SOIL MANAGEMENT PLAN

CORN HILL LANDING EXCHANGE BOULEVARD ROCHESTER, NEW YORK

OCTOBER 1999

Prepared For:

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And

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1.0 Introduction

1.1 Purpose

This Soil Management Plan has been developed at the request of the City of Rochester and pertains to the Corn Hill Landing site located on Exchange Boulevard in the City of Rochester, New York (Drawing EN1). It has been developed to assist the City, its developers and designers in planning for development, monitoring, management and characterization of fill materials that will be excavated during site development activities at the subject property.

The subject property (approximately 6 acres) is located adjacent to the west bank of the Genesee River and the east side of Exchange Boulevard in the City of Rochester, New York. The subject property was historically used as a railroad yard and depot for a period of about 100 years. A variety of industrial uses were historically situated adjacent to, or partially on, the subject property. Available records indicate that various industrial buildings, rail lines and petroleum tanks were located adjacent to, or on, the subject property. Historical features have been removed from the subject property. Currently, the northern portion of the property is improved with a municipal parking lot. Immediately south of this parking lot is the Sam Patch Boat Tours parking lot and associated ticket booth. The southern portion of the subject property is improved with a paved pedestrian walkway.

The subject property is proposed for redevelopment with a mixture of commercial and high end residential apartment buildings (Drawings EN2A and EN2B). Four of the six buildings will contain parking areas that will be partially underground (estimated 4 ft). The remaining two buildings are proposed to be slab on grade structures. In addition, recreational amenities involving boating and outdoor activities are proposed. The proposed developer of the site, Mark IV, will retain ownership and complete control over the management of the property. Development will require that some soil/fill materials present on the subject property be excavated and properly managed. In addition, because of the proposed areas in order to minimize the potential for direct exposure to the fill.

New York State Department of Environmental Conservation (DEC) regulations require management of hazardous and non-hazardous solid waste as contained in 6 NYCRR Parts 371-376 and 6 NYCRR Part 360, respectively. Proper management will require that care be taken in planning, monitoring and characterizing the soil/fill materials to confirm their non-hazardous status and allow for proper off-site disposal or relocation on site. This Soil Management Plan provides guidance for planning and performing such monitoring, testing, and management of excavated soil fill materials at the Corn Hill Landing site.

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1.2 Background

Sear-Brown conducted a Phase I Environmental Site Assessment (ESA) of the subject property which was summarized in a report dated May 1999. The Phase I ESA identified several potential environmental concerns associated with the historic uses of the subject property which are summarized in the attached Corrective Action Plan. The potential environmental concerns identified during the Phase I ESA warranted the completion of a Phase II Environmental Investigation on the property. Sear-Brown completed the Phase II Investigation between April and June 1999. The program included the installation of 28 soil gas probes, excavation of 59 test pits, and the installation of 10 monitoring wells and 7 small diameter soil and groundwater monitoring points.

Based on these previous investigations, the following site specific issues were identified:

• *Petroleum-affected Soil and Groundwater:* An area of petroleum-impacted soil and groundwater located near the Sam Patch Boat Tours site. The source was identified as a spill that occurred in 1991 when a backhoe ruptured an abandoned 4,000-gallon fuel oil UST.

Corrective actions with regards to the petroleum-affected soil and groundwater near the Sam Patch Boat Tours site are presented in the attached Corrective Action Plan (CAP). The proposed activities include excavation and off-site disposal of petroleum affected soil, pumping and off-site disposal of petroleum affected groundwater, and the implementation of possible engineering controls and long term monitoring.

• *Site-Wide Fill and Surficial Materials:* Approximately 4 to 6 feet of fill material, consisting of black, cinder-rich fill, with varying amounts of slag, coal dust, sand and gravel were observed across the subject property. These fill materials on various portions of the site exceed DEC recommended soil cleanup objectives for certain metals, and semi-volatile organic compounds (SVOCs). In addition, lubricating oil has been reported in various soil samples although a specific guidance value has not been established by the DEC. The SVOCs reported were generally polycyclic aromatic hydrocarbons (PAHs) that are commonly formed during the incomplete combustion of coal, petroleum products and other organic substances. These types of analytical findings (metals, PAHs and lubricating oil) are typical of former railroad yards. These compounds are relatively insoluble in water and do not generally leach into, or migrate via, groundwater in any appreciable concentrations. However, metals and SVOCs in soils can present inhalation and ingestion concerns via wind-blown dust or direct contact exposure pathways.

Given these findings and the proposed mixed-use redevelopment of the site, this Soil Management Plan was developed to aid the property developers in properly handling and managing the impacted fill materials.

2.0 Development and Pre-Excavation Planning

2.1 Existing Information – Site Wide Fill Materials

Site development and excavation planning will need to incorporate information from the previous investigation and the intended location of proposed development. Drawings EN2A & EN2B present the locations of investigation points performed during the Phase II program. These drawings also present an outline of the conceptual development plans and proposed use of buildings. Those areas that are expected to be landscaped are shaded. The following is a summary of the findings from the past investigation.

Chemical Data

In general, samples of the black cinder-rich fill from a number of test pit and soil boring locations on the subject property contain reported concentrations of various semi-volatile organic compounds, RCRA metals and lubricating oil. A total of 24 soil samples were submitted and analyzed. In addition, low levels of volatile organic compounds were reported (see Tables 1 through 4).

Review of volatile organic soil data (see Tables 1 and 2) revealed the presence of several low-level petroleum based compounds: ethylbenzene, cumene, n-butylbenzene, n-propylbenzene, sec-butylbenzene and naphthalene. The occurrence of these constituents was primarily in the central portion of the site (TP-37, 38, 54 and GP-106). Exceedance of DEC soil guidance values for petroleum compounds were found only at GP-106 in the area of the petroleum spill described in Section 1.2. Three other non-petroleum based volatile organic compounds (VOCs) were also detected at low concentrations, however each of them were below their respective recommended soil cleanup objectives.

Review of SVOC soil data revealed the presence of 15 compounds. Five SVOCs were reported at TP-10, TP-27, TP-45, TP-47 and 48 and MW-7 at concentrations that exceed their respective DEC recommended soil cleanup objectives (see Table 3). The SVOCs reported were primarily polycyclic aromatic hydrocarbons (PAHs) that are commonly formed during the incomplete combustion of coal, petroleum products and other organic substances. Historically, the site had considerable coal storage and coal fragments were observed in fill materials on site.

Lubricating oil was reported in soil at 11 locations and fuel oil #2 was reported at three locations. The estimated concentrations of lubricating oil and fuel oil ranged from 33 to 230 mg/kg and 420 to 970 mg/kg, respectively. There are no soil guidance values that have been published by DEC for lubricating oil or fuel oil concentrations in soil. However, the three locations containing fuel oil, TP-54, MW-8 and GP-106 are proposed for remediation as part of the attached Corrective Action Plan.

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Review of RCRA metals data (see Table 4) revealed four metals (arsenic, lead, mercury and selenium) reported at concentrations that exceed DEC recommended soil cleanup objectives and their naturally occurring Eastern USA background range (see Table 4). The exceedance of one or more metals occurred at a total of 16 locations. It is not unusual to find elevated metals concentrations in cinder-rich fill at former rail yards. In order to further evaluate the potential significance of the elevated metals data, two soil samples (TP-52E and TP-57) were submitted for supplemental analysis involving the Toxicity Characteristic Leaching Procedure (TCLP) for RCRA metals. In particular, the sample from TP-57 was selected due to its proximity to the former Rochester Lead Works and its 2100 mg/kg total lead concentration. Results of the TCLP analyses revealed none of the elevated metals were present in the TCLP extract and, therefore, they did not exceed their respective hazardous waste thresholds. As such, these four metals do not appear to present a hazardous waste site contamination concern.

Soil-Fill Data/Hydrogeology

The site contains a thick layer of relatively permeable but largely unsaturated coarsetextured fill which is underlain by a silt-dominated, low permeability river alluvium. The fill consists of brown to black silty sand with abundant slag, gravel, metal, brick, coal, cinders and ash, and limited wood. The total thickness of fill materials varies widely across the site from 2.5 ft to 16 ft. The estimates of fill thickness are based upon logging of test borings and test pits (see Appendices A and B). As observed in test pits, groundwater typically occurred as seeps at the base of the fill interval. These seeps were more abundant in the northerly portions of the site, especially in gravelly fill deposits (TP-22 and TP-23). Conversely, groundwater infiltration in test pits at the southerly portion of the site occurred more slowly and was more commonly noted at the top of rock. The site is consequently characterized by variable depths to water and apparent variation in hydraulic conductivities.

2.2 Construction/Design Considerations

Past investigations and laboratory analyses at the Corn Hill Landing site have shown that the fill materials present at the site consist of non-hazardous solid waste. However, the possibility that hazardous materials exist on site cannot be ruled out. Any waste material that is excavated during construction or site development must therefore be properly managed. The development process can be simplified by pre-planning how the fill will be handled during necessary excavation and construction.

If hazardous waste is encountered as part of the excavation program, it cannot be replaced on the site and must be properly characterized, managed and disposed of offsite at a permitted facility. Based on a concept plan prepared by The Cavendish Partnership dated June 8, 1999, a preliminary grading plan was prepared by Sear-Brown on September 28, 1999, in conjunction with the adjacent Genesee River wall design which is scheduled to be reconstructed by the NYS Canal Corporation during the year 2000. Working with the dimensioned building footprints provided by Barkstrom & LaCroix Architects dated July 27, 1999 and the site layout, finished grade elevations were established for the buildings and incorporated into the design with the river wall final grading plan. The plans were reviewed with the developer, Mark IV Construction, on September 23, 1999 and were found to be substantially complete for this stage of the project. Site cross sections were then generated along the project work area to ensure the necessary cut and fill areas would be represented in the earthwork quantity.

At the time the preliminary earthwork analysis was prepared, the following assumptions were included:

- the top 6 inches of existing material would be removed to account for uncontaminated topsoil, gravel and pavement material;
- the existing soil may be re-distributed on-site with a combined 8" clean subsoil and 4" topsoil cap or a pavement cap;
- Based on the Phase II Environmental Investigation report, the off-site removal of 300 cubic yards of petroleum impacted soil has been accounted for;
- over-excavation of 3 feet on the building limits, 1 foot for building slab and 15 inches for road pavement and sub-base was accounted for;
- substantial over-excavation of the existing soil was not anticipated; and
- 15% compaction from in situ condition to an in-place fill condition has been incorporated.

Based on the foregoing, the total amount of earthwork for the site work is expected to generate 9,550 cubic yards of cut (including excess cut from the River Wall project) and 5,950 cubic yards of fill. The 5,950 cubic yards of fill material are proposed to be relocated from other portions of the site requiring cuts. Therefore, by subtracting out the 5,950 yards of fill required for the site work from the total cut quantity, it is estimated that 3,600 cubic yards of excess cut may need to be hauled off-site. It should be noted, however, that the final design of the project may affect these earthwork quantities.

As the project progresses, developers and design engineers for the planned development will need to continue to consider that the following construction elements may be affected by soil/fill management and waste characterization:

• Schedules: Scheduling of construction will need to allow for management of waste fill material that is excavated during the course of construction. Should unanticipated materials or conditions be observed during excavation work, sampling may be required. Sampling will entail laboratory analysis which typically takes from several days to several weeks to be completed. Therefore, construction

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schedules and design plans should allow for adequate flexibility for sampling, segregation, and temporary stockpiling of unanticipated materials on-site.

• Fill and Subsurface Variability: Construction schedules should also provide both contingency time and measures to address variability in fill conditions and the presence of shallow groundwater. For example if hazardous conditions are encountered, additional safety measures and use of personal protection gear may be required. Excavation dewatering and work stoppage would also affect construction schedules and costs.

Measures designed to address these situations are described in further detail in Sections 3.0, 4.0 and 5.0.

3.0 Soil-Fill Characterization

3.1 Pre-Construction Sampling

Sufficient data is available at this time that it does not appear necessary to perform additional sampling prior to construction activities. Test pits and soil borings have been performed throughout the property and appear to provide sufficient coverage in anticipation of planned development.

3.2 Pre-Construction Excavation Sampling

As indicated previously, prior to the beginning of construction activities, the petroleum impacted soil/fill in a portion of the property near the Sam Patch Boat Tours will be excavated and the materials will be disposed of off-site. This area has been targeted because of elevated petroleum related VOC and TPH concentrations detected during previous investigations and is discussed in further detail in the CAP. Soil sampling will be conducted during the excavation of this area and samples will be submitted for analysis as specified in the CAP.

3.3 Construction Sampling

Sampling of excavated fill or subsurface materials during construction efforts should be considered if either of the following conditions are encountered:

- If conditions during construction are significantly different than those observed during pre-construction exploration, including unusual odors, or visual observations such as stained soils, drums, containers, etc.
- If concerns such as odors, sheens, or free-product are identified within soil or groundwater.

In these situations, sampling frequency and analyses would vary based on the types and quantities of material encountered. Typical analyses may include ignitability, corrosivity, reactivity, PCBs, and the toxicity characteristic leaching procedure (TCLP).

4.0 Monitoring During Excavation

Monitoring of materials being excavated during construction is generally needed for three purposes:

- Protection of health and safety of site workers during construction;
- To determine that soil-fill materials are consistent with pre-construction characterization; or
- If no pre-construction characterization was performed.

4.1 Health and Safety Monitoring

Past investigations have shown that fill materials will be encountered during construction activities. Based on the historical uses of the subject property, hazardous materials may potentially be encountered. These include materials that could be associated with the fill as well as materials that may be present in groundwater. General groups of chemicals that are associated with the fill and are considered as potentially hazardous materials subject to health and safety planning include:

- Volatile organic compounds these include petroleum derived constituents;
- Semi-volatile organic compounds these include polycyclic aromatic hydrocarbons (PAHs) which commonly result from incomplete combustion or organic matter including fossil fuels, such as coal or fuel oil, and are often found in ash, cinders, soot and coal tar pitch; and
- Heavy Metals four heavy metals including arsenic, lead, mercury, and selenium are present in elevated concentrations in the fill materials.

Health and safety planning should also give consideration to other construction related issues, such as use of heavy equipment, weather conditions, confined space entry, excavation safety, and other construction-related OSHA regulations.

Health and safety planning should be performed prior to construction activities. This should include the preparation of a written Health and Safety Plan (HSP) for construction activities. The HSP would be based on the results of the previous chemical analyses, information specific to the proposed development, specific construction tasks to be completed, and the potential of exposure for site workers.

The use of OSHA-trained hazardous waste site workers during earthwork activities should be considered. Previous investigations show that overall, the potential for worker exposure exists, but is relatively low. However, all contractors and developers involved in earth moving and excavation activities should consider the need for health and safety planning relative to their specific tasks, and planned activities.

4.2 Fill Monitoring

Monitoring of fill and soil excavated during construction should be performed for two reasons:

- To determine that the soil/fill excavated during construction is consistent with the fill encountered during previous investigations; and
- to allow characterization of the non-hazardous or hazardous nature of solid waste excavated in the event that no previous investigation results are available for a specific area.

Monitoring should generally consist of documentation of visible characteristics of the soil/fill excavated including obvious staining, sheens, odors, or other indicators of contamination such as oils, tars or containers. It is recommended that construction monitoring by a trained individual such as an environmental engineer, scientist or geologist, be performed during all earth moving and excavation work.

Several portable monitoring instruments are available to assist in field monitoring of excavated materials. Such instruments are primarily used for detection of volatile organic compounds. Since volatile organics have been detected in the past at the subject property, this instrumentation is appropriate for construction excavation monitoring. Types of instruments available for this purpose include:

- Photoionization detector instruments (PID) these instruments operate by pumping a sample of ambient air into a chamber where the air is ionized using a light source of specific energy (either 10.2, 10.7, or 11.7 eV). Such instruments include HNu's and Microtips.
- Flame ionization detector instruments (FID) these instruments operate on a similar principle as the PIDs, however, ionization is caused by a flame produced by combusting hydrogen. The OVA manufactured by Foxboro is such an instrument.
- Colorimetric tubes these are small glass tubes which contain chemical salts formulated to react with specific volatile and some non-volatile compounds such as heavy metals. A sample of air is drawn through a tube with the use of a hand pump. The presence of the target chemical causes a reaction and a color change to the chemical salts in the tube. The Draeger Tube system is such an instrument.
- Combustible gas meters/gas monitors these instruments are capable of measuring combustible gases such as methane and hydrogen sulfide and would be used during construction activities if large amounts of organic materials such as railroad timbers are encountered and are to remain in place.

These types of instruments are readily available in the Rochester area and can be rented or purchased from several sources. However, these instruments should be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments should be recorded in the field along with visual observations. As long as excavation monitoring shows soil/fill material to be consistent with previous investigations, then the fill should be manageable as determined prior to construction. If conditions are different from those anticipated, then sampling and additional characterization may be necessary.

5.0 Management of Excavated Material

At this time, there is no preferred method for the management of soil/fill excavated during construction activities. In general, it is recommended that non-hazardous soil/fill excavated during foundation work, utility trenching work and other earth moving activities be either managed on-site or hauled off-site for disposal. However, if hazardous wastes are encountered, they cannot be reused on-site and will need to be disposed properly at an off-site location.

5.1 On-Site Management of Excavated Materials

At this time, the conceptual plans for the subject property identify structures, landscaped areas and areas that will be paved with impervious surfaces (Drawings EN2A and EN2B). Based on the preliminary earthwork calculations, it is estimated that $5,950^{\pm}$ cubic yards of non-hazardous soil-fill materials excavated as part of the construction and development of the subject property can be reused on-site for fill. It will be the responsibility of the site developer/owner to prepare site development plans and grading plans that allow for safe placement of the material as backfill or as landscaping fill material.

