 U	310
SELENIUM	2.9 U	7.8 U	4.6 U	2.8 U	5	3.9
SILVER	0.59 U	1.6 U	1.4	0.56 U	0.62	0.59 U
SODIUM	710	6900	830	440 U	470 U	470 U
THALLIUM	1.4 U	3.7 U	2.2 U	1.3 U	1.4 U	1.4 U
VANADIUM	24	31 U	19 U	20	39	28
ZINC	600	2300	92	17	700	250
MERCURY	1	0.61	0.26 U	0.16 U	0.38	0.48

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-WOOD-3**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**
Sample Date	11/29/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-WOOD-3	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05
Sample Depth	6-8'	0-2'	2-4'	4-6'	6-8'	8-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	1600 U	1500	1300	1300	2500	2000
ANTIMONY	2.8 U	1.7 U	2.8	1.7 U	2 U	2.5 U
ARSENIC	3.9 U	2.4 U	27	11	28	8.7
BARIUM	38	21	250	33	54	36
BERYLLIUM	0.78 U	0.48 U	0.48 U	0.48 U	0.55 U	0.68 U
CADMIUM	0.59 U	0.36 U	0.36 U	0.36 U	0.41 U	0.51 U
CALCIUM METAL	400000	1200 U	7400	1200 U	1400 U	11000
CHROMIUM	7.8 U	7.4	12	4.8 U	6	6.8 U
COBALT	3.2 U	2 U	2 U	2.5	6.6	6.7
COPPER	7.5 U	8.1	59	34	37	20
IRON	4600 U	4000	8200	3300	7500	6600
LEAD	7.8 U	13	130	4.8 U	32	22
MAGNESIUM	4000	710 U	2000	710 U	810 U	1000 U
MANGANESE	69	28	55	20 U	27	38
NICKEL	4.8 U	2.9 U	12	7.6	15	17
POTASSIUM	490	84 U	150	270	320	320
SELENIUM	4.9 U	3 U	3 U	3 U	3.4 U	4.2 U
SILVER	0.98 U	0.6 U	0.6 U	0.6 U	0.68 U	0.85 U
SODIUM	2300	110 U	110 U	110 U	120 U	810
THALLIUM	2.4 U	1.4 U	1.4 U	1.4 U	1.6 U	2 U
VANADIUM	20 U	24	16	12 U	14 U	17 U
ZINC	20 U	21	190	19	94	56
MERCURY	0.28 U	0.34 U	0.41	0.17 U	0.19 U	0.24 U

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-WOOD-05**	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-5**	**PG-PA-MW-6**
Sample Date	11/7/2000	11/22/2000	11/22/2000	11/22/2000	11/9/2000	11/7/2000
Sample ID	PG-WD-05	PG-PAMW1	PG-PAMW1	PG-PAMW1	PG-PAMW-05	PG-MWPA-06
Sample Depth	14-16'	3-4.5'	4.5-6'	10-12'	0-2'	0-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	14000	1400 U	1700 U	1700	3100	4300
ANTIMONY	5 U	2.4 U	3 U	2.7 U	1.7 U	1.7
ARSENIC	6.9 U	3.3 U	4.2 U	3.7 U	260	150
BARIUM	34 U	16 U	21 U	21	200	120
BERYLLIUM	1.4 U	0.66 U	0.83 U	0.74 U	0.85	0.43 U
CADMIUM	1 U	0.49 U	0.62 U	0.56 U	0.35 U	0.33 U
CALCIUM METAL	7700	310000	310000	210000	33000	13000
CHROMIUM	24	6.6 U	8.3 U	7.4 U	15	28
COBALT	5.7 U	2.9	3.4 U	3.1 U	6.4	7
COPPER	13 U	61	7.9 U	67	70	58
IRON	19000	3900 U	4900 U	4400 U	23000	24000
LEAD	14 U	69	8.3 U	42	100	73
MAGNESIUM	6200	1700	3600	13000	13000	3800
MANGANESE	110	43	39	42	120	200
NICKEL	19	29	5.1 U	25	24	0.28
POTASSIUM	2600	660 U	830 U	740 U	470 U	26
SELENIUM	8.6 U	4.1 U	5.2 U	4.6 U	3.5	190
SILVER	1.7 U	0.82 U	1 U	0.93 U	0.58 U	2.7 U
SODIUM	6000	2300	2000	2000	470 U	0.68
THALLIUM	4.1 U	2 U	2.5 U	2.2 U	1.4 U	370
VANADIUM	40	16 U	21 U	19 U	37	1.3 U
ZINC	360	190	21 U	260	320	38
MERCURY	0.49 U	0.23 U	0.3 U	0.26 U	1	120

Table 5D
Soil Analytical Results
Metals
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**
Sample Date	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06
Sample Depth	1.5-3'	3-4.5'	4.5-6'	6-8'	8.5-10'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	4300	7800	6000	1100 U	1400 U
ANTIMONY	1.7	1.7 U	1.7 U	1.8 U	2.5 U
ARSENIC	150	36	24	16	3.4 U
BARIUM	120	180	170	50	53
BERYLLIUM	0.43 U	.49	0.46 U	0.5 U	0.68 U
CADMIUM	0.33 U	0.35 U	0.34 U	0.37 U	0.51 U
CALCIUM METAL	13000	11000	4300	1300 U	1700 U
CHROMIUM	28	32	13	5.1	6.8 U
COBALT	7	6.8	10	2.7	2.8 U
COPPER	58	46	36	15	7.7
IRON	24000	30000	28000	19000	4000 U
LEAD	73	31	17	6.8	6.8 U
MAGNESIUM	3800	810	680 U	740 U	6800
MANGANESE	200	92	140	20 U	27 U
NICKEL	26	17	26	8.1	4.1 U
POTASSIUM	190	320	330	460	120 U
SELENIUM	2.7 U	3.3	3.9	3.5	4.2 U
SILVER	.68	0.58 U	0.57 U	0.62 U	1.8
SODIUM	370	350	290	260	3000
THALLIUM	1.3 U	1.4 U	1.4 U	1.5 U	2 U
VANADIUM	38	24	20	13 U	17 U
ZINC	120	34	48	13 U	17 U
MERCURY	0.28	0.22	0.16 U	0.18 U	0.24 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-A-1**	**PG-A-2**	**PG-A-2**	**PG-A-3**	**PG-A-3**	**PG-A-3**
Sample Date	12/2/2000	11/29/2000	11/29/2000	11/16/2000	11/16/2000	11/16/2000
Sample ID	PG-A-01	PG-A-02	PG-A-02	PG-A-03	PG-A-03	PG-A-03
Sample Depth	2-4'	0-2'	2-4'	2.4-4'	6-8'	10-12'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	61	36 U	64 U	85 U	67 U	100
OIL & GREASE	1100	91	130	850	430	670
CYANIDE	0.31 U	0.26 U	0.47 U	0.63 U	0.49 U	0.42 U
pH	7.6	8.0	8.4	12	12	13
TOTAL PHENOLICS	5.1	1.3 U	2.4 U	3.1 U	2.4 U	2.1 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-A-6**	**PG-F1-3**	**PG-F1-3**	**PG-H/R-1**	**PG-H/R-1**	**PG-H/R-2**
Sample Date	11/10/2000	11/10/2000	11/10/2000	12/2/2000	12/2/2000	11/10/2000
Sample ID	PG-A-06	PG-F1-3	PG-F1-3	PG-H/R-01	PG-H/R-01	PG-H/R-2
Sample Depth	1-3'	1-3'	3-5'	1-3'	3-4.5'	0-1.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	66	1600	68 U	47 U	68 U	40
OIL & GREASE	490	17000	250	91 U	130 U	310
CYANIDE	0.58	0.30 U	0.50 U	0.34 U	0.5 U	0.45 U
pH	7.4	7.9	8.7	8.2	8.4	8.0
TOTAL PHENOLICS	1.7 U	16	2.5 U	1.7 U	2.5 U	1.4 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-H/R-2**	**PG-H/R-3**	**PG-H/R-3**	**PG-PD-6**	**PG-PD-6**	**PG-PD-8**
Sample Date	11/10/2000	11/10/2000	11/10/2000	11/21/2000	11/21/2000	11/29/2000
Sample ID	PG-H/R-2	PG-H/R-3	PG-H/R-3	PG-PD-06	PG-PD-06	PG-PD-8
Sample Depth	1.5-3.5'	0.3-1'	1-3'	6-8'	12-14'	2-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	61 U	59	60 U	72 U	210	1600
OIL & GREASE	310	390	270	470	6200	19000
CYANIDE	0.45 U	0.30 U	0.44 U	0.53 U	0.96 U	1.2
pH	8.3	8.1	8.4	7.3	10	4.6
TOTAL PHENOLICS	2.2 U	1.5 U	2.2 U	2.7 U	25	3.1

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PD-8**	**PG-PD-8**	**PG-PD-9**	**PG-PD-9**	**PG-PD-10**	**PG-PD-10**
Sample Date	11/29/2000	11/29/2000	12/4/2000	12/4/2000	11/28/2000	11/28/2000
Sample ID	PG-PD-8	PG-PD-8	PG-PD-09	PG-PD-09	PG-PD-10	PG-PD-10
Sample Depth	8-10'	16-17'	4-6'	8-10'	2-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	2500	780	160	350	1700	93
OIL & GREASE	31000	17000	450	900	42000	530
CYANIDE	0.46	0.52	0.37 U	0.38 U	0.29 U	0.64 U
pH	4.8	5.8	5.4	7.2	5.9	11
TOTAL PHENOLICS	7.3	2.5 U	1.8 U	1.9 U	1.4 U	4.3

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PD-11**	**PG-RR-8**	**PG-RR-8**	**PG-RR-10**	**PG-RR-10**	**PG-FS-1B**
Sample Date	11/27/2000	12/1/2000	12/1/2000	12/2/2000	12/2/2000	11/17/2000
Sample ID	PG-PD-11	PG-RR-08	PG-RR-08	PG-RR10	PG-RR10	PG-FS-01B
Sample Depth	4-6'	2-4'	6-8'	2-2.5'	8-10'	1-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	60 U	64	47 U	170	4900	6900
OIL & GREASE	630	170	240	250	31000	110000
CYANIDE	0.44 U	0.39 U	0.35 U	0.34 U	0.33 U	0.50 U
pH	7.9	6.8	7.6	8.0	7.0	7.8
TOTAL PHENOLICS	2.2 U	2.0 U	10	1.7 U	1.6 U	2.5 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-FS-1B**	**PG-FS-1B**	**PG-FS-4**	**PG-FS-4**	**PG-FILL-7**	**PG-FILL-7**
Sample Date	11/17/2000	11/17/2000	11/15/2000	11/15/2000	12/4/2000	12/4/2000
Sample ID	PG-FS-01B	PG-FS-01B	PG-FS04	PG-FS04	PG-FILL7	PG-FILL7
Sample Depth	6-6.5'	12-13.5'	0.5-1'	2-4'	1-2.5'	2.5-4'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	62	65 U	170	50 U	43	72
OIL & GREASE	460	130 U	1400	330	72 U	75 U
CYANIDE	0.40 U	0.48 U	0.56	0.53	0.27 U	0.28 U
pH	8.0	8.3	7.4	5.3	11	8.3
TOTAL PHENOLICS	2.0 U	2.4 U	1.6 U	1.8 U	1.4 U	1.4 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-FILL-7**	**PG-FILL-8**	**PG-FILL-8**	**PG-UST2-1**	**PG-UST2-1**	**PG-UST2-1A**
Sample Date	12/4/2000	12/2/2000	12/2/2000	11/30/2000	11/30/2000	11/30/2000
Sample ID	PG-FILL7	PG-FILL08	PG-FILL08	PG-UST2-1	PG-UST2-1	PG-UST2-1A
Sample Depth	10-12'	0-2'	6-8'	6-7'	8-10'	0-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	72 U	120	71 U	970	11000	120
OIL & GREASE	160	1100	140 U	2000	36000	610
CYANIDE	0.53 U	0.3 U	0.52 U	0.35	0.3 U	1.1 U
pH	11	8.5	10	7.8	8.4	7.0
TOTAL PHENOLICS	2.7 U	1.5 U	2.6 U	1.5 U	1.5 U	5.7 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST2-1B**	**PG-UST2-1B**	**PG-UST2-2**	**PG-UST2-2**	**PG-UST2-3**	**PG-UST2-3**
Sample Date	11/30/2000	11/30/2000	11/30/2000	11/30/2000	12/1/2000	12/1/2000
Sample ID	PG-UST2-1B	PG-UST2-1B	PG-UST2-2	PG-UST2-2	PG-UST2-3	PG-UST2-3
Sample Depth	2-4'	4-5.5'	4-5.5'	10-12'	2-4'	7.5-9'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	130	4900	39 U	2800	42 U	15000
OIL & GREASE	160	27000	77 U	26000	82 U	37000
CYANIDE	0.36 U	0.28 U	0.29 U	0.32 U	0.31 U	0.42 U
pH	7.0	8.2	7.7	8.3	7.4	8.2
TOTAL PHENOLICS	1.8 U	1.4 U	1.4 U	1.6 U	7.2	10

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST2-3**	**PG-UST5-2**	**PG-UST6-2**	**PG-UST6-2**	**PG-UST6-2**	**PG-UST6-3**
Sample Date	12/1/2000	11/27/2000	11/28/2000	11/28/2000	11/28/2000	11/28/2000
Sample ID	PG-UST2-3	PG-UST5-2	PG-UST6-2	PG-UST6-2	PG-UST6-2	PG-UST6-3
Sample Depth	12-14'	4-6'	4-6'	8-10'	16-18'	1.5-2'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	480	170	68 U	79 U	83 U	150
OIL & GREASE	1800	1100	290	260	160 U	780
CYANIDE	0.48 U	0.46 U	0.50 U	0.58 U	0.61 U	0.29 U
pH	8.4	8.0	9.7	12	12	9.9
TOTAL PHENOLICS	2.4 U	2.3 U	2.5 U	2.9 U	3.1 U	1.5 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-UST6-3**	**PG-WOOD-1C**	**PG-WOOD-03**	**PG-WOOD-03**	**PG-WOOD-3**	**PG-WOOD-3**
Sample Date	11/28/2000	11/9/2000	11/10/2000	11/10/2000	11/29/2000	11/29/2000
Sample ID	PG-UST6-3	PG-WD-01C	PG-WD-03	PG-WD-03	PG-WOOD-3	PG-WOOD-3
Sample Depth	14-16'	10-12'	0.5-2'	2-4'	2-4'	6-8'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	130	69	710	73	140	67 U
OIL & GREASE	1600	540	2800	1200	1300	130
CYANIDE	0.78 U	0.46 U	0.28 U	0.29 U	16	3.2
pH	12	8.2	7.4	7.7	8.2	9.0
TOTAL PHENOLICS	3.9 U	2.3 U	1.4 U	1.5 U	1.6	3.7

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**	**PG-WOOD-05**
Sample Date	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05	PG-WD-05
Sample Depth	0-2'	2-4'	4-6'	6-8'	8-10'	14-16'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	41 U	(1000 ?	47	95	58 U	110
OIL & GREASE	80 U	13000	250	18000	110 U	410
CYANIDE	0.30 U	0.30 U	0.30 U	0.34 U	0.42 U	0.86 U
pH	7.2	7.1	7.1	6.8	7.5	7.7
TOTAL PHENOLICS	1.5 U	1.5 U	1.5 U	1.7 U	2.1 U	4.3 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-1**	**PG-PA-MW-5**	**PG-PA-MW-6**	**PG-PA-MW-6**
Sample Date	11/22/2000	11/22/2000	11/22/2000	11/9/2000	11/7/2000	11/7/2000
Sample ID	PG-PAMW1	PG-PAMW1	PG-PAMW1	PG-PAMW-05	PG-MWPA-06	PG-MWPA-06
Sample Depth	3-4.5'	4.5-6'	10-12'	0-2'	1.5-3'	3-4.5'
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	56 U	71 U	63 U	42	72	74
OIL & GREASE	110 U	140 U	120 U	310	72 U	78 U
CYANIDE	0.41 U	0.52 U	0.46 U	0.29 U	0.52	4.4
pH	7.7	7.8	11	7.7	6.9	7.0
TOTAL PHENOLICS	2.0 U	2.6 U	2.3 U	1.4 U	1.4 U	1.5 U

Table 5E
TPHC, Oil and Grease, Cyanide, pH, and Total Phenolics
Operable Unit 1 HHMT - Port Ivory Facility

Location	**PG-PA-MW-6**	**PG-PA-MW-6**	**PG-PA-MW-6**
Sample Date	11/7/2000	11/7/2000	11/7/2000
Sample ID	PG-MWPA-06	PG-MWPA-06	PG-MWPA-06
Sample Depth	4.5-6'	6-8'	8.5-10'
Concentration	MG/KG	MG/KG	MG/KG
PETROLEUM HYDROCARBONS	87	43 U	58 U
OIL & GREASE	190	180	110 U
CYANIDE	3.5	2.9	18
pH	5.5	4.5	10
TOTAL PHENOLICS	1.4 U	1.6 U	2.1 U

Table 6A
Groundwater Analytical Results
Volatile Organic Compounds
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-CS-7	PG-EW-3	PG-EW-6	PG-PA-MW-1	PG-PA-MW-1	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6D	PG-RS-1	PG-RS-2	PG-TMW-02
Sample Date	11/24/2000	11/24/2000	11/24/2000	11/29/2000	11/28/2000	11/24/2000	11/27/2000	11/30/2000	11/24/2000	11/24/2000	12/2/2000
Concentration	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.88 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.84 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-TRICHLOROETHANE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-DICHLOROETHANE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.70 U	0.35 U	0.35 U	0.35 U	0.35 U
1,1-DICHLOROETHYLENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.88 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-DICHLORORPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.88 U	0.44 U	0.44 U	0.44 U	0.44 U
2-CHLOROETHYL VINYL ETHER	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
ACROLEIN	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U
ACRYLONITRILE	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	13 U	6.6 U	6.6 U	6.6 U	6.6 U
BENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U	0.32 U	0.32 U	0.32 U	0.32 U
BROMODICHLOROMETHANE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	0.30 U	0.30 U	0.30 U
BROMOFORM	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U	0.32 U	0.32 U	0.32 U	0.32 U
BROMOMETHANE	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	1.1 U	0.55 U	0.55 U	0.55 U	0.55 U
CARBON TETRACHLORIDE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROETHANE	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.0 U	0.52 U	0.52 U	0.52 U	0.52 U
CHLOROFORM	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.90 U	0.45 U	0.45 U	0.45 U	0.45 U
CHLOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U	0.32 U	0.32 U	0.32 U	0.32 U
CIS-1,3-DICHLOROPROPENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.70 U	0.35 U	0.35 U	0.35 U	0.35 U
DIBROMOCHLOROMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	0.41 U	0.41 U
DICHLOROMETHANE	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	1.7 U	0.85 U	0.85 U	0.85 U	0.85 U
ETHYLBENZENE	6.7	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U
M&P-XYLENES	18	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	1.6 U	0.81 U	0.81 U	0.81 U	0.81 U
METHYLBENZENE	4.9	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	2.4	0.24 U	0.24 U
O-XYLENE	3.3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 U	0.36 U	0.36 U	0.36 U	0.36 U
TETRACHLOROETHYLENE	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.68 U	0.34 U	0.34 U	0.34 U	0.34 U
TRAMS-1,2-DICHLOROETHYLEN	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.46 U	0.46 U	0.46 U
TRANS-1,3-DICHLOROPROPENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U
TRICHLOROETHYLENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.37 U	0.37 U	0.37 U	0.37 U
VINYL CHLORIDE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	1.3 U	0.67 U	0.67 U	0.67 U	0.67 U

Table 6B
Groundwater Analytical Results
Semi-Volatile Organic Compounds
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-CS-7	PG-EW-3	PG-EW-6	PG-PA-MW-1D	PG-PA-MW-1	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6D	PG-RS-1	PG-RS-2	PG-TMW-02
Sample Date	11/24/2000	11/24/2000	11/24/2000	11/29/2000	11/28/2000	11/24/2000	11/27/2000	11/30/2000	11/24/2000	11/24/2000	12/2/2000
Concentration	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2,4-TRICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,2-BENZPHENANTHRACENE	0.30 U	1.2	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,2-DICHLOROBENZENE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2-DIPHENYLHYDRAZINE	0.24 U	1.2	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,4-DICHLOROBENZENE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,6-TRICHLOROPHENOL	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
2,4-DICHLOROPHENOL	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-DIMETHYLPHENOL	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
2,4-DINITRPHENOL	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2,4-DINITROTOLUENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
2,6-DINITROTOLUENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2-CHLORONAPHTHALENE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
2-CHLOROPHENOL	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
2-NITROPHENOL	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
3,3'-DICHLOROBENZIDINE	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
4,6-DINITRO-O-CRESOL	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
4-BROMOPHENYLPHENYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
4-CHLORO-3-METYLPHENOL	1.9 U	1.9 J	1.9 J	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-CHLORORPHENLYPHENYL ETHER	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
4-NITROPHENOL	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ACENAPHTHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
ACENAPHTHYLENE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
ANTHRACENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
BENZIDINE	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
BENZO{A}ANTHRACENE	0.20 U	1.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
BENZO{A}PYRENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
BENZO{B}FLOURANTHENE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
BENZO{G,H,I}PERYLENE	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
BENZO{K}FLOURANTHENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZYL BUTYL PHTHALATE	0.29 U	1.1	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BIS(2-CHLOROETHOXY)METHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
BIS(2-CHLOROETHYL)ETHER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BIS(2-CHLOROISOPROPYL)ETHER	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
BIS(2-ETHYLHEXYL)PHTHALATE	2.1	2.6	0.37 U	8.2	5.3 B	1.9	0.37 U	2.3 B	2.1	1.6	4.6 B
DI-N-BUTYL PHTHALATE	0.26 U	1.0	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.5	0.26 U	0.26 U	0.26 U
DI-N-OCTYL PHTHALATE	0.80 U	1.3	0.80 U	0.80 U	2.0 B	0.80 U	0.80 U	1.3	0.80 U	0.80 U	1.1 B
DIBENZ[A,H]ANTHRACENE	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
DIETHYL PHTHALATE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIMETHYL PHTHALATE	0.24 U	0.24 U	1.6	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
FLUORANTHENE	0.29 U	1.4	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U

Table 6B
Groundwater Analytical Results
Semi-Volatile Organic Compounds
Operable Unit 1 HHMT-Port Ivory Facility