Wherever the material is ultimately placed, it will have to be covered with soil and vegetation or a structure (driveway, sidewalk, parking area). The objective of placing cover over the excavated material is to prevent routine contact with the soil-fill. Coverage should consist of a minimum of 12 inches of clean soil (8" clean sub soil and 4" topsoil) cover and vegetation, or a substantial barrier consisting of asphalt, concrete or building slab.

Appropriate measures for on-site management of excavated materials will need to include temporarily stockpiling excavated soils and solids, and measures to prevent them from contaminating other materials or migrating off-site. Measures that will need to be incorporated into such plans include:

- Stockpile locations away from storm sewers, downwind property boundaries, and drainage courses;
- Dust suppression techniques, as necessary;
- Placement of stockpiles of petroleum contaminated soils or hazardous materials (e.g. drums, containers, odiferous fill) on 6-mil polyethylene (poly) with perimeter berms; and
- Covering stockpiles of petroleum contaminated soils or hazardous materials (e.g. drums, containers, odiferous fill) with weighted down poly at the end of each day of placement to prevent migration by wind-blown dust or stormwater runoff until final placement and final cover is established.

5.2 Off-Site Disposal of Excavated Materials

Based on preliminary grading plans, an excess $3,600^{\pm}$ cubic yards of soil/fill will be generated during site wide grading activities. Management of these materials will need to include characterization (sampling and laboratory analysis as required by the chosen landfill), management, and off-site transportation and disposal at an approved landfill. If the materials will need to be stockpiled while awaiting off-site hauling, measures similar to the ones presented for on-site soil management should be implemented including stockpiling on plastic and covering the stock pile with weighted down plastic to prevent stormwater runoff and wind-blown dust.

5.3 Flagging System

The City of Rochester has established a procedure for "flagging" property tax account numbers of properties that require special environmental reviews as a result of hazardous waste or substance contamination. The reviews are conducted as referrals to the City's Environmental Quality unit for any permit applications for properties where soil management plans or environmental contingency plans need to be established and followed during construction activities.

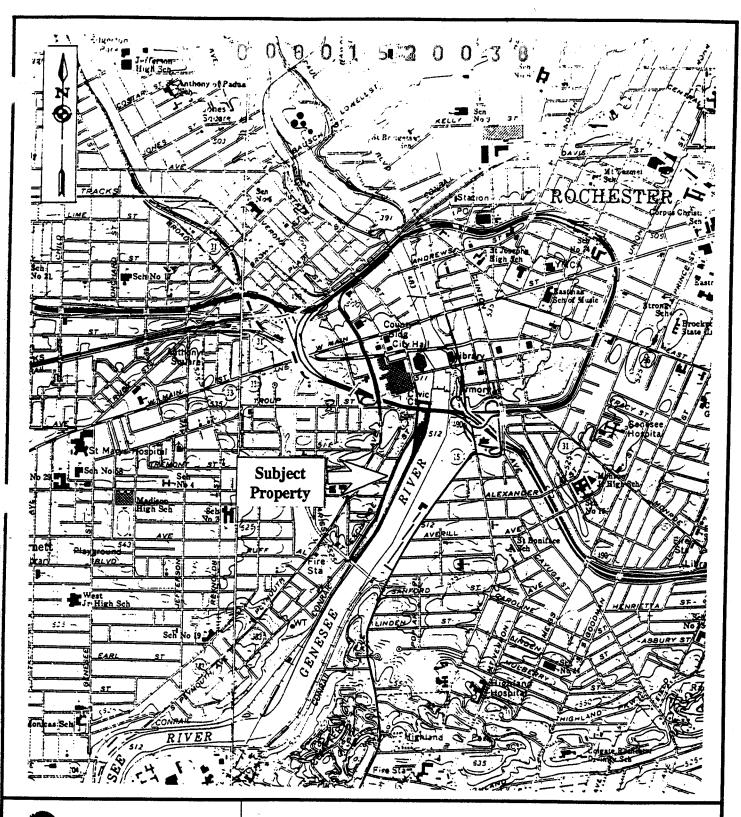
The City will "flag" the parcels of the Corn Hill Landing site that will be subject to such restrictive use. A special notation will be added to the City's mainframe computer database of property information for the following tax account numbers:

121.39-01-005 121.39-01-008 121.47-01-014.1 121.47-01-015 121.47-01-017 121.47-01-019 121.47-01-020 121.47-01-040 121.47-01-041

The notation will appear as a "flag" to City staff that receive various building and site preparation permit applications. The flag will require a referral to the City's Division of Environmental Quality (DEQ) before the application can be processed for approval. DEQ staff will review the permit application for consistency with the Soil Management Plan, limited-use areas and land-use restrictions. IF DEC wishes, a notification to the DEC can be included at the time the permit is reviewed. This system is currently in use for other City hazardous waste sites including the former Emerson Street Landfill.

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DRAWINGS



THE SEAR-BROWN GROUP

85 Metro Park Rochester, NY 14623 (716) 475-1440

Drawing EN1 Corn Hill Landing

Exchange Street City of Rochester, Monroe County, NY

Site Location Map

Scale: 1 in. = 2,000 ft.

TABLES

TABLE 1

SUMMARY OF TCL VOLATILE ORGANIC COMPOUNDS IN SOIL (ug/kg)

Corn Hill Landing

Rochester, NY

						· · · ·			SOIL SAMI	PLES	· · · · · · · · · · · · · · · · · · ·			<u>.</u>						··································
TCL Volatile	RECOMMENDED		1				I						m b • • •			1 mp = -		1 100 -	NULO	
Organic Compounds	SOIL CLEANUP	1	TP-9	TP-10	TP-14, 15 & 16	TP-19 & 20	TP-24	TP-27	TP-32 & 33		TP-37 & 38	1 1	TP-43		TP-49		TP-54	MW-7	1	GP-106
	OBJECTIVE*	(3')	(2')	(4')	(composite)	(composite)	5.0'	2.0'	(composite)	(composite)	(composite)	(composite)	8.0 '	(composite)	2.0 '	4.5 '	10.0 '	10 - 12 '	4-6	6.5 - 7 '
1 1 1 7	800		- 20	-20	(20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
1,1,1-Trichloroethane		<20	<20	<20	<20		<5	<20	<20 <20	<20	<20 <20	<20 <20	<5	<20 <20	<20	<20	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	600 NS	<20	<20	<20	<20	<20		<20	<20 <20	<20 <20	<20 <20	<20 <20	<5	<20 <20	<20	<20	<5	<5	<5	<5
1,1,2-Trichloroethane		<20	<20	<20	<20	<20	<5 <5	<20	<20 <20	<20 <20	<20 <20	<20 <20	<5	<20	<20	<20	<5	<5	<5	<5
1,1-Dichloroethane	200 400	<20	<20	<20	<20	<20		<20		<20 <20	<20 <20	<20	<5	<20	<20	<20	<5	<5	<5	<5
1,1-Dichloroethene		<20	<20	<20	<20	<20	<5		<20		l I	<20 <20	<5	<20 <20	<20	<20	<5	<5	<5	<5
1,2-Dichloroethane	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20		<5 <5		<20	<20	<5	<5	<5	<5
1,2-Dichloroethene, Total	300	<20	<20	<20	• <20	<20	<5	<20	<20	<20	<20	<20	<5 <5	<20 <20	<20	<20	<5	<5	<5	<5
1,2-Dichloropropane	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	-		ŕ	<40	34	<5	<5	<5
2-Butanone (MEK)	300	<40	<40	<40	<40	<40	<10	<40	<40	<40	<40	<40	<10	<40	<40	<40 <40	<10	<10	<10	<10
2-Hexanone	NS	<40	<40	<40	<40	<40	<10	<40	<40	<40	<40	<40	<10	<40	<40	<40 <40	<10	<10 <10	<10	<10
4-Methyl-2-pentanone (MIBK)	1,000	<40	<40	<40	<40	<40	<10	<40	<40	<40	<40	<40	<10	<40	<40		<10 100	<10 40	<10 80	<10 <40
Acetone	200	<40	<40	<40	<40	<40	<10	<40	<40	<40	<40	<40	<10	<40 120	<40	<40				
Benzene	60	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5 <5
Bromodichloromethane	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	
Bromoform	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5 <5
Bromomethane	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	
Carbon disulfide	2,700	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Carbon tetrachloride	600	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Chlorobenzene	1,700	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Chloroethane	1,900	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Chloroform	300	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Chloromethane	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
cis-1,3-Dichloropropene	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Dibromochloromethane	- N/A	· <20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	. <5	<5	<5	<5
Ethyl benzene	5,500	<20	<20	· <20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	` <i><20</i>	<20	<5	<5	<5	110
Methylene chloride	100	<40	<40	<40	<40	<40	<10	<40	<40	<40	<40	<40	<10	<40	<40	<40	<10	<10	<10	<10
Styrene	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Tetrachloroethene	1,400	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	8.9	<5	<5	<5
Toluene	1,500	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
trans-1,3-Dichloropropene	NS	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Trichloroethene	700	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Vinyl chloride	200	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5
Xylenes (Total)	1,200	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<5	<5

1. * = NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum, HWR 94-4046 (Revised).

2. ug/kg = all values expressed in micrograms per kilogram (equivalent to parts per billion).

3. N/A = not available

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4. NS = specific cleanup objective not specified by DEC. However, a general cleanup objective of total VOCs < 10,000 ppm is given in TAGM 4046.

5. **BOLD** = reported concentration is above detection limits.

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0 0 0 0 1 5 2 0 0 4 3

TABLE 2

SUMMARY OF STARS VOLATILE ORGANIC COMPOUNDS IN SOIL (ug/kg)

Corn Hill Landing Rochester, NY

STARS Volatile	RECOMMENDED							ې بۇر.		SC	DIL SAMPL	ES								
Organic Compounds	SOIL CLEANUP	TP-8	TP-9	TP-10	TP-14, 15 & 16	TP-19 & 20	TP-24	TP-27	TP-32 & 33	TP-35 & 36	TP-37 & 38	TP-40 & 46	TP-43	TP-47 & 48	TP-49	TP-54	TP-54	MW-7	MW-8	GP -106
	OBJECTIVE*	(3')	(2')	(4')	(composite)	(composite)	5.0'	2.0'	(composite)	(composite)	(composite)	(composite)	8.0'	(composite)	2.0 '	4.5 '	10.0 '	10 - 12 '	4 - 6 '	6.5 - 7 '
1,2,4-Trimethylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
1,3,5-Trimethylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
4-Isopropyl toluene (Cymene)	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
Benzene	14	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
Ethyl benzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	110
sopropylbenzene (Cumene)	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<u>260</u>
MTBE	1000	<20	<20	<20	• <20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
n-Butylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	28	<5	<5	<20	<u>410</u>
N-Propylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	330
Naphthalene	200	<20	<20	<20	<20	<20	<5	<20	<20	<20	45	<20	<5	<20	<20	<20	<5	<5	<20	<u>1900</u>
sec-Butylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	61	<5	<5	77_	<u>460</u>
ert-Butylbenzene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20
Foluene	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	[:] <20	<20	<5	<5	<20	<20
Xylenes (Total)	100	<20	<20	<20	<20	<20	<5	<20	<20	<20	<20	<20	<5	<20	<20	<20	<5	<5	<20	<20

1. * = NYSDEC. December 1992. Petroleum Contaminated Soil Guidance Policy: STARS Memo #1. Div. Of Construction Management, Bureau of Spill Prevention and Response.

2. ** = estimated values

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St. Z

3. ug/kg = all values expressed in micrograms per kilogram (equivalent to parts per billion).

4. **BOLD** = reported concentration is above detection limits.

5. **BOLD** = reported concentration is above cleanup objectives.

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TABLE 3

SUMMARY OF TCL SEMI-VOLATILE

ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS IN SOIL (mg/kg)

Corn Hill Landing Rochester, NY

	RECOMMENDED									S	OIL SAMPLE	ES											
TCL Semi-Volatile	SOIL CLEANUP	TP-8	TP-9	TP-10	TP-14, 15 & 16	TP-19 & 20	TP-24	TP-27	TP-32 & 33	TP-35 & 36	TP-37 & 38	TP-40 & 46	TP-43	TP-45	TP-45	TP-47 & 48	TP-49	TP-54	TP-54	TP-57	MW-7	MW-8	GP-106
Organic Compounds	OBJECTIVE*	(3')	(2')	(4')	(composite)	(composite)	5.0 '	2.0 '	(composite)	(composite)	(composite)	(composite)	8.0 '	2.0	3.0'	(composite)	2.0'	4.5 '	10.0	2.0'	10 - 12'	4-6'	6.5 - 7 '
· · · · · · · · · · · · · · · · · · ·	I				<u> </u>						<u></u>									1			
1,2,4-Trichlorobenzene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	< 0.5	<0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<2	<1	<0.2
1,2-Dichlorobenzene	NS	<0.2	<0.2	<2	<0.2	< 0.2	<0.2	<0.2	<0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	<2	<1	<0.2
1,3-Dichlorobenzene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<2	<1	<0.3
1,4-Dichlorobenzene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.4
2,4,5-Trichlorophenol	0.1	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2,4,6-Trichlorophenol	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2,4-Dichlorophenol	0.4	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2,4-Dimethylphenol	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2,4-Dinitrophenol	0.200 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2,4-Dinitrotoluene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
2,6-Dinitrotoluene	1.0	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
2-Chloronaphthalene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
2-Chlorophenol	0.8	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2-Methyl-4,6-dinitrophenol	NS	<0.4	<0.4	<4	<0.4	<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4	<2	<2
2-Methylnaphthalene	36.4	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.86	<0.5	<0.5	<2	<1	5.5
2-Methylphenol (o-Cresol)	0.100 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
2-Nitroaniline	0.430 or MDL	<0.4	<0.4	<4	<0.4	<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><4</td><td><2</td><td><0.4</td></i<>	<1	<1	<1	<1	<1	<4	<2	<0.4
2-Nitrophenol (o-Nitrophenol)	0.330 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
3,3'-Dichlorobenzidine	N/A	<0.4	<0.4	<4	<0.4	<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4	<2	<0.4
3-Nitroaniline	0.500 or MDL	<0.4	<0.4	<4	<0.4	<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4	<2	<0.4
4-Bromophenyl-phenylether	NS 0.240 and (D)	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<2	<1	<0.2
4-Chloro-3-methylphenol 4-Chloroaniline	0.240 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<2	<1	<1
	0.220 or MDL	<0.2	<0.2	<2	<0.2	<0.2	< 0.2	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<2	<1	<0.2
4-Chlorophenyl-phenylether	NS 0.9≁	<0.2	<0.2	<2	<0.2 <0.2	<0.2 <0.2	< 0.2	< 0.2	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<2 <2	<1 <1	<1 <1
4-Methylphenol (p-Cresol) 4-Nitroaniline	NS	<0.2	< 0.2	<2 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<0.2	<0.2 <0.4	< 0.2	< 0.2	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5	<0.5	<0.5	<0.5 <1	<0.5	<2 <4	<1 <2	<1 <2
4-Nitrophenol	0.100 or MDL	<0.4 <0.2	<0.4 <0.2	<2	<0.4	<0.4 <0.2	<0.4 <0.2	<0.4 <0.2	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	< 0.5	<0.5	< 0.5	< 0.5	<0.5	< 0.5	<4 <2	<2 <1	<1
Acenaphthene	50						1		< 0.5	<0.5	<0.5 <0.5			2.0	< 0.5	< 0.5	<0.5	0.90	< 0.5	<0.5	<2	<1 <1	0.46
Acenaphthylene	41.0	<0.2	< 0.2	<2 <2	<0.2 <0.2	<0.2 <0.2	< 0.2	< 0.2	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5	< 0.5	< 0.5	<0.5	<0.5	< 0.5	<0.5	<2 <2	<1 <1	<0.2
Actinghingitie	50	< 0.2	<0.2				< 0.2	< 0.2	< 0.5			< 0.5	< 0.5	4.1	< 0.5	< 0.5	<0.5	0.75	< 0.5	< 0.5	<2 <2	<1 <1	0.49
	••	<0.2	< 0.2	<2 2 5	<0.2	<0.2	< 0.2	< 0.2		< 0.5	<0.5												1 1
Benzo(a)anthracene	0.224 or MDL	<0.2	<0.2	<u>2.5</u>	<0.2	<0.2	<0.2	1.1	< 0.5	<0.5	< 0.5	< 0.5	<0.5	<u>7.3</u>	< 0.5	<u>2.2</u>	< 0.5	<0.5	< 0.5	< 0.5	<2	<1	<0.2
Benzo(a)pyrene	0.061 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<u>0.61</u>	<0.5	<0.5	<0.5	<0.5	<0.5	<u>4.7</u>	<0.5	<u>1.5</u>	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Benzo(b)fluoranthene	1.1	<0.2	<0.2	<u>3.3</u>	<0.2	<0.2	<0.2	0.96	<0.5	<0.5	<0.5	<0.5	<0.5	<u>4.9</u>	<0.5	<u>2.6</u>	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Benzo(ghi)perylene	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Benzo(k)fluoranthene	1.1	<0.2	<0.2	<2	<0.2	<0.2	<0.2	0.79	<0.5	<0.5	<0.5	<0.5	<0.5	<u>5.5</u>	<0.5	<u>1.3</u>	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
bis(2-Chloroethoxy)methane	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
bis(2-Chloroethyl)ether	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
bis(2-Chloroisopropyl)ether	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
bis(2-Ethylhexyl)phthalate	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
Butylbenzylphthalate	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
Carbazole	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
Chrysene	0.4	<0.2	<0.2	<u>2.4</u>	<0.2	<0.2	<0.2	<u>1.3</u>	<0.5	<0.5	<u>0.64</u>	<0.5	<0.5	<u>5.4</u>	<0.5 0	0 2.1	<0.5	<0.5	<0.5	<0.5	<u>2.4</u>	<1	<0.2
								-						7 7	U	2 0		0 (U 0	0		<1	<1