Location Sample Date Concentration	PG-CS-7 11/24/2000 UG/L	PG-EW-3 11/24/2000 UG/L	PG-EW-6 11/24/2000 UG/L	PG-PA-MW-1D 11/29/2000 UG/L	PG-PA-MW-1 11/28/2000 UG/L	PG-PA-MW-5 11/24/2000 UG/L	PG-PA-MW-6 11/27/2000 UG/L	PG-PA-MW-6D 11/30/2000 UG/L	PG-RS-1 11/24/2000 UG/L	PG-RS-2 11/24/2000 UG/L	PG-TMW-02 12/2/2000 UG/L
FLUORENE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
HEXACHLORO-1,3-BUTADIENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBENZENE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
HEXACHLOROCYCLOPENTADIENE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
HEXACHLOROETHANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
INDENO[1,2,3-CD]PYRENE	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
ISOPHORONE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
M-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
N-NITROSO-DI-N-PROPYLAMINE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
N-NITROSODIMETHYLAMINE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
N-NITROSODIPHENYLAMINE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
NAPHTHALENE	2.0	0.36 U	0.36 U	0.36 U	1.0	0.36 U	0.36 U	0.36 U	9.6	0.36 U	0.36 U
NITROBENZENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
PENTACHLOROPHENOL	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PHENANTHRENE	0.27 U	1.6	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
PHENOL	1.8	1.2 U	29	1.2 U	33	1.2 U	2.1	1.2 U	16	1.2 U	1.2 U
PYRENE	0.27 U	1.4	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U

Table 6C
Groundwater Analytical Results
Pesticides and PCBs
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-CS-7	PG-EW-3	PG-EW-6	PG-PA-MW-1D	PG-PA-MW-1	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6D	PG-RS-1	PG-RS-2	PG-TMW-02
Sample Date	11/24/2000	11/24/2000	11/24/2000	11/29/2000	11/28/2000	11/24/2000	11/27/2000	11/30/2000	11/24/2000	11/24/2000	12/2/2000
Concentration	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
4,4'-DDD	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDE	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDT	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ALDRIN	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ALPHA-BHC	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
AROCLOR 1016	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1221	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1232	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1242	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1248	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1254	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR 1260	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BETA-BHC	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
CHLORDANE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DELTA-BHC	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
DIELDRIN	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDOSULFAN I	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDOSULFAN II	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDOSULFAN SULFATE	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDRIN	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDRIN ALDEHYDE	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
ENDRIN KETONE	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
GAMMA-BHC (LINDANE)	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
HEPTACHLOR	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
HEPTACHLOR EPOXIDE	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
METHOXYCHLOR	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TOXAPHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 6D
Groundwater Analytical Results
Metals
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-CS-7	PG-EW-3	PG-EW-6	PG-PA-MW-1D	PG-PA-MW-1	PG-PA-MW-5	PG-PA-MW-6	PG-PA-MW-6D	PG-RS-1	PG-RS-2	PG-TMW-02
Sample Date	11/24/2000	11/24/2000	11/24/2000	11/29/2000	11/28/2000	11/24/2000	11/27/2000	11/30/2000	11/24/2000	11/24/2000	12/2/2000
Concentration	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM (FUME OR DUST)	180	170	130	58 U	610	500	430	260	260	2200	58 U
ANTIMONY	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
ARSENIC	3.6 U	26	3.6 U	13	3.6 U	55	83	3.6 U	17	3.7	54
BARIUM	23	160	160	62	75	34	23 U	68	23 U	110	23 U
BERYLLIUM	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
CADMIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	16	1.4 U
CALCIUM METAL	14000	39000	460000	36000	230000	96000	1900	180000	22000	22000	140000
CHROMIUM	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U
COBALT	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
COPPER	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
IRON	310	1200	88 U	5100	88 U	3200	120	15000	88 U	12000	690
LEAD	3.4 U	3.4 U	4.6	3.4 U	3.4 U	6.2	3.4 U	3.4 U	3.4 U	9.9	3.4 U
MAGNESIUM	13000	99000	400	79000	260 U	14000	5500	430000	13000	10000	58000
MANGANESE	12 U	28	12 U	90	12 U	290	12 U	1200	12 U	120	140
NICKEL	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
POTASSIUM	19000	46000	20000	39000	40000	6100	100000	81000	25000	77000	17000
SELENIUM	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
SILVER	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
SODIUM	230000	220000	770000	840000	210000	55000	900000	4000000	150000	330000	400000
THALLIUM	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
VANADIUM	4.8	6.8	4.3 U	12	4.3 U	4.8	50	4.3 U	5.9	21	10
ZINC	20 U	26	20 U	20 U	20 U	55	20 U	20 U	20 U	70	25
MERCURY	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U

Table 6E
Groundwater Analytical Results
TPHC, Oil Grease, pH, Cyanide and Total Phenolics
Operable Unit 1 HHMT-Port Ivory Facility

Location **Sample Date**		**PG-CS-7** 11/24/200	**PG-EW-3** 11/24/2000	**PG-EW-6** 11/24/2000	**PG-PA-MW-1D** 11/28/2000	**PG-PA-MW-1** 11/29/2000	**PG-PA-MW-5** 11/24/2000	**PG-PA-MW-6** 11/27/2000	**PG-PA-MW-6D** 11/30/2000	**PG-RS-1** 11/24/2000	**PG-RS-2** 11/24/200	**PG-TMW-02** 12/2/2000
PETROLEUM HYDROCARBONS	MG/L	1.0 U	1.2	1.1 U	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10
OIL & GREASE	MG/L	22	22	15	0.66	0.15	1.0 U	13	21	21	14	7.8
CYANIDE	MG/L	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U
*pH	pH unit	9.16	8.23	12.82	12.35	7.07	6.76	11.36	7.08	11.24	8.54	7.1
TOTAL PHENOLICS	MG/L	0.05 U	0.05 U	0.05 U	0.22	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

*Note: pH listed is the pH recorded in the field

Table 7
Sediment Analytical Results
Metals
Operable Unit 1 HHMT-Port Ivory Facility

Location	**PG-SED-1**	**PG-SED-2**	**PG-SED-3**	**PG-SED-4**	**PG-SED-5**
Sample Date	11/21/2000	11/21/2000	11/21/2000	11/21/2000	11/21/2000
Concentration	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
ALUMINUM (FUME OR DUST)	4100	3400	1900	5800	5700
ANTIMONY	3.2 U	2.7 U	2.3 U	5 U	5.2 U
ARSENIC	16	19	14	11	12
BARIUM	72	70	32	96	98
BERYLLIUM	0.89 U	0.74 U	0.63 U	1.4 U	1.4 U
CADMIUM	0.67 U	0.64	0.53	1 U	1.1 U
CALCIUM METAL	2700	3500	2700	4600	5200
CHROMIUM	52	49	30	78	82
COBALT	4.9	5.8	3.4	6	5.9 U
COPPER	130	160	61	180	190
IRON	20000	23000	18000	23000	25000
LEAD	160	380	310	200	190
MAGNESIUM	5100	6400	2700	5200	5900
MANGANESE	130	120	100	160	180
MERCURY	1.1	.92	.29	2.6	2.6
NICKEL	48	90	33	53	45
POTASSIUM	1200	740 U	630 U	1400 U	1900
SELENIUM	5.6 U	4.6 U	4 U	8.6 U	8.9 U
SILVER	1.8	4.3	0.79 U	2.5	2.5
SODIUM	8000	2200	1300	5300	13000
THALLIUM	2.7 U	2.2 U	1.9 U	4.1 U	4.3 U
VANADIUM	24	27	18	43	36 U
ZINC	610	600	510	650	560

Table 8
Surface Water Analytical Results
Metals and pH
Operable Unit 1 HHMT-Port Ivory Facility

Location	PG-SW-01	PG-SW-02	PG-SW-03
Date	11/21/2000	11/21/2000	11/21/2000
LAB ID#			
Concentration	ug/l	ug/l	ug/l
ALUMINUM	1400	1700	25000
ANTIMONY	3.3U	3.3U	3.3U
ARSENIC	3.6	5.2	57
BARIUM	71	70	440
BERYLLIUM	2.5U	2.5U	4.1
CADMIUM	1.4U	1.4U	9.8
CALCIUM	150000	150000	160000
CHROMIUM	16U	16U	220
COBALT	4.6U	4.6U	16
COPPER	43	51	790
IRON	2900	3800	63000
LEAD	21	29	650
MAGNESIUM	360000	380000	320000
MANGANESE	190	180	690
NICKEL	15U	15U	140
POTASSIUM	130000	140000	110000
SELENIUM	20U	20U	20U
SILVER	5.2U	5.2U	5.2U
SODIUM	3500000	3600000	2800000
THALLIUM	3.1U	3.1U	3.1U
VANADIUM	4.3U	4.3U	100
ZINC	130	130	2500
pH (150.1)	8.1	8.2	7.5
MERCURY (245.1)	0.93	0.54	0.55

high
sed samp 4
was unparable
to others.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: PD-6	SURFACE ELEV.
LOCATION: 20'W of NW corner of Bldg 17 Block 1400 lot1		CONTRACT NO.: 426-99-006	DATE: 11-21-00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER: 140 # FALL 30 "
HAMMER: # FALL "
DRILLER: J. Craig
INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-21-00	2:30pm	2.7'	Sample #2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. NO. [2]	SAMPLE DESCRIPTION AND REMARKS [3] — LINE LOCATES CHANGE OF PROFILE
Cutter Head	0	Cutter Head	Full	1	CONCRETE 1.5
				2	Fill grey c-f SAND & Gravel, tr. SILT
	5			3	Fill grey c-f SAND & Gravel tr dietomaceous 6.0'
Hollow STEM Augers		W.O Hammer	14"	4*	Fill grey Dietomaceous
	10	W.O Hammer	12"	5	SAME 10.0'
		1-1			
		1-1	4"	6	Fill yellowish-grey c-f SAND, tr Gravel, tr. SILT, cinders 12.
		1-0			
		1-0	12"	7*	Greenish-grey SILTY CLAY
	15	1-1			
		0-1	4"	8	SAME
		W.O Hammer	6"	9	SAME 17.5' Brown PEAT w. fibers, some Clay 18.0'
	20				Note: 2 samples saved for testing. All other samples screened with PID meter & discarded

Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
8-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: PD 8 (FS)	SURFACE ELEV.
LOCATION: SE of NE Corner of Bldg 17 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11-29-00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 2 3/8 "I.D.	Auger	1
HAMMER: Safety 140 # FALL 30 "	HAMMER # FALL "	

DRILLER: A. Kides

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-28-00	11.00 AM	3.0'	Sample #2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Handauger	0	Cutting Head HAND AUGER	Full Rec		CONCRETE	0.6'
					DGABC	1.3'
				1	Fill greyish black c-f SAND & Gravel, tr. Silt, cinders, coal, brick	
				2	SAME	
	5				SAME	
				3	Greyish-brown c-f SAND, tr. Gravel, tr. Silt	
Hollow STEM AUGERS		5-5				
		3-2	20"	4	SAME 98.3	
		2-3				
	10	5-5	20"	5	SAME 239.6	
		3-2				
		2-2	12"	6	SAME 150.2	
		3-2				
		8-6	24"	7	SAME 132.6	
	15	3-3				
		4-3	20"	8	SAME 111.4	
		3-1		9A	SAME 102.6	17.0'
		3-4	24"	9B	Brown PEAT	18.0'

NOTE: 3 samples saved for testing
All samples checked with PID meter
the other samples discarded.

Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: PD 9	SURFACE ELEV.:
LOCATION: E of Bldg 17 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 12-4-00

CASING SIZE	HOLE TYPE	HAMMER	HAMMER # FALL
3 "O.D. 2 3/8 "I.D.	Augers 1	Safety 140 # FALL 30 "	# FALL "

DRILLER: D. Cooke
INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12-4-00	12:35 PM	7.0'	SAMPLE #4

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Cutter Head Handauger	0	Cutter Head HANDAUGER	Full Rec			0.0'
					Concrete	1.0'
				1	Fill grey c-f SAND, some Gravel, Cobbles tr. Silt	
				2	Fill greyish black c-f SAND, little Gravel, tr. Silt	
	5			3 *	Fill greyish-black c-f SAND, tr Gravel, tr Silt	
Hollow STEM AUGERS		2 - 2				
		2 - 2	10"	4	Misc Fill greyish-black & Orange c-f SAND, tr Gravel tr Silt cinders, coal	
		1 - 1		5 *		
	10	1 - 2	12"		SAME	
		2 - 5		6		
		6 - 4	2/6"		SAME	
		1 - 1		7		
		1 - 1	4"		SAME	
	15	2 - 2		8		15.0'
		2 - 2	18"		Brown PEAT	16.0'

Note: 2 Samples saved for testing
All samples checked w PID meter
Remaining samples discarded

Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-00

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory - P&G	Craig	PD-10	
LOCATION		CONTRACT NO.	DATE
35' North of Bldg 16 Block 1400 Lot 1		426-99-006	11/28/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Auger	1

HAMMER	HAMMER
140 # FALL Self 30 "	# FALL "

DRILLER: D. Cooke

INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/28/00	2:15 PM	5.0'	In S-2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0				Concrete 0.5'
		Hand Auger	Full Rec	1	Fill - Br M-F Sand, tr Cone, Little Gr, tr Cobbles.
				2*	Fill - Br M-F Sand, Little Gravel
					Sand
	5			3	6.0
Augers		1-1		4*	Fill - White Diatomaceous Soil w/ Green layers.
		1-1	20"		
		1-1		5	Fill - White Diatomaceous Soil
	10	1/12"	18"		
		1-1		6	Sand
		WOH/12"	18"		
		1 - WOH/-1 12"	19"	7	Sand
	15	WOH/24"	20"	8	Sand
		WOH/18"		9 A	Sand 17.5
		1	16"	D	Fill - As Above w/ organics
		1, 1			sawed 19.0
	20	1, 1	18"		Dark Brown Organic Silt w Pieces of decomposed Peat
					Note: Samples #2 & 4 were saved for testing. All other samples were screened w/ PID & then discarded

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

1547
H-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory, PTC Site	Craig drilling	PD-11	
LOCATION: North of Building S-16		CONTRACT NO. 476-99-000	DATE 11/27/2000

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8" I.D.	Augers	I
HAMMER 140 # FALL 30"	HAMMER # FALL "	
DRILLER: David Cooks		
INSPECTOR: Madhu Patel		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/27/00	1000	5.5	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
					Concrete 0.7
Hand Auger		Hand Auger	Full	1	light Gray & Black cmf SAND, some cmf Gravel
				C	same
				2	
					same
	5			3	Wet
Auger		WOH	24	4	Wet White Diatomaceous earth
		H			SAME
		WOH	24	5	SAME
		1, 1			
	10	2, 2	24	6	SAME
		2, 2			SAME
		3, 3	18	7	wet Black Pieces of Rock, gravel, silt etc
		4, 4			White & Greey Diatomaceous earth material
		2, 2	16	8	same
	15	2, 2			Wet. white Diatomaceous earth material
		WOH	10	9	same.
		2, 2	12	10	wet park Brown Organic silt, trace F sand
	20	3, 4			with pieces of decomposed wood (Peat)
					Bottom of the Hole at 20.0'
					All soil samples collected and
					check with PID. No 3 saved for
					Environmental testing. Remaining soil
					discarded

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 1

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PDCS.Tp	Craig Drilling	PD-11A	
LOCATION		**CONTRACT NO.**	**DATE**
North of Building 5-16		486-99-006	11/27/2000

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Auger	1
HAMMER Safety 140 # FALL 30 "	**HAMMER** # FALL "	
DRILLER David Cooke		
INSPECTOR Madhu Patel		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/27/00		Dry	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Aug.	0				0.0
					Concrete 0.7
		Hand Augs	Full	1	light Gray & Black cmf SAND, some cmf Gravel & Piece of Rock etc
				2	Same
				3	Same 4.5
	5				Bottom of Boring, Obstruction concrete Slab
	10				
	15				
	20				
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 1

PROJECT: HH - Ft. Wadsworth P&G	NAME OF CONTRACTOR: Craig	BORING NO.: PA-12B	SURFACE ELEV.
LOCATION: As laid out by Killam ± 150' S.W. of S.W. corner Bldg 17		CONTRACT NO.: 426-99-006	DATE: 11/28/00
SPOON: "O.D. "I.D.	CASING SIZE	HOLE TYPE: 1	
HAMMER: # FALL "	HAMMER: # FALL "		
DRILLER: D. Cooke			
INSPECTOR: T. Ryan			

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
					Concrete 0.6'
					Hit Rebar & Thin Conduit Pipe under Conc. This was the 3rd attempt.
	5				Bottom of Boring
					Note: Dan from Killam did attempts # PA-12 & PA-12A
	10				
	15				
	20				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A [redacted]
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: RR8	SURFACE ELEV.:
LOCATION: 2' E of wire Fence betw. 1st & 2nd Railroad tracks Block 1400 lot 1		CONTRACT NO.: 426-99-006	DATE: 12-01-00

SPOON: 3 "O.D. 2 3/8 "I.D. | CASING SIZE: Augers | HOLE TYPE: 1

HAMMER: Automatic 140 # FALL 30 " | HAMMER # FALL "

DRILLER: D Cooke

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12-1-00	11:45	2.5'	Sample #2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand auger	0	Hand auger	Full Rec		
				1	Misc Fill black c-f SAND & Gravel, Coal, Cinders, Brick
				2 *	SAME
	5			3	SAME
Hollow STEM Augers		1-1			
		1-1	12"	4 *	SAME 8.0'
		3-2			
	10	2-2	14"	5	Brown PEAT 10.0'
					Note: 2 samples saved for testing. All samples checked with PID meter. The other samples discarded.
	15				

Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P+G	Cuzzi Driller	RR-10	
LOCATION	**CONTRACT NO.**	**DATE**	
N Bld 13	426-99-006	12/2/00	

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	4 auger	1

HAMMER	HAMMER
140 # FALL 30 " (SOFT)	# FALL "

DRILLER: Jim Fuch

INSPECTOR: Charlie Springer

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12/2/00	1200	4.5'	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
NA		NA	Full	1	Gravel w/Sand matrix 0.0
					~~Asphalt~~ Gravel w/Sand matrix 0.4
					Cinders/Gravel Block 1.2
					Silty Sand white fine(?) mica 2.5
				2*	Cinders + Gravel Some Slag
	5			3	Some Sand Silt matrix mixed with brown/black earth
Hollow Stem Auger		7-10	1.8'	4	Some
		12-19			
		12-11	1'	5*	Some
	10	7-6			
		8-17	2'	6	Some
		13-9			
		14-10	2'	7	Some
		6-4			
	15	3-3	1.1'	8	
		3-3			Some 16.0
					End of Boring 15'
					- all Samples Screened w/ PID
	20				- Samples 2+5 Sent For Env Test
					- all Remaining Samples Discarded

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P & G	Craig drilling	FS 1 B	
LOCATION		**CONTRACT NO.**	**DATE**
40'W of BH-FS 1 betw. Bldg 12 & Bldg 13 Block 1400 Lot 1		426-99-006	11-17-00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER	HAMMER
Safety # FALL 30 "	# FALL "

DRILLER: S. Burns

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-17-00	11:20	7.0'	Sample #4

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Handauger	0	Handauger	Full Rec		ASPHALT	0.0' / 0.2'
				* 1	Fill greyish-black c-f SAND, Gravel, tr SILT, Cinders, coal, wood.	1.3'
				* 1	Fill greyish-yellow c-f SAND AND Silty CLAY, cinders, wood, coal.	
				2	Fill greyish-black Gravel, some c-f SAND, tr SILT, cinders	
	5			3	Fill greyish black Gravel, some c-f SAND, tr SILT, cinders	6.0'
Hollow Stem Augers		4-7		* 4 A	Misc Fill yellowish-white dietomaceous, grey c-f SAND, Gravel, cinders, wood	6.5'
		4-3	18"	4 B	Fill greyish-black Gravel, some c-f SAND, tr SILT, cinder	
		1-4				
	10	1-0	24"	5	Fill greyish-White Dietomaceous - with grey c-f SAND & Gravel.	
		Weight of				
		HAMMER	0"	6	(Sample fall into the hole)	
		W.O.H. - 18" Bounce	18"	* A	Fill grey Dietomaceous - with grey c-f SAND & Gravel	13.5'
			100/0"	7		
	15				Refusal - Bottom of Boring	
					Note: 3 SAMPLES saved for testing	
					All samples screened with PID meter,	
					the other samples discarded	
	20					

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

547
-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: FS-4	SURFACE ELEV.
LOCATION: As laid out in the field		CONTRACT NO.: 426-99-006	DATE: 11-15-00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER	HAMMER
140 # FALL 30 "	# FALL "

DRILLER: D. Osuch

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-15-00	1:40 PM	8.0	Sample #5 (top)

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE	
HAND AUGER	0	HAND AUGER	Full Rec		DGABC	0.0' 0.5'
				* 1	Fill grey c-f SAND and Gravel, tr. SILT	
				2	Fill greyish-black c-f SAND some Gravel, tr. SILT, cinders, coal, wood	
	5			3	SAME	
HOLLOW STEM AUGER		4-5				
		5-5	24"	4	SAME	
		4-4				
	10	9-9	20"	5	SAME (wood)	
		8-12				
		8-6	8"	6	SAME (wood)	
		9-9				
		4-4	2"	7	SAME	14.0'
	15	2-2		*		
		2-2	20"	8	Brown Peat, tr. grey Silty CLAY	16'
					Note: Samples 1, 2 & 8 saved for testing	
					All samples screened with PID meter	
	20				and discarded Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P&G Site	Craig Drilling	Fill-7	
LOCATION		CONTRACT NO.	DATE
West of wood chipper, Block 1400 Lot 1		426-99-006	12/4/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Buyrs	1
HAMMER Safety 140 # FALL 30	HAMMER # FALL	
DRILLER S Burns		
INSPECTOR D Howe		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12/4	945	10.0	S#6

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
	0				Concrete	0.0 / 0.7
Hand Auger		Hand Auger	Full	1	Misc Fill, Sand, Gravel, Cinders, Wood, Silt, ETC	
				2	Same	4.0
	5			3	Misc Fill, Cinders, Gravel, ETC	
Hollow Stem Augers		16-11		4		
		16-18	19"		Same	
		17-9		5		
	10	4-3	20"		Same	10.0
		3-2		6		
		1-1	24"		Fill - White Diatomaceous Earth	
		WOH		7		
		WOH	24"		Same	
	15	WOH-1		8		
		2-2	23"		Same	
		2-2		9		
		2-2	24"		Same	
		9-18		10		
	20	25-45	15"		Fill - White Diatomaceous Earth, Little Cinders, Tr Gravel	
		7-3		11		
		2-2	18"		Fill - White & Grey Diatomaceous Earth	
		3-2		12 A	Same	23.0
		1-1	18"	B	Brown Peat	24.0
	25				Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