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TABLE 3

SUMMARY OF TCL SEMI-VOLATILE

ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS IN SOIL (mg/kg)

Corn Hill Landing Rochester, NY

	RECOMMENDED									S	OIL SAMPLE	ES	-		-								
TCL Semi-Volatile	SOIL CLEANUP	TP-8	TP-9	TP-10	TP-14, 15 & 16	TP-19 & 20	TP-24	TP-27	TP-32 & 33	TP-35 & 36	TP-37 & 38	TP-40 & 46	TP-43	TP-45	TP-45	TP-47 & 48	TP-49	TP-54	TP-54	TP-57	MW-7	MW-8	GP-106
Organic Compounds	OBJECTIVE*	(3')	(2')	(4')	(composite)	(composite)	5.0 '	2.0 '	(composite)	(composite)	(composite)	(composite)	8.0 '	2.0'	3.0'	(composite)	2.0 '	4.5 '	10.0 '	2.0 '	10 - 12 '	4 - 6 '	6.5 - 7 '
																		· ·					1
Di-n-butylphthalate	8.1	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Di-n-octylphthalate	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Dibenzo(a,h)anthracene	0.014 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<1
Dibenzofuran	6.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Diethylphthalate	7.1	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	[°] <2	<1	<0.2
Dimethylphthalate	2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Fluoranthene	50	<0.2	0.24	3.5	<0.2	0.24	<0.2	1.8	<0.5	<0.5	0.65	<0.5	<0.5	12	<0.5	3.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Fluorene	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<2	<1	1.1
Hexachlorobenzene	0.41	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Hexachlorobutadiene	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Hexachlorocyclopentadiene	NS	<0.2	<0.2	<2	< 0.2	<0.2	<0.2	<0.2	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	, <0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Hexachloroethane	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Indeno(1,2,3-c,d)pyrene	3.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
Isophorone	4.40	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
N-Nitroso-di-n-propylamine	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<2	<1	<0.2
N-Nitrosodiphenylamine	NS	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<2	<1	<0.2
Naphthalene	13.0	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	0.64	<0.5	<0.5	<2	<1	1.9
Nitrobenzene	0.200 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	< 0.5	<2	<1	<0.2
Pentachlorophenol	1.0 or MDL	<0.4	<0.4	<4	<0.4	<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4	<2	<2
Phenanthrene	50	<0.2	<0.2	<2	<0.2	<0.2	<0.2	0.76	< 0.5	<0.5	0.55	0.68	< 0.5	16	<0.5	2.2	< 0.5	2.6	<0.5	<0.5	<2	<1	1.7
Phenol 7	0.03 or MDL	<0.2	<0.2	<2	<0.2	<0.2	<0.2	< 0.2	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	<2	<1	<1
Pyrene with	50	<0.2	0.23	3.4	<0.2	0.22	<0.2	1.6	<0.5	0.51	0.60	0.62	<0.5	13	<0.5	4.0	<0.5	0.67	<0.5	<0.5	<2	- <1	<0.2
1												-											
TPH (mg/l)																							
Kerosene	NS -	<20	<20	<200	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Lubricating oil	NS	85	NP	230	33	NP	NP	130	68	66	68	110	NP	110	NP	140	NP	NP	NP	34	NP	NP	NP
Fuel oil #2	NS	<20	<20	<200	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	970	<20	<20	<20	420	570
Gasoline	NS	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

2

1. * = NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum, HWR 94-4046 (Revised).

¹ 2. mg/kg = all values expressed in milligrams per kilogram (equivalent to parts per million).

3. NS = specific cleanup objective not specified by DEC.

: 4. MDL = method detection limit.

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• 5. **BOLD** = reported concentration is above detection limits.

6. **BOLD** = reported concentration is above soil guidance values.

7. NA = samples from MW-7 and MW-8 not analyzed for acid extractables.

TABLE 4 SUMMARY OF RCRA METALS IN SOIL (mg\kg)

RCRA	DEC RECOMMENDED	EASTERN USA	EP/ SOIL SCR									SAMPLES						· · · · · · · · · · · · · · · · · · ·			
METALS	SOIL CLEANUP	BACKGROUND	GUIDANCE	VALUE ⁽²⁾	TP-8	TP-9	TP-10	TP-14,15 & 16	TP-19 & 20	TP-24	TP-27	TP-32,33	TP-35,36	TP-37,38	TP-40,46	TP-45	TP-45	TP-47,48	TP-52 E	TP-52 W	TP-57
	OBJECTIVE ⁽¹⁾	RANGE ⁽¹⁾	Ingestion	Inhalation	3'	2'	4'	(composite)	(composite)	5.0'	2.0'	(composite)	(composite)	(composite)	(composite)	2.0'	3.0'	(composite)			2.0'
											-		· · ·						Î		
Arsenic	7.5 or SB	3 - 12	0	750	9.4	<u>18</u>	<u>38</u>	<u>25</u>	2.2	7.6	<u>18</u>	5.2	<u>26</u>	<u>23</u>	<u>19</u>	22	8.2	<u>20</u>	<u>18</u>	14	19 /
Barium	300 or SB	15 - 600	5,500	690,000	27	140	100	72	51	48	57	52	69	- 57	80	110	44	59	82	85	73
Cadmium	1 / 10 *	0.1 - 1	78	1800	<1	<0.9	<0.9	<0.8	<0.8	<0.9	<0.9	<0.6	<1	<0.6	<1	<1	<0.8	<1	<0.9	<0.9	4.1
Chromium	10 / 50 *	1.5 - 40	390	270	39	7.7	21	9.5	6.0	8.7	8.2	4.7	9.2	7.4	10	10	5.0	8.3	9.1	8.2	19
Lead	SB	200 - 500 (urban)	400	400	25	82	<u>590</u>	. 190	140	34	100	120	160	140	220	300	15	170	230	100	<u>2100</u>
Mercury	0.1	0.001 - 0.2	23	10	<0.1	<0.1	<0.1	<u>0.33</u>	<u>0.79</u>	<0.1	<0.1	<u>0.21</u>	0.16	<u>0.63</u>	0.16	<u>0.23</u>	<0.1	<u>0.49</u>	<0.1	0.16	<0.1
Selenium	2 or SB	0.1 - 3.9	390	NA	<u>12</u>	<u>8.6</u>	<u>8.4</u>	11	<u>8.4</u>	<0.9	<u>5.5</u>	3.0	<u>9.3</u>	<u>4.1</u>	<u>6.8</u>	<u>7.4</u>	<u>4.1</u>	<u>7.9</u>	<u>6.3</u>	<u>5.9</u>	<u>8.0</u>
Silver	SB	NA	390	NA	<1	<0.9	<0.9	<0.8	<0.8	<0.9	<0.9	<0.6	<1	56	<1	<1	<0.8	<1	<0.9	<0.9	<1

1

Notes:

11

1. NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels,

Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum HWR 94-4046 (Revised).

 USEPA. July 1996. Soil Screening Guidance: Fact Sheet. Office of Solid Waste and Emergency Response. Publication 9355.4-14FSA, EPA/540/F-95/041, PB96-963501.

3. mg/kg = all values expressed in milligrams per kilogram (equivalent to parts per million).

4. SB = site background.

5. NA = not available.

6. * = existing and proposed guidance values.

7. **BOLD** = reported concentration is above DEC soil cleanup objective and eastern USA background range.

RBCA - Tier & - Surface Soil Residential - As = 10 ppm Commercial - As = 28 ppm Se > Restorall

L:\1515506\jobs\data\cornhill2.xls\metals

APPENDIX A

Project: Corn Hill Landing Project No.: 15155.06 Date: April 29, 1999

TEST PIT / TEST TRENCH SEGMENT LOG

Test Hole N	No:	TP-1	Inspected By:	P. Smi	th, J. Ig	gnaszak	We	ather/Temp:	Sunny, 50°
Location/St	tation:	Corn Hill La	nding N:			E:		Elev.:	
Equipment	Used:	PC-150LC	Contractor:	Noth	nagle		Оре	erator:	Jim
Start Time:		09:35	Stop Time:	10:20)		Age	ncy Rep:	
Comments:		· · · · · · · · · · · · · · · · · · ·	•						••••••••••••••••••••••••••••••••••••••
	Rock No C	Fill 🛛	At 8.5 Ft.			CATIO	ON SKET	<u>ГСН:</u>	
DEPTH					PID	READI	NGS		· · · · · · · · · · · · · · · · · · ·
(ft. BGS)		CLASSII	FICATION		MAX	SUST	BKGD	NOTE	S/SAMPLES
) - 1.5 ft.	SLAG,	coarse gravel, r	netal, wood debris		0.4	0.4	0.4	Topsoil (06	")
1.5 - 4 ft.	Coarse	gravel, brown,	sandy silt		0.4	0.4	0.4	· ·	· · ·
4 - 6 ft.	Dark b	rown-black, silt	y sand gravel		0.6	0.6	0.6	NATIVE	
6 - 8 ft.	Brown	silty sand, some	e coarse gravel (we	t)	0.4	0.4	0.4	-	
			· · · · · · · · · · · · · · · · · · ·						
								Bedrock at ap	oprox. 8.5 ft. bgs
								Water on top	of bedrock
		,a	· · · · · · · · · · · · · · · · · · ·					Sample TP-1	at 0 - 1.5 ft. bgs
8.5 ft.	Testpit	terminated at ap	pprox. 8.5 ft. bgs				-		
		and the second	· .						



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0 0 0 0 1 5 2 0 0 5 2

Test Hole N	Jo:	TP-2	Inspe	cted By:	P. 5	Smith		Weath	er/Temp:	Sunny, 55°
Location/St	ation:	Corn Hill Landi	ng	N:			E:	-	Elev.:	
Equipment	Used:	Komatsu PC150	OLC	Contrac	tor:	Noth	nnagle	Ор	erator:	Jim
Start Time:		10:40		Stop Ti	me:	11:1	0	Agenc	y Rep:	
Comments:								-		
	Rock No C		15 Ft. countered tered A % MSV	t 15 Ft.	CS)	<u>L0</u>	CATIO	N SKE	<u>ГСН:</u>	
DEPTH						PID	READI	NGS		
(ft. BGS)		CLASSIFIC	ATION	I		MAX	SUST	BKGD	NOTH	CS/SAMPLES
0 -1.5 ft.	Metal S	SLAG/gravel				0.4	0.4	0.4	Topsoil (0	6")
1.5 - 3 ft.	Brown	silt/sand gravel				0.4	0.4	0.4	[FILL]	
3 - 4 ft.	SLAG/	gravel, black sand	(FILL) r	netal		-	-	0.4		
4 - 6 ft.	Brown	silty sand (MOIST) some c	oarse grav	vel	0.4	0.4	0.4	[NATIVE]	
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·									
6 - 8 ft.	Brown	silty sand (MOIST) some c	oarse grav	vel	0.4	0.4	0.4		
									······································	
8 - 10 ft.	Brown	silty sand (MOIST) some c	oarse grav	/el					
	· · · · · · · · · · · · · · · · · · ·									
10 - 12 ft.		ilty clay (Wet) (Mo	·····						Sample	
12 - 15 ft.	Gray, si	ilty clay (Wet) (Mo	ottled)						TP-2 (0-1.5ft	.)
								Rock at appro top of rock	ox. 15 ft., water on	
15 ft.	Test pit	terminated at 15 f								



Test Hole N	o:	TP-3	Inspected By:	P. Sm	ith	Weath	er/Temp:	Sunny, 55°
Location/Sta	ation:	Corn Hill Landing	N:		E:	-	Elev.:	
Equipment V	Used:	Komatsu PC 150LC	C Contractor:	Nothr	agle	Operat	tor:	Jim
Start Time:		11:30	Stop Time:	12:00		- Agenc	y Rep:	
Comments:						-		· · · · · · · · · · · · · · · · · · ·
	Rock No C		ntered.		OCATIO	DN SKE	<u>TCH:</u>	
DEPTH				PID	READI	NGS		
(ft. BGS)		CLASSIFICAT	ION	MAX	SUST	BKGD	NOT	ES/SAMPLES
06 ft.	Topso	il					Sample at 0	- 1.5 ft.
0.5 - 1.5 ft.	SLAG	/metal debris, brick fra	igments	0.4	0.4	0.4	[FILL]	
1.5 - 3 ft.	Brown	silty sand, some coars	se gravel	0.4	0.4	0.4	This testpit	excavated in area of
3 - 4 ft.	SLAG brick	- fill material, some co	oarse gravel,	0.4	0.4	0.4	anomaly at	500E 400N, nothing
	fragme	ents					observed in	testpit
4 - 8 ft.	Brown	silty sand, some grave	21	0.4	0.4	0.4		
8 - 12 ft.	Brown	silty sand, some grave	:1					
12 - 15.5 ft.	Brown	and gray silty clay - w	/et	0.4	0.4	0.4	(NATIVE)	
•							Bedrock at a	approx. 15 ft. bgs
							Water on top	p of bedrock
15.5 ft.	Test pi	t terminated at 15.5 bg	S				· · · · · · · · · · · · · · · · · · ·	
ed.								

THE TAR-BROWN OUP	0 TEST PIT		0 (EST						-	•	Pr
Test Hole No:	TP-4		pected			P. Sn				eather	
Location/Station:	Corn Hill Landing		N:				E:	•	•		E
Equipment Used:	Komatsu PC 150L0	<u> </u>	Contra	ctor:	1	Noth	nagle	>	Ор	erator	

roject: Corn Hill Landing Project No.: 15155.06 Date: April 29, 1999

G

Location/Station Com Hill Landing N: E: Elev.: Equipment Used: Komatsu PC 150LC Contractor: Nothnagle Operator: Jim Start Time: 13:15 Stop Time: 13:45 Agency Rep: Comments: No Rock Encountered At 14.5 Ft. No Ground Water Encountered At 14.5 Ft. No Ground Water Encountered At 14.5 Ft. Stop Time: Image: Stop Time:	Test Hole N	∛o:	TP-4	Inspected By:	P. Sr	nith	Weatl	her/Temp:	Sunny, 60°
Start Time: 13:15 Stop Time: 13:45 Agency Rep: Comments: No Rock Encountered. Rock Encountered At 14.5 Ft. No Ground Water Encountered At 14.5 Ft. Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. So % Fill % MSW % MSW % C&D 70% Native (USCS) Image: Comment At 14.5 Ft. DEPTH % C&D 70% Native (USCS) PID READINGS NOTES/SAMPLES (ft. BGS) CLASSIFICATION MAX SUST BKGD NOTES/SAMPLES 0 - 3 ft. SLAG (Wood) (Coal) coarse gravel Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. 3 - 4 ft. Light brown silty sand, coarse gravel Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. 3 - 4 ft. Light brown silty sand, coarse gravel Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. 4 - 8 ft. Light brown silty sand Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. Image: Comment At 14.5 Ft. 11 - 12 ft. Light gray silty clay Image: Comment At 14.5 Ft.	Location/St	ation:	Corn Hill Landing	N:		E:		Elev.:	
Output of the second state of the second st	Equipment	Used:	Komatsu PC 150LC	C Contractor:	Noth	nagle	Opera	itor:	Jim
No Rock Encountered. Rock Encountered At 14.5 Ft. No Ground Water Encountered At 14.5 Ft. 30 % Fill % MSW % C&D 70% Native (USCS)LOCATION SKETCH: wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww	Start Time:		13:15	Stop Time:	13:45	5	Agen	cy Rep:	
Rock Encountered At 14.5 Ft. No Ground Water Encountered. Ground Water Encountered At 14.5 Ft. 30 % Fill % MSW % C&D 70% Native (USCS) Image: Comparison of the state o	Comments:								
(ft. BGS)CLASSIFICATIONMAXSUSTBKGDNOTES/SAMPLES0 - 3 ft.SLAG (Wood) (Coal) coarse gravelIIIIIIII TP-4 in railroad bed(Brick)IIIPulled out railroad ties3 - 4 ft.Light brown silty sand, coarse gravelIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Rock No C Grou 30 %	Encountered At 14. Fround Water Encounter nd Water Encounter Fill 9	ntered. ed At 14.5 Ft. MSW	L	DCATIO	ON SKF	<u>CTCH:</u>	
(Intersection)(Intersection)0 - 3 ft.SLAG (Wood) (Coal) coarse gravel[FILL] TP-4 in railroad bed(Brick)Pulled out railroad ties3 - 4 ft.Light brown silty sand, coarse gravel(NATIVE)4 - 8 ft.Light brown silty sand(NATIVE)8 - 11 ft.Light brown silty sandSample collected at TP-4 0 - 3 ft.11 - 12 ft.Light gray silty clayIntersection12 - 14 ft.Light gray silty clay - wetBedrock at approx. 14.5 ft. bgsWater on top of rockIntersectionIntersection	DEPTH				PII	READI	NGS		· · · · · · · · · · · · · · · · · · ·
(Brick)Pulled out railroad ties3 - 4 ft.Light brown silty sand, coarse gravel(NATIVE)4 - 8 ft.Light brown silty sand(NATIVE)8 - 11 ft.Light brown silty sandSample collected at TP-4 0 - 3 ft.11 - 12 ft.Light gray silty clayImage: Collected at TP-4 0 - 3 ft.12 - 14 ft.Light gray silty clay - wetImage: Collected at approx. 14.5 ft. bgsImage: Collected at the col	(ft. BGS)		CLASSIFICAT	ION	MAX	SUST	BKGD	NOTE	S/SAMPLES
3 - 4 ft.Light brown silty sand, coarse gravelImage: Coarse gravelImage: Coarse gravel4 - 8 ft.Light brown silty sand(NATIVE)8 - 11 ft.Light brown silty sandSample collected at TP-4 0 - 3 ft.11 - 12 ft.Light gray silty clayImage: Coarse gravel12 - 14 ft.Light gray silty clay - wetImage: Coarse gravelImage: Coarse gravelImage: Coarse gravelImage: Coarse gravelImage: Coarse gravelImage: Coarse gravelImage: Coarse gravel12 - 14 ft.Light gray silty clay - wetImage: Coarse gravelImage:	0 - 3 ft.	SLAG	(Wood) (Coal) coarse	gravel				[FILL] TP-4 i	n railroad bed
4 - 8 ft.Light brown silty sand(NATIVE)8 - 11 ft.Light brown silty sandSample collected at TP-4 0 - 3 ft.11 - 12 ft.Light gray silty clayImage: Collected at TP-4 0 - 3 ft.12 - 14 ft.Light gray silty clay - wetImage: Collected at approx. 14.5 ft. bgsImage: Collected at TP-4 0 - 3 ft.Image: Collected at TP		(Brick)						Pulled out rai	lroad ties
8 - 11 ft.Light brown silty sandSample collected at TP-4 0 - 3 ft.11 - 12 ft.Light gray silty clayImage: Collected at TP-4 0 - 3 ft.12 - 14 ft.Light gray silty clay - wetImage: Collected at TP-4 0 - 3 ft.Image: C	3 - 4 ft.	Light b	rown silty sand, coarse	e gravel					
11 - 12 ft. Light gray silty clay 12 - 14 ft. Light gray silty clay - wet Bedrock at approx. 14.5 ft. bgs Water on top of rock	4 - 8 ft.	Light b	rown silty sand					(NATIVE)	
12 - 14 ft. Light gray silty clay - wet Bedrock at approx. 14.5 ft. bgs Water on top of rock	8 - 11 ft.	Light b	rown silty sand				-	Sample collec	ted at TP-4 0 - 3 ft.
Bedrock at approx. 14.5 ft. bgs Water on top of rock	11 - 12 ft.	Light g	ray silty clay						
Water on top of rock	12 - 14 ft.	Light g	ray silty clay - wet						
			·····					Bedrock at ap	prox. 14.5 ft. bgs
14 ft. Test pit terminated at 14 ft.			······································					Water on top	of rock
	14 ft.	Test pit	terminated at 14 ft.						
			-						
	-								
	2								
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THE SEAR-BROWN OUP