All Samples checked with PID Meter S# 1,3,6 Saved for Environ. Testing Remaining Samples Discarded

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PIC Site	Craig Drilling	Fill-8	
LOCATION		**CONTRACT NO.**	**DATE**
NW Corner of Site, 75' South of PA-NW-1	Block 140C Lot 1	426-99-006	12/2/00

SIZE OF	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1
HAMMER Safety 140 # FALL 30"	HAMMER # FALL	
DRILLER S Burns		
INSPECTOR D Howe		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12/2	11 3/4	3.0	while Hand Augering

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger	Full	1	
					Misc Fill - Sand, Silt, Brick, Gravel, Metal, ER
				2	4.0
	5			3	Fill - Grey Diatomaceous Earth, Little Misc Fill
Wilbco		1-1		4	
3.25 ID Hollow Stem Augers		1-1	19"		Fill - Grey Diatomaceous Earth
		WOH		5	
	10	WOH	23"		Fill - White & Grey Diatomaceous Earth
		WOH		6	
		WOH	22"		Same
		WOH		7	
		WOH	22"		Same
	15	WOH		8	
		WOH	22"		Same
		WOH		9 A	Same 17.5
		WOH-1	24"	B	Black Peat 18.0
					Bottom of Boring
	20				
					All Samples checked with PID Meter
					S# 1 & 4 Saved for Envir Testing
					Remaining Samples Discarded
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P+G	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: A-1	SURFACE ELEV.
LOCATION: N Bld 1-A Block 1400		CONTRACT NO.: 426-99-006	DATE: 12/2 AND 12/4/00

SECTION	CASING SIZE	HOLE TYPE
3 "O.D. 2 7/8 "I.D.	auger	1

HAMMER: 140 # FALL 30 (SAFT) — HAMMER # FALL

DRILLER: JAT

INSPECTOR: Charlie Springer

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12/4/00	7:45	8.0	DURING SPLIT-SPOONING

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
NA		NA	Fill	1	Gravel w/ Sand SILT matrix
				2	~~Gravel w/ cinders Sand SILT matrix Block~~ 6.5 ~~diatomaceous Earth white~~ 7.5
	5			3	Cinders + Gravel Block
AUGER		7 8	15"	4	SAME
		12 9			
		9 7	13"	5	SAME
	10	3 3			
		7 6	20"	6	SAME, WITH 4' LAYER DIATOMACEOUS EARTH TOP OF SPOON
		5 3			
		3 1	3"	7	SAME
		2 3			14'
	15	2 1	14"	8	BROWN PEAT
		2 2			16.0
					↑ BOTTOM OF BORING
	20				- ALL SAMPLES SCREENED WITH PID METER
					- SAMPLE #2 SAVED FOR ENVIRONMENTAL TESTING
					- ALL REMAINING SAMPLES DISCARDED

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

547
90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory, P+G site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: A-2	SURFACE ELEV.
LOCATION: SW of Building 16 (approx. 60 feet)		CONTRACT NO.: 4/2C.99.006	DATE: 11/29/2000

SPOON: 3 "O.D. 2 3/8 "I.D.	CASING SIZE	HOLE TYPE	
HAMMER: Safety 140 # FALL 30 "	HAMMER: 140 # FALL "		
DRILLER: David Cooks			
INSPECTOR: M. Patel			

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/29/00	0815	4.0'	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger		Hand Auger	Full	1	Fill- Black and Brownish yellow cmf SAND trace Silt, trace mf Gravel, Rock, cinder, etc 2.0'
				2	White Diatomaceous earth material
	5			3	White & Gray same
Auger		WO	24"	4	White Diatomaceous earth material
		H			
		1 0	24"	5	SAME
	10	1 0			
		1 0	20"	6	SAME
		1,1			
		1, 1	16"	7	SAME
		2, 2			
		9, 15	18"	8	SAME 15.0'
	15	20, 15			Black cmf GRAVEL, trace cmf SAND Rock, cinder
		5, 6	10"	9	SAME
		10, 5			
		1, 1	18"	10	SAME
	20	1, 1			Brown Organic SILT & decomposed wood (PEAT)
					Bottom of Hole at 20.0'
					All soil samples checked for PID meter
					Sample # 1 & 2 saved for Environmental testing
					Remaining samples are discarded.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: A-3	SURFACE ELEV.
LOCATION: As laid out in the field		CONTRACT NO.: 426-99-006	DATE: 11-16-00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1
HAMMER Safety 140 # FALL 30"	HAMMER # FALL	
DRILLER: G. Mc Aneny		
INSPECTOR: J. ZARKS		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-16-00	2:05 PM	2.0'	SAMPLE # 2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Hollow Stem Augers	0	Cutter Head	Full Re		concrete	0.0' / 0.6
				1	Fill grey c-f SAND and Gravel, tr. SILT	
				2*	SAME	2.4'
					Fill greyish-green Silt, tr. m-f SAND	4.0
	5			3	Fill greyish-black SILT & CLAY	
		6-6				
		8-10	24"	4*	Fill black - SILT & CLAY	8.0'
		7-8				
		9-15	24	5	Fill grey c-f SAND, greenish-White Diatomaceous	
	10	4-5				
		6-6	24"	6*	Fill white & grey c-f SAND, Gravel, Diatomaceous	12.0
		2-2				
		3-4	20"	7	Fill black Silty Clay, some chunks	
	15	1-2				
		1-2	24"	8	Fill black Clay SILT	
		2-2				
		2-2	24"	9	SAME	
		1-2				19.0'
	20	2-2	24"	10	Brown PEAT	
					Note: 3 samples saved for testing All other samples screened with PID meter & discarded	Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory PDG Site	NAME OF CONTRACTOR: Crary Drilling	BORING NO.: A-6	SURFACE ELEV.
LOCATION: E of Bldg 17 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11/10/00 - 11/11

SPOON: 3 "O.D. 2 3/8 "I.D. | CASING SIZE | HOLE TYPE: 1

HAMMER: 140 # FALL 30 " | HAMMER # FALL "

DRILLER: S Burns

INSPECTOR: D Howe / J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/10/00	4:15 PM	6.0'	while Hand Augering
11/11/00	1:05 PM	6.5'	Sample # 4

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D [1]	SAMP. NO. [2]	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger	Full		Crushed Stone, Little Misc Fill 0.1 ft
				1	Misc Fill Cinders, Gravel, Sand, Brick, Etc
				2	
	5			3	Same / Same
Hollow STEM Augers		4 - 3			
		3 - 6	20"	4	SAME
		4 - 5			
	10	6 - 6	20"	5	SAME
		6 - 8			
		6 - 11	24"	6	SAME
		18 - 18			
		12 - 3	18"	7	Misc Fill Cinders, black c-f SAND, Gravel etc 14.0
	15	W. O			
		H. 1	24"	8	Brown PEAT, some grey Silty CLAY 16.0'
					Bottom of Boring
	20				All Samples checked with PID Meter
					Split 2 Saved for Testing
					Sample #8 saved (On hold) for testing
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-1	SURFACE ELEV.
LOCATION: NW of BH: UST 2-1 A Block 1400 lot 1		CONTRACT NO.: 426-99-006	DATE: 11-30-00

SECTION	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER: Safety 140 # FALL 30"
HAMMER: # FALL "
DRILLER: D. Cooke
INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-30-00	11:15 AM	7.0'	Sample # 4A

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Handauger	0	Handauger	Full		
				1	Fill brown decomposed wood
				2	Fill brown decomp. wood & tr. grey diatomaceous 4.0'
	5			3	Orange-brown c-f SAND, tr. Gravel, tr. Silt
		4 - 4		4A	greyish-black c-f SAND, tr Gravel, tr Silt some Coal.
		5 - 2	24"	4B	brown c-f SAND, tr. Gravel, tr. Silt
		4 - 4			14.1 ppm
	10	8 - 10	24"	5*	Greyish-black c-f SAND, tr. Gravel, tr. Silt Fuel odor
		4 - 5			
		5 - 7	20"	6	SAME 14 ppm
		4 - 4			
		2 - 2	20"	7	SAME 12.8 ppm 14.0'
	15				Note: 2 Samples saved for testing.
					All samples checked w. PID meter.
					The other samples discarded
					Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-1A	SURFACE ELEV.:
LOCATION: ±100' SW of Bldg 12	Block 1400 Lot 1	CONTRACT NO.: 426-99-006	DATE: 11-30-00

SECTION	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER: Safety — # FALL 30"
HAMMER: — # FALL "
DRILLER: D. Cooke
INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand auger	0	Hand auger	Full	*	
				1	Fill brown decomposed wood.
				2	Fill grey & yellow dietomaceous & brown dec. wood.
					CONCRETE OBSTRUCTION.
	5				NOTE: 1 sample saved for testing. Obstruction during handauger.
					Bottom of Boring
	10				
	15				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-1 B	SURFACE ELEV.
LOCATION: W. of BH UST2-1 A Block 1400 lot 1		CONTRACT NO.: 426-99-006	DATE: 11-30-00

DIMENSION: 3" O.D. 2 3/8" I.D.	CASING SIZE: Augers	HOLE TYPE: 1	
HAMMER: Safety # FALL 30"	HAMMER # FALL "		
DRILLER: D. Cooke			
INSPECTOR: J. Zarks			

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
HAND AUGER	0	Hand AUGER	Full		
				1	Fill brown decomposed wood.
				2 *	Fill brown decomposed wood & greyish white diatomaceous.
	5			3 *	Brown c-f SAND, tr. Gravel tr. SILT.
					Greyish black c-f SAND, tr Gravel, tr SILT, Fuel odor. 5.5'
					CONCRETE OBSTRUCTION
					Note: 2 samples ~~saved~~ for testing.
					STOP Handauger because of obstruction.
					Bottom of Boring
	10				
	15				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A [redacted]Z
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-2	SURFACE ELEV.:
LOCATION: 5'S of UST 2-1 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11-30-00

SIZE OF CASING	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	Augers	1

HAMMER	HAMMER
[redacted]0 # FALL 30 "	# FALL "

DRILLER: D. Cooke
INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-30-00	2:15 pm	7.0'	Sample #4

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Handauger	0	Handauger	Full		Fill brown decomposed Wood some grey c-f SAND	0.6'
				1	Fill brown c-f SAND, tr. Gravel, tr. Silt, some Cobbles & bricks	
				2	Misc Fill greyish-brown c-f SAND & Gravel, tr. Silt, cinders, Coal, bricks	
	5			3*	Misc Fill greyish-black c-f SAND & Gravel, tr. Silt, cinders, coal, bricks	
No Casing used.		7-11				
		7-5	12"	4	Fill yellowish-grey c-f SAND, tr. Gravel, tr Silt, cinders.	
		7-9				
	10	8-4	10"	5	SAME	
		2-2		6*		
		2-2	10"		Misc. Fill grey c-f SAND & Gravel, tr. Silt, wood, cinders, Coal.	12.0'
					Note: 2 samples saved for testing	
					All samples checked with PID meter & discarded	
					Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A [redacted]7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 2

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-2A	SURFACE ELEV.
LOCATION: W of UST 2-2 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11-30-00

SECTION — "O.D. "I.D.	CASING SIZE: Handauger	HOLE TYPE: 1	
HAMMER: Handauger # FALL "	HAMMER # FALL "		
DRILLER: D Cooke			
INSPECTOR: J Zarks			

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. NO. [2]	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Handauger		Handauger	Full	1	Fill br decomposed Wood	0.0'
					Fill brown c-f SAND, tr Gravel, tr SILT, cobbles, bricks, cinders	1.0'
					SAME	
					CONCRETE OBSTRUCTION	2.5
					Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

5-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 2

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-2B	SURFACE ELEV.:
LOCATION: S'S of UST 2-2 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11-30-00

SPOON	CASING SIZE	HOLE TYPE
"O.D. "I.D.	Handauger	1
HAMMER Handauger # FALL "	HAMMER # FALL "	

DRILLER: D. Cooke

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Handauger	0	Handauger	Full		Fill brown decomposed wood some c-f SAND 0.0' / 0.5'
				1	Fill grey c-f SAND & Gravel tr. Silt, cinders, coal, brick.
				2	SAME
					Concrete Obstruction
	5				
					Bottom of Boring
	10				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A-7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST 2-3	SURFACE ELEV.
LOCATION: ±50' W of Bldg 12 Center Concrete Roadway - Block 1400 lot 1		CONTRACT NO.: 426-99-006	DATE: 12-01-00

SECTION: 3 "O.D. 2 3/8 "I.D.	CASING SIZE: Augers	HOLE TYPE: 1	
HAMMER: Autom WT 140 # FALL 30 "	HAMMER WT. # FALL "		
DRILLER: D. Cooke			
INSPECTOR: J. Zarks			

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12-1-00	9:45 AM	6.0'	SAMple # 3

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
Cutter Head Handauger	0	Cutter Head. Handauger	Full R		Concrete	0.0 / 1.0'
				1	Misc Fill dark greyish-black c-f SAND some Gravel, f Silt, Cinders, Coal, Brick	
				2 *	SAME	
	5			3	SAME	
Hollow STEM Augers		5-13		4	SAME - Fuel.	7.6'
		10-3	18"		Fill greyish white diatomaceous	
		1-2		* A	SAME & wood	9.0'
	10	3-3	20"	5 B	Misc Fill greyish-brown Clayey Silt c-f SAND, cinders (Fuel)	
		2-1				
		1-1	8"	6	Fill greyish-white diatomaceous (Fuel), some Gravel	
		12-14				
		Wo-H	24"	7*	Brown PEAT (Fuel oder)	14.0'
	15				NOTE: 3 samples saved for testing. All samples checked w. PID meter & the other discarded	
					Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory PDG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: UST 5-2	SURFACE ELEV.:
LOCATION: South of Building 17		CONTRACT NO.: 426-98-00C	DATE: 11/27/2000

DIVISION: 3 O.D. 2 3/8 I.D.	CASING SIZE: Auger	HOLE TYPE: 1	
HAMMER: 140 # FALL 30	HAMMER: Safty # FALL		
DRILLER: David Cooks			
INSPECTOR: Madhu Patel			

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/27/00	1345	5.0'	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
						0.0
					Concrete	0.7
Hand Auger		Hand Auger	Fill	1		
				2	Fill - cnf Gravels, Rocks, etc	
	5			3	Wet, White & Gray Diatomaceous Earth material, trace clay	
Auger		1 2	24"	4	Wet, White & Gray Diatomaceous earth material.	
		2 1				
		W O	18"	5	SAME	
		H				
	10	1 1	16"	6	SAME	
		1 1				
		2 1	20"	7	SAME	
		1 1				14.0
	15	2 3	22"	8	Dark Brown Organic SILT, with decomposed wood (Peat)	16.0
		1 1				
					Bottom of Hole at 16.0'	
					All samples checked with PID	
					Sample No #3 saved for Enviromental testing. Remaining sample discard	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

547
-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P & G	NAME OF CONTRACTOR: Craig drilling	BORING NO.: UST6-2	SURFACE ELEV.
LOCATION: ±150' W of center of Bldg 17 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11-21-00/11-28-00

SPOON: 3 "O.D. 2 3/8 "I.D. | CASING SIZE: Augers | HOLE TYPE: 1

HAMMER: 140 # FALL 30 " | HAMMER # FALL "

DRILLER: J. Craig

INSPECTOR: J. Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11-28-00	12:48 PM	1.8'	Open hole.

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
4" auger	0	HAND AUGER	Full		DG ABC & Crushed Rock	0.2'
				1	Fill greyish-brown c-f SAND & Gravel, tr. Silt.	
					SAME	3.0'
				2	Fill light grey dietomaceous.	
	5			3*	SAME	
Hollow Stem Augers		WOH - 0				
		0 - 1	20"	4	Fill white dietomaceous	
		1 - 0				
	10	1 - 0	24"	5*	Fill white dietomaceous	
		1 - 0				
		1 - 0	20"	6	SAME	
		1 - 0				
		1 - 0	24"	7	SAME	
	15	W 0				
		H - 0	24"	8	SAME	
		W 0		9*		
		H 0	24"		Fill brown & white dietomaceous	
		2 - 2			SAME	18.5'
	20	3 - 3	24"	10	Brown PEAT	20.0'
					Note: 3 samples saved for testing	
					All other samples checked with PID meter & discarded.	
					Bottom of Boring	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
- Portfoam - P&G	Craig	UST6-3	
LOCATION: 110' West of Bldg 17		CONTRACT NO. 426-99-006	DATE 11/28/00

SPOON	CASING SIZE	HOLE TYPE
3" "O.D. 2 3/8 "I.D.	Augers	1

HAMMER (Safety)	HAMMER
140 # FALL 30 "	# FALL "

DRILLER: D. Cooke
INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/28/00	10:45 A	3.2'	At S-2

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0	Hand	Full	1 A	Fill - Br M-F Sand & Gravel, little Brick, & Steel 1.5'
		Auger	Rec	1 B	Fill - Cinders, Sand, Gravel
				2	
	5			3 A	Same 5.3'
				3 B	Gray & Black Diatomaceous fill
Augers		WOH/24"	24"	4	Same
		WOH/24"	18"	5	Same
	10	WOH/18"-1	19"	6	Same
		WOH/10"-1	20"	7	Same
	15	1/12" 1/12"	17"	8	Same w/ Green Silt
		WOH/24"	16"	9 A	Same 17.0'
				9 B	Br Peat 18.0'
	20				Bottom of Boring

Note: Sample # 1B & 8 were saved for testing. All other samples were screened w/ PID & then discarded.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PA 47
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 2

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
HH - P & G	Craig	Wood - 1	
LOCATION		CONTRACT NO.	DATE
laid out, ± 16' East of Conveyor at Wood Site (Block 1400)		426-99-006	11/7/00

SPOON "O.D. "I.D.	CASING SIZE	HOLE TYPE
		2

HAMMER # FALL	HAMMER # FALL

DRILLER D. Osuch

INSPECTOR T Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7/00	10:35 AM		No water encountered.

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Full	1 A	Fill - Gravel, some Sand & Cinders 1.0'
			Rec	B	Fill - Br F Sand, little Silt
				2	Fill - Br M-F Sand & Cinders, little Gravel
					Concrete 3.5' 4.0'
	5				Hit Concrete - Bottom of Boring
					See Boring - Wood - 1A
	10				
	15				
					Note: No samples were saved. Moved Boring. See BH - Wood 1A

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 2

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
HH - P&G	Craig	Wood - 1A	
LOCATION (Alignment)		CONTRACT NO.	DATE
Staked out ± 3' S.E. of Wood-1 (± 18' east of Conveyor at Wood Site) Block 1400		426-99-006	11/7/00

SECTION "O.D. "I.D.	CASING SIZE	HOLE TYPE	0
		1	

HAMMER # FALL "	HAMMER # FALL "

DRILLER: D. Brach

INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7/00			No Water encountered

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
	0	Hand	Full	1 A	Fill - Gravel, some Sand, Cinders, little Clay	1.0'
		Auger	Rec	1 B	Fill - Br F Sand, little Silt	2.0'
		↓	↓	2 A	Fill - Br M-F Sand, & Cinders, little Gravel	2.5'
				2 B	Fill - Gravel, some Cinders, little Sand (R.R. Ballast)	3.5'
	5				Hit Conc - Bottom of Boring	
	10					
	15					
					Note: No samples taken. Moved Boring. See BH - Wood 1-B	

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A...7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 2

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
HH - P&G	Craig	Wood 1-B	
LOCATION: 10' north of BH-Wood-1 (±16' west of Rte 12 & east of Conveyor at Wood Site) Block 1400		CONTRACT NO. 426-99-006	DATE 11/7/00

SIZE OF CASING "O.D. "I.D.	CASING SIZE	HOLE TYPE
		1

HAMMER # FALL "	HAMMER # FALL "

DRILLER: D. Douch
INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7/00			No water encountered

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0	Hand	Full	1	Fill - Gravel, some Sand Cinders
		Auger	Rec	1	Fill - Br M-F Sand, little Silt.
		↓		2	Same w/ little Conc Boulders. 3.5'
	5				Hit Concrete - Bottom of Boring
	10				
	15				
					Note: Samples were taken & then discarded as per Kellon Rep C Springer. Will return to this area at another time.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A-447
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
HH - P&G	Clarg	Wood - 1C	
LOCATION		CONTRACT NO.	DATE
South end of wood pile ± 141' S.W. of Bldg 12 (Block 1400)		426-95-006	11/9/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Auger HS	1

HAMMER	HAMMER
140 # FALL 30 "	# FALL "

DRILLER: D. Osuch
INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/9/00	1:10 pm	7.5'	In S #4

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Full Rec.	1	Wood 0.3' Fill - Gray Clay cinders 1.5'
				2	Same
	5			3	Same
augers		4-3		4	Same
		4-4	12"		
		6-5		5	Same
	10	2-3	12"		
		15-6		6	Same w/ sheen & odor
		4-4	14"		12.0'
		7-3		7	Peat 3.5 ppm
		2-2	14"		
	15	3-3	12"	8	Peat 0.9 ppm 15.0'

Bottom of Boring

Note: Samples #4 & 6 were saved for testing. Sample #4 on HOLD! all other samples were screened w/ PID & then discarded.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory P+G site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: Wood-3	SURFACE ELEV.:
LOCATION: South of Bowlding 1A (25)		CONTRACT NO.: YZC-99-006	DATE: 11/29/2005

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Auger	1

HAMMER: Safty — 146 # FALL 30 "
HAMMER: # FALL "
DRILLER: David Cooks
INSPECTOR: M. Patel

GROUND WATER LEVEL			
Date	Time	Depth	Remarks
11/29/2005	1600	6.5'	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger		Hand Auger			Asphalt
				1	Fill- light Brown cmf SAND, silt, Rock, wood etc
				2 (X)	light Brown and Dark Gray cmf SAND, little m/f Gravel, lt stone, concrete, Rock etc
	5			3	Same w/ white diatomaceous earth materials
Auger		1, 1	24"	4 (X)	Same
		1, 1			
		6, 6	12"	5	Same 9.0'
	10	5, 4			Dark cmf GRAVEL, little cmf Sand from f/t- w/ cobble. Rock.
		4, 4	18"	6	SAME
		6, 5			
		2, 2	16"	7	SAME 13.0'
		2, 3			Brown organic silt- w/ decomposed wood (PEAT)
	15				Bottom of the Hole at 140'
					All soil samples checked with PID meters. Sample No. 2 and 4 are saved for Enviromental testing. Remaing sample are discarded
					(X) Sample collected for Analysis

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PA 47
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Avery St. - P&G	Craig	Wood #3	
LOCATION: staked out ± 98' South of Bldg 1-A (Block 1400)		CONTRACT NO. 426-99-006	DATE 11/10/00

SPOON "O.D. "I.D.	CASING SIZE	HOLE TYPE 1
HAMMER # FALL "	HAMMER # FALL "	
DRILLER D. Drach		
INSPECTOR T. Ryan		

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/10		Dry	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Roller	0	Hand auger	Full Rec	1	ASPHALT 0.2' / CONCRETE 0.3' / Fill Gr M-F Sand, Little Gravel. 1.5' / Gray Clay 2.0'
		↓	↓	2	Misc. Fill black c-f SAND, little Clayey Silt, coal, cinders. 4.0'
	5				Bottom of Boring / Obstruction, Concrete Slab
	10				
	15				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
3-

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 1

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P+G Site.	Craig Drilling	Wood-3A	
LOCATION		CONTRACT NO.	DATE
South of Building 1A		426-99-605	11/29/2000

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Auger	1

HAMMER	HAMMER
Safty 140 # FALL 30	# FALL

DRILLER: David Cooks

INSPECTOR: M. Patel

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/29/00	1100	Dry	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger		Hand Auger	full		Asphalt
					Fill- light Brown & Dark Gray cmf SAND, Rock, Sft cinder.
					Bottom of Hole due to obstruction.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A-1347
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
HH - P&G	Craig	Wood 5	
LOCATION		CONTRACT NO.	DATE
Staked out ± 80' South of Bldg 1-B (Wood Site) (Block 1400)		426-99-006	11/7/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER	HAMMER
140 # FALL 30"	# FALL "

DRILLER: D. Osmuch

INSPECTOR: T. Ryan

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7/00	2:30 PM	5.8'	In S #3

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hand	Full	1	Top Soil 0.3'
		Auger	Rec		Fill - Br M-F Sand, little Silt 2.0'
				2	Fill - Cinders, tr Sand
	5			3	Same
Augers		4-3			
		3-3	19"	4	Same
		4-3		5	Same w/ little wood. 10.0'
	10	8-10	15"		
		6-15		6	Wood w/ tr cinders
		12-13	8"		
		13-8		7	Same 14.0'
		12-12	7"		
	15	3-3		8	Peat, little org silty Clay 15.0'
		3-4	18"		2.5 ppm
					Bottom of Boring
					Note: Samples # 1-5 and # 8 were saved. Other samples (6 & 7) were screened w/ PID & then discarded.