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)년 14 Project: Corn Hill Landing Project No.: 15155.06 Date: April 29, 1999

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Test Hole N	lo:	TP-5	Inspected By:	P. Smi	ith	Weathe	er/Temp:	Sunny, 60°
Location/St	ation:	Corn Hill Landing	N:]	E:		Elev.:	
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothn	agle	Operat	or:	Jim
Start Time:		14:00	Stop Time:	14:30		Agency	y Rep:	
Comments:								
	Rock No C Grou		ntered.		CATIO	N SKET	ГСН:	
DEPTH				PID	READI	NGS		
(ft. BGS)		CLASSIFICAT	ION	MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 2 ft.	SLAG/	Railroad ties/coarse gr	avel	0.2	0.2	0.2	[FILL]	
	wood d	lebris, coal fragments			<u>.</u>			· · · · · · · · · · · · · · · · · · ·
2 - 3 ft.	Brown	silty sand, some coarse	e gravel	0.2	0.2	0.2	Sample TP-	5 at 0 - 2 ft.
3 - 4 ft.	SLAG/	Coarse gravel		0.2	0.2	0.2		
4 - 6 ft.	Brown	silty sand		0.2	0.2	0.2	(NATIVE)	
6 - 8 ft.	Brown	silty sand	·	0.2	0.2	0.2		
8 - 10 ft.	Brown	silty sand						
10 - 14 ft.	Brown	silty sand, some gray s	silty clay		:			
14 - 15 ft.	Gray si	ilty clay		0.2	0.2	0.2		
	wet - sa	aturated	· · ·					
15 ft.	Test pi	t terminated at 15 ft. by	zs					·
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Test Hole N	No:	TP-6	Inspected By:	P. Smith		Weather/Temp:		Sunny, 60°
Location/St	tation:	Corn Hill Landin	g N:	· · ·	E:	Elev.:		
Equipment	Used:	Komatsu PC 150	LC Contractor:	Nothn	Nothnagle		tor:	Jim
Start Time:		14:40	Stop Time:	15:30		Agency Rep:		
Comments:				•••••		-		
 No Rock Encountered. Rock Encountered At 16 Ft. No Ground Water Encountered. Ground Water Encountered At 15 Ft. % Fill % C&D % Native (USCS) 					CATIC	<u>DN SKE'</u>	<u>ГСН:</u>	
DEPTH				PID	READI	NGS		
ft. BGS)	CLASSIFICATION			MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 3 ft.	SLAG - coal fragments, brick, large gravel			0.2	0.2	0.2	[FILL]	
3 -4 ft.	Silty sand, coarse gravel			0.2	0.2	0.2		
4 - 7 ft.	Silty sand, coarse gravel			0.2	0.2	0.2	1	
7 - 9.5 ft.	Silty sa	ind, coarse gravel, tip	o of bucket wood	0.2	0.2	0.2		
	cinders	and ash - wet						
9.5 - 12 ft.	Light g	ray silty sand, wet					(NATIVE)	
12 - 16 ft.	Mottled	d clay, gray, brown,	wet	0.2	0.2	0.2		
	Light g	ray silty sand, wet						
16 ft.	Test pit	t terminated at 16 ft.	bgs					
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Test Hole N	lo:	TP-7	Inspected By:	P. Smi	Smith V		er/Temp:	Sunny, 60°	
Location/St	ation:	Corn Hill Landing	600N:	500E:		E	lev.:		
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothn	agle	Operat	or:	Jim	
Start Time:		09:10	Stop Time:	09:45		Agenc	y Rep:		
Comments:					÷.				
 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At Ft. % Fill % C&D % Native (USCS) 					CATIO	N SKET	<u>ГСН:</u>		
DEPTH				PID	READI	NGS			
(ft. BGS)	CLASSIFICATION			MAX	SUST	BKGD	NOT	ES/SAMPLES	
0 - 2 ft.	Slag [w/wood, railroad tie, coal pieces]						(Sampled 1.	0 ft.) FILL	
2 - 4 ft.	Brown sand fill w/bricks (Possible foundation?)			0.2	0.2	0.2	Chunk-of co	ncrete, possible	
4 - 5 ft.	Dark b	rown sandy silt (dry) fi	11				light post footer (4' x 2')		
5 - 8 ft.	Light b	rown sandy silt (moist)	0.2	0.2	0.2	NATIVE		
8 ft.	Test pi	t terminated at 8.0 ft. b	gs			:			
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Project: Corn Hill Landing Project No.: 15155.06 Date: April 30, 1999

Test Hole M	No: TP-8		Inspected By:	P. Smith		Weather/Temp:		Sunny, 60°
Location/St	tation:	Corn Hill Landing	650N:	600E:		Elev.:		
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothnagle		Operator:		Jim
Start Time:		10:10	Stop Time:	11:00		- Agenc	y Rep:	·····
Comments:		· ·			-	. 1		
 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At 9 Ft. 90 % Fill % MSW % C&D X 10% Native (USCS) 					DCATIC	DN SKE	<u>FCH:</u>	••••••••••••••••••••••••••••••••••••••
DEPTH				PID	READI	NGS		
(ft. BGS)		CLASSIFICATION			SUST	BKGD	NOTI	ES/SAMPLES
0 - 8 ft.	[sandy	[sandy gravel - brown] dry [some slag]					FILL at 3 ft.	- layer of black fine
	Wood at 7 ft., sandy			0.2	0.2	0.2	railroad coal	dust
8 - 9 ft.	Grey si	lty wet		0.2	0.2	0.2	NATIVE	
9.0 ft.	Test pit	terminated at 9.0 ft. by	gs			:		
		······································						
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STAR-BROWN DUP 0 0 0 0 1 5 2 0 0 5 9

Project: Corn Hill Landing Project No.: 15155.06 Date: April 30, 1999

Test Hole M	No: <u>TP-9</u>		Inspected By:	P. Smith		Weather/Temp:		Sunny, 60°
Location/St	tation:	Corn Hill Landing		E:		Elev.:		
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothn	agle	Operat	or:	Jim
Start Time:		11:10	Stop Time:	11:50		Agency Rep:		
Comments:	Comments:					-		and a second
 No Rock Encountered. Rock Encountered At 15 Ft. No Ground Water Encountered. Ground Water Encountered At 9 Ft. 90 % Fill % MSW % C&D 10% Native (USCS 					CATIC	DN SKE	<u>ГСН:</u>	· · ·
DEPTH				PID	READI	NGS		
(ft. BGS)	CLASSIFICATION			MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 2 ft.	Black slag w/coal pieces						FILL	
2 - 9 ft.	Gravel, sandy light brown			0.2	0.2	0.2		
	Fill-dry to wet, sandy						Groundwate	r at 9.0 ft.
9 - 9.5 ft.	Gray sa	ndy silt - wet		0.2	0.2	0.2	NATIVE	
9.5 ft.	Test pit	terminated at 9.5 ft. by	gs					
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Test Hole N	No: TP-10 Inspected By:		Inspected By:	P. Smith		Weather/Temp:		Sunny, 60°
Location/St	tation:	Corn Hill Landing	455N:	540E:		Elev.:		
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothnagle		Operator:		Jim
Start Time:		12:00	Stop Time:					
Comments:						- -		
 No Rock Encountered. Rock Encountered At 15 Ft. No Ground Water Encountered. Ground Water Encountered At 15 Ft. 50% Fill % MSW 50% C&D % Native (USCS) 					OCATIO	<u>DN SKE</u>	<u>ГСН:</u>	
DEPTH					READI	NGS		
(ft. BGS)		CLASSIFICATION			SUST	BKGD	NOT	ES/SAMPLES
0 - 6.0	Miscellaneous debris, including mechanical						(FILL)	
	arms and machinery, steel I-beams, concrete							
	slabs ar	nd foundations, dye		0.2	0.2	0.2	Anomaly B	
6.5	Test pit	terminated @ 6.5 ft. E	BGS					
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Test Hole N	No:	TP-11	Inspected By:	P. Sm	ith	Weath	er/Temp:	Sunny, 50°	
Location/St	tation:	Corn Hill Landing	2850N:		500E:		Elev.:		
Equipment	Used:	Komatsu PC 150L	C Contractor:	Nothr	agle	Operat	or:	Jim	
Start Time:		08:20	Stop Time:	09:30 Agency Rep:					
Comments:						-			
No Rock Encountered. Rock Encountered At 15 Ft. No Ground Water Encountered. Ground Water Encountered At 8 Ft. % Fill % MSW % C&D % Native (USCS)					OCATIC	DN SKE	<u>ГСН:</u>		
DEPTH				PID	READI	NGS			
(ft. BGS)		CLASSIFICATION			SUST	BKGD	NOTH	ES/SAMPLES	
0 - 5 ft.	Light brown gravel with red brick, some			0.2	0.2	0.2	[FILL]		
- .	cobbles and wood - dry								
5 - 6 ft.	Light b	rown sandy silt - mois	t	0.2	0.2	0.2	[NATIVE]		
6 - 8 ft.	Light g	ray sandy silt - moist t	o wet	0.2	0.2	0.2			
8.0 ft.	Test pit	terminated at 8.0 ft. b	gs						
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Test Hole N	No: <u>TP-12</u>		Inspected By:	P. Smith		Weather/Temp:		Sunny, 50°	
Location/St	ation:	Corn Hill Landing	2850N:		600	E:		Elev.:	
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Not	hnagle	e	Operat	or:	Jim
Start Time:		08:35	Stop Time:	09:00 Agency Rep:					
Comments:							-		
No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At Ft. % Fill % MSW % C&D % Native (USCS)]	LOCA	TIC	DN SKE'	<u>ГСН:</u>	
DEPTH						ADI	NGS		
(ft. BGS)	CLASSIFICATION			MA	x st	JST	BKGD	NOTI	ES/SAMPLES
0 - 5 ft.	Light brown and dark brown gravel with			0.2	0	.2	0.2	[FILL]	
	bricks, wood, concrete, some cobbles								
	dry	dry							
5 - 7 ft.	Light b	rown sandy silt moist		0.2	0	.2	0.2	[NATIVE]	
7 - 8 ft.	Gray sa	ndy silt moist		0.2	0	.2	0.2		
8.0 ft.	Test pit	terminated at 8.0 ft. b	gs						
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

TEST	PIT	/ TEST	TRENCH	SEGM	ENTI	OG
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Test Hole N	No: TP-13 Inspected B		ected By:	P. Smith		Weather/Temp:		Sunny, 55°	
Location/St	tation:	Corn Hill Landing 28	350N:	700E:			Elev.:		
Equipment	Used:	Komatsu PC 150LC C	ontractor:	Nothn	agle	Operat	or:	Jim	
Start Time:		09:35 Stop	Time:	10:20 Agency Rep:					
Comments:						-	. *	·	
	Rock No C	المهمجية	Ft.		CATIO	N SKE	ГСН:		
DEPTH				PID	READI	NGS			
(ft. BGS)		CLASSIFICATION		MAX	SUST	BKGD	NOTE	S/SAMPLES	
) - 2.5 ft.	Dark b	ack fill - asphalt - bricks, co	bbles,	0.2	0.2	0.2	[FILL]		
	railroad ballasts						Wood plank		
2.5 - 6 ft.	Light brown sandy silt with cobbles, brick			0.2	0.2	0.2			
	pieces, wood						Galvenized p	ipe 4"	
6 - 8 ft.	Light b	rown sandy silt, moist		0.2	0.2	0.2	[NATIVE]		
8 - 9 ft.	Gray sa	ndy silt moist		0.2	0.2	0.2			
9.0 ft.	Test pit	terminated at 9.0 ft. bgs							
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Test Hole N	lo:	TP-14	Inspected By:	P. Sm	ith	Weath	er/Temp:	Sunny, 60°
Location/St	ation:	Corn Hill Landing	1515W of 400	3		E	lev.:	
Equipment	Used:	Komatsu PC 150L0	C Contractor:	Nothn	agle	Operat	or:	Jim
Start Time:	-	10:50	Stop Time:	11:15		Agency	y Rep:	
Comments:								
	Rock No G		ntered.					
DEPTH				PID	READI	NGS		
(ft. BGS)		CLASSIFICAT	ION	MAX	SUST	BKGD	NOTI	ES/SAMPLES
0 - 3 ft.	Asphalt	t - black gravel w/bricl	k wood, cobbles	0.2	0.2	0.2	Refusal at 1 ^s	st location
	and pos	ssible foundation wall					Moved 14 ft	. west
3 - 5 ft.	Light b	rown sandy silt w/buil	ding cobbles,	0.2	0.2	0.2	[FILL]	
	wood -	wet						
5 - 7 ft.	Light b	rown sandy silt moist					[NATIVE]	
7 - 8 ft.	Gray sa	ndy silt - moist						
8.0 ft.	Test pit	terminated at 8.0 ft. b	gs					
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Test Hole No:	TP-15	Inspected By:	P. Smith	Weather/Temp:	Sunny, 65°		
Location/Station:	Corn Hill Landing	16 ft. SW of 4	Elev.:				
Equipment Used:	Komatsu PC 150LC	C Contractor:	Nothnagle	Operator:	Jim		
Start Time:	11:20	Stop Time:	11:40	Agency Rep:			
Comments:			<u></u>	—			
Roc No Gro % F		tered.	LOCATI	<u>ON SKETCH:</u>			

DEPTH		PID	READI	NGS	
(ft. BGS)	CLASSIFICATION	MAX	SUST	BKGD	NOTES/SAMPLES
0 - 5 ft.	Light brown gravel fill to dark brown gravel	0.2	0.2	0.2	[FILL]
	fill w/wood, bricks, cobbles, moist				Water infiltrated at 5 ft.
5 - 7 ft.	Light brown sandy silt w/wood, bricks, cobbles	0.2	0.2	0.2	
-	Moist				one 2" pipe at 6.5 ft.
7 - 8 ft.	Light brown sandy silt moist	0.2	0.2	0.2	[NATIVE]
8 - 10 ft.	Gray sandy silt moist	0.2	0.2	0.2	
14 ft. 10"	Test pit terminated at 14 ft. 10 inches bgs				
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

		TEST P	PIT / T	EST TRE	ENCH	I SEG	MENT	LOG			
Test Hole N	lo:	TP-16	Ins	spected By:	P. S	nith	Weath	er/Temp:	Sunny, 65°		
Location/St	ation:	Corn Hill Land	ding	25 ft. NW of S	SG-19		 .	Elev.:			
Equipment	Used:	Komatsu PC 1	50LC	Contractor:	Notł	inagle	Operat	or:	Jim		
Start Time:		11:45	Sto	op Time:	12:0	5	Agenc	ncy Rep:			
Comments:	-										
	Rock No G	ليستسب	t Ft. ncounter intered A % MS	At 4 Ft.	L	OCATI	<u>DN SKE</u>	<u>ГСН:</u>			
DEPTH		· · · · · · · · · · · · · · · · · · ·				D READ	INGS				
(ft. BGS)		CLASSIFICATION			MAX	SUST	BKGD	NOT	ES/SAMPLES		
0 - 8 ft.	Dark br	ark brown gravel w/bricks, wood, cobbles			0.2	0.2	0.2	[FILL]			
	Moist			. <u></u>				Groundwate	r at 4 ft.		
		· · · · · · · · · · · · · · · · · · ·						Foundation -	- footer at 2 ft		
	3:00pm	W/L = 5.5 ft. bg	S					broke through w/excavation			
·											
8.0 ft.	Test pit	terminated at 8.0) ft. bgs					No light bro	wn sandy silt		
·							· · ·	layer at this	location		
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THE **SEAR-BROWN** OUP



THE SEAR-BROWN OUP 00001520067

TEST PIT / TEST TRENCH SEGMENT LOG										
Test Hole N	No:	TP-17	Inspected By:	P. Sm	ith	Weath	er/Temp:	Sunny, 50 - 60°		
Location/St	tation:	Corn Hill Land	ing			- .	Elev.:			
Equipment	Used:	Komatsu PC 15	50LC Contractor:	Nothr	nagle	Operat	or:	Jim		
Start Time:		12:10	Stop Time:			Agenc	y Rep:			
Comments:										
	I. Ft. countered. ntered At 4 Ft. % MSW 50% Native (USCS)		DCATIC	DN SKE'	ГСН:	- month of the second				
DEPTH			· · · · · · · · · · · · · · · · · · ·	PID	READI	NGS		•		
(ft. BGS)		CLASSIFIC	MAX	SUST	BKGD	NOT	ES/SAMPLES			
0 - 6"	Asphal	t/gravel base				Sample colle	ected at 1.5 ft.			
0.5 - 5 ft.	Black a	nd dark gray silt, s	sand, gravel, some	0.2	0.2	0.2	(FILL)			
	wood, o	concrete footer in v	west edge of test pit							
5 - 7.5 ft.	Gray si	lt, some f. soil, tra	ce clay, moist	0.2	0.2	0.2	(NATIVE)			
7.5 ft.	Test pit	t terminated at 7.5	ft. bgs							
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

TEST PIT / TEST TRENCH SEGMENT LOG

Test Hole N	lo:	TP-18	Inspected By:	P. Smi	th	Weath	er/Temp:	Sunny, 60s°
Location/St	ation:	Corn Hill Landing	- -			-	Elev.:	
Equipment	Used:	Komatsu PC 150L0	C Contractor:	Nothn	agle	Operat	or:	Jim
Start Time:		12:25	Stop Time:	-		- Agenc	y Rep:	
Comments:			-			-		
	Rock No C		ntered.	LO				
DEPTH				PID	READ	INGS		<u>2</u>
(ft. BGS)		CLASSIFICAT	MAX	SUST	BKGD	NOTI	ES/SAMPLES	
0 - 6"	Asphal	t/gravel subbase				Sample colle	ected at 1.5 ft.	
6" - 5 ft.	Black a	Black and gray sand/cinders, some bricks,			0.1	0.1	(FILL)	
	cobbles	s - stabilized						
5 - 14.9 ft.	Gray si	lt, some fine sand, trac	e clay moist to wet	0.2	0.2	0.2	(NATIVE)	
14.9 ft.	Bucket	refusal						
	3:15pm	W/L = 10 ft. bgs						
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THE SEAR-BROWN OUP	0 0	0 (0	I	5	2	0	0	6	9
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Test Hole No:	TP-19	Insp	ected	d By	•	P. 9	Smit	h		Weath
Location/Station:	Corn Hill Landing									

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Test Hole N	No:	TP-19	Inspected By:	P. Smit	h	Weathe	er/Temp:	Sunny, 60s°		
Location/St	tation:	Corn Hill Landing	5				Elev.:			
Equipment	Used:	Komatsu PC 1501	LC Contractor:	Nothna	gle	Operato	or:	Jim		
Start Time:			Stop Time:			Agency	Rep:			
Comments:										
	Rock No C				LOCATION SKETCH:					
DEPTH				PID	READ	INGS				
(ft. BGS)		CLASSIFIC	ATION	MAX	SUST	BKGD	NOT	ES/SAMPLES		
0 - 6"	Asphal	t/gravel base								
6" - 2 ft.	Brown	and gray silt, some c	oarse to find gravel				(FILL)			
2 - 2.5 ft.	Black,	white soft fill/ash		0.1	0.1	0.1	Sample tak	en at 2.0 ft.		
2.5 - 6 ft.	Brown	fine sand, some silt a	nd gravel			1				
6 - 8.5 ft.	Gray si	lt, some fine sand, m	oist	0.1	0.1	0.1	(NATIVE)			
8.5 ft.	Test pit	terminated at 8.5 ft.								
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SEAR-BROWN

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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Test Hole N	lo:	TP-20	Inspected By:	P. Smit	h	Weathe	r/Temp:	Sunny, 60s°
Location/St	ation:	Corn Hill Landing	400 ft.	east of 50	0 E 260	00 N	Elev.:	
Equipment	Used:	Komatsu PC 150L0	C Contractor:	Nothna	gle	Operato	or:	Jim
Start Time:		13:05	Stop Time:		······································	Agency	Rep:	
Comments:							<i>.</i>	
No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At 6.0 Ft. 50% Fill % MSW % C&D 50% Native (USCS)					CATIO	N SKET	<u>°CH:</u>	
DEPTH				PID	READ	INGS		
(ft. BGS)		CLASSIFICA	TION	MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 6"	Asphal	t/gravel					-	
0.5 - 5 ft.	Black,	brown, gray, white cin	0.1	0.1	0.1	(Stratified f	ill)	
	sand, g	ravel, some ash, slag.						
5 - 8 ft.	Gray, s	ilt, some fine sand, mo	ist to wet	0.1	0.1	0.1	(NATIVE)	
8.0 ft.	Test pit	terminated at 8.0 ft. b	gs					
		······					· · · · · · · · · · · · · · · · · · ·	
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		· ····						
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Test Hole N	No:	TP-21	Inspected By:	P. Smit	h	Weathe	er/Temp:	Sunny, 60s°	
Location/St	tation:	Corn Hill Landir	ng			El	ev.:	<u></u>	
Equipment	Used:	Komatsu PC 150	LC Contractor:	Nothna	gle	Operato	or:	Jim	
Start Time:		13:30	Stop Time:			Agency	Rep:		
Comments:									
	Rock No C			LOCATION SKETCH:					
DEPTH				PID	READ	INGS			
(ft. BGS)		CLASSIFIC	CATION	MAX	SUST	BKGD	NOT	ES/SAMPLES	
0 - 6"	Asphal	t/gravel base							
0.5 - 3.5 ft.	Dark gi	ray to black coarse t	0.5	0.4	0.2	(FILL)			
	and gra	vel, some cobbles, t	race cinders				seepage at l	base of fill	
3.5 - 8.5 ft.	Gray si	lt, some fine sand, li	ittle clay, moist	0.4	0.4	0.3	(NATIVE)		
	(NATI)	VE)							
8.5 ft.	Test pit	terminated at 8.0 ft	. bgs						
		·							
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Comments: No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At 3.0 Ft. 100% Fill % MSW % C&D % Native (USCS) LOCATION SKETCH: DEPTH % MSW % C&D % Native (USCS) PID READINGS (ft. BGS) CLASSIFICATION MAX SUST BKGD NOTES/SAMPLES 0 - 6" Asphalt/gravel base 0.4 0.4 0.3			TEST PIT	/ TEST TRE	NCH S	SEGN	IENT	LOG	
Equipment Used: Komatsu PC 150LC Contractor: Nothnagle Operator: Jim Start Time: 13:45 Stop Time: Agency Rep:	Test Hole N	No:	TP-22	Inspected By:	P. Smit	h	Weathe	er/Temp:	Sunny, 60s°
Start Time: 13:45 Stop Time: Agency Rep: Comments: No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At 3.0 Ft. 100% Fill % MSW % C&D % Native (USCS) LOCATION SKETCH: DEPTH % C&D % MSW % C&D % Native (USCS) PID READINGS (ft. BGS) CLASSIFICATION MAX SUST BKGD NOTES/SAMPLES 0 - 6" Asphalt/gravel base 0.4 0.4 0.3 Grill L) trace wood, bricks I I I I I 8.5 ft. Test pit terminated at 8.0 ft. bgs I I I I	Location/St	tation:	Corn Hill Landing				El	ev.:	· · · · · · · · · · · · · · · · · · ·
Comments: Image and the prime of the	Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothna	gle	Operate	or:	Jim
No Rock Encountered. LOCATION SKETCH: Rock Encountered AtFt. No Ground Water Encountered. Ground Water Encountered At 3.0 Ft. 100% Fill% MSW % C&D% Native (USCS) % Native (USCS) DEPTH PID READINGS (ft. BGS) CLASSIFICATION MAX SUST 0 - 6" Asphalt/gravel base 0.4 0.4 0.3 6" - 8.5 ft. Coarse to fine gravel and cobbles, some sand/silt 0.4 0.4 - abundant water 8.5 ft. Test pit terminated at 8.0 ft. bgs I I I I	Start Time:		13:45	Stop Time:			Agency	Rep:	
Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered At 3.0 Ft. 100% Fill % MSW % C&D % Native (USCS) % Native (USCS) DEPTH CLASSIFICATION MAX SUST BKGD NOTES/SAMPLES 0 - 6" Asphalt/gravel base 0.4 0.4 0.3 6" - 8.5 ft. Coarse to fine gravel and cobbles, some sand/silt 0.4 0.4 0.3 (FILL) trace wood, bricks Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gravel and cobbles, some sand/silt Image: State of the gr	Comments:								· .
(ft. BGS)CLASSIFICATIONMAXSUSTBKGDNOTES/SAMPLES0 - 6"Asphalt/gravel base0.40.40.36" - 8.5 ft.Coarse to fine gravel and cobbles, some sand/silt0.40.40.3(FILL)trace wood, bricks11- abundant water8.5 ft.Test pit terminated at 8.0 ft. bgs111		Rock No G Grou 100%	Encountered At Fround Water Encourt nd Water Encountere Fill% I	ntered. ed At 3.0 Ft. MSW		CATIO			
0 - 6" Asphalt/gravel base 0.4 0.4 0.3 6" - 8.5 ft. Coarse to fine gravel and cobbles, some sand/silt 0.4 0.4 0.3 trace wood, bricks - abundant water 8.5 ft. Test pit terminated at 8.0 ft. bgs - abundant water					······································				
6" - 8.5 ft. Coarse to fine gravel and cobbles, some sand/silt 0.4 0.4 0.3 (FILL) trace wood, bricks - abundant water 8.5 ft. Test pit terminated at 8.0 ft. bgs - -			CLASSIFICAT	FION	MAX	SUST	BKGD	NOT	ES/SAMPLES
trace wood, bricks - abundant water 8.5 ft. Test pit terminated at 8.0 ft. bgs	0 - 6"	Asphalt	/gravel base	0.4	0.4	0.3		·	
8.5 ft. Test pit terminated at 8.0 ft. bgs	6" - 8.5 ft.	Coarse to fine gravel and cobbles, some sand/sil			0.4	0.4	0.3	(FILL)	
		trace wo	ood, bricks					- abundant	water
Image: Section of the section of th	8.5 ft.	Test pit	terminated at 8.0 ft. bg	gs					
Image: Section of the section of th			· · · · · · · · · · · · · · · · · · ·						
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THE SEAR-BROWN OUP

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Project: Corn Hill Landing Project No.: 15155.06 Date: May 1, 1999

Test Hole I	No:	TP-23		Inspected By:	P. Smit	h	Weathe	er/Temp:	Sunny, 60s°
Location/S	tation:	Parking Lot	40 ft. s	outh of corner of	fence				
Equipment	Used:	Komatsu PC	C 150LC	C Contractor:	Nothna	gle	Operate	or:	Jim
Start Time:		14:00		Stop Time:			Agency	Rep:	
Comments:					· ··· · · ···				
	Rock No C Grou	Rock Encounter x Encountered Ground Water und Water Encound 6 Fill &D	At Encoun countere % N		LOCATION SKETCH:				
DEPTH					PID	READ	INGS		
(ft. BGS)		CLASS	TION	MAX	SUST	BKGD	NOT	TES/SAMPLES	
0 - 6"	Asphal	t and gravel sul	ГУ						
6" - 8 ft.	Gray coarse to fine sand and gravel, some				0.4	0.3	0.3	(FILL)	
	cobbles and pockets of silt, trace wood, wet								
								rapid water	infiltration at 3.5 ft.
8.0 ft.	Test pit	terminated at	8.0 ft. bg	;S	0.6	0.3	0.3		
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TEST PIT / TEST TRENCH SEGMENT LO
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Test Hole N	No:	TP-24	Inspected By:	P. Smit	h	Weathe	r/Temp:	Sunny, 60s°		
Location/St	tation:	Along wall	12 ft. east of 40	001						
Equipment	Used:	Komatsu PC 150LC	C Contractor:	Nothna	gle	Operato	or:	Jim		
Start Time:			Stop Time:			Agency	Rep:			
Comments:										
	Rock No C Grou		tered.		LOCATION SKETCH:					
DEPTH				PID	READ	INGS				
(ft. BGS)		CLASSIFICA	TION	MAX	SUST	BKGD	NOT	'ES/SAMPLES		
0 - 2 ft.	Black c	vinder - rich SILT					(FILL)			
2 - 5.5 ft	Gray-b	rown silt, some coarse	to fine gravel and	0.2	0.2	0.2				
	cobbles	s, wet at 5 ft.	·							
5.5 ft.	Test pit	terminated at 5.5 ft. b	gs	0.2	0.2	0.2				
								·		
		· · · · · · · · · · · · · · · · · · ·								
						· · · · · · · · · · · · · · · · · · ·				

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Project: Corn Hill Landing Project No.: 15155.06 Date: May 3, 1999

TEST PIT / TEST TRENCH SEGMENT LOG											
Test Hole N	lo:	TP-25	Inspected By:	P. Smit	h	Weathe	r/Temp:	Sunny, 60s°			
Location/St	ation:										
Equipment	Used:	Komatsu PC 1	50LC Contractor:	Nothna	gle	Operato	or:	Jim			
Start Time:			Stop Time:		Agency Rep:						
Comments:	·			:							
	Rock No C	السسية	t Ft. ncountered.		CATIO)	<u>N SKET</u>	<u>°CH:</u>				
DEPTH			in an	PID	READ	INGS					
(ft. BGS)		CLASSIF	ICATION	MAX	SUST	BKGD	NOT	TES/SAMPLES			
0 - 1.5 ft.	Brown	sandy silt, dry									
1.5 - 3.5 ft	Black c	inders - rock fill		0.1	0.1	0.1	(FILL)				
3.5 - 8.0	Coarse	to find sand and	silt, some gravel and	0.1	0.1	0.1					
	cobbles	;									
8.0 ft.	Test pit	terminated at 5.5	ft. bgs								
-											
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			·								
			······		:						
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0 0 0 0 1 5 2 0 0 7 6

TEST	PIT	/ TEST	TRENCH	SEGMENT	LOG
				DEGIMENT	LOG

Test Hole N	lo:	TP-26	Inspected By:	P. Smit	P. Smith		r/Temp:	Sunny, 60s°	
Location/St	ation:		н 						
Equipment	Used:	Komatsu PC 150LC	Contractor:	Nothna	gle	Operato	or:	Jim	
Start Time:			Stop Time:			Agency	Rep:		
Comments:									
	Rock No C		tered.		<u>CATIO</u>	N SKET	<u>ГСН:</u>		
DEPTH				PID	READ	INGS		· · · · · · · · · · · · · · · · · · ·	
(ft. BGS)		CLASSIFICA	ΓΙΟΝ	MAX	SUST	BKGD	NOTES/SAMPLES		
) - 0.5 ft.	Gravel	road material						•	
0.5 - 1.5 ft.	Brown	fine sand, some silt							
1.5 - 3.0 ft.	Black s	sand, some cinders and	gravel	0.1	0.1	0.1	(FILL)		
3 - 5 ft.	Gray b	rown cobbles, sand grav	vel - pipe running						
	N-S at	4 ft. (FILL)							
5 - 14.8 ft.	Gray si	lt, some fine sand, moi	st to wet, some	0.1	0.1	0.1	(NATIVE)		
	cobbles	s in upper foot (NATIV	E)				-		
14.8 ft.	Test pit	t terminated at 14.8 ft. l	ogs						
			· · · · · · · · · · · · · · · · · · ·	-					
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THE SEAR-BROWN DUP	0	0001	5 2	00	77	÷	et: Corn Hill Landing roject No.: 15155.06 Date: May 3, 1999
	TEST PIT /	TEST TREN	NCH S	SEGN	1ENT	LOG	
Test Hole No:	TP-27	P. Smit	th	Weathe	er/Temp:	Sunny, 65°	
Location/Station:		-					1997 - 19
Equipment Used:	Komatsu PC 150LC	Contractor:	Nothna	gle	Operato	or:	Jim
Start Time:	Agency Rep:						
Comments:		_					
Rock	أسيسا	tered			<u>ON SKF</u>	<u>лсн:</u>	
DEPTH			PID	READ	INGS		
(ft. BGS)	CLASSIFICAT	TION	MAX	SUST	BKGD	NO	TES/SAMPLES
0 - 5 ft. Black a	and gray cinder- rich fil	l, some sand,	0.2	0.2	0.2	(FILL)	
gravel ((FILL)						
5 - 8 ft. Gray br	rown coarse to fine sand	d and gravel, moist	0.1	0.1	0.1		· · ·
8.0 ft. Test pit	t terminated at 8.0 ft. bg	js					- · · · · · · · · · · · · · · · · · · ·
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Test Hole N	le No: TP-28 Inspected By: F		P. Smit	P. Smith		r/Temp:	Sunny, 60s°	
Location/St	ation:							
Equipment	Used:	Komatsu PC 150LC	Contractor:	Nothna	gle	Operato	or:	Jim
Start Time:						Agency	Rep:	
Comments:								
	Rock No C Grou	Rock Encountered. K Encountered At Ground Water Encountered Ind Water Encountered % Fill &D % N	tered.		CATIO	<u>N SKE</u> T	ГСН:	_
DEPTH				PID	READ	INGS		
(ft. BGS)		CLASSIFICAT	ION	MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 2 ft.	Gray to	black cinder, slag, soil	, gravel, dry, trace	0.1	0.1	0.1	(FILL)	
	asphalt	, brick, concrete						
2 - 8 ft.	Gray b	rown coarse to find sand	l and gravel, some	0.1	0.1	0.1		
	silt and	l cobbles, moist						
8 ft.	Test pi	t terminated at 8.0 ft. bg	S					
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 3, 1999