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory PJG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: HR-1	SURFACE ELEV.
LOCATION: West Side of Site, Near Fence, Northwest wood chipper Block Nee LOT 1		CONTRACT NO.: 426-99-006	DATE: 12/2/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER: Safety 140 # FALL 30 — HAMMER: # FALL

DRILLER: S Burns

INSPECTOR: D Hoar

GROUND WATER LEVEL

Date	Time	Depth	Remarks
12/2/00	1700	3.5'	While Hand Augering

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D [1]	SAMP. NO. [2]	SAMPLE DESCRIPTION AND REMARKS [3] — LINE LOCATES CHANGE OF PROFILE
Hand	0	Hand Auger	Full		Crushed Stone 0'-1'
Auger				1	Misc Fill Cinders, Gravel, White Diatomaceous Earth 1'-3'
				2	Fill Gray & White Diatomaceous Earth
	5			3	Same
Hollow		WOH			
Stem		1-1	24"	4	Same
Augers		WOH-2		5	
	10	1-1	24"		Fill-White & Gray Diatomaceous Earth
		WOH		6	
		1-1	23"		Fill- White Diatomaceous Earth
		2-1		7	
		2-1	23"		Same
	15	WOH-2		8	
		4-2	24"		Fill- White Diatomaceous Earth & Gray Diatomaceous Earth
		WOH		9 A	Same 17.5'
		2-3	23"	B	Brown Peat 18'
					Bottom of Boring
	20				All Samples checked with PID Meter
					S# 1 & 2 Saved for Enviro Testing
					Remaining Samples Discarded
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A-7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PDG Site	Craig Drilling	H/R-2	
LOCATION		**CONTRACT NO.**	**DATE**
NW corner, Near Fence Line Block 1400 Lot 1		426-99-006	11/10/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	Augers	1

HAMMER	HAMMER
140 # FALL 30 Safety	# FALL

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/10	3P	6.5	open hole
11/11	9:38 AM	5.2'	Open hole

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger	Full	1	Misc Fill - Cinders, Sand, Gravel, Brick, ETC
				2	Fill - Diatomaceous Earth (White / Gray)
	5			3	SAME
Hollow Stem Augers		1 - 1			
	10	1 - 1	24"	4	SAME
		1 - 1			
		1 - 1	24"	5	SAME
		1 - WOR			
		1 - 1	24"	6	SAME
	15	W - 0			
		H - 1	24"	7	SAME
		1 - 1		A	SAME 17.0'
		1 - 2		8B	Brown PEAT, little black organic Clayey Silt 18.0'
	20				All Samples checked with PID Meter
					S# 1 2 Saved For Testing
					Bottom of Boring
					Sample # 8B saved (on hold) for Testing
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 3

PROJECT: Port Ivory PDG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: A1/R-3	SURFACE ELEV.
LOCATION: NW Corner LOT, Near Fence Line Block 140C LOT 1		CONTRACT NO.: 426-99-006	DATE: 11/10/00 / 11-11-00

SECTION	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	1

HAMMER	HAMMER
140 # FALL 30 "	# FALL "

DRILLER: S Burns

INSPECTOR: D Howe / J Zarks

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/10/00	11 am	5.0	while Hand Augering
11/11	8:10 AM	4.6'	Open hole

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. NO. [2]	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	O.C
Hand Augar	0	Hand Augar	Ful	1	Crushed Stone	0.3
					Misc Fill - Cinders, Gravel, Sand, ETC	1.0
				2	Fill Diatomaceous Earth, (White)	
	5			3	SAME	
				4	Same	
Hollow Stem Augers		WOH-1				
	10	1-1	24"	5	SAME	
		2-2				
		1-1	24"	6	Fill Diatomaceous Earth (White & light grey)	
		1-1				
		1-1	24"	7	SAME	
	15	2-1				
		1-3	24"	8	SAME	
		1-WOR				
		1-3	24"	9	SAME	
					Yellowish brown c-f SAND some Clayey Silt, little Gravel.	17.3'/18.6'
	20				All Samples checked with PID MeTer	
					S# 1-3 Saved for Testing, S#2 To be Tested	
					Remaining Samples Discarded	
					Bottom of Boring	
	25					

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 4

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PDG Site	Craig Drilling	PB MW-1	
LOCATION		**CONTRACT NO.**	**DATE**
NE Corner of Site, Near Richmond Terr Block 1400 Lot 1		426-99-006	11/22/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	"A" Monitor

HAMMER	HAMMER
Safety 140 # FALL 30	# FALL

DRILLER: J Craig

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/22	10 45	4.5	while Hand Augering

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Augr	Full		0.0
					Crushed Stone, Gravel, Sand, Cinders, Etc
					3.0
				1	Fill - White Diatomaceous Earth Ph-7
	5			2	Fill White & Gray Diatomaceous Earth Ph-7
Hollow		1-1			
Stem		1-1	24"	3	Fill Gray Diatomaceous Earth Ph-7
Augers		1-1		4	
	10	1-1	24"		Fill - White & Gray Diatomaceous Earth Ph-7
		1-0		5	
		0-0	16"		Same Ph-13
		1-0		6	
		1-0	20"		Same Ph-13
	15	1-0		7	
		0-0	24"		Same Ph-13
		1-1		8A	Fill - Brown, Green, Gray, White Diatomaceous Earth Ph-13 17.0
		3-4	18"	8B	Brown Peat Ph 7 18.0
	20				Bottom of Boring
					All Samples checked with PID Meter, S# 1, 2, 5 & 8B Saved for Enviro Testing, Remaining Samples Discarded
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

Well Installation Report

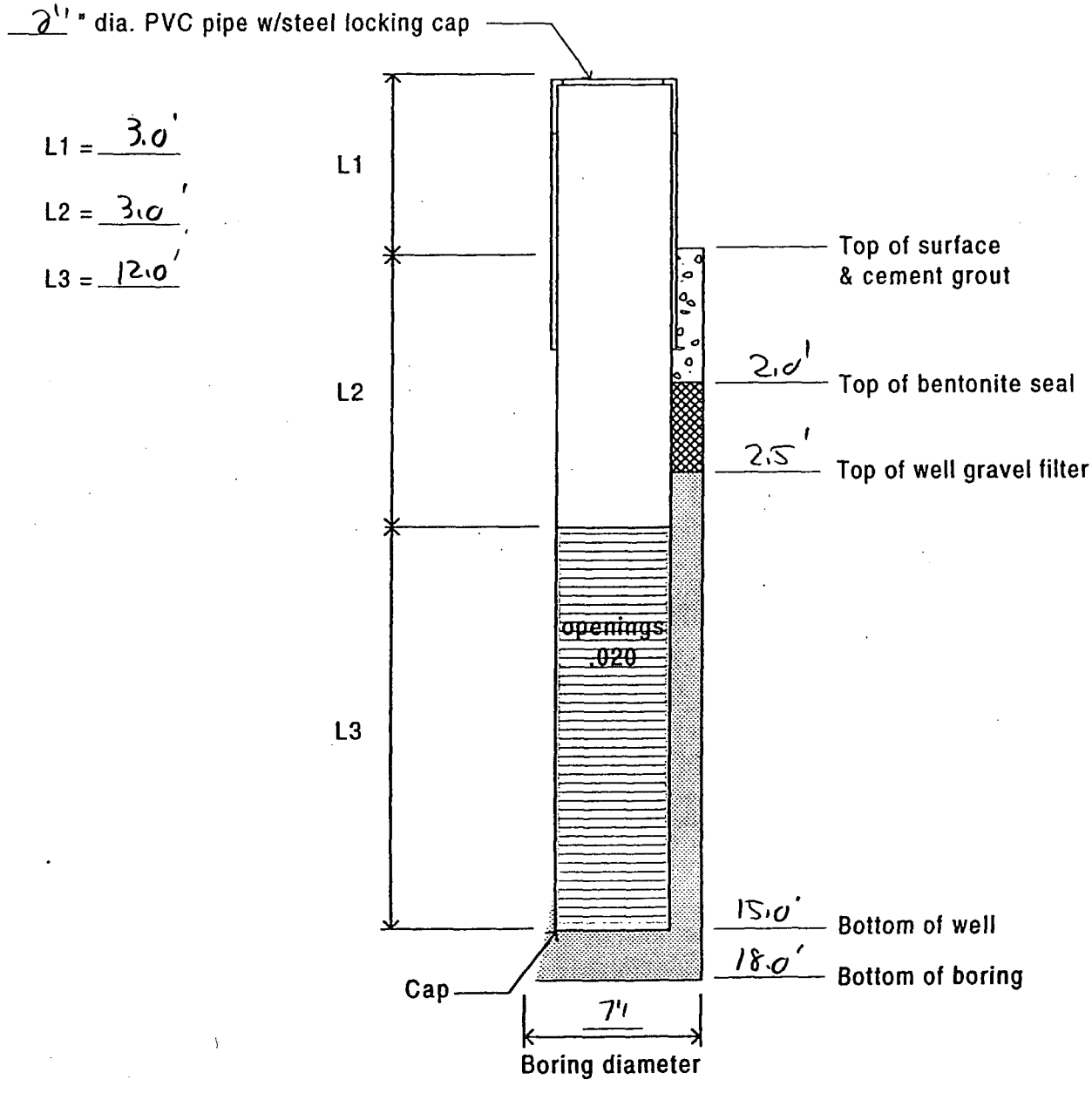
Sheet 2 of 4

PROJECT				CONTRACT NO.
Port Ivory PTG Site Block 1400 Lot 1				426-99-006
LOCATION				CONTRACTOR
NW corner of Site, Near Richmond Ter				Craig Drilling
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
PANW 1	"B" Monitor	D Moore	J Craig	11/22/00

Well Development Report

(NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE	WATER LEVEL BEFORE	WATER LEVEL AFTER	TAKEN
11/29/00	7.5'	10.1'	10 MINUTES AFTER



REMARKS:

Hole Backfilled 15-18' with Bentonite

A[illegible]7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 5

PROJECT: Port Ivory PDG S,To	NAME OF CONTRACTOR: Crain Drilling	BORING NO.: PAMW-1D	SURFACE ELEV.
LOCATION: #10' North of PAMW-1, NW Corner of S,To, Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11/22/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	HW	'A' Manson

HAMMER: Safety 140 # FALL 30 "
HAMMER: # FALL "
DRILLER: J Craig
INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/22	3P	4.0	While Hand Augering

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger	Full		0.0
					For Strata 0-18' See Log for PAMW-1
	5				
Casing					
	15				
					18.0'
Drill	20	WOH	2d'	1	9.8 ppm Brown Peat Ph-7
Head		WOH	20"	2	4.8 ppm Same Ph-7
with		1			2.1 ppm
Power		2-1-4	21"	3	Same Ph-7
	25				25.0
		2-3		4	Ph-7
		4-3	14"		M-F Brown Sand, Tr Gravel, Tr Silt
	30				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 2 OF 6

PROJECT: Port Ivory PJG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PBNW-1D	SURFACE ELEV.
LOCATION: [illegible]' North of PBNW-1, NW Corner of site, Block 1400 Lot 1		CONTRACT NO.: 486-99-006	DATE: 11/24/00

SIZE OF: 2" O.D. 1 3/8" I.D.	CASING SIZE: Rovert	HOLE TYPE: "B" Monitor	
HAMMER: Safety 140 # FALL 30"	HAMMER: # FALL "		
DRILLER: J Craig			
INSPECTOR: D Houp			

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
[illegible]11	30	3-4		5	Ph-6
Ahead		4-4	16"		M-F Gray Sand, Tr Gravel, Tr Silt
with					
Rovert					
	35	3-3		6	Ph-7
		4-5	12"		F Gray Sand, Tr Silt, Tr Gravel 32.0
					F Red Brown Sand w Tight Spoon
	40	4-7		7	Ph-7
		7-8	10"		F Brown Sand, Tr Silt, Tr Gravel
	45	7-4		8	Ph-7
		5-4	14"		M-F Brown Sand, Tr Silt, Tr Gravel 48.0
					Rods chattering
	50	9-18		9	No Ph Reading
		25-30	8"		Red Brown Clayey Silt, Little F Sand, Tr Gravel
	55				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A-7
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 3 OF 6

PROJECT: Port Ivory PRGSite	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PA MW-10	SURFACE ELEV.
LOCATION: 10' North of PA MW-4 NW Corner of Site Block 1400 Lot 1		CONTRACT NO.: 426-95-006	DATE: 11/24/00

SECTION: 2 "O.D. 13/8 "I.D.	CASING SIZE: Rovert	HOLE TYPE: "B" Monitor	
HAMMER: 140 Safety # FALL 30"	HAMMER: # FALL "		
DRILLER: J Craig			
INSPECTOR: D Howe			

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
11	55	30-100/5" 4/1"		10	No Ph Readings — Little M-F Sand
Ahead		24-26 *	11"		Decomposed Red Shale, Little Red Brown clayey SILT,
with					
Rovert					
					60.0
	60	27-31		11	No Ph Readings
		36-40	13"		M-F Red Brown Sand, Little Red Shale, Tr Clayey Silt
					65.0
	65	37-46		12	No Ph Readings — Tr Silt
		36-42	7"		Decomposed Red Shale, Little M-F Red Brown Sand,
	70	100/2" 50/6"	2"	13	Decomposed Red Shale, Tr F Sand — 70.2
					Refusal: Bottom of Boring
	75				
	80				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

* 300lb Hammer used

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

Well Installation Report

PROJECT				CONTRACT NO.
Port Ivory PDG Site				426-98-006
LOCATION				CONTRACTOR
±10' North of PA MW-1D				Craig Dr. Hwy
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
PA MW-1D	'B' Monitor	D Howe	J Crais'	11/24/00

Well Development Report

(NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE	WATER LEVEL BEFORE	WATER LEVEL AFTER	TAKEN MINUTES AFTER

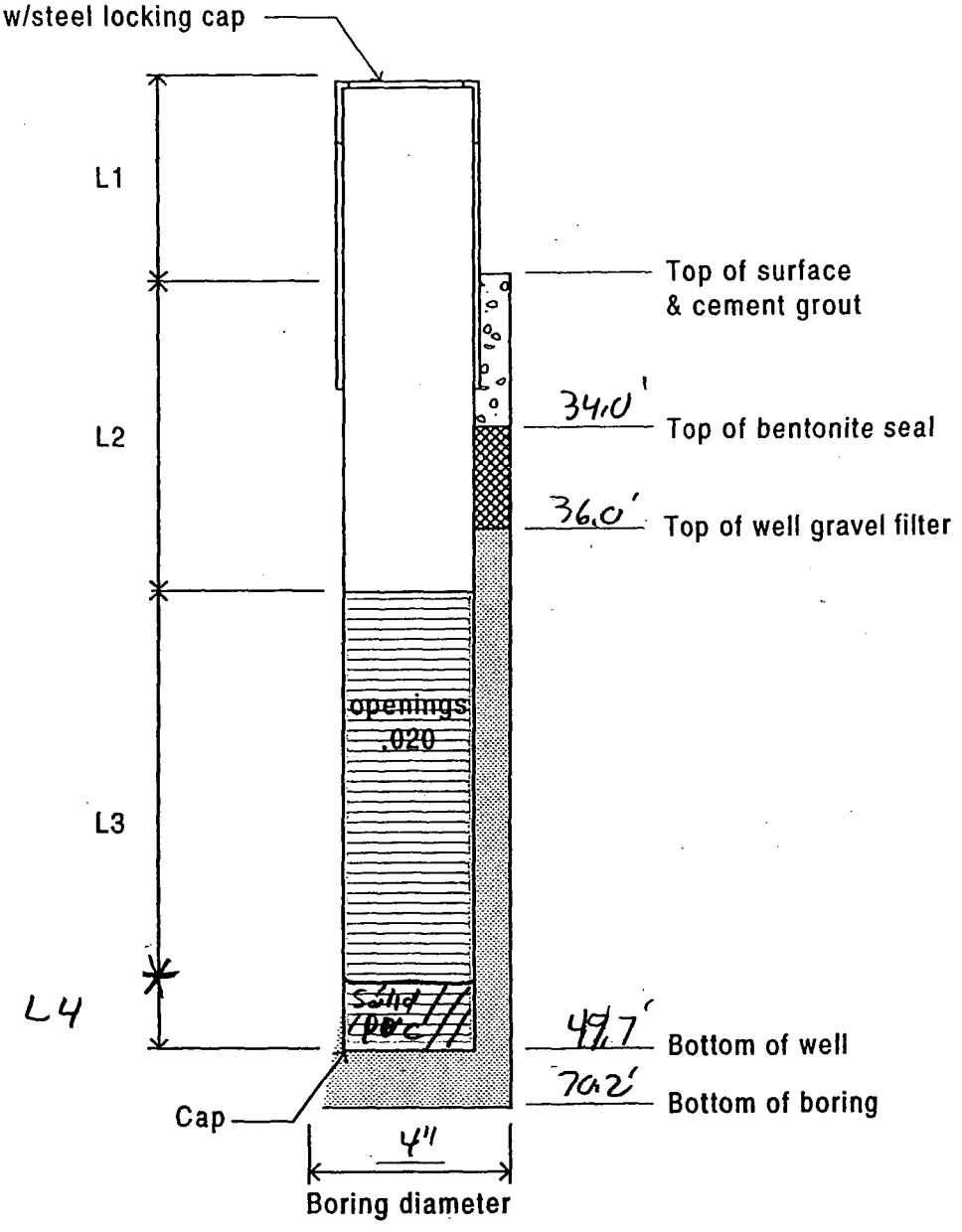
2" dia. PVC pipe w/steel locking cap

L1 = 33'

L2 = 38.0'

L3 = 10.0'

L4 = 2.0'



REMARKS:

Hole Back filled 55.0-70.2 with Hole Plug

" " 47.7-55.0 with Well Gravel

A
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 4

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PDG Site	Craig Drilling	PDMW-5	
LOCATION		**CONTRACT NO.**	**DATE**
East Side of RR car Scale Block 1400 Lot 1		426-99-006	11/9/00

SECTION	CASING SIZE	HOLE TYPE
3 "O.D. 2 3/8 "I.D.	Augers	"A" Monitor

HAMMER	HAMMER
Safety 140 # FALL 30 "	# FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/9/00	3 pm	4.0	while Hand Augering

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE		
	0						0.0
Hand		Hand Auger	Full		Crushed Stone		0.5
Auger				1	Misc Fill - Cinders, Ashes, Gravel, ETC	0.1	
				2	Same	0.1	
	5			3	Same	0.3	
Hollow		5-3		4A	Same		7.5
Stem		2-1	7"	B	Fill - Dig Domaceous Earth (White)	0.1	8.0
Augers		3-1		A	Misc Fill - Cinders Ashes, ETC	0.1	8.5
		1-2	23"	5 B	~~Brown Peat~~	0.1	9.5
	10			C	Fill - Dig Domaceous Earth White	0.1	10.0
		WOH-1		6			
		0-1	14"		Brown Peat 4.7 ppm		12.0
					Bo Dom of Borings		
	15						
					All Samples checked with PID Meter		
					S# 1-3 Saved for Testing S# To Be Tested		
					Remaing Samples Discarded		
	20						
	25						

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

Well Installation Report

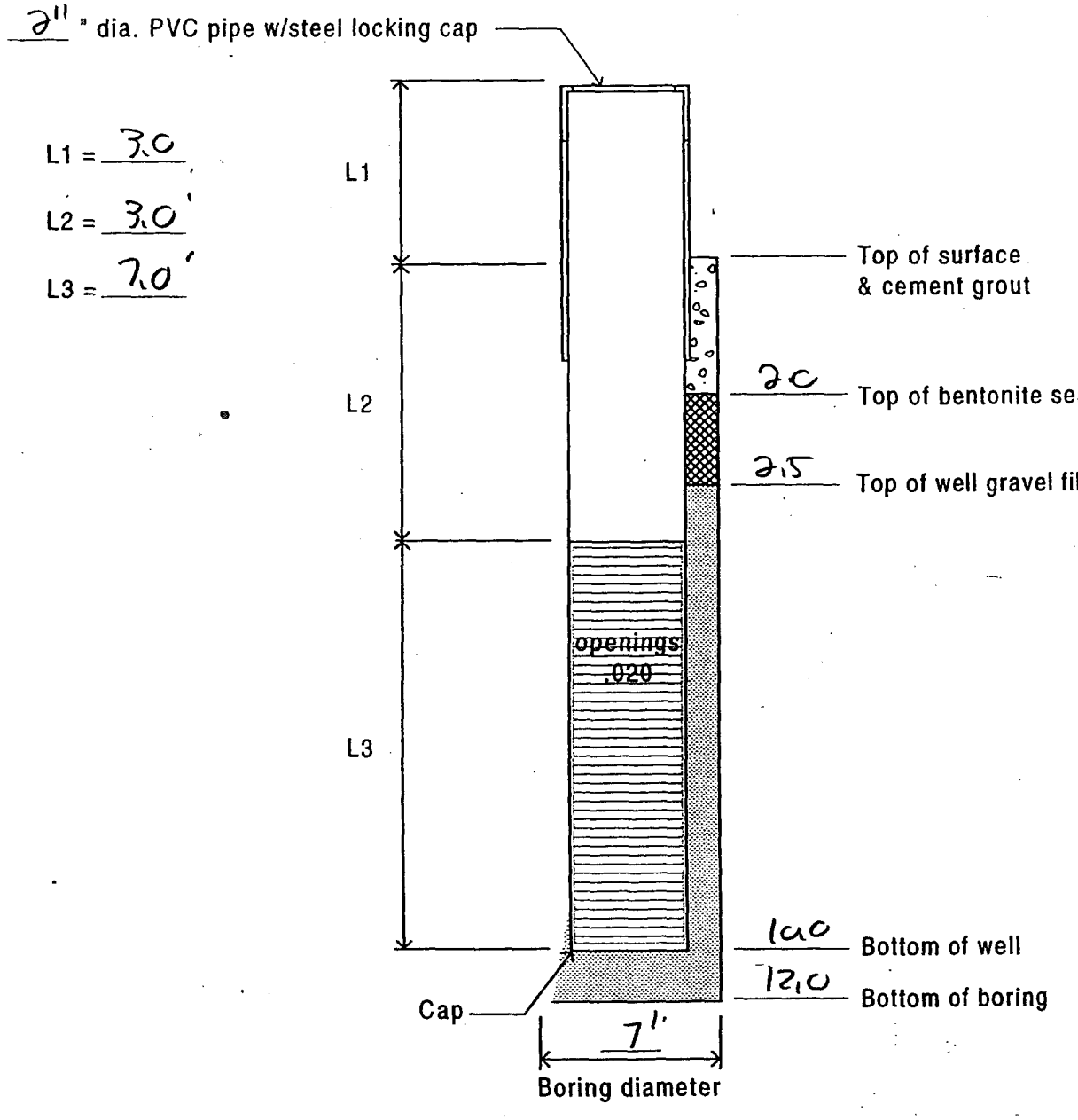
Sheet 2 of 4

PROJECT				CONTRACT NO.
Port Ivory PAG Site				426-99-006
LOCATION				CONTRACTOR
East of RR Car Scale				Craig Drilling
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
PA MW-5	"A" Monitor	D Howe	S Burns	11/9/00

Well Development Report

(NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE					
11/9/00	WATER LEVEL BEFORE 7.1'	WATER LEVEL AFTER 7.4	TAKEN 10	MINUTES AFTER



REMARKS:
Hole Back filled 10-12' with Bentonite

A-547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 4

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P&G Site	Craig Drilling	PA-MW-6	
LOCATION		**CONTRACT NO.**	**DATE**
West side of wood Dumping Ramp Block 1400 Lot 1		476-99-006	11/7/00

SPOON	CASING SIZE	HOLE TYPE
3 "O.D." 2 3/8 "I.D."	Augers	4

HAMMER	HAMMER
140 # FALL 30	# FALL

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7/00	1250	9.0	S# 5

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP. [2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0				0.0
Hand		Hand Augr	Full		Asphalt 0.2
Augr					DGABC 1.5
				1	Misc Fill- Cinders, Coal, Brick, Wood, Sand, ETC
				2	Misc Fill Cinders, Ashes, Gravel, ET
	5			3	Same
Hollow		8-6			
Stem		5-5	18"	4	Misc Fill Cinders, Ashes, ETC 8.5
Augers		2-0			Same
		1-2	24"	5	Fill - Filter Material, (White) Diatomaceous Earth
	10	WOH			
		WOH-1	24"	6	Same
		WOH-WOH			
		1-2	24"	7	Same
		1-2			
	15	2-2	24"	8	Fill - Filter Material, (White), Diatomaceous Earth
		WOH-1			Trace F-M Gray Sand Near Bottom of Sample
		0-1	24"	9	Fill - Filter Material, (White to Gray) Diatomaceous Earth 18.0
		3-3			
		4-4	20"	10	Brown Peat 20.0
	20				Bottom of Boring
					All Samples checked with PID Meter
					S# 1-5 Saved for Environ Testing, Geotech
					Samples on all
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

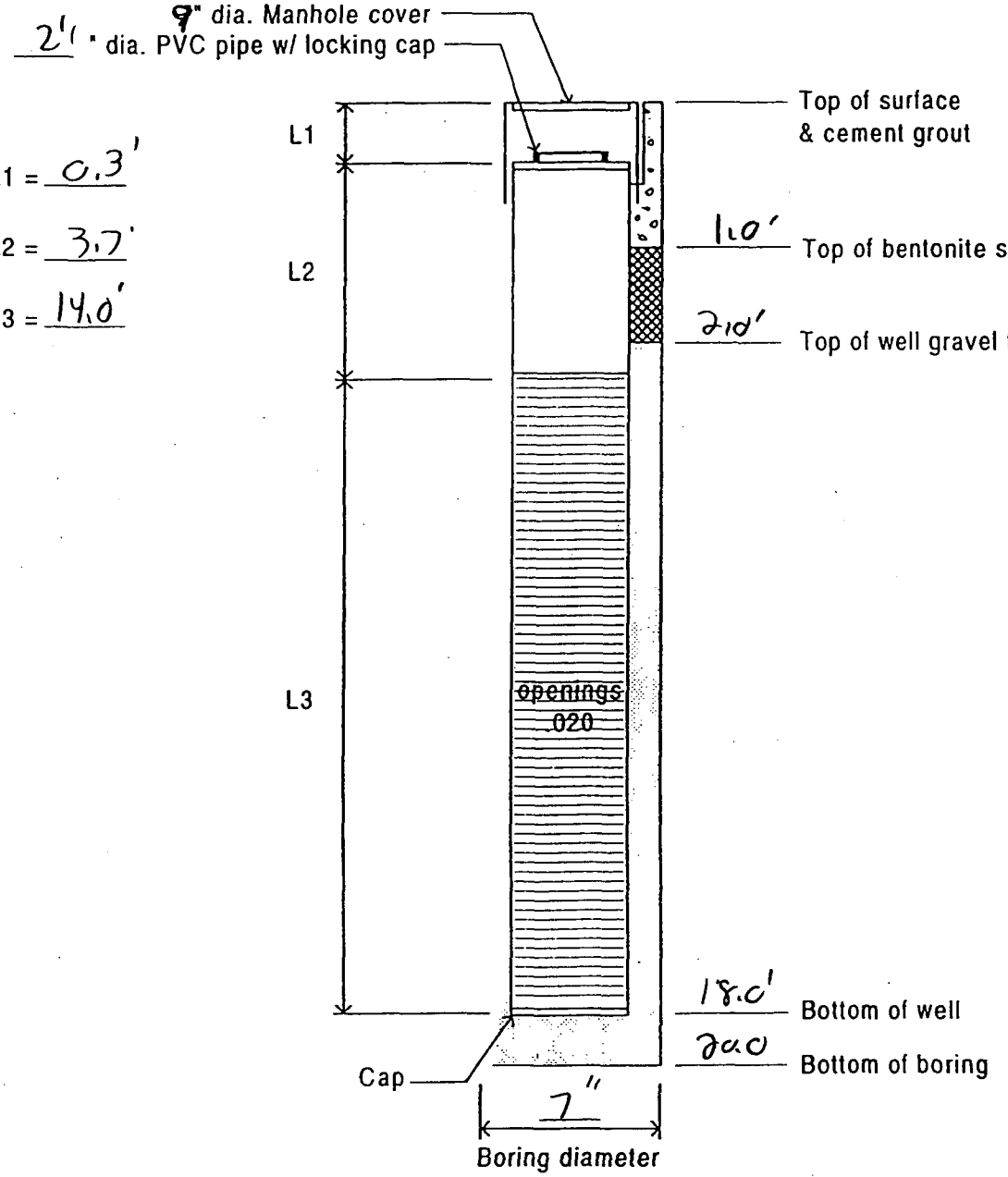
Well Installation Report

Sheet 2 of 4

PROJECT				CONTRACT NO.
Port Ivory PDG Site				426-97-006
LOCATION				CONTRACTOR
West Side of Wood Dumping Ramp Block 140C Lot 1				Crain
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
A MW-6	"A" Manjoy	D Howe	S Burns	11/7/00

Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE					
11/8/00	WATER LEVEL BEFORE 8.0	WATER LEVEL AFTER 8.0	TAKEN 60 MINUTES AFTER



REMARKS:

Hole Back filled 18.0-20.0 with Bentonite

A 547
6-99

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET | OF 1

PROJECT: Port Ivory PAG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PA-MW-6DA	SURFACE ELEV.
LOCATION: West of wood Dumpsey Ramp, ±15' North of PA-MW-6 Block 1400 Lot 1		CONTRACT NO.: 426-99-006	DATE: 11/7/6

SPOON	CASING SIZE	HOLE TYPE
"O.D. "I.D.		1

HAMMER # FALL " | HAMMER # FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/7		Dry	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. NO. [2]	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE	
	0				Bsphalt	0.0
						0.2
					DGABC	2.0
					Misc Fill - Cinders, Orange, Sand ER	2.4
					Bo Dom of Boring	
	5				Obstruction, Flat Concrete Slab	
					No Samples Saved	
	10					
	15					
	20					

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A 547
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 1

PROJECT: Port Ivory PDG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PAMW-6DB	SURFACE ELEV.
LOCATION: West of Wood Dump Ramp, 210 North of PAMW-6 Block 1400 Lot 1		CONTRACT NO.: 426-95-006	DATE: 11/8/00

SPOON "O.D. "I.D.	CASING SIZE	HOLE TYPE: 1
HAMMER # FALL "	HAMMER # FALL "	

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks
11/8		Dry	

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
	0				Asphalt 0.0 – 0.2
					DGABC 0.2 – 1.5
					Misc Fill – Cinders, Bricks, Gravel, Etc 1.5 – 4.6
	5				Bottom of Boring 4.6 obstruction, concrete, Possible Slab
	10				
	15				
	20				
	25				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 5

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PJG Site	Craig Drilling	PA-MW-6D	
LOCATION	Block 140C Lot 1	CONTRACT NO.	DATE
W of wood dumping Ramp ± 15' South of PA MW-6		426-98-006	11/8/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	HW	'A' Monitor

HAMMER	HAMMER
CME # FALL 30 "	# FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Hand Auger	0	Hand Auger			
				—	No Samples Taken for Strata 0-2d See Log for PA MW-6
	5				
HW Casing					
	19				
Drill	20				20.1
Hand Auger with Reverse		WOH-1		1	
		1-2	24"		Brown Peat
		WOH-1		2	
		1-1	20"		Same 24.0
	25	8-8		3	
		8-8	14"		F Gray Sand, Tr Silt
		6-6		4	
		7-9	16"		F Gray Sand, Little Silt
		7-11		5A	F Gray & Dk Gray Sand, Tr Silt 29.0
	30	9-6	14"	5B	F Reddish Brown Sand, Little Silt 30.0
		6-7		6	
		8-9	14"		F Red Brown Sand, Some Silt
		9-10		7	
		11-11	17"		Same
	35	10-13	18"	8	Same

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 2 OF 5

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory PDG Site	Craig Drilling	PA MW-6D	
LOCATION		CONTRACT NO.	DATE
West of Wood Pump Ramp #15' South of PA MW-6 Block 1400 Lot 1		426-99-006	11/8/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	Rovert	4" Mountor

HAMMER	HAMMER
140 # FALL 30" Safety	# FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
11	35	15-16	18"	8	F Red Brown Sand, Some Silt
Ahead		15-20		9	Note! After S#9 Casing advanced from 19'-34'
With		18-18	17"		Same
Rovert		16-20		10	Note after S#10 casing advanced from 34'-39'
	40	21-21	18"		Same
		13-13		11	
		17-19	18"		Same
		16-15		12	
		13-13	17"		Same
		9-9		13	
	45	9-12	19"		F Red Brown Sand, Tr clayey Silt 46.0'
		6-6		14	
		8-8	15"		Gray Clayey Silt, Little F Sand, Tr Gravel 48.0
		5-13		15	
	50	16-25	13"		M-F Red Brown Sand, Little Gravel, Tr clayey Silt
		11-15		16	
		16-21	13"		F Red Brown Sand, Little Silt, Tr Gravel 52.0
		10-14		17	Red Brown clayey Silt, Little F Sand, Tr Gravel
		13-29	16"		Lens of F Brown Sand in middle of Sample
	55	17-17		18	Sand
		12-12	7"		Red Brown clayey Silt, Little M-F Sand, Little Gravel, Tr F Brown
		7-10		19	
		16-32	15"		Red Brown clayey Silt, Little F Sand, Little Gravel
		20-26		20	Red Brown clayey Silt, Little F Sand, Little Gravel,
	60	26-34	2"		Tr Decomposed Red Shale

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 3 OF 4

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Port Ivory P&G Site	Craig Drilling	PANW 6D	
LOCATION		CONTRACT NO.	DATE
Westofwood Dumping Ramp, ±15' South of PANW-6 Block 1400 Lot 1		426-99-006	11/9/00

SPOON	CASING SIZE	HOLE TYPE
2" O.D. 1 3/8" I.D.	Rovert	4 1/4" Mentor

HAMMER	HAMMER
Safety 140 # FALL 30"	# FALL "

DRILLER: S Burns

INSPECTOR: D Houp

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP. NO. [2]	[3] SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
0/11	60	18-14		21	
Hand		15-21	15"		Red Brown clayey SILT, Little F Sand, Little Gravel
Rovert		16-14		22	
		24-19	6"		Same
	65	10-12		23	Red Brown clayey SILT, Little F Sand, Little Decomposed Red Shale, Tr Gravel
		12-100 5"/0" *	18"		66.0 Refusal, See Drilling Report
	70				71.0 Bottom of Boring
	75				
	80				
	85				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

* 300 lb Hammer used

[redacted] 2255
8-98

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

DRILLING REPORT

PROJECT	NAME OF CONTRACTOR	BORING NO.	SHEET 4 OF 5
Port Ivory PTC Site	Craig Drilling	PANW-6D	
LOCATION		CONTRACT NO.	DATE
Elliot wood Dumping Ramp, ± 15' South of PANW-6 Block 140 Lot 1		426-99-006	11 / 9 / 00

TYPE OF DRILL RIG.	COE BARREL	CORE DRILL SIZE	CONDITION OF DIAMOND BIT
Mobile B-58	SINGLE TUBE / (DOUBLE TUBE)	2" wireline I.D.	Good

DEPTH BOTTOM CASING	DEPTH START CORING	DRILLER	INSPECTOR
39.0	66.0	S Burns	D Howe

TIME [1] Start	TIME [1] End	DEPTH	DRILL [2] BEHAVIOR	WASH [3] WATER	[4] ROCK—DESCRIPTION AND REMARKS / LINE LOCATED END OF RUN
		66			66.0
	Mud/FT		Steady	Full Rod	
9					Run # 1 Redshale, Seamy, Fractured
[redacted]0					
6					
[redacted]0		71			71.0
					Bottom of Boring
		76			
		81			
		86			

	RUN NO.	FROM	TO	LENGTH DRILLED	LENGTH RECOVERED	% RECOVERED	NO. PIECES
NOTES ON DRILL RUNS	1	66.0'	71.0'	5.0'	5.0'	100%	14 Pieces & Frags

NOTES: 1 — Record the time to start and end of each foot of drilling
2 — Log drill behavior (i.e., steady, chatter, grinding, etc.)
3 — Log wash water return (i.e., color, loss, blocking, etc.)
4 — Log type, color and condition of rock (i.e., broken, soft, seamy, hard, etc.), log character of wash return solids

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

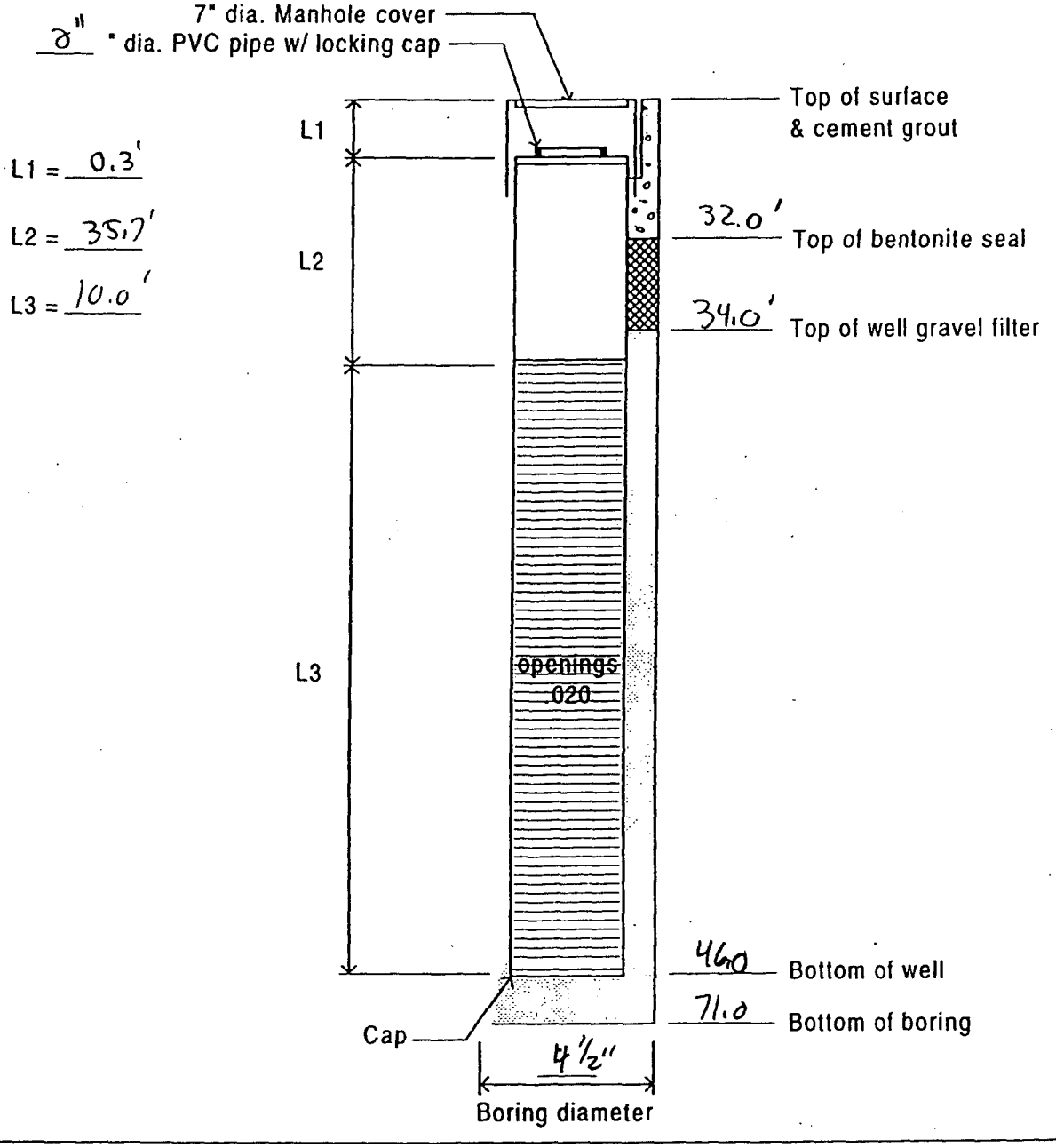
Well Installation Report

Sheet 5 of 5

PROJECT				CONTRACT NO.
Port Ivory PDG Site				42699-006
LOCATION				CONTRACTOR
West of Wood Dumping Ramp #15' South of PBMW-6 Block 1400 Lot 1				Craig
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
PBMW 6D	"B" Monitor	D Howe	S Burns	11/9/00

Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE	WATER LEVEL BEFORE	WATER LEVEL AFTER	TAKEN ____ MINUTES AFTER



REMARKS:

Hole Back filled 50'-71' with Hole plug
" 46'-50 with Well Gravel

A[redacted]
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 1 OF 5

PROJECT: Howland Hook, Port Ivory, PFG Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PA-MW 15D	SURFACE ELEV.
LOCATION: Staked out by Killam Assoc		CONTRACT NO.: 426-99-006	DATE: 11/3/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1 3/8 "I.D.	HW	2

HAMMER	HAMMER
140 # FALL 30 "	# FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE- [1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
HW	0				0.0
Casing					No Samples Taken for STrata 0-16 See log for PA-MW-15
	5				
	10				
	15				
					16.0
Hand		11-12			
with		15-13	14"	1	F Brown Sand, Tr Silt, Tr Gravel
Auger		6-8			
	20	11-13	14"	2	Same
		11-12			
		13-17	18"	3	F Brown Sand, Little Silt, Tr Gravel
		10-12			
		16-18	15"	4	Same
	25	9-10	16"	5	Same

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

A
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 2 OF 5

PROJECT	NAME OF CONTRACTOR	BORING NO.	SURFACE ELEV.
Howland Hook, Port Ivory P&G Site	Craig Drilling	PA-MW 15D	
LOCATION		CONTRACT NO.	DATE
Laid out by Killam Assoc		426-99-006	11/3/00

SPOON	CASING SIZE	HOLE TYPE
2 "O.D. 1⅜ "I.D.	Rivort	
HAMMER Safety 140 # FALL 30 "	HAMMER # FALL "	
DRILLER S Burns		
INSPECTOR D Howe		