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Test Hole N	√o:	TP-29	· .	Inspected By:	P. Smit	h	Weathe	r/Temp:	Sunny, 60s°	
Location/St	tation:									
Equipment	Used:	Komatsu	PC 150LC	Contractor:	Nothna	gle	Operato	or:	Jim	
Start Time:				– Stop Time:			Agency	Rep:	,	
Comments:		······································		t	<u></u>				· · · · · · · · · · · · · · · · · · ·	
	Rock No C	Fill [red At 16.5 er Encount Encountered % M	ered. I at top of rock.	LOCATION SKETCH:					
DEPTH			· .		PID	READ	INGS			
(ft. BGS)		CLA	SSIFICAT	ION	MAX	SUST	BKGD	NOT	ES/SAMPLES	
0 - 1 ft.	Gravel	parking surf	ace	· · · · · · · · · · · · · · · · · · ·						
1 - 2 ft.	Black s	and, cinders	, dry		0.1	0.1	0.1	(FILL)		
2 - 16.5 ft.	Coarse	to find sand	, some woo	d, building stones,						
	dry			· ·						
12.5 ft.	Wood 1	plants at 12 f	t flat lyin	g N-S orientation						
16.0 ft.	Gray si	lt			0.1	0.1	0.1	(NATIVE)		
16.5 ft.	Top of	rock - bucke	t refusal							
	Test pit	terminated	at 16.5 ft. b	gs						
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Test Hole N		TP-30			pecte	ed By	/: -	P. Sm	111		weathe	r/Temp:	Sunny, 60s°
Location/St	ation:	30 ft. South	of SG-	1						· · · · · ·			
Equipment	Used:	Komatsu PC	2150LC	<u> </u>	Cont	tracto	r: -	Nothn	agl	le	Operato	or:	Jim
Start Time:	art Time: 14:25 Stop Time:				-				Agency	Rep:			
Comments:												•	
	No C	اسمعا	Encounter counter	ntere ed at MSV	: V	_ Ft. e (US0	CS)						
DEPTH								PI	D F	READ	INGS		
(ft. BGS)		CLASS	SIFICA	TIOI	N			MAX	:	SUST	BKGD	NOT	ES/SAMPLES
0 - 1.0 ft.	Gravel	, parking lot										-	
1 - 6 ft.	Black,	rust, gray, brov	vn, alter	natir	ıg lar	yers o	of	0.1		0.1	0.1	(FILL)	
	cinders	, slag and silt/s	and, mo	oist									
6 - 8.5 ft.	Brown	fine sand, som	e silt, m	oist				0.2		0.1	0.1	(NATIVE)	
8.5 ft.	Test pi	t terminated at	8.5 ft. b	gs									
		<u></u>											
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	TEST	PIT / TEST	TREN	CH S	SEGN	AENT	LOG		
Test Hole M	No: TP-31	Inspected	By: I	P. Smitl	h	Weather	/Temp:	Mostly sunny, 60°	
Location/St	tation:								
Equipment	Used: Komatsu PC	150LC Contrac	tor: 1	Nothnag	gle	Operator: Jim			
Start Time:		Stop Time	me: Agency Rep:						
Comments:								· · · · · · · · · · · · · · · · · · ·	
	No Rock Encounter Rock Encountered A No Ground Water Enco Ground Water Enco 50% Fill	At Ft. Encountered.				<u>DN SKE</u>	<u>ГСН:</u>		
DEPTH				PID	READ	INGS			
(ft. BGS)	CLASSI	FICATION		MAX	SUST	BKGD	N	OTES/SAMPLES	
0 - 1 ft.	Gravel, dry			-					
1 - 7 ft.	Black cinder - rich fill	······································		0.1	0.1	0.1	(FILL)		
7 - 10 ft.	Gray silt, some fine san	d (NATIVE)		0.4	0.4	0.1	(NATIV	/E)	
10 ft.	Test pit terminated at 1	0 ft. bgs							
					<u> </u>	ļ			
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THE SEAR-BROWN OUP	000	0 1 5	20	08	3 2	Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999
	TEST PIT / TE	ST TREN	CH S	EGN	IENT]	LOG
Test Hole No	: TP-32 Inspe	cted By:	P. Smith	1	Weather/	Temp: Overcast, 50°
Location/Sta	tion:					
Equipment U	sed: Komatsu PC 150LC Co	ntractor:	Nothnag	gle	Operator	r: Jim
Start Time:	Stop	Time:			Agency	Rep:
Comments:		_				
	No Rock Encountered. Rock Encountered At 11.5 Ft. No Ground Water Encountered. Ground Water Encountered at% Fill% MSW % C&D% Native	Ft.			<u>N SKET</u>	<u>.Сн:</u>
DEPTH			PID	READ	INGS	
(ft. BGS)	CLASSIFICATION		MAX	SUST	BKGD	NOTES/SAMPLES
0 - 1 ft.	Gravel parking lot					
1-2.8 ft.	Black cinders, sand, gravel		0.1	0.1	0.1	(FILL)
2.8 - 4.8 ft.	Gray brown sand, some silt and gra	vel,				
	occasional cobble					
4.8 - 10.5 ft.	Gray silt, some fine sand, trace clay	, moist	0.1	0.1	0.1	(NATIVE)
11.5 ft.	Test pit terminated at 11.5 ft. bgs					Top of rock
					-	
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999

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Test Hole N	No:	TP-33	Inspected By:	P. Smith	ι ν	Veather/T	emp: Overcast, 50°
Location/St	tation:						
Equipment	Used:	Komatsu PC 150L	C Contractor:	Nothnag	le (Operator:	Jim
Start Time:		9:45	Stop Time:	10:10		Agency F	Rep:
Comments:							
No Rock Encountered. Rock Encountered AtFt. No Ground Water Encountered. Ground Water Encountered at 5 Ft. (bottom of fill) \$50% Fill % MSW % C&D \$50% Native (USCS)					CATION	N SKET(<u>CH:</u>
DEPTH		·····	PI	D READ	INGS		
(ft. BGS)	CLASSIFICATION				SUST	BKGD	NOTES/SAMPLES
0 - 6 in.	Gravel parking lot						
6 in 3 ft.	Black c	inders, some sand, in	terbedded brown	0.1	0.1	0.1	(FILL)
	sandy s	ilt	· · · · · · · · · · · · · · · · · · ·				
3 - 5 ft.	Gray br	own sand and silt, gr	aney brick from 3-4	ft.			inc. 2 ft. square concrete pillar
5 - 8 ft.	Gray m	ottled silt, some fine	sand, trace clay, moi	st 0.1	0.1	0.1	(NATIVE)
8.0 ft.	Test pit	terminated at 8.0 ft.	bgs				
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999

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		TEST P	IT / TEST TRE	NCH SI	EGM	ENT I	LOG				
Test Hole N	o:	TP-34	Inspected By:	P. Smith		/eather/7	Temp:	Overcast, 50°			
Location/Sta	ation:										
Equipment V	Used:	Komatsu PC 1	50LC Contractor:	Nothnag	le (Operator	:	Jim			
Start Time:		10:20	Stop Time:			Agency I	Rep:				
Comments:		· · · · · · · · · · · · · · · · · · ·									
 No Rock Encountered. No Ground Water Encountered. Ground Water Encountered. Ground Water Encountered at 6 Ft. (base of fill) % Fill % C&D % 50% Native (USCS) 					ATION	SKET	<u>CH:</u>				
DEPTH				PID READINGS							
(ft. BGS)	CLASSIFICATION			MAX	SUST	BKGD	Γ	NOTES/SAMPLES			
0 - 1 ft.	Gravel	parking lot									
1 - 3.5 ft.	Black	interbedded fill, c	inders, sand, strong	0.1	0.1	0.1	(FILL))			
	sulfur	odor (sewer?)	······								
3.5 - 6 ft.	Gray b	brown coarse to fin	ne sand and gravel								
	some c	cobbles, moist to v	wet								
6 - 12.3 ft.	Gray, s	silt, some fine san	d and clay moist	0.1	0.1	0.1	(NAT	IVE)			
13.3 ft.	Test pi	it terminated at 13	3.3 ft. bgs								
						. <u>.</u>					

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Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999

		TEST I	PIT / TEST TRE	NCH S	SEGN	IENT	LOG		
Test Hole N	No:	TP-35	Inspected By:	P. Smit	h	Weather	r/Temp:	Overcast, 60°	
Location/St	tation:	<u> </u>							
Equipment	Used:	Komatsu PC	150LC Contractor:	Nothna	gle	Operate	or:	Jim	
Start Time:		11:05	Stop Time:			Agency	Rep:		
Comments:								· · · · · · · · · · · · · · · · · · ·	
	ed. At Ft. ncountered. untered at Ft. % MSW % Native (USCS)		CATIO	D <u>N SKE</u>	<u>TCH:</u>				
DEPTH				PID REAL		INGS			
(ft. BGS)	CLASSIFICATION			MAX	SUST	BKGD	NOTES/SAMPL		
· · · .	Concrete foundation 0 - 38 in. bgs						West sid	le of test pits	
	Railroa	d ties just below	surface				East sid	e of test pits	
0 - 6 in.	Gravel	parking lot				-			
6 in 1 ft.	Brown	sandy silt	·						
1 - 3 ft.	Black c	inders, brick	·	0.1	. 0.1	0.1	(FILL)		
3 - 4 ft.	Gray br	own sand, grave	l, cobbles						
4 - 6 ft.	Black c	inders, some slag	g, ash						
6 - 7.5 ft.	Gray fi	ne sand, some sil	t, NATIVE	0.1	0.1	0.1	(NATIV	Е)	
7.5 ft.	Test pit	terminated at 7.5	5 ft. bgs						
			· · · · · · · · · · · · · · · · · · ·					-	
		· · · · · · · · · · · · · · · · · · ·							
		·····	· · · · · · · · · · · · · · · · · · ·						
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999

		TEST	Г РІТ	/ TEST TRE	NCH S	SEGN	IENT	LOG	
Test Hole 1	No:	TP-36		Inspected By:	P. Smi	th	Weather	r/Temp:	Overcast, 50°
Location/St	tation:			- 		-			
Equipment	Used:	Komatsu P	PC 150L	C Contractor:	Nothna	gle	Operate	or:	Jim
Start Time:		11:36		Stop Time:			Agency	Rep:	
Comments:									
No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered at 6 Ft. 60% Fill % MSW % C&D 40% Native (USCS)						<u>CATIC</u>	<u>DN SKE</u>	<u>ICH:</u>	
DEPTH					PID	READ	INGS		
(ft. BGS)		CLASSIFICATION			MAX	SUST	BKGD	N	OTES/SAMPLES
	Stone p	avers, floor/p							
0 - 5.0 ft.	Black c	inder - rich fi	ll some o	coarse to fine sand	0.2	0.1	0.1		
	and grav	vel, moist		······································				(FILL)	
@ 32 in.	Bottom	of stone floor	r						
5 - 8 ft.	Brown f	fine sand, son	ne silt, so	ome coarse to fine					
•	gravel (1	FILL?)							
8 - 9 ft.	Gray SI	LT, some find	e sand		0.2	0.1	0.1	(NATIV	E)
9.0 ft.	Test pit	terminated at	9.0 ft. b	gs					
									· · ·
									······································
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	TEST PIT / TEST TRE	NCH S	SEGN	1ENT	LOG	
Test Hole No	b: TP-37 Inspected By:	P. Smit	ĥ	Weather	r/Temp: Overcast, 50°	
Location/Sta	tion:					
Equipment U	Jsed: Komatsu PC 150LC Contractor:	Nothna	gle	Operate	or: Jim	
Start Time:	Stop Time:			Agency	/ Rep:	
Comments:	12:45					
No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered at 5 Ft. 60% Fill % C&D 40% Native (USCS)						
DEPTH		PID	READ	INGS	`	
(ft. BGS)	CLASSIFICATION	MAX	SUST	BKGD	NOTES/SAMPLES	
0 - 6 in.	Gravel parking lot					
6 in 30 in.	Black fill: cinders, brick, cobbles, wood,				(FILL)	
	boulders, plastic alternating layers					
30 in 42 in.	Stone floor (12 in. thick)					
0 - 5 ft.	Black fill: cinders, brick, cobbles, wood,	0.4	0.3	0.2		
	boulders, plastic alternating layers					
5 - 6 ft.	Gray brown coarse to fine sand and gravel,					
	some trace cobbles, silt					
6 - 8 ft.	Gray, fine sand, some silt, trace clay	0.1	0.1	0.1	(NATIVE)	
8.0 ft.	Test pit terminated at 8.0 ft. bgs					
		<u>·</u>				
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Test Hole No	D: TP-38 Inspected By:	P. Smit	h	Weather	Temp:	Overcast, 50°
Location/Sta	tion:					
Equipment U	Jsed: Komatsu PC 150LC Contractor:	Nothnag	gle	Operato	or:	Jim
Start Time:	2:00 Stop Time:	2:40		Agency	Rep:	
Comments:						
	No Rock Encountered. Rock Encountered At 13.3 Ft. No Ground Water Encountered. Ground Water Encountered at seepage at bas of wall. 40% Fill // % MSW % C&D // 60% Native (USCS)		CATIO	<u>N SKE</u> T	<u>ГСН:</u>	
DEPTH		PID	READ	INGS		
(ft. BGS)	CLASSIFICATION	MAX	SUST	BKGD	NO	TES/SAMPLES
0 - 6 in.	Gravel parking lot					
0 - 36 in.	Concrete wall on east side of test pit					
6 in 8.5 ft.	Interbedded black cinder-rich fill, some coal,	0.1	0.1	0.1	(FILL)	
	gravel sand, wood					
6.5 - 8.5 ft.	gray brown sand, some silt and cobble, moist					
8.5 - 13.3 ft.	Gray silty alluvial material, moist	0.1	0.1	0.1	(NATIVE)
13.3 ft.	Test pit terminated at 13.3 ft. bgs					
	· · · · · · · · · · · · · · · · · · ·					
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 4, 1999

TEST PIT	/ TEST	TRENCH	SEGN	IENT	LO	G

Test Hole N	Jo:	TP-39	Inspected By:	P. Smit	mith Wea		/Temp:	Overcast, 50°
Location/St	ation:							
Equipment	Used:	Komatsu PC 150L0	C Contractor:	Nothna	gle	Operato	or:	Jim
Start Time:	·	3:00	Stop Time:	3:15		Agency Rep:		
Comments:	·							
	Rock No C	المسمعا ا	ntered.	LO	<u>CATIO</u>	N SKET	<u>ГСН:</u>	
DEPTH	PID READINGS							·····
(ft. BGS)		CLASSIFICATION			SUST	BKGD	NC	DTES/SAMPLES
0 - 6 in.	Gravel	Gravel						
6 in 8 ft.	Interbe	dded, black cinders, sla	ag, coal	0.1	0.1	0.1	(FILL)	
	with gr	ay brown coarse to find	e sand and gravel,				Mild petr	oleum odor in test pit
	silt, mo	ist to wet					Sheen on	water
8 - 15 ft.	Gray si	lty alluvial deposits	-	0.1	0.1	0.1	(NATIVI	E)
15.2 ft.	Test pit	terminated at 15.2 ft.	bgs				Top of ro	ck
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Test Hole No	D: TP-40	Inspected By:	M. Goi	man	Weather	/Temp: S	unny, 70°		
Location/Sta	tion:	۲.		· · · · · · · · · · · · · · · · · · ·					
Equipment U	Jsed: Komatsu PC 150L	C Contractor:	Nothna	gle	Operato	or:	Jim		
Start Time:	8:50	Stop Time:	9:30 Agency			y Rep:			
Comments:									
		ntered.		CATIC	DN SKET	<u>ГСН:</u>			
DEPTH			PID	READ	INGS				
(ft. BGS)	CLASSIFICA	TION	MAX	SUST	BKGD	NOT	ES/SAMPLES		
0 - 6 in.	asphalt/gravel								
2 ft.			0.1	0.1	0.1	Samples tak	en at 2 ft.		
6 in 6.5 ft.	Black/gray/rust cinders, slag	, coal				4 railroad ti	es, creosote noted		
						on lumber (FILL)		
6.5 - 7.5 ft.	Gray silt, some fine sand	· · · · · · · · · · · · · · · · · · ·				(NATIVE)			
7.5 ft.	Test pit terminated at 7.5 ft.	bgs	0.2	0.1	0.1				
	· · · · · · · · · · · · · · · · · · ·								
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

Test Hole I	No:	TP-41	Inspected By:	M. Goi	1. Gorman Weather/Temp: Sun, 74°					
Location/S	tation:						-	· · · · · · · · · · · · · · · · · · ·		
Equipment	Used:	Komatsu PC 15	OLC Contractor:	Nothna	Nothnagle Operat			or: Jim		
Start Time:	9:45 Stop Time:			Time: 10:15 Agency Rep:						
Comments:	:			·		• •	,	Marian a company and a comp		
	Rock No C		11.5 Ft. countered.	LO	<u>CATI(</u>	DN SKET	<u>ГСН:</u>			
DEPTH		· · · · · · · · · · · · · · · · · · ·		PID	READ	INGS				
(ft. BGS)		CLASSIFI	CATION	MAX	SUST	BKGD	NC	TES/SAMPLES		
0 - 3 ft	Cobbles	s, gray silt, black c	inders, coal				(FILL)			
3 - 4 ft.	Reddish	ı brown sandy silt						· · · · · · · · · · · · · · · · · · ·		
4 ft.				0.1	0.1	0.1				
11 ft.				0.1	0.1	0.1		·····		
4 - 11.5 ft.	Gray sil	t					(NATIVI	3)		
11.5 ft.	Test pit	terminated at 11.5	ft. bgs				Bedrock/	bucket refusal		
							No analy	ical collected		
				~						