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-[1] COV'D	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Drill	25	12-12	16"	5	F Brown Sand, Little Silt, Tr Gravel
Ahead		13-18		6	
With		24-22	15"		Same
Rivort		11-16		7	
	30	12-12	8"		Same 30.0'
		12-11		8	
		13-14	11"		Brown Silt, Little F Sand
		9-11		9	
		13-12	15"		Brown Silt & F Sand 34.0'
	35	10-17		10	
		13-16	18"		F Brown Sand, Some Silt 36.0'
		8-8		11	
		7-6	18"		F Brown Sand, Some Silty Clay
		2-2		12	
	40	3-4	15"		Same
		3-2		13	
		3-4	16"		Same
		4-2		14	
		1-1	19"		Same
	45	3-2		15	
		1-4	24"		Same 46.0
		5-4		16	
		3-4	22"		F Brown Sand, Little Silt 48.0
		3-4		17	M-F Reddish Brown Sand, Little Silt, Tr Red Shale
	50	5-6	23"		1/4" Lens of F Gray Sand, 1/2" Layer of Gray clayey Silt

Note after S#17 Hole Caved in to 40'

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

BORING REPORT

SHEET 3 OF 5

PROJECT: Newbond Hook, Port Ivory P&G Site	NAME OF CONTRACTOR: Craig Drilling	BORING NO.: PA MW-15D	SURFACE ELEV.:
LOCATION: Laid out by Killam Assoc		CONTRACT NO.: 426-99-006	DATE: 11/3/00

SPOON: 2" O.D. 1 3/8" I.D. | CASING SIZE: Rovert | HOLE TYPE: 'D' Monitor

HAMMER: 140 # FALL 30" Safety | HAMMER: # FALL "

DRILLER: S Burns

INSPECTOR: D Howe

GROUND WATER LEVEL

Date	Time	Depth	Remarks

CASING BLOWS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D [1]	SAMP.[2] NO.	[3]SAMPLE DESCRIPTION AND REMARKS — LINE LOCATES CHANGE OF PROFILE
Drill	50	6-9		18 D	F Brown Sand, Little Silt 51.0
Ahead		21-22	20"	18 B	M-F Red Brown Sand, Some clayey Silt, Little Red Shale Gravel 52.0
with		8-3		19	Note: PA-MW-15D Hole cased from 17' to 51'
Rovert		8-10	12"		Red Brown clayey Silt, Little M-F Sand, Little Gravel 54.0
		9-13		20	Red Shale
	55	27-22	18"		Reddish Brown clayey Silt, Little M-F Sand, Tr Decomposed 56.0
		10-15		21	
		23-30	19"		Red Brown Silt, Tr F Sand 58.0
		8-11		22	
	60	19-43	11"		Red Brown Clayey Silt, Some M-F Sand, Tr Gravel, Tr Red Shale 60.0
		10-26		23	
		22-21	11"		M-F Red Brown Sand, Some Silt, Little Gravel, Little Red Shale 62.0
		7-10	11"	24	Decomposed Red Shale, Little M-F Red Brown Sand 63.5
		100/½" 41/5½" 55/6"			Refusal, See Drilling Report
	65				
					68.5
					Bottom of Boring
	70				
	75				

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used
2 — U = undisturbed; A = auger; OER = open end rod; V = vane
3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

PA 2255
6-90

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Construction Division
Materials Engineering Section

DRILLING REPORT

PROJECT	NAME OF CONTRACTOR	BORING NO.	SHEET 4 OF 5
Howland Hook, Port Ivory PDG Site	Craig Drilling	PD MW 150	
LOCATION		CONTRACT NO.	DATE
As Laid out by Killam Assoc		426-99-006	11 / 4 / 00

TYPE OF DRILL RIG.	COE BARREL	CORE DRILL SIZE	CONDITION OF DIAMOND BIT
Mobile B-58	SINGLE TUBE / (DOUBLE TUBE)	2" Wireline I.D.	Good

DEPTH BOTTOM CASING	DEPTH START CORING	DRILLER	INSPECTOR
5.0	63.5	S Burns	D Howe

TIME 1 Start	TIME 1 End	DEPTH	DRILL BEHAVIOR 2	WASH WATER 3	4 ROCK—DESCRIPTION AND REMARKS / LINE LOCATED END OF RUN
		63.5			63.5
7	Mins/Ft		Steady	Full Ret	
10	↓		↓	↓	Run #1 Red Shale, Seamy & Fractured
1					
15	↓		chattering	Blocked up	
13	↓		4	losing water	
		68.5			68.5
					Bottom of Boring
		73.5			
		78.5			
		83.5			

NOTES ON DRILL RUNS	RUN NO.	FROM	TO	LENGTH DRILLED	LENGTH RECOVERED	% RECOVERED	NO. PIECES
	1	63.5'	68.5'	5.0'	3.9'	78%	7 Pieces & Frags

NOTES: 1 — Record the time to start and end of each foot of drilling
2 — Log drill behavior (i.e., steady, chatter, grinding, etc.)
3 — Log wash water return (i.e., color, loss, blocking, etc.)
4 — Log type, color and condition of rock (i.e., broken, soft, seamy, hard, etc.), log character of wash return solids

PORT AUTHORITY OF NY & NJ
Engineering Department - Materials Division

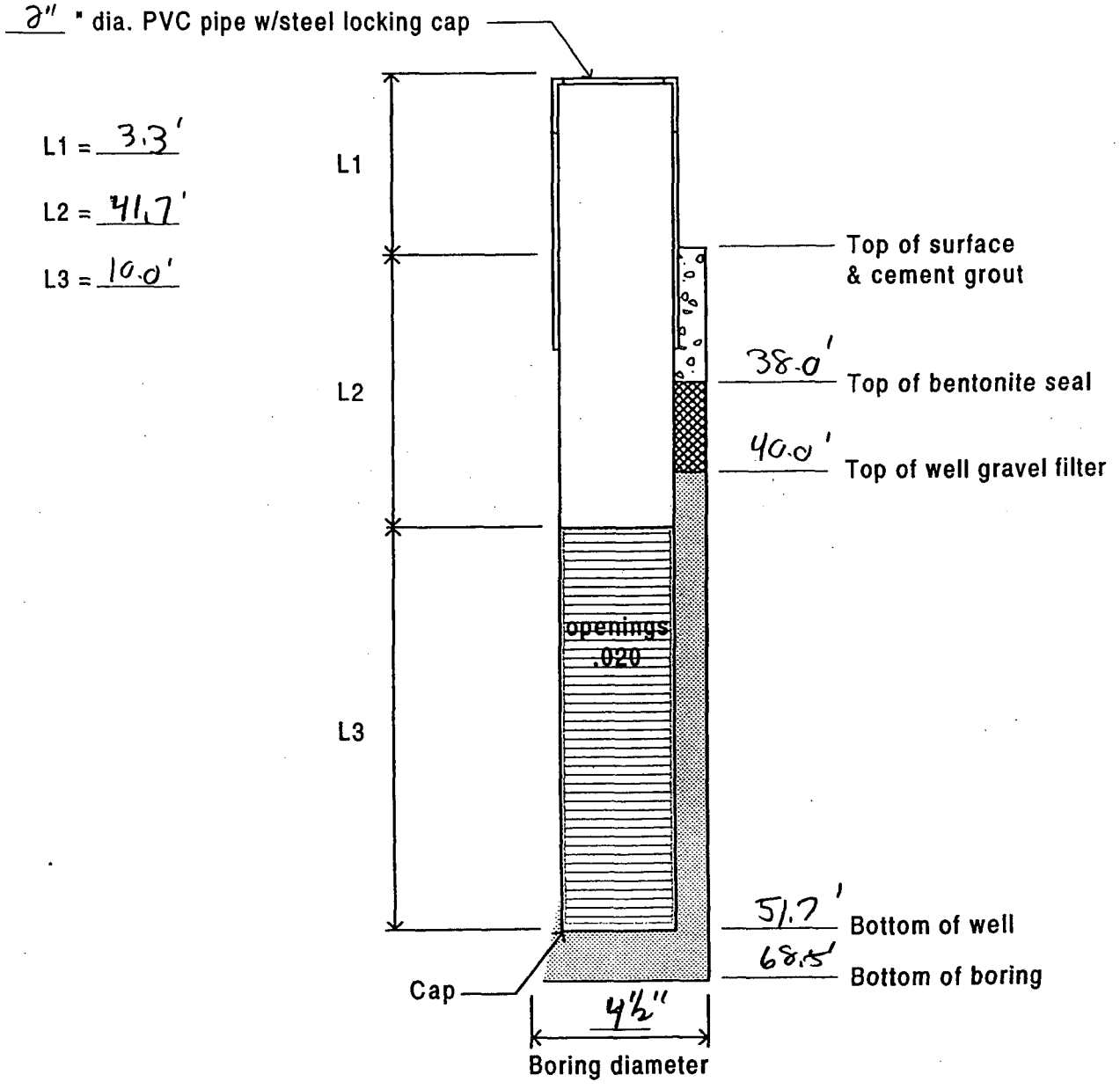
Well Installation Report

Sheet 5 of 5

PROJECT				CONTRACT NO.
Howland Hook, Port Ivory P&G Site				426-99-006
LOCATION				CONTRACTOR
As Laid out by Killam Assoc				Craig Dr. Hng
WELL NO.	WELL TYPE	INSPECTOR	DRILLER	DATE
PA-MW 15D	"B" Monitor	D Howe	S Boring	11/4/00

Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE	WATER LEVEL BEFORE	WATER LEVEL AFTER	TAKEN ____ MINUTES AFTER



REMARKS:
Hole Back Filled 51.7' - 68.5' with Holo Plug

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: MW-EW-3	DATE: 11/24/00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 2" Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD's : LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	13:15	13.41	
POST PURGE:	14:30	15.93	

WELL PURGE

DEPTH OF WELL		17.90	FEET
DEPTH TO WATER		13.41	FEET
DEPTH OF WATER COLUMN		4.49	FEET
FACTOR *	X	0.618	
VOLUME TO BE REMOVED		2.77	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
13:31	8.27	14.9	1461	0.7	330	—
13:45	8.20	15.0	1749	0.8	65	—
13:58	8.23	15.2	1702	0.8	27	—

SAMPLED BY: AZ & DP

COMMENTS: Well went dry after one volume - Very slow recovery

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: MW CS 7	DATE: 11-24-00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 2 Inch
WEATHER CONDITIONS: SUNNY 28°F	STICK-UP DISTANCE: 1.3
STATIC WATER LEVEL	GPS COORD'S: LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	9:18AM	10.96	—
POST PURGE:	10:57AM	13.43	

	DEPTH OF WELL	14.32	FEET
	DEPTH TO WATER	10.96	FEET
	DEPTH OF WATER COLUMN	3.36	FEET
WELL PURGE	FACTOR *	X 0.618	—
	VOLUME TO BE REMOVED	2.08	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
9:22AM	9.45	13.8°	1540	0.8	30	—
9:33AM	9.41	13.6°	1487	0.8	25	—
9:38AM	9.16	14.1°	1413	0.7	23	—
Well evacuated during 3rd Volume.						

SAMPLED BY: K.G. & E.M.

COMMENTS: Well sampled at 9:55AM

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: MW- EW-6	DATE: 11/24/00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 4 Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD'S: LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	9:20	10.20	—
POST PURGE:	10:55AM	11.96	—

WELL PURGE

DEPTH OF WELL		19.96	FEET
DEPTH TO WATER		10.20	FEET
DEPTH OF WATER COLUMN		9.76	FEET
FACTOR *	X	2.471	
VOLUME TO BE REMOVED		24.12	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
9:55	12.75	15.3	3596	2.4	19	—
10:10	12.83	15.9	7910	5.4	8.1	—
10:20	12.80	17.4	7290	4.8	6.9	—
10:25	12.78	17.3	7530	4.9	7.0	—
10:34	12.81	17.1	8600	5.4	5.4	—
10:45	12.82	17.0	7700	5.4	5.5	—

SAMPLED BY: AZ & BP

COMMENTS:

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: PA MW-5	DATE: 11-24-00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 2 Inch
WEATHER CONDITIONS: SUNNY 30°F	STICK-UP DISTANCE: 2.60
STATIC WATER LEVEL GPS COORD'S: LONG.:	LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	1:18 PM	7.03	—
POST PURGE:	1:59 PM	7.16	—

WELL PURGE

DEPTH OF WELL	13.20	FEET
DEPTH TO WATER	7.03	FEET
DEPTH OF WATER COLUMN	6.17	FEET
FACTOR *	X 0.618	—
VOLUME TO BE REMOVED	3.81	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
*1:30 PM	6.47	13.6°	869	0.6	Er 3	—
*1:37 PM	6.87	14.7°	1045	0.5	320	—
1:48 PM	6.76	14.8°	1048	0.5	45	—
1:54 PM	—	—	—	—	18 - After another Volume (4th)	

SAMPLED BY: R.G. / E.M.

COMMENTS: Well evacuated during 2nd Volume → Slowed flow From ~400 ml to 200 ml/min
Recovered & 3rd Volume removed (Flow @ ~200 ml/min)
Good Recovery
Well sampled @ 1:58 PM

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: MW RS-2	DATE: 11-24-00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 4 Inch
WEATHER CONDITIONS: Sunny 28°F	STICK-UP DISTANCE: 0.0
STATIC WATER LEVEL GPS COORD'S: LONG.:	LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	11:24AM	6.02	—
POST PURGE:	12:12PM	6.70	—

WELL PURGE

DEPTH OF WELL		6.02	FEET
DEPTH TO WATER		7.20	FEET
DEPTH OF WATER COLUMN		1.18	FEET
FACTOR *	X	2.471	—
VOLUME TO BE REMOVED		2.92	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
11:30AM	8.56	14.1°	1883	1.0	E-1	—
11:40AM	8.57	16.6°	1844	0.9	270	—
11:47AM	8.54	16.7°	1840	0.9	250	—
					150 *	

SAMPLED BY: R.G. / E.M.

COMMENTS: Well Sampled @ 12:05PM

* Metals Filtered

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: PAM4-1	DATE: 11/28/00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 2" Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD'S : LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	10:54	5.64	—
POST PURGE:	12:34	13.32	—

WELL PURGE

DEPTH OF WELL		15.93	FEET
DEPTH TO WATER		5.64	FEET
DEPTH OF WATER COLUMN		10.29	FEET
FACTOR *	X	0.618	—
VOLUME TO BE REMOVED		6.36	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
11:04	11.85	15.1	1351	0.7	Er 3	—
11:28	12.25	16.5	2270	1.2	Er 3	—
11:45	12.35	16.4	2700	1.4	Er 3	—
11:55	12.35	16.4	2729	1.4	Er 3	—
					Er 3 = Over Range	

SAMPLED BY: AZ & EM

COMMENTS: Well goes dry between volume - slow recovery

Filtered metals

Grey silty water

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: PAMW - 1D	DATE: 11/29/00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: 2" Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD's: LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	1245	12.62	
POST PURGE:	1355	12.67	

WELL PURGE

DEPTH OF WELL	56.75	FEET
DEPTH TO WATER	12.62	FEET
DEPTH OF WATER COLUMN	44.13	FEET
FACTOR * 2"	X 0.618	
VOLUME TO BE REMOVED	27.3	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm) mS	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
13:20	7.06	15.4	4.2	2.2	11.3	
13:32	7.05	15.6	4.8	2.6	9.09	
13:45	7.07	15.6	4.9	2.6	5.6	

12.65

SAMPLED BY:

COMMENTS:

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

* FACTOR

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: PAMW-6	DATE: 11/27/00
CHECK BOX FOR LOWFLOW: ☐ RATE(ML):	CASING DIAMETER: Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD'S : LONG.: LAT.:

		DISTANCE FROM TOP OF PIPE TO:	
	TIME	WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	10:30	7.68	
POST PURGE:	11:55	16.05	

	DEPTH OF WELL	17.80	FEET
	DEPTH TO WATER	7.68	FEET
	DEPTH OF WATER COLUMN	10.12	FEET
WELL PURGE	FACTOR * 2	X 0.618	
	VOLUME TO BE REMOVED	6.25	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm) MS	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
10:30	10.59	19.0	4.54	2.5	ER-3	
11:20	10.95	19.7	4.65	2.5	ER-3	
11:35	11.36	19.7	4.78	2.6	ER-3	

SAMPLED BY: DP + EM

COMMENTS: Sample for metals is filtered, turbidity.

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

[redacted] WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: PAMW-6D	DATE: 11/30/00
CHECK BOX FOR LOWFLOW: ☐ RATE (ML):	CASING DIAMETER: 2 Inch
WEATHER CONDITIONS:	STICK-UP DISTANCE:
STATIC WATER LEVEL	GPS COORD'S: LONG.: LAT.:

	TIME	DISTANCE FROM TOP OF PIPE TO: WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	11:29	8.26	—
POST PURGE:	12:58	13.63	—

WELL PURGE

DEPTH OF WELL		45.85	FEET
DEPTH TO WATER		8.26	FEET
DEPTH OF WATER COLUMN		37.59	FEET
FACTOR *	X	0.618	
VOLUME TO BE REMOVED		23.23	

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm)	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
11:46	7.04	16.2	~~11800~~ 19810	11.8	16	—
11:58	7.10	16.6	22100	13.2	140	—
12:16	7.09	16.8	22200	13.4	39	—
12:29	7.08	16.8	22300	13.5	36	—
~~12~~						

SAMPLED BY: AZ & E.M.

COMMENTS: Slow recovery

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

THE PORT AUTHORITY OF N.Y. & N.J.

MATERIALS ENGINEERING DIVISION

WELL MONITORING DATA SHEET

PROJECT: HH - PORT IVORY P&G SITE	JOB NO: 501-233-295
WELL DESIGNATION: TW2	DATE: 12-2-00
CHECK BOX FOR LOWFLOW: [ ] RATE(ML):	CASING DIAMETER: 2 Inch
WEATHER CONDITIONS: SUNNY 28°F	STICK-UP DISTANCE: 2.0
STATIC WATER LEVEL	GPS COORD'S : LONG.: LAT.:

		DISTANCE FROM TOP OF PIPE TO:	
	TIME	WATER (FEET)	PRODUCT (FEET)
PRE-PURGE:	11:15AM	6.77	—
POST PURGE:	12:20PM	6.85	—

DEPTH OF WELL		11.05	FEET
DEPTH TO WATER		6.77	FEET
DEPTH OF WATER COLUMN		4.28	FEET
FACTOR *	X	0.618	—
VOLUME TO BE REMOVED		2.65	

WELL PURGE

TIME	pH (SU)	TEMP (C)	CONDUCTIVITY (umohs/cm) µS	SALINITY (0/00)	TURBIDITY	DISS. O2 (mg/l)
11:21AM	7.18	16.8°	2950	1.5	762	—
11:30AM	7.28	16.2°	3167	1.7	1,006	—
11:40	7.10	17.1	3138	1.7	735 *	—

SAMPLED BY:

COMMENTS: Sheen Visible in purged volumes

* METALS SAMPLED WITH FILTER

Well sampled at 12:00PM

* FACTOR = 0.618 FOR 2 INCH DIAMETER WELL CASING

Hatch Mott MacDonald

Table 9
Summary of Remedial Investigation Sampling
Operable Unit 1 HHMT - Port Ivory Facility

Initial AOC	SI Location(s)	Description of Issues	Description of Actions and Sampling	Analytical Parameters (Soil)
Potential USTs (UST2, UST5 and USTS6)	**UST-2 (including soil boring locations UST2-1, UST2-1A, UST2-2 and TMW-02)**	Sanborn Maps identified three potential UST areas at Operable Unit 1, UST2, UST5 and UST6. The SI at UST2 also revealed indications of potential petroleum impacts at soil borings UST2-1, UST2-1A,UST2-2 and temporary well location TMW-02. RI actions have not been implemented at UST5 and UST6 has been addressed through remedial actions.	12 soil borings were installed: UST2-1-N1, UST2-1-N2, UST2-1-N3, UST2-1-N4, UST2-1-N5, UST2-1A-E1, UST2-2-S1, UST2-1-W1, UST2-1-W2, UST2-1-W3, UST2-1-W4 and UST2-1-W5. 4 soil samples were submitted for laboratory analysis: UST2-1N5-S1(0-2'), UST2-1N5-S2(2-4'), UST2-1N5-S3(4-6'), UST2-2S1-S2(2-4'), UST2-2S1-S3(4-6'), UST2-1AE-S1(0-2'), UST2-1AE-S2(2-4'), UST2-1W2-S1(0-2'), and UST2-1W2-S2(2-4').	STARS List 8270; STARS List 8260
Wood Yard	**Wood-5**	The SI at the Wood Yard identified potential petroleum impacts at the soil boring Wood-5 location.	4 soil borings were installed: Wood-05-N1, Wood-05-E1, Wood-05-S1, and Wood-05-W1. 11 soil samples were submitted for laboratory analysis: Wood5-E1-S1(0-2'), Wood5-E1-S2(2-4'), Wood5-E1-S3(4-6'), Wood5-N1-S1(0-2'), Wood5-N1-S2(2-4'), Wood5-N1-S3(4-6'), Wood5-W1-S1(0-2'), Wood5-W1-S2(2-4'), Wood5-W1-S3(4-6'), Wood5-S1-S1(0-2'), Wood5-S1-S2(2-4').	STARS List 8270; STARS List 8260
Area A	**A-2 & A-5 (north, south and west)**	Area A is located within both Operable Unit 1 and 2. The SI of Area A identified potential petroleum impacts at several boring locations including A-2 and A-5. Location A-2 and associated RI soil borings are situated within Operable Unit 1. Soil boring A-5 is located in Operable Unit 2. However, RI soil borings installed to the north, south and west are situated within Operable Unit 1.	5 soil borings were installed 1to evaluate location A-2: A-2-W1, A-2-S1, A-2-N1, A-2-E1, A-2-E2, 7 soil samples were collected from A-2 RI borings and submitted to the lab for analysis: A2-W1-S1(0-2'), A2W1-S2(2-4'), A2W1-S3(4-6'), A2S1-S1(0-2'), A2N1-S1(0-2'), A2N1-S2(2-4'), A2N1-S3(4-6') 15 soil borings were installed in Operable Unit 1 to evaluate location A-5: A-5-S5, A-5-S4, A-5-S3, A-5-S2 A-5-S1, A-5-N1, A-5-N2, A-5-N3, A-5-N4, A-5-N5, A-5-W5, A-5-W4, A-5-W3, A-5-W2, and A-5-W1 3 soil samples were collected from A-5 RI borings located in	STARS List 8270; STARS List 8260

Hatch Mott MacDonald

Table 9
Summary of Remedial Investigation Sampling
Operable Unit 1 HHMT - Port Ivory Facility