THE SEAR-BROWN OUP	0 0	0 0		20() 9 2	Proj	ect: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999		
501									
Test Hole N	Test Hole No: TP-42 Inspected			M. Gorm	ian We	eather/Temp:	Sun, 76°		
Location/St	ation:								
Equipment	Used: Komatsu PC 150L	C Contra	actor:	Nothnagl	le O	perator:	Jim		
Start Time:	10:20	Stop Tim	ie:	11:00	A	gency Rep:			
Comments:						,			
			-	LOCATION SKETCH:					
DEPTH		-	P	ID READI	NGS				
(ft. BGS)	CLASSIFICATIO	DN	MAX	SUST	BKGD	NO	TES/SAMPLES		
0 - 6 in.	Gravel, asphalt, silt					(FILL)			
6 in 7 ft.	Black cinders, coal					Groundwater at 6.5 ft., no sheen/odo			
4 ft.			2.0	2.0	2.0				
7 - 10 ft.	Gray silt, some fine sand		2.0	2.0	2.0	(NATIVE)			
10 ft.	Test pit terminated at 10.0 ft	. bgs	2.0	2.0	2.0		· · · · · · · · · · · · · · · · · · ·		
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

lo:	TP-43	Inspected By:	M. Go	orman	Weath	er/Temp:	Sun, 76°
ation:							
Used:	Komatsu PC 150L	C Contractor:	Nothnagle		Operator:		Jim
		Stop Time:			Agen	cy Rep:	
·	11:00	11:40				,	
Rock No C Grou % Fi	CEncountered At Ground Water Encou and Water Encounter 11 %	ntered. ed at 10 Ft. MSW	L	DCATI	<u>ON SK</u>	ETCH:	
			PID	READ	INGS		
	CLASSIFICAT	ΓΙΟΝ	MAX	SUST	BKGD	NOT	TES/SAMPLES
Gravel,	, asphalt, silt gray						· · · · · · · · · · · · · · · · · · ·
Black s	ilt, cinders, coal					Petro odor a	at approx. 6 ft. (FILL)
			0.0	0.0	0.0		
		· ·	6.2	5.0	0.0		
Gray si	lt, stained, black, petro	o odor & staining				(NATIVE)	
			15.0	6.0	0.0		
			2.2	1.3	0.0	-	
Test pit	terminated at 10.0 ft.	bgs				Groundwate	er at 10 ft., petro sheen
				e		· ·	
	ation: Used: No F Rock No C Grou % Fi % Ca Gravel Black s	ation: Used: Komatsu PC 150L 11:00 No Rock Encountered. Rock Encountered At No Ground Water Encounter % Fill	ation: Used: Komatsu PC 150LC Contractor: Stop Time: 11:00 11:40 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered at 10 Ft. % Fill \$1000000000000000000000000000000000000	ation: Used: Komatsu PC 150LC Contractor: Nothr Stop Time: 11:00 11:40 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered at 10 Ft. % Fill% MSW % C&D% Native (USCS) PID CLASSIFICATION MAX Gravel, asphalt, silt gray Black silt, cinders, coal 0.0 6.2 Gray silt, stained, black, petro odor & staining 15.0 2.2	ation: Used: Komatsu PC 150LC Contractor: Nothnagle Stop Time: 11:00 11:40 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered at 10 Ft. % Fill % MSW % C&D % Native (USCS) PID READI CLASSIFICATION MAX SUST Gravel, asphalt, silt gray Black silt, cinders, coal 0.0 0.0 6.2 5.0 Gray silt, stained, black, petro odor & staining 15.0 6.0 2.2 1.3	ation: Used: Komatsu PC 150LC Contractor: Nothnagle Opera Stop Time: Agen 11:00 11:40 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered at 10 Ft. % Fill % MSW % C&D % Native (USCS) PID READINGS CLASSIFICATION MAX SUST BKGD Gravel, asphalt, silt gray Black silt, cinders, coal 0.0 0.0 0.0 Gray silt, stained, black, petro odor & staining 15.0 6.0 0.0 Grav silt, stained, black, petro odor & staining 15.0 6.0 0.0	ation: Used: Komatsu PC 150LC Contractor: Nothnagle Operator: Stop Time: Agency Rep: 11:00 11:40 No Rock Encountered. Rock Encountered AtFt. No Ground Water Encountered. Ground Water Encountered at 10 Ft. % Fill % MSW % C&D % Native (USCS) PID READINGS CLASSIFICATION MAX SUST BKGD NOT Gravel, asphalt, silt gray Black silt, cinders, coal 0.0 0.0 0.0 Gray silt, stained, black, petro odor & staining (NATIVE) 15.0 6.0 0.0 CLASSIFICATION 2.2 1.3 0.0

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Test Hole N	Io: TP-44 Inspected By:			M. Gor	nan	Weather/	Temp: S	un, 78°
Location/St	ation:							
Equipment	Used:	Komatsu PC 150L0	C Contractor:	Nothnag	gle	Operato	r:	Jim
Start Time:		11:45	Stop Time:			Agency	Rep:	
Comments:								
 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered at 8 Ft. % Fill % MSW % C&D % Native (USCS) 				LO	CATIC	DN SKET	<u>CH:</u>	
DEPTH				PID	READ	INGS		
(ft. BGS)		CLASSIFICA	TION	MAX	SUST	BKGD	NOT	ES/SAMPLES
0 - 6 in.	Asphal	lt, gravel, silt						
6 in 6 ft.	Black	cinders, coal, gray silt					(FILL)	- -
3 ft.				2.4	2.4	2.4		
6 - 8 ft.	Gray s	ilt, some fine sand					(NATIVE)	Groundwater at 8 ft.
8 ft.				2.4	2.4	2.4		
8 ft.	Test pi	t terminated at 8.0 ft. b	ogs					·
	-							
							-	
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TEST PIT / TEST TRENCH SEGMENT LOG										
Test Hole No	: TP-45	5	Inspected By:	M. Gor	M. Gorman Weath			Sun, 80°		
Location/Stat										
Equipment U	sed: Koma	Komatsu PC 150LC Contractor:			gle	Operator:		Jim		
Start Time:	12:40		Stop Time:	1:20	-	Agency	Rep:			
Comments:										
	No Rock En Rock Encou No Ground Ground Wat % Fill % C&D	ntered.		CATIO	N SKET	<u>'CH:</u>				
DEPTH				PID	READ	INGS				
(ft. BGS)		CLASSIFICA	TION	MAX	SUST	BKGD	N	OTES/SAMPLES		
0 - 6 in.	Asphalt, gravel									
6 in 2 ft.	Black cinder,	, coal, silt				4 ¹	Sampleo	l (FILL)		
2 - 6.5 ft.	Lighter brow	n-gray cinder,	ash, silt				Sampleo	1		
2 ft.				2.2	2.2	2.2				
6.5 - 14.5 ft.	Gray silt, son	ne fine sand					(NATIV	Έ)		
10 ft.		•		2.2	2.2	2.2				
14.5 ft.	Test pit termi	inated at 14.5 f	t. bgs				Top of r	ock		
		····								
					20 					
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

		TEST P	IT / TEST TRE	NCH S	EGN	IENT.	LOG	·
Test Hole N	o:	TP-46	Inspected By:	M. Gorr	nan	Weather/	Temp:	Sun, 80°
Location/Sta	ation:							
Equipment V	Used:	Komatsu PC 15	50LC Contractor:	Nothnag	Nothnagle Operator:			Jim
Start Time:		13:25	Stop Time:	13:40		Agency	Rep:	
Comments:								
	Rock No C		Ft.		CATIC	<u>ON SKET</u>	<u>`CH:</u>	
DEPTH		,		PID	READ	INGS		
(ft. BGS)		CLASSIF	ICATION	MAX	SUST	BKGD	N	OTES/SAMPLES
0 - 6 in.	Gray si	lt, gravel, asphalt	-					
6 in 7 ft.	Dark b	lack cinder and sil	t, coal		-		(FILL)	
2 ft.				2.1	2.1	2.1		·
7 - 8 ft.	Brown	and gray SILT, so	me fine sand	2.1	2.1	2.1	(NATIV	Έ)
8 ft.	Test pi	t terminated at 8.0	ft. bgs					
		· · ·						
		<u>.</u>						
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

		TEST F	PIT / TEST TRE	NCH S	EGM	IENT	LOG	
Test Hole N	o:	TP-47	Inspected By:	M. Gorr	nan	Weather/	Temp:	Sun, 76°
Location/Station:								
Equipment Used: Komatsu PC 150LC Contr			50LC Contractor:	Nothnag	gle	Operato	r:	Jim
Start Time:	Stop Time:	14:00		Agency	Rep:			
Comments:								
		CATIO	<u>N SKET</u>	<u>CH:</u>				
DEPTH				PID	READ	INGS	·	·
ft. BGS)		CLASSI	FICATION	MAX	SUST	BKGD	NO	TES/SAMPLES
0 - 6 in.	Gray s	ilt, gravel, asphal	lt					
6 in 6 ft.	Black	cinder, coal	<u></u>				(FILL)	
4 ft.				2.0	2.0	2.0		
6 - 7 ft.	Brown	sandy silt	· · · · · · · · · · · · · · · · · · ·					
8 ft.			·	2.3	2.1	2.0		
7 - 13 ft.	Gray s	ilt, some fine san	ıd				(NATIVI	E)
13 ft.	Test p	it terminated at 1	3.0 ft. bgs					
			·					
			· · · · · · · · · · · · · · · · · · ·					
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

		TEST P	IT / TEST TRE	ENCH S	SEGN	IENT	LOG		
Test Hole No:		TP-48	Inspected By:	M. Gorman		Weather/Temp:		Sun, 76°	
Location/St	ation:	······································							
Equipment Used:		Komatsu PC 150LC Contractor:		Nothnagle		Operator:		Jim	
Start Time:		14:05	5 Stop Time:			Agency Rep:			
Comments:									
No Rock Encountered. LOCATION SKETCH: Rock Encountered At 13.5 Ft. No Ground Water Encountered. Ground Water Encountered at Ft. % Fill % Fill % MSW % C&D % Native (USCS)									
DEPTH				PID	PID READINGS			· · ·	
(ft. BGS)		CLASSIF	TICATION	MAX	SUST	BKGD	N	OTES/SAMPLES	
0 - 6 in.	Asphalt	t gravel, silty san	d					·	
6 in 6 ft.	Dark black cinder, coal						Sample at 2 ft. (FILL)		
2 ft.			<u> </u>	1.7	1.7	1.7			
6 - 7 ft.	Brown	sandy fill							
7 - 13.5 ft.	Gray si	lt, some fine sand	[(NATIV	Έ)	
8 ft.			· · · · · · · · · · · · · · · · · · ·	1.7	1.7	1.7			
13.5 ft.	Test pit	terminated at 13	.5 ft. bgs				Bedrock	/bucket refusal	
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Project: Corn Hill Landing Project No.: 15155.06 Date: May 5, 1999

	IES	Г PIT / TEST TRE	INCH S)ÉGN		LUG	
Test Hole N	No: <u>TP-49</u>	Inspected By:	M. Gorman		Weather	/Temp:	Sun, 76°
Location/St	ation:						
Equipment	Used: Komatsu F	Komatsu PC 150LC Contractor:		gle	Operator:		Jim
Start Time:	14:45	Stop Time:	15:20		Agency Rep:		
Comments:							
	No Rock Encour Rock Encountere No Ground Water Ground Water En % Fill	ed At Ft. er Encountered.		CATIO	<u>DN SKE'</u>	<u>ГСН:</u>	
DEPTH			PID READINGS				
(ft. BGS)	CLAS	SSIFICATION	MAX	SUST	BKGD	N	OTES/SAMPLES
0 - 6 in.	Gravel						· · · · · · · · · · · · · · · · · · ·
6 in 4 ft.	Black cinder, coal					(FILL)	
2 ft.			1.7	1.7	1.7		
4 ft.	Concrete slab						
	Building foundation						
	and brick, creosote s					· · ·	
•	brown sandy fill						
0 - 6 in.	Gravel (next to foundation)						
6 in 8 ft.	Brick, timbers, coal,						
8 ft.	Brown gray silt, som				(NATIV	Έ)	
8 ft.	Test pit terminated a	t 8.0 ft. bgs				·	
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THE STAR-BROWN OUP		2 0	I 0	0	Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999		
	TEST PIT / TEST TRE	NCH S	EGN	IENT	LOG		
Test Hole N	Io: TP-50 Inspected By:	M. Gor	man	Weather	/Temp: Hazy, 70°		
Location/St	ation:				·		
Equipment	Used: Komatsu PC 150LC Contractor:	Nothna	gle	Operato	or: Jim		
Start Time:	09:25 Stop Time:	10:00		Agency	Rep:		
Comments:							
No Rock Encountered. LOCATION SKETCH: Rock Encountered At Ft. Ft. No Ground Water Encountered. Ground Water Encountered at Ft. % Fill % MSW % C&D % Native (USCS)							
DEPTH	<u> </u>	PID	READ	INGS			
(ft. BGS)	CLASSIFICATION	MAX	SUST	BKGD NOTES/SAMPLES			
0 - 6 in.	Asphalt and gravel						
6 in 5 ft.	Soil w/organic odor, black and brown and gray				(FILL)		
	clayey brick, cobbles	1.8	1.8	1.8	Sample at 4 ft.		
5 ft.	Test pit terminated at 5.0 ft. bgs						
	·						
•							
		_					
-							
4 							
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	· · · · · · · · · · · · · · · · · · ·						
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THE SEAR-BROWN OUP 0 0 0 0 1 5 2 0 1 0 1

Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

Test Hole N	o:	TP-51	Inspected By:	M. Gor	man	Weather	/Temp: Ha	azy, 70°	
Location/Sta	tion:		-						
Equipment U	Jsed:	Komatsu PC 150L	C Contractor:	Nothna	gle	Operato	or:	Jim	
Start Time:		10:00	Stop Time:	10:50		Agency	Rep:		
Comments:			-						
	Rock No C	Ground Water Encourter			CATIC	DN SKET	<u>ГСН:</u>		
DEPTH				PID	READ	INGS			
(ft. BGS)		CLASSIFIC	MAX	SUST	BKGD	NOT	ES/SAMPLES		
0 - 6 in.	Aspha	alt and gravel							
6 in 1.5 ft.	Cobbl	e and fine black silts					(FILL)	1	
1.5 - 2.5 ft.	Cobbl	e floor					Sewer odor	at groundwater level	
2.5 - 4 ft.	Brown	n silty clay					(NATIVE)		
3 ft.			-	2.0	1.9	1.7			
4 ft.	Test p	it terminated at 4.0 ft.	bgs				Groundwater		
							End (Corner NE) of 3 ft. building		
				· .			foundation,	SLAB measures 3 ft.	
							thickness. F	oundation ends 37 ft.	
			· · · · ·				due north of	fenceline	
		•							
		·····							



00001520102

Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

							LOG	
Test Hole N	ю:	TP-52 Inspected By: M. Gorman Weath		Weather	/Temp:	Sun, 74°		
Location/Sta	ation:				· · ·			· · · · · · · · · · · · · · · · · · ·
Equipment Used: Komatsu PC 150LC Contractor:				Nothna	gle	Operator:		Jim
Start Time:	-	11:05	Stop Time:	11:55 Agency Rep				
Comments:	_			· · · · · · · · · · · · · · · · · · ·				
	Rock No G		At Ft. Incountered.		CATIO	<u>DN SKE</u>	<u>ГСН:</u>	
DEPTH				PID	PID READINGS			
(ft. BGS)		CLASSI	FICATION	MAX	SUST	BKGD	N	OTES/SAMPLES
	WEST							
0 - 6 in.		t and gravel					Sample	at 2 ft. west
0 - 6 in. 6 in 1.5 ft.	Asphal	t and gravel nd black silt					Sample (FILL)	at 2 ft. west
	Asphal			1.7	1.7	1.7	(FILL)	at 2 ft. west at 2 ft. east
6 in 1.5 ft.	Asphal Gray ar		obble	1.7	1.7	1.7	(FILL)	
6 in 1.5 ft. 2 ft.	Asphal Gray ar Brown	nd black silt	·····	1.7	1.7	1.7	(FILL)	
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft.	Asphal Gray ar Brown Brick, c	nd black silt sandy silt and c	t & cinder	1.7	1.7	1.7	(FILL)	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft.	Asphal Gray ar Brown Brick, c	nd black silt sandy silt and c cobble, black sil	t & cinder	1.7	1.7	1.7	(FILL) Sample	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft.	Asphal Gray ar Brown Brick, c	nd black silt sandy silt and c cobble, black sil	t & cinder	1.7	1.7	1.7	(FILL) Sample	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft.	Asphal Gray ar Brown Brick, c Gray si <u>EAST</u>	nd black silt sandy silt and c cobble, black sil	t & cinder	1.7	1.7	1.7	(FILL) Sample	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft. 6 - 8 ft. 0 - 6 in.	Asphal Gray ar Brown Brick, c Gray si EAST Asphalt	nd black silt sandy silt and c cobble, black sil lt, some fine sar	t & cinder	1.7	1.7	1.7	(FILL) Sample	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft. 6 - 8 ft. 0 - 6 in.	Asphal Gray ar Brown Brick, c Gray si EAST Asphalt	nd black silt sandy silt and c cobble, black sil lt, some fine san t and gravel	t & cinder	1.7	1.7	1.7	(FILL) Sample : (NATIV	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft. 6 - 8 ft. 0 - 6 in. 6 in 4.5 ft.	Asphal Gray ar Brown Brick, c Gray si <u>EAST</u> Asphalt Black c	nd black silt sandy silt and c cobble, black sil lt, some fine san t and gravel	t & cinder				(FILL) Sample : (NATIV	at 2 ft. east
6 in 1.5 ft. 2 ft. 1.5 - 2.5 ft. 2.5 - 6 ft. 6 - 8 ft. 0 - 6 in. 6 in 4.5 ft. 2 ft.	Asphal Gray ar Brown Brick, c Gray si <u>EAST</u> Asphalt Black c Brown	nd black silt sandy silt and c cobble, black sil lt, some fine san t and gravel inder, coal, silt	t & cinder nd				(FILL) Sample : (NATIV	at 2 ft. east E)