Initial AOC	SI Location(s)	Description of Issues	Description of Actions and Sampling	Analytical Parameters (Soil)
			Operable Unit 1 and submitted to the lab for analysis: A5W5-S1(0-2'), A5W5-S2(2-4'), and A5W5-S3(4-6').	
Former Structures	**FS-1 (FS-1B)**	Sanborn Maps and aerial photographs revealed the presence of former structures, at various locations throughout Operable Unit 1. The SI identified potential petroleum impacts at the FS-1B loation.	10 soil borings were installed in four directions from FS-1B: FS-1B-S2, FS-1B-S1, FS-1B-E3,FS-1B-E2, FS-1B-E1, FS-1B-N1, FS-1B-N2, FS-1B-W1, FS-1B-W2, and FS-1B-W3. 9 soil samples were submitted for laboratory analysis: FS1BN2-S2(2-4'),FS1BN2-S3(4-6'), FS1BW3-S1(0-2'), FS1BW3-S2(2-4'), FS1BW3-S3(4-6'), FS1BS2-S1(0-2'), FS1BS2-S3(4-6'), FS1BE3-S1 (0-2') and FS1BE3-S4(5-5.5').	STARS List 8270; STARS List 8260
Area B	**B-3**	Area B is located within Operable Unit 2. The SI of Operable Unit B identified potential petroleum impacts at soil boring B-3 location. Soil boring B-3 is located in Operable Unit 2. However, one soil boring installed to the west of B-3 is located within Operable Unit 1.	1 soil boring installed to evaluate location B-3 is located in Operable Unit 1: B-3-W2. No soil sample was collected from the boring because of the close proximity to soil boring GW-14-W4. Please see comments for GW-14.	STARS List 8270; STARS List 8260
Monitoring Wells	**GW-14**	The SI revealed a sheen on the groundwater surface of monitoring well GW-14 which is located in Operable Unit 2. Two RI soil borings installed to the west of GW-14 are located within Operable Unit 1.	2 soil borings installed to evaluate location GW-14 are located in Operable Unit 1: GW-14-W3 and GW-14-W4. 1 soil sample was submitted for laboratory analysis: GW-14-W4.	STARS List 8270; STARS List 8260

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
1.	**UST-2 Area Block 1400**	UST2-1-W1	15' W of UST2	5/22/02	0-2' m-c Grv, dk brn-blk slty Sd, misc. fill (cndrs) 2-3' m-c Grv, dk brn-blk slty Sd, misc. fill (cndrs) 3-4' lt brn-org f-m Sd, f-m Grv 4-5.2' lt brn-org f-m Sd, f-m Grv 5.2-6' dk brn slty Sd, f-m Grv ; strng odor (440 PID) Gw @ 5' bsg	Yes	No
2.	**UST-2 Area Block 1400**	UST2-1-W2	30' W of UST2-1	5/22/02	0-2' m-c Grv, dk brn-blk slty Sd, s cndrs; odor (76 PID) 2-4' m-c Grv, dk brn-blk slty Sd, cndrs; strng odor 123.2 PID) 4-5' m-c Grv, dk brn-blk slty Sd, cndrs Gw @ 5' bsg	Yes	Yes AB 57969-70 5/22/02
3.	**UST-2 Area Block 1400**	UST2-1-W3	45' W of UST-2	5/22/02	0-2' dk brn-blk slty Sd, cndrs, m-c Grv; strng odors (150.6 PID) 2-4' dk brn-blk slty Sd, cndrs, coal; strng odors (150.1 PID) 4-5' dk brn-blk slty Sd, cndrs, m-c Grv Gw @ 4.5'	Yes	No
4.	**UST-2 Area Block 1400**	UST2-1-W4	60' W of UST-2	5/22/02	0-2' dk brn- blk slty Sd, s cndrs, m-c Grv (PID 219.2) 2-4' dk brn-blk slty Sd, cndrs, coal pcs Gw @ 4' bsg	Yes	No
5.	**UST-2 Area Block 1400**	UST2-1-W5	75' W of UST-2	5/22/02	0-2' dk brn-blk slt Sd, m-c Grv, cndrs, brk (PID 417) 2-4' dk brn-blk slty Sd, m-c Grv, cndrs, brk, coal,ash Gw @ 4' bsg	Yes	No
6.	**UST-2 Area Block 1400**	UST2-1-N1	15' N of UST-2	5/22/02	0-2' dk brn-blk slty Sd, m-c Grv; cndrs, coals, brk 2-2.4' dk brn-blk slty Sd, m-c Grv; cndrs, coals, brk 2.4-4' Brn-blk slt Sd, s slag cndrs 4-5' Brn-blk slt Sd, s slag cndrs Gw @ 5'	Yes	No
7.	**UST-2 Area Block 1400**	UST2-1-N2	30' N of UST-2	5/22/02	0-2' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 273.9)	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
					2-3.5' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 263.3) 3.5-4' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk 4-5' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 417) Gw @ 5' bsg		
8.	**UST-2 Area Block 1400**	UST2-1-N3	45' N of UST-2	5/22/02	0-2' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 388.4) 2-4' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 227.9) 4-5' dk brn-blk slty Sd, m-c Grv; cndrs, coal, ash, slag, brk (PID 72.1) Gw @ 5'	Yes	No
9.	**UST-2 Area Block 1400**	UST2-1-N4	60' N of UST-2	5/22/02	0-2' Dk brn-blk slty Sd, m-c Grv (PID 322) 2-2.2' Dk brn-blk slty Sd, m-c Grv (PID 364.1) 2.2-4 red brn Sd, cndrs, coal pcs 4-5' dk brn slty Sd, s cndrs (PID 423.3) Gw @ 5' bsg	Yes	No
10	**UST-2 Area Block 1400**	UST2-1-N5	75' N of UST-2	5/23/02	0-2' dk brn-blk slty Sd, m-c Grv; cndrs, brk, coal pcs 2-3.5' dk brn-blk slty Sd, m-c Grv; cndrs, brk, coal pcs 3.5-4' red brn slty Sd 4-5' red brn slty Sd Gw @ 5' bsg	Yes	Yes AB 58210-12 5/23/02
11	**UST-2 Area Block 1400**	UST2-1A-E1	15' E of UST-2	5/23/02	0-2' dk brn-blk slty Sd; s cndrs, coal, slag, wd 2-4' dk brn-blk slty Sd; s cndrs, coal, slag, wd Gw @ 4' bsg	Yes	Yes AB 58215-6 5/23/02
12	**UST-2 Area Block 1400**	UST2-2-S1	15' S of UST-2	5/23/02	0-2' dk brn-blk slty Sd, c Grv; cndrs, slag, coal pcs, brk 2-4' dk brn-blk slty Sd, s cndrs,slag, coal pcs 4-5' dk brn-blk slty Sd, s cndrs,slag, coal pcs	Yes	Yes AB 58213-4 5/23/02

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
					Gw @ 5' bsg		
13	**Wood-5 Area Block 1400**	Wd-5-E1	10' E of Wood-5	5/23/02	0-0.5' topsoil, wd pcs 0.5-1.3' Sd, t. slt, wd pcs 1.3-2' dk brn-blk slt Sd; f Grv, cndrs, slag 2-4' dk brn-blk slt Sd; f Grv, cndrs, slag 4-6' dk brn-blk slt Sd; f Grv, cndrs, slag Gw @ 6' bsg	Yes	Yes AB 58199-201 5/23/02
14	**Wood-5 Area Block 1400**	Wd-5-N1	15' N of Wood-5	5/23/02	0-0.3' topsoil, wd pcs 0.3' 1.4' lt. Brn Sd 1.4-2' dk brn-blk slt Sd; f Grv, cndrs, slag 2-4' dk brn-blk slt Sd; f Grv, cndrs, slag 4-6' dk brn-blk slt Sd; f Grv, cndrs, slag Gw @ 6' bsg	Yes	Yes AB58202-4 5/23/02
15	**Wood-5 Area Block 1400**	Wd-5-W1	15' W of Wood-5	5/23/02	0-0.2' topsoil wd pcs 0.2-1' lt. Brn Sd 1-1.5' brn Sd 1.5-2' dk brn-blk slt Sd; f Grv, cndrs, slag 2-4' dk brn-blk slt Sd; f Grv, cndrs, slag 4-6' dk brn-blk slt Sd; f Grv, cndrs, slag Gw @ 6' bsg	Yes	Yes AB58205-7 5/23/02
16	**Wood-5 Area Block 1400**	Wd-5-S1	15' S of Wood-5	5/23/02	0-0.2' top soil, wd pcs 0.2-1.3' brn sand 1.3-2' dk brn-blk slt Sd; f Grv, cndrs, slag 2-4' dk brn-blk slt Sd; f Grv, cndrs, slag Gw @ 4'	Yes	Yes AB58208-9
17	**FS-1 Area Block 1400**	FS-1B-E1	15'E of FS-1B *located in Operable Unit 2	6/3/02	0-2' brn. Sdy gravel, t. slit; 2-4'some wd pale green sand, dk brn. m Sd., l Grv. Lit. brn-pale green grease 4-4.5'diatomaceous earth white gray Gw @ 4" bsg	Yes	No
18	**FS-1 Area**	PG-FS-1B-	30'E	6/3/02	0-1' brn Grvly Sd, t. slt.	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
	Block 1400	E2	of FS-1B *located in Operable Unit 2		1-2' dk brn, Grvly Sd, t. slt 2-4' dk brn Grvly Sd, s. slt. Wd chips, slag [PID 5.4] 3.0' tan yellow-pale green Sd/wd 4-5'moist mottled rust/brn/blk slt, diatomaceous earth Gw @ 4.5' 5' diatomaceous earth		
19	**FS-1 Area Block 1400**	PG-FS-1B-E3	45'E of FS-1B *located in Operable Unit 2	6/3/02	0-1' brn Grvly Sd, t. slt 1-2' brn-blk Sdy Grv, slag 2-2.5' brn-blk Sdy Grv, slag 2.5-4' concrete, brk, Sdy Grv 4-5' Concrete, brk, Sdy Grv 5-5.5' concrete, brk, wd, Sdy Grv Gw@ 5.5' bsg	Yes	Yes AB58799-00
20	**FS-1 Area Block 1400**	FS-1B-N1	15' N of FS-1B	6/3/02	0-0.6' brn slt Sd, Grv, brk 0.6-0.9' concrete rbl 0.9-2' blk Sd slt, cndrs, Grv 2-4.5' blk Sd slt, cndrs, Grv 4.5-5' wht diatomaceous earth Gw @ 5' bsg	Yes	No
21	**FS-1 Area Block 1400**	FS-1B-N2	30' N of FS-1B	6/3/02	0-0.7' brn slt Sd, Grv 0.7-1' concrete rbl 1-2' blk slt Sd, cndrs, Grv 2-4' blk slt Sd, cndrs, Grv 4-5' blk slt Sd, cndrs, Grv 5-5.1' diatomaceous earth Gw @ 5' bsg	Yes	Yes AB58958-9
22	**FS-1 Area Block 1400**	FS-1B-S1	15' S of FS-1B	6/3/02	0-0.7' brn Sd slt, Grv, cndrs, brk 0.7-1' asphalt 1-2' blk slt Sd, Grv, brk, cndrs 2-4' blk slt Sd, Grv, brk, coal, cndrs 4-6' blk slt Sd, Grv, brk, coal, cndrs, wd; odor	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
					Gw @ 4' bsg		
23	**FS-1 Area Block 1400**	FS-1B-S2	30' S of FS-1B	6/3/02	0-0.7' brn slt Sd, Grv, brk 0.7-1' asphalt 1-2' blk slt Sd, Grv, brk, coal, cndrs, slag 2-4' blk slt Sd, Grv, brk, coal, cndrs, slag 4-5' blk slt Sd, Grv, brk, coal, cndrs, slag Gw @ 5'	Yes	Yes
24	**FS-1 Area Block 1400**	FS-1B-W1	15'W of FS-1B	6/3/02	0-1' brn grvly Sd, t. slt 1-2' gray Grv. ,Blk cndrs 2-2.5' cndrs 2.5-4' blk Sdy Grv, diatomaceous earth, wd Gw @ 4' bsg	Yes	No
25	**FS-1 Area Block 1400**	FS-1B-W2	30'W of FS-1B	6/3/02	0-1' brn grvly Sd, t. slt 1-2' brn grvly Sd, cndrs 2-3' brn, rust grvly Sd diatomaceous earth 3-5' wd, grvly Sd, lt. Brn diatomaceous earth & Grv. Gw @ 5'bsg.	Yes	No
26	**FS-1 Area Block 1400**	FS-1B-W3	45' W of FS-1B	6/4/02	0-0.1' asphalt 0.1-0.5' Grv sub base 0.5-1' c Grv 1-1.6' blk Sd slt, Grv, cndrs 1.6-2' blk Sd slt, brn-blk cndrs 2-4' blk Sd slt, Grv, brn-blk cndrs Gw @ 4' bsg	Yes	YesAB58960-2
27	**A-2 Area Block 1400**	PG-A-2-E1	15' E of A-2	5/21/01	0-1.3' lt brn f–m Sd 1.3-2' gry brn f Sd, m-c Grv 2-2.2' gry brn f Sd, m-c Grv 2.2-3' f-m Grv, aggregate road base 3-4' slt cl, Grv 4' OBSTRUCTION concrete	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
28	**A-2 Area Block 1400**	PG-A-2-E2	30' E of A-2	5/21/01	0-1.3' lt brn f-m Sd, s Grv 1.3-2' lt brn f-m Sd, wd particles 2-2.5' OBSTRUCTION	Yes	No
29	**A-2 Area Block 1400**	PG-A-2-N1	15' N of A-2	5/21/01	0-0.2' asphalt 0.2-2' lt. Brn f-m Sd, s Grv 2-4' lt. Brn f-m Sd, s Grv 4-6' lt. Brn f-m Sd, s Grv 6-8' lt. Brn f-m Sd, s Grv Gw @ 6' bsg	Yes	Yes AB 57965-7 5/21/02
30	**A-2 Area Block 1400**	PG-A-2-S1	15' S of A-2	5/21/01	0-0.4' lt. Brn f-m Sd, fil 0.4-0.6' asphalt 0.6-2'lt. Brn f-m Sd 2-3.5' lt brn f-m Sd 3.5-4' lt brn f-m Sd, f-m Grv 4-4.2' lt brn f-m Sd, f-m Grv 4.2-4.8' cndrs 4.8-5.0' cndrs, s Grv 5.0-5.2' wht. diatomaceous earth 5.2-8' wht. Diatomaceous earth, s Sd GW @ 3.5' bsg	Yes	Yes AB57963-4 5/21/02
31	**A-2 Area Block 1400**	PG-A-2-W1	15' W of A-2	5/21/01	0-0.2' asphalt 0.2-0.3' gravel 0.3-2' lt. Brn f-m Sd 2-4' lt. Brn f-m Sd 4-6' lt. Brn f-m Sd Gw @ 5' bsg	Yes	Yes AB57960-2 5/21/02
32	**A-5 Area Block 1400**	PG-A-5-S1	15' S of A-5	5/24/02	0-2' brn-dk brn slty Sd, f-m Grv, crushed concrete 2-3.1' brn-dk brn slty Sd, f-m Grv, crushed concrete 3.1-3.7' brk/ cl pipe 3.7-4' lt. Brn Sd 4-4.2' lt. Brn Sd	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
					4.2-5' blk slit Sd,; strng petroleum. odor, Gw @ 5' bsg		
33	**A-5 Area Block 1400**	PG-A-5-S2	30' S of A-5	5/24/02	0-2' brn-dk brn slt Sd, f-m Grv 2-4' brn-dk brn slt Sd, f-m Grv 4-4.1' brn-dk brn slt Sd, f-m Grv 4.1-5' blk slt Sd; sli odor Gw @ 5' bsg	Yes	No
34	**A-5 Area Block 1400**	PG-A-5-S3	45' S of A-5	5/24/02	0-2' brn-dk brn slt Sd, f-m Grv 2-4' dk brn slt Sd, stn soil, cndrs; sli odor 4-5' dk brn slt Sd, stn soil, cndrs; sli odor, sheen on water Gw@ 5' bsg	Yes	No
35	**A-5 Area Block 1400**	PG-A-5-S4	60' S of A-5	5/24/02	0-2' brn-dk brn slt Sd, f-m Grv 2-2.1' brn-dk brn slt Sd, f-m Grv 2.1-2.8' cndrs, Grv 2.8-4' blk slt Sd, s cndrs 4-5' blk slt Sd, s cndrs; sli odor, sli sheen Gw @ 5'	Yes	No
36	**A-5 Area Block 1400**	PG-A-5-S5	75' S of A-5	5/24/02	0-1.9' brn-dk brn slt Sd, f-m Grv 1.9-2'cndrs/slag, diatomaceous earth 2-3' cndrs/slag, diatomaceous earth 3-4' blk slt Sd, s cndrs/slag; no odor 4-5' blk slt Sd, s cndrs/slag; no odor Gw @ 5' bsg	Yes	Yes AB58335-7 5/24/02
37	**A-5 Area Block 1400**	PG-A-5-N1	15' N of A-5	5/28/02	0-2'Grv, dk brn slt Sd 2-2.2' Grv, dk brn slt Sd 2.2-4' cndrs, s slag 4-5' cndrs, s slag Gw @ 5' bsg	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
38	**A-5 Area Block 1400**	PG-A-5-N2	30' N of A-5	5/28/02	0-1.8' Grv, dk brn slt Sd 1.8-2' cndrs, Grv, blk slt Sd 2-3' cndrs, Grv, blk slt Sd; sli odor (18.3 PID) Gw @ 3'	Yes	No
39	**A-5 Area Block 1400**	PG-A-5-N3	45' N of A-5	5/28/02	0-1.9' Grv, dk brn slt Sd 1.9-2' blk slt Sd, cndrs, sli odor 2-3' blk slt Sd, cndrs; odor. Gw @ 3' bsg	Yes	No
40	**A-5 Area Block 1400**	PG-A-5-N4	60' N of A-5	5/28/02	0-1.8' Grv, dk brn slt Sd 1.8-2' blk slt Sd, cndrs; odor 2-3.2' blk slt Sd, cndrs; odor Gw @ 3.2' bsg	Yes	No
41	**A-5 Area Block 1400**	PG-A-5-N5	75'N of A-5	5/28/02	0-2' Grv, dk brn slt Sd 2-3.4' blk cndrs, Grv; no odors, no sheen Gw @ 3.4' bsg	Yes	Yes AB 58483-4 5/28/02
42	**A-5 Area Block 1400**	PG-A-5-W1	15' W of A-5	5/28/02	0-0.8' Grv 0.8-2' dk brn-blk slt Sd 2-2.6' dk brn-blk slt Sd 2.6-3.0' diatomaceous earth; no odor, no sheen Gw @ 3' bsg	Yes	No
43	**A-5 Area Block 1400**	PG-A-5-W2	30' W of A-5	5/28/02	0-0.7' Grv 0.7-2' dk brn-brn slt Sd, Grv 2-3' dk brn-brn slt Sd, Grv, cndrs; sheen on Gw table Gw @ 3' bsg	Yes	No
44	**A-5 Area Block 1400**	PG-A-5-W3	45' W of A-5	5/28/02	0-0.1' Grv 0.1-1' brn Sd, t. slt 1-2' brn-blk slt Sd, Grv 2-3' brn-blk slt Sd, Grv 3-4' diatomaceous earth 4-6' diatomaceous earth; sli odor/sheen Gw @ 3' bsg	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

	Area of Concern	Soil Boring ID	Distance and Direction Reference	Date	Field Observations and PID Readings	Located on Map (Yes/No)	Laboratory Analysis (Yes/No)
45	**A-5 Area Block 1400**	PG-A-5-W4	60' W of A-5	5/28/02	0-0.2' Grv 0.2-2' brn slt Sd, Grv 2-3' brn-blk slt Sd, Grv, cndrs 3-4' diatomaceous earth 4-5' diatomaceous earth 5-6' cndrs; odor, sheen Gw @ 3.5'	Yes	No
46	**A-5 Area Block 1400**	PG-A-5-W5	75' w of A-5	5/29/02	0-1.7' Grv, dk brn slt Sd 1.7-2' diatomaceous earth 2-3' blk-brn slt Sd, cndrs, Grv 3-4' diatomaceous earth 4-5.8' blk slt Sd, cndrs, slag; no odor, no sheen 5.8-6.0' diatomaceous earth Gw @ 4'	Yes	Yes AB 58487-89 5/28/02
47	**GW-14 Area Block 1400**	PG-GW-14-W3	15'W of GW-14	6/20/02	0-4" asphalt 4"-1' blk f Sd slt, 1 ½" Grv 1-2' reddish brn m-f Sd; sheen developed on Gw Gw @ 2.5' bsg	Yes	No
48	**GW-14 Area Block 1400**	PG-GW-14-W4	15'W of GW14-W3	7/19/02	0-4" concrete rbl, cndrs, rebar 4"-1' concrete rbl, cndrs, rebar 1-2' concrete rbl, cndrs 2-3' concrete rbl, cndrs 3-4' blk f Sd, cndrs 4-5' blk-gry Cl Gw @ 4.5' bsg	Yes	Yes
49	**B-3 Area Block 1400**	PG-B-3-W2	45' W of B-3	6/21/02	0-6" asphalts 6"-1' blk f Sd, mix 1" Grv and cndrs 1-2' blk f Sd, mix 1" Grv and cndrs 2-3' blk f Sd, mix 1" Grv and cndrs, sli odors, stn soil, product in Gw Gw @ 3' bsg	Yes	No

Hatch Mott MacDonald

Table 10
Summary RI Field Observations
Operable Unit 1 HHMT- Port Ivory Facility

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**FS1BN2-S2**	**FS1BN2-S3**	**FS1BW3-S1**	**FS1BW3-S2**	**FS1BW3-S3**	**FS1BS2-S1**
Sample Date	6/4/2002	6/4/2002	6/4/2002	6/4/2002	6/4/2002	6/3/2002
Area ID	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B
Sample Depth (feet)	2-4'	4-6'	0-2'	2-4'	4-6'	0-2'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
1,3,5-trimethylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
4-isopropyltoluene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Benzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Ethylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Isopropylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
M&p Xylenes	0.0023U	0.0024U	0.0023U	0.0026U	0.0027U	0.0023U
Methyl-t-butyl ether	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Naphthalene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
N-Butylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
N-Propylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
O-Xylene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Sec-Butylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
t-Butyl Alcohol	0.011U	0.012U	0.011U	0.013U	0.013U	0.011U
T-Butylbenzene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U
Toluene	0.0011U	0.0012U	0.0011U	0.0013U	0.0013U	0.0011U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**FS1BS2-S3**	**FS1BE3-S1***	**FS1BE3-S4***	**A2-W1-S1**	**A2W1-S2**	**A2W1-S3**
Sample Date	6/3/2002	6/3/2002	6/3/2002	5/21/2002	5/21/2002	5/21/2002
Area ID	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-A-2	PG-A-2	PG-A-2
Sample Depth (feet)	4-5'	0-2'	5-5.5'	0-2'	2-4'	4-6'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg.kg
1,2,4-trimethylbenzene	0.0012U	0.0011U	0.0013	0.0011U	0.0011U	0.0012U
1,3,5-trimethylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
4-isopropyltoluene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Benzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Ethylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Isopropylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
M&p Xylenes	0.0025U	0.0022U	0.0023U	0.0022U	0.0023U	0.0023U
Methyl-t-butyl ether	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Naphthalene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
N-Butylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
N-Propylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
O-Xylene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Sec-Butylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
t-Butyl Alcohol	0.012U	0.011U	0.011U	0.011U	0.011U	0.012U
T-Butylbenzene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U
Toluene	0.0012U	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**A2S1-S1**	**A2S1-S2**	**A2N1-S1**	**A2N1-S2**	**A2N1-S3**	**PG5S5-S-1**
Sample Date	5/21/2002	5/21/2002	5/21/2002	5/21/2002	5/21/2002	5/24/2002
Area ID	PG-A-2	PG-A-2	PG-A-2	PG-A-2	PG-A-2	PG-A-5
Sample Depth (feet)	0-2'	2-4'	0-2'	2-4'	4-6'	0-2'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
1,3,5-trimethylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
4-isopropyltoluene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Benzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Ethylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Isopropylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
M&p Xylenes	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U	0.0026U
Methyl-t-butyl ether	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Naphthalene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
N-Butylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
N-Propylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
O-Xylene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Sec-Butylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
t-Butyl Alcohol	0.011U	0.011U	0.011U	0.011U	0.012U	0.013U
T-Butylbenzene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U
Toluene	0.0011U	0.0011U	0.0011U	0.0011U	0.0012U	0.0013U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**PG-5S5-S2**	**PG-5S5-S3**	**A5N5-S1**	**A5N5-S2**	**A5W5-S1**	**A5W5-S2**
Sample Date	5/24/2002	5/24/2002	5/28/2002	5/28/2002	5/29/2002	5/29/2002
Area ID	PG-A-5	PG-A-5	PG-A-5	PG-A-5	PG-A-5	PG-A-5
Sample Depth (feet)	2-4'	4-6'	0-2'	2-3'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
1,3,5-trimethylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
4-isopropyltoluene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Benzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Ethylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Isopropylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
M&p Xylenes	0.0024U	0.0025U	0.0027U	0.0031U	0.0025U	0.0037U
Methyl-t-butyl ether	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Naphthalene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
N-Butylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
N-Propylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
O-Xylene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Sec-Butylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
t-Butyl Alcohol	0.012U	0.013U	0.014U	0.016U	0.012U	0.019U
T-Butylbenzene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U
Toluene	0.0012U	0.0013U	0.0014U	0.0016U	0.0012U	0.0019U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**A5W5-S3**	**UST2-1N5-S1**	**UST2-1N5-S2**	**UST2-1N5-S3**	**UST2-2S1-S2**	**UST2-2S1-S3**
Sample Date	5/29/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002
Area ID	PG-A-5	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2
Sample Depth (feet)	4-6'	0-2'	2-4'	4-5'	2-4'	4-5'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
1,3,5-trimethylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
4-isopropyltoluene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
Benzene	0.0013U	0.0013	0.0012U	0.0012U	0.0013U	0.0014U
Ethylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
Isopropylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
M&p Xylenes	0.0027U	0.0014J	0.0024U	0.0023U	0.0026U	0.0029U
Methyl-t-butyl ether	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
Naphthalene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
N-Butylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
N-Propylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
O-Xylene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
Sec-Butylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
t-Butyl Alcohol	0.013U	0.012U	0.012U	0.012U	0.013U	0.014U
T-Butylbenzene	0.0013U	0.0012U	0.0012U	0.0012U	0.0013U	0.0014U
Toluene	0.0013U	0.0026	0.0012U	0.0012U	0.0013U	0.0014U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**UST2-1AE-S1**	**UST2-1AE-S2**	**UST2-1W2-S1**	**UST2-1W2-S2**	**Wood5-E1-S1**	**Wood5-E1-S2**
Sample Date	5/23/2002	5/23/2002	5/22/2002	5/22/2002	5/23/2002	5/23/2002
Area ID	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2	PG-Wood-5	PG-Wood-5
Sample Depth (feet)	0-2'	2-4'	0-2'	0-2'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mg.kg	mgkg	mg/kg
1,2,4-trimethylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
1,3,5-trimethylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
4-isopropyltoluene	0.0012U	0.0013U	0.0012U	0.0013U	0.0017	0.013
Benzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
Ethylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
Isopropylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
M&p Xylenes	0.0024U	0.0025U	0.0024U	0.0026U	0.0025U	0.0024U
Methyl-t-butyl ether	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
Naphthalene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
N-Butylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
N-Propylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
O-Xylene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
Sec-Butylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
t-Butyl Alcohol	0.012U	0.013U	0.012U	0.013U	0.013U	0.012U
T-Butylbenzene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U
Toluene	0.0012U	0.0013U	0.0012U	0.0013U	0.0012U	0.0012U

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**Wood5-E1-S3**	**Wood5-N1-S1**	**Wood5-N1-S2**	**Wood5-N1-S3**	**Wood5-W1-S1**	**Wood5-W1-S2**
Sample Date	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002
Area ID	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5
Sample Depth (feet)	4-6'	0-2'	2-4'	4-6'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mf/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
1,3,5-trimethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
4-isopropyltoluene	0.0066	0.0011U	0.0012U	0.0013U	0.0016	0.022
Benzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
Ethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
Isopropylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
M&p Xylenes	0.0024U	0.0022U	0.0025U	0.0027U	0.0022U	0.0024U
Methyl-t-butyl ether	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
Naphthalene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
N-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
N-Propylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
O-Xylene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
Sec-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
t-Butyl Alcohol	0.012U	0.011U	0.013U	0.013U	0.011U	0.012U
T-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.0012U
Toluene	0.0012U	0.0011U	0.0012U	0.0013U	0.0011U	0.002

Table 11A
Soil Analytical Results
Volatile Organic Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**Wood5-W1-S3**	**Wood5-S1-S1**	**Wood5-S1-S2**	**GW-14-W4**
Sample Date	5/23/2002	5/23/2002	5/23/2002	7/19/2002
Area ID	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-GW-14
Sample Depth (feet)	4-6'	0-2'	2-4'	4-4.5'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-trimethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
1,3,5-trimethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
4-isopropyltoluene	0.0062	0.0011U	0.004	0.0013U
Benzene	0.0012U	0.0011U	0.0012U	0.0013U
Ethylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
Isopropylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
M&p Xylenes	0.0024U	0.0022U	0.0024U	0.0026U
Methyl-t-butyl ether	0.0012U	0.0011U	0.0012U	0.0013U
Naphthalene	0.0012U	0.0011U	0.0012U	0.0013U
N-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
N-Propylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
O-Xylene	0.0012U	0.0011U	0.0012U	0.0013U
Sec-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
t-Butyl Alcohol	0.012U	0.011U	0.012U	0.013U
T-Butylbenzene	0.0012U	0.0011U	0.0012U	0.0013U
Toluene	0.0012U	0.0011U	0.0012U	0.0013U

* Soil Samples collected from soil borings installed on Operable Unit 2

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**FS1BN2-S2**	**FS1BN2-S3**	**FS1BW3-S1**	**FS1BW3-S2**	**FS1BW3-S3**	**FS1BS2-S1**
Sample Date	6/4/2002	6/4/2002	6/4/2002	6/4/2002	6/4/2002	6/3/2002
Area ID	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-FS-1B
Sample Depth (feet)	2-4'	4-6'	0-2'	2-4'	4-6'	0-2'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.38U	0.4U	0.38U	0.43U	0.44U	0.38U
Anthracene	0.08J	0.4U	0.041J	0.43U	0.44U	0.38U
Benzo(a)anthracene	0.22J	0.4U	0.19J	0.22J	0.12J	0.16J
Benzo(a)pyrene	0.21J	0.4U	0.18J	0.19J	0.089J	0.14J
Benzo(b)fluoranthene	0.29J	0.4U	0.34J	0.25J	0.2J	0.33J
Benzo(g,h,I)perylene	0.19J	0.4U	0.18J	0.15J	0.096J	0.075J
Benzo(k)fluoranthene	0.084J	0.4U	0.09J	0.074J	0.44U	0.12J
Chrysene	0.24J	0.041J	0.28J	0.27J	0.18J	0.31J
Dibenzo(a,h)Anthracene	0.049J	0.4U	0.059J	0.43U	0.44U	0.38U
Fluoranthene	0.41	0.048J	0.25J	0.3J	0.15J	0.2J
Fluorene	0.38U	0.4U	0.045J	0.053J	0.44U	0.38U
Indeno(1,2,3-cd)pyrene	0.15J	0.4U	0.13J	0.12J	0.08J	0.073J
Naphthalene	0.056J	0.4U	0.42	0.15J	0.11J	0.23J
Phenanthrene	0.35J	0.045J	0.42	0.36J	0.2J	0.47
Pyrene	0.4	0.053J	0.26J	0.41J	0.19J	0.31J

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**FS1BS2-S3**	**FS1BE3-S1***	**FS1BE3-S4***	**A2-W1-S1**	**A2W1-S2**	**A2W1-S3**
Sample Date	6/3/2002	6/3/2002	6/3/2002	5/21/2002	5/21/2002	5/21/2002
Area ID	PG-FS-1B	PG-FS-1B	PG-FS-1B	PG-A-2	PG-A-2	PG-A-2
Sample Depth (feet)	4-5'	0-2'	5-5.5'	0-2'	2-4'	4-6'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.054J	0.16J	0.075J	0.37U	0.38U	0.39U
Anthracene	0.21J	0.27J	0.068J	0.37U	0.38U	0.39U
Benzo(a)anthracene	0.78	0.62	0.17J	0.37U	0.38U	0.39U
Benzo(a)pyrene	0.65	0.64	0.19J	0.37U	0.38U	0.39U
Benzo(b)fluoranthene	0.77	0.89	0.31J	0.37U	0.38U	0.39U
Benzo(g,h,I)perylene	0.16J	0.19J	0.072J	0.37U	0.38U	0.39U
Benzo(k)fluoranthene	0.35J	0.44	0.11J	0.37U	0.38U	0.39U
Chrysene	0.91	0.57	0.17J	0.37U	0.38U	0.39U
Dibenzo(a,h)Anthracene	0.41U	0.37U	0.38U	0.37U	0.38U	0.39U
Fluoranthene	0.58	1.4	0.32J	0.057J	0.38U	0.39U
Fluorene	0.07J	0.15J	0.38U	0.37U	0.38U	0.39U
Indeno(1,2,3-cd)pyrene	0.15J	0.21J	0.078J	0.37U	0.38U	0.39U
Naphthalene	0.12J	0.075J	0.14J	0.37U	0.38U	0.39U
Phenanthrene	1.2	1.2	0.27J	0.041J	0.38U	0.39U
Pyrene	1.7	1.2	0.33J	0.056J	0.38U	0.39U

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**A2S1-S1**	**A2S1-S2**	**A2N1-S1**	**A2N1-S2**	**A2N1-S3**	**PG5S5-S-1**
Sample Date	5/21/2002	5/21/2002	5/21/2002	5/21/2002	5/21/2002	5/24/2002
Area ID	PG-A-2	PG-A-2	PG-A-2	PG-A-2	PG-A-2	PG-A-5
Sample Depth (feet)	0-2'	2-4'	0-2'	2-4'	4-6'	0-2'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.38U	0.38U	0.38U	0.38U	0.39U	0.44U
Anthracene	0.38U	0.38U	0.38U	0.38U	0.39U	0.44U
Benzo(a)anthracene	0.38U	0.38U	0.38U	0.38U	0.39U	0.065 J
Benzo(a)pyrene	0.38U	0.38U	0.38U	0.38U	0.39U	0.055 J
Benzo(b)fluoranthene	0.38U	0.38U	0.38U	0.38U	0.39U	0.16 J
Benzo(g,h,I)perylene	0.38U	0.38U	0.38U	0.38U	0.39U	0.047 J
Benzo(k)fluoranthene	0.38U	0.38U	0.38U	0.38U	0.39U	0.055 J
Chrysene	0.38U	0.38U	0.38U	0.38U	0.39U	0.15 J
Dibenzo(a,h)Anthracene	0.38U	0.38U	0.38U	0.38U	0.39U	0.44U
Fluoranthene	0.38U	0.38U	0.38U	0.38U	0.39U	0.099 J
Fluorene	0.38U	0.38U	0.38U	0.38U	0.39U	0.44U
Indeno(1,2,3-cd)pyrene	0.38U	0.38U	0.38U	0.38U	0.39U	0.047 J
Naphthalene	0.38U	0.38U	0.38U	0.38U	0.39U	0.092 J
Phenanthrene	0.38U	0.38U	0.38U	0.38U	0.39U	0.12 J
Pyrene	0.38U	0.38U	0.38U	0.38U	0.39U	0.081 J

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**PG-5S5-S2**	**PG-5S5-S3**	**A5N5-S1**	**A5N5-S2**	**A5W5-S1**	**A5W5-S2**
Sample Date	5/24/2002	5/24/2002	5/28/2002	5/28/2002	5/29/2002	5/29/2002
Area ID	PG-A-5	PG-A-5	PG-A-5	PG-A-5	PG-A-5	PG-A-5
Sample Depth (feet)	2-4'	4-6'	0-2'	2-3'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mf/kg	mg/kg
Acenaphthene	0.41U	0.42U	0.11	0.52U	0.046J	0.62U
Anthracene	0.41U	0.42U	0.23	0.52U	0.16J	0.62U
Benzo(a)anthracene	0.41U	0.42U	0.28	0.1	0.55	0.62U
Benzo(a)pyrene	0.41U	0.42U	0.29	0.074	0.47	0.62U
Benzo(b)fluoranthene	0.41U	0.42U	0.76	0.17	0.8	0.081J
Benzo(g,h,I)perylene	0.41U	0.42U	0.22	0.52U	0.13J	0.62U
Benzo(k)fluoranthene	0.41U	0.42U	0.24	0.067	0.35J	0.62U
Chrysene	0.045J	0.42U	0.4	0.14	0.5	0.62U
Dibenzo(a,h)Anthracene	0.41U	0.42U	0.45U	0.52U	0.41U	0.62U
Fluoranthene	0.41U	0.42U	0.85	6.1	0.97	0.62U
Fluorene	0.41U	0.42U	0.12	0.52U	0.41U	0.62U
Indeno(1,2,3-cd)pyrene	0.41U	0.42U	0.26	0.52U	0.15J	0.62U
Naphthalene	0.41U	0.42U	0.37	0.17	0.15J	0.62U
Phenanthrene	0.057 J	0.055J	0.61	0.52U	0.64	0.62U
Pyrene	0.41U	0.42U	0.52	0.25	0.53	0.62U

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**A5W5-S3**	**UST2-1N5-S1**	**UST2-1N5-S2**	**UST2-1N5-S3**	**UST2-2S1-S2**	**UST2-2S1-S3**
Sample Date	5/29/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002
Area ID	PG-A-5	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2
Sample Depth (feet)	4-6'	0-2'	2-4'	4-5'	2-4'	4-5'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.44U	0.39U	0.4U	0.049J	0.43U	0.48U
Anthracene	0.44U	0.056J	0.40U	0.24J	0.063J	0.48U
Benzo(a)anthracene	0.44U	0.22J	0.1J	0.58	0.16J	0.11J
Benzo(a)pyrene	0.44U	0.18J	0.067J	0.5	0.11J	0.076J
Benzo(b)fluoranthene	0.072J	0.34J	0.15J	0.77	0.21J	0.16J
Benzo(g,h,I)perylene	0.44U	0.054J	0.40U	0.17J	0.43U	0.48U
Benzo(k)fluoranthene	0.44U	0.15J	0.40U	0.21J	0.084J	0.48U
Chrysene	0.087J	0.26J	0.18J	0.55	0.2J	0.27J
Dibenzo(a,h)Anthracene	0.44U	0.39U	0.40U	0.39U	0.43U	0.48U
Fluoranthene	0.052J	0.38J	0.14J	1.3	0.19J	0.1J
Fluorene	0.44U	0.39U	0.40U	0.067J	0.43U	0.48U
Indeno(1,2,3-cd)pyrene	0.44U	0.057J	0.40U	0.18J	0.43U	0.48U
Naphthalene	0.44U	0.8	0.27J	0.39U	0.86	0.19J
Phenanthrene	0.088J	0.68	0.42	1.1	0.76	0.32J
Pyrene	0.44U	0.29J	0.12J	1	0.18J	0.086J

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**UST2-1AE-S1**	**UST2-1AE-S2**	**UST2-1W2-S1**	**UST2-1W2-S2**	**Wood5-E1-S1**	**Wood5-E1-S2**
Sample Date	5/23/2002	5/23/2002	5/22/2002	5/22/2002	5/23/2002	5/23/2002
Area ID	PG-UST-2	PG-UST-2	PG-UST-2	PG-UST-2	PG-Wood-5	PG-Wood-5
Sample Depth (feet)	0-2'	2-4'	0-2'	0-2'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.27J	0.42U	0.40U	0.43U	0.42U	2.0U
Anthracene	0.45	0.049J	0.40U	0.43U	0.42U	2.0U
Benzo(a)anthracene	1.3	0.095J	0.086J	0.1J	0.42U	2.0U
Benzo(a)pyrene	1.8	0.17J	0.075J	0.084J	0.42U	2.0U
Benzo(b)fluoranthene	3.6	0.34J	0.13J	0.15J	0.07J	2.0U
Benzo(g,h,I)perylene	0.94	0.083J	0.054J	0.047J	0.42U	2.0U
Benzo(k)fluoranthene	0.99	0.13J	0.053J	0.43U	0.42U	2.0U
Chrysene	1.9	0.18J	0.097J	0.17J	0.42U	2.0U
Dibenzo(a,h)Anthracene	0.11J	0.42U	0.40U	0.43U	0.42U	2.0U
Fluoranthene	1.5	0.17J	0.098J	0.11J	0.076J	2.0U
Fluorene	0.21J	0.42U	0.40U	0.43U	0.42U	2.0U
Indeno(1,2,3-cd)pyrene	0.99	0.088J	0.041J	0.43U	0.42U	2.0U
Naphthalene	0.2J	0.051J	0.15J	0.37J	0.42U	2.0U
Phenanthrene	1.1	0.16J	0.16J	0.44	0.42U	2.0U
Pyrene	1.3	0.13J	0.082J	0.098J	0.055J	2.0U

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**Wood5-E1-S3**	**Wood5-N1-S1**	**Wood5-N1-S2**	**Wood5-N1-S3**	**Wood5-W1-S1**	**Wood5-W1-S2**
Sample Date	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002	5/23/2002
Area ID	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-Wood-5
Sample Depth (feet)	4-6'	0-2'	2-4'	4-6'	0-2'	2-4'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	0.41U	0.37U	2.1U	0.44U	0.36U	3.9U
Anthracene	0.41U	0.076J	2.1U	0.44U	0.36U	3.9U
Benzo(a)anthracene	0.41U	0.11J	2.1U	0.44U	0.36U	3.9U
Benzo(a)pyrene	0.41U	0.12J	2.1U	0.44U	0.36U	3.9U
Benzo(b)fluoranthene	0.41U	0.4	0.22J	0.44U	0.36U	3.9U
Benzo(g,h,I)perylene	0.41U	0.071J	2.1U	0.44U	0.36U	3.9U
Benzo(k)fluoranthene	0.41U	0.14J	2.1U	0.44U	0.36U	3.9U
Chrysene	0.41U	0.16J	2.1U	0.44U	0.36U	3.9U
Dibenzo(a,h)Anthracene	0.41U	0.37U	2.1U	0.44U	0.36U	3.9U
Fluoranthene	0.41U	0.24J	2.1U	0.44U	0.36U	3.9U
Fluorene	0.41U	0.37U	2.1U	0.44U	0.36U	3.9U
Indeno(1,2,3-cd)pyrene	0.41U	0.081J	2.1U	0.44U	0.36U	3.9U
Naphthalene	0.41U	0.061J	0.38J	0.44U	0.36U	3.9U
Phenanthrene	0.41U	0.16J	0.44J	0.44U	0.36U	3.9U
Pyrene	0.41U	0.3J	2.1U	0.44U	0.36U	3.9U

Table 11B
Soil Analytical Results
PAH Compounds
Operable Unit 1 - HHMT Port Ivory Facility

Location	**Wood5-W1-S3**	**Wood5-S1-S1**	**Wood5-S1-S2**	**GW-14-W4**
Sample Date	5/23/2002	5/23/2002	5/23/2002	7/19/2002
Area ID	PG-Wood-5	PG-Wood-5	PG-Wood-5	PG-GW-14
Sample Depth (feet)	4-6'	0-2'	2-4'	4-4.5'
Concentration	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	2.0U	0.36U	2.0U	0.094J
Anthracene	2.0U	0.36U	2.0U	1.1
Benzo(a)anthracene	2.0U	0.36U	2.0U	0.68
Benzo(a)pyrene	2.0U	0.36U	2.0U	0.49
Benzo(b)fluoranthene	2.0U	0.36U	0.27J	0.85
Benzo(g,h,I)perylene	2.0U	0.36U	2.0U	0.094J
Benzo(k)fluoranthene	2.0U	0.36U	2.0U	0.40J
Chrysene	2.0U	0.36U	0.21J	0.98
Dibenzo(a,h)Anthracene	2.0U	0.36U	2.0U	0.43U
Fluoranthene	2.0U	0.36U	0.25J	1.8
Fluorene	2.0U	0.36U	2.0U	0.15J
Indeno(1,2,3-cd)pyrene	2.0U	0.36U	2.0U	0.11 J
Naphthalene	2.0U	0.36U	0.36J	0.40 J
Phenanthrene	2.0U	0.36U	0.41J	1.3
Pyrene	2.0U	0.36U	0.43J	1.6

* Soil Samples collected from soil borings installed on Operable Unit 2