THE SEAR-BROWN OUP	0 0	0015	20	I 0	3	Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999
	TEST PIT	/ TEST TRE	ENCHS	SEGN	1ENT	LOG
Test Hole No:	ГР-53	Inspected By:	M. Gor	man	Weather	/Temp: Sun, 74°
Location/Station:	·····	•.		·····		· · · · · · · · · · · · · · · · · · ·
Equipment Used:	Komatsu PC 150L	C Contractor:	Nothna	gle	Operato	r: Jim
Start Time: 1	2:00	Stop Time:	12:30		Agency	Rep:
Comments:						
Rock E		ntered.			N SKET	<u>'СН:</u>
DEPTH	· · · · · · · · · · · ·		PID	READ	INGS	· · · · · · · · · · · · · · · · · · ·
(ft. BGS)	CLASSIFICA	ATION	MAX	SUST	BKGD	NOTES/SAMPLES
	1 1				-	
0-6 in. Asphalt a	and gravel	* * * * * * * *				
	nder, silt, coal	· · · · · · · · · · · · · · · · · · ·				(FILL)
	_	· · · · · · · · · · · · · · · · · · ·	1.7	1.7	1.7	(FILL)
6 in 4 ft. Black cir	nder, silt, coal	· · · · · · · · · · · · · · · · · · ·	1.7	1.7	1.7	(FILL)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal		1.7	1.7	1.7	(FILL) (NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand		1.7	1.7	1.7	
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil	. bgs				
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7			(NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7			(NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7			(NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7	1.7		(NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7			(NATIVE)
6 in 4 ft. Black cir 2 ft.	nder, silt, coal andy soil , some fine sand	. bgs	1.7	1.7		(NATIVE)



THE SEAR-BROWN OUP

0 0 0 0 1 5 2 0 1 0 4

Test Hole N	o:	TP-54	Inspected By:	M. Gor	Gorman Weat		/Temp: Sun, 76°				
Location/Sta	ation:										
Equipment U	Used:	Komatsu PC 15	OLC Contractor:	Nothna	gle	Operato	or: Jim				
Start Time:		12:35	Stop Time:	16:00		Agency	Rep:				
Comments:		· · · · · · · · · · · · · · · · · · ·		-, <u>, , , , , , , , , , , , , , , , , , </u>							
 No Rock Encountered. Rock Encountered At Ft. No Ground Water Encountered. Ground Water Encountered at 6 Ft. % Fill % MSW % C&D % Native (USCS) 					LOCATION SKETCH:						
DEPTH				PID	READ	INGS					
(ft. BGS)		CLASSIF	MAX	SUST	BKGD	NOTES/SAMPLES					
0 - 6 in.	Aspha	lt and gravel									
6 in 3.5 ft.	Light	brown fill and dark				(FILL)					
3 ft.				34.7	29.2	1.9	-				
3.5 - 4 ft.	Rust c	olored silty sand									
4 - 8 ft.	Petrol	eum impacted blac	k cinder				Strong odor				
4.5 ft.				68.7	65.0	1.9					
8 - 10 ft.	Dark g	gray silt, some fine	sand	6.3	5.7	1.9	(NATIVE)				
10 ft.	Test p	it terminated at 10.	0 ft. bgs								
			· · · ·								
		·									
		· · · · · · · · · · · · · · · · · · ·									
			- 								

THE SEAR-BROWN OUP Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

Test Hole N	o:	TP-55	Inspected By:	Gorr	nan/Smitl	n/Smith		/Temp: Su	un, 76°			
Location/Sta	ation:											
Equipment U	Jsed:	Komatsu I	PC 150LC Con	tractor:	Nothna	gle	Operato	or:	Jim			
Start Time:		13:10	Stop Ti	me:	13:55	13:55 Agency Rep:						
Comments:		<u></u> ,										
	No Rock Encountered. LOCATION SKETCH: Rock Encountered At Ft. Ft. No Ground Water Encountered at Ft. Fill % Fill % MSW % C&D % Native (USCS)											
DEPTH				-	PID	READ	INGS	-				
(ft. BGS)		CLA	SSIFICATION		MAX	SUST	BKGD	NOT	ES/SAMPLES			
0 - 6 in.	Grass	and topsoil							· · · · · · · · · · · · · · · · · · ·			
6 in 2.5 ft.	Black	ish brown co				(FILL)						
2.5 ft.					1.8	1.8	1.8					
2.5 - 3 ft.	Sandy	clay - reddis	sh brown									
3 ft.					1.8	1.8	1.8					
3 - 5.5 ft.	Black	cinder and c	oal									
5.5 - 8 ft.	Grays	silt, some fin	e sand					(NATIVE)				
8 ft.	Test p	it terminated	at 8.0 ft. bgs									
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SEAR-BROWN

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Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

		TEST	' PIT / TEST '	TRE	NCH S	SEGN	IENT	LOG			
Test Hole N	lo:	TP-56	Inspected By:	Gorn	nan/Smit	h	Weather/Temp: Sun, 76°				
Location/Sta	ation:				-			. •			
Equipment V	Used:	Komatsu PO	C 150LC Contrac	tor:	Nothnagle Operat			or:	Jim		
Start Time:		13:55	Stop Time	:	14:05		Agency	ency Rep:			
Comments:			· · · · · · · · · · · · · · · · · · ·	-							
	Rock No C	nd Water End	At Ft. Encountered.		LO	CATIO	<u>N SKE</u>	<u>ГСН:</u>			
DEPTH			н 	PID READING							
(ft. BGS)		CLAS		MAX	SUST	BKGD	N	IPLES			
0 - 1 ft.	Topsoi	l: two railroa					Anomaly	, С	······································		
1 ft.	Test pi	t terminated a	t 1.0 ft. bgs								
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		· · · · · · · · · · · · · · · · · · ·									
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0 0 0 0 1 5 2 0 1 0 7

Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

Test Hole N	e No: TP-57 Inspected By: Gorman/Smith		h	Weather/Temp: Sun, 78°						
Location/Sta	ation:	· · · · · · · · · · · · · · · · · · ·								
Equipment V	Used: Ko	matsu PC	150LC C	ontractor:	Nothna	gle	Operato	or: Jim		
Start Time:	14:	10	Stop	Time:	14:30	Agency Rep:				
Comments:		·				·				
	Rock End No Groui		At Ft. Encountered ountered at % MSW	Ft.	LOCATION SKETCH:					
DEPTH					PID	READ	INGS			
(ft. BGS)		CLASSIFICATION				SUST	BKGD	NOTES/SAMPLES		
0 - 4 in	Grass, tops	oil								
4 in 6 ft.	Black cinde	ers and coal	, black silt					(FILL)		
2 ft.					1.8	1.8	1.8	Sample at 2 ft.		
6 - 9 ft.	Brown sand	ly silt						(NATIVE)		
9 ft.	Test pit terr	ninated at 9	0.0 ft. bgs							
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THE
SEAR-BROWN
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00001520108

Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

		TES	Γ PIT /	TEST	TRE	NCH S	SEGN	IENT	LOG			
Test Hole N	ío:	TP-58	Inspect	ed By:	М. С	forman		Weather/Temp: Sun, 76°				
Location/Sta	ation:				·····					······································		
Equipment	Used:	Komatsu P	C 150LC	Contrac	ctor:	Nothna	gle	Operator: Jin		Jim		
Start Time:		14:30	S	- Stop Time	e:	15:00 Agency Rep:						
Comments:	•											
	Rock No G		d At 15.2 r Encounte ncountered] % M	ered. at Ft		LO	CATIO	N SKE	<u>ГСН:</u>			
DEPTH						PID READINGS						
(ft. BGS)		CLASSIFICATION				MAX	SUST	BKGD	NOTES/SAMPLES			
0 - 6 in.	Grass,	, topsoil										
6 in 2.5 ft.	Brown	gray cinder,	sand cobble	es								
2.5 - 6.5 ft.	Dark b	lack cinder si	lt						(FILL)			
4 ft.						1.9	1.9	1.9	Sample a	nt 4 ft.		
6.5 - 8 ft.	Rusty b	prown sandy	silt									
8 - 15.2 ft.	Gray si	lt, some fine	sand						(NATIV	E)		
15.2 ft.	Test pit	t terminated a	at 15.2 ft. b	gs						· · · ·		
			*									
		·			-				-			
<u>}</u>			<u></u>									
									_			

THE
SEAR-BROWN
OUP

0 0 0 0 1 5 2 0 1 0 9

Project: Corn Hill Landing Project No.: 15155.06 Date: May 6, 1999

TEST PIT / T	LEST TRENCH	SEGMENT LOG

Test Hole N	lo:	TP-59	Inspec	ted By:	M. G	orman		Weather	/Temp: S	un, 76°
Location/Sta	ation:						<u> </u>			· · · · · · · · · · · · · · · · · · ·
Equipment U	Used:	Komatsu P	C 150LC	Contra	ctor:	Nothna	gle	Operato	or:	Jim
Start Time:		15:00	(_ Stop Tim	e:	15:30		Agency	Rep:	
Comments:										
	Rock No C		ed At r Encount ncountered] % M	ered. 1 at F			CATIO	N SKET	<u>rch:</u>	
DEPTH						PID	READ	INGS		
(ft. BGS)		CLAS	SSIFICAT	ION		MAX	SUST	BKGD	NOT	res/samples
0 - 6 in.	Grass	and topsoil								
6 in 3 ft.	Black	and brown co	arse cinde	r and silt					(FILL)	
2 ft.						1.7	1.7	1.7	Sample at 2	2 ft.
3 - 9 ft.	Gray-t	brown silty sa	nd, cobble	and cinde	r blocks				-	
9 ft.	Test pi	it terminated	at 9.0 ft. bg	gs						· · · · · · · · · · · · · · · · · · ·
			· · · ·							·····
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APPENDIX B

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	THE									Test Boring No. $MW - 1$
	SE/	R-BR	OWN	() RO	METRO PA		к	5	201	
	FULL	OUP Service		716	2 3 -475-1440 (: 716-272					
			ESSIONAL							
		κι <u> </u>	The of	Roch	aing /	Roches	ster, N	<u>iy</u>		
	leva	lion	J	Star	5	Roche /11/99	Com	ieted	5/11/99	Driller Target Drilling Co.
			During D	Filling					Inspector	
			At Comp			observe	d welon	lanal		· · · · · · · · · · · · · · · · · · ·
Ĭ			ows on S		ay aiter	00301 40				
	С	0.	6.	12.	18"	1	52	i qma	e	Soil and Rock Information
0		6.	12.	18.	24"	N	Rec.	No		Remarks
		2	6			12		+	0'-2'	(TOPSOIL) Brown silly Fine SAND, trace roots 0.5
				6	9			-		SAND, trace roots 0.5 Gray to block silt, tr. cinder1.5
_		9				15		2	2'-4'	Block Cindows, some sand
			8	- 7-		<u> </u>				and slag, trace brick, dry
ļ	_				6					- same, except moist
5			З			5	<u> </u>	3	4-61	(FILL)
ŀ				2	2		ļ			- same
Ē		2				9		ų	6'- 8'	
-	-			8				—	ů.	7.0
					4					Gray brann fine SAND, some silt, trace fine
ŀ		2	4			12		5	8'-10'	some silt, trace time
10 1				8						gravel, wet
~ +	-+				~	12		6	10'-12'	
F	\neg		3				27		1012	Dark gray SILT, some f. Sand, trace word, wet
E				9	q					sand, trace word, wet
-	_	3				4		2	12'-14'	- Same here i
				3				-		- same with tr. clay, sravel lens@ 13.8.
ŀ	+	6			15.	56/8		8	14'-15-2'	graves lens (a 13.8
15	_		6	/		-/0		Ľ	17 - 13-2	- same 15.7
┢	-			50/2				├┦		Auger refusal / top of rock
F	4									inter relinsue top or rock
								$\left - \right $		
F	-								·	
E										
zot										
	of Bi	lows to l		2" 0		L 2.″ wit	h 13r) IN	wt. <u>30''</u> E	e Blow
		lows to f							wtE	
									· · · · · · · · · · · · · · · · · · ·	

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I										
1 ·	inn Tilt									Test Boring No. MW - 2_
	THE SE A		OWN	n 197	METROJPA	RK	()		201	
		OUP	omi	J ROI 146	CHESTER. 21	NEW YORI	4)	e u i	Page 1 of 1
ľ	FULL	SERVICE	ESSIONAL	716 5 FA 1	-475-1440 K: 716-272-	1014				
							(
	сног Снос			Port	aing /	Roches	ter, N		<u></u>	
	Eleva	د <u></u> انت	Jigor	Sim	ster,	<u>Roches</u> [11].99	fer N	<u>y</u>	Fliles	
ł			During D		·	<u>, 19</u>	_ Comp	9190	<u>5/11/99</u> Inspector	
			At Comp	. •			· · · ·			
					nay alter	observed	i water	levels	•	· · · · · · · · · · · · · · · · · · ·
		B	lows on S	ampler		1	5.	mal	<u></u>	Soil and Rock Information
		0.7	16.	12./	18"		52	mp)	e	
0	С	6.	12	18-	24-	N	Rec.	No	Depth	Remarks
	ļ	12				20		1.	0-2'	Gravel parking 0.5
			10	10			 	+		Black Sand and silt, some
					21		· · ·			
		12			<u> </u>	13		2	2-4'	- cinders, brick, wood, moist
	<u> </u>		6	7				┼╌		(FILL) <u>3,5</u>
					9				L	
5		5	5	 		1.		3	4-6'	- Brown Fine SAND, Some silt,
-			2	6	<u> </u>	<u> </u>		+-		trace einders, ash, moist
					7					(FILL)
		5			ļ	10		4	6-8'	Gray brown e-f SAND and gravel, dry
			5	5						and gravel, dry
					25					- coal chips, wood @ 7.5' 8.0
		2	2			5		5	8-10'	Gray brown Fine sand, some
				3						sitt, moist
/0					З					5, 1, 10, 0, 51
			2_			3		6	10-12'	- same with trace clay
								+		
					2					(NATIVE)
						25		7	12-13.6	- Same
			2	23						
					50/1.					Spron refusal/top of rock
15			-					<u> </u>		spron retusal top of rock
· ~ _								<u> </u>		
						·		<u> </u>		
	-+							┝╌┨		
	\neg]						\square		
	-+							┝──┨		
2 <u>0</u>										
N-No	. of E	Blows to	Drive .	2" 9	Spoon _/	2" wi	h 130	2_ Ib	. wl. <u>30''</u>	Es. Blow
									. wl	
			•			_				
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1										
1	THE SEA		ROWN	1 () 85	METRO P		1		2 0	Test Boring No. $MW - 3$
	GRO	OUP					1 K 📲	Э	2.0	Page _ of _
			E FESSIONAL		16-475-1440 X: 716-272-	2-1814				
	Proj	ject(Corn Hi	il Lar	nding , 1	Roche:	ster, N	īΛ	·	
	Clien	ж <u>с</u>	<u>? Pry of</u>	Roche	ester, 1 rl <u>5/1</u>	Roche	ster, N	<u>iý</u>		
	Eleva Walr	noile 	- During D	Starn	<i>بلخ</i> ۱	12/99	Compi	betei		_ Driller <u>Target Drilling Co.</u> P. Swith
١	Water	er Level -	- At Comp	pletion					Inspector	<u> </u>
		ional and c	climatic c	changes n	may alter	observe	d water !	levels	s. ·	
i	[_	10.7	Blows on S	Sampler	18-	7	Sạ	ampl	le .	Soil and Rock Information
0	C	6.	6.			N	Rec.	INO	Depth	Remarks
- 1	F'	11	4	Ť	Ť	11		11		gravel parking
1				7	<u></u>	<u> </u>	<u> </u>	E	4	V13
_1	H	5	 '	'	7	50/3	<u> </u>	2	2-2.8'	Black coal and cinders,
	\square		50/3		<u> </u>	3-1-	<u></u>	É	2-40	dry
t		<u> </u>	<u> </u>	<u>}</u>	<u> </u>	{'	F	F		(FILL)
5	$\overline{-}$	8	6	—		<u> </u>		З	4-6'	- same, except
1				5			<u> </u>		l	layored
ł	J	4	<u> </u>	[]	7	6	F'	4	6-8'	- ·
}	F		2	\square			<u> </u>	日	6-0	Grav brown SILT Some
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^{/5} +	$\overline{+}$	-+	+	<u> </u>					1	Auger rotusal / top of rock
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		lows to D) Jrive	<u>2"</u> Sr	poon 12	witt	n <u>130</u>	_ lb.	wt. <u>30"</u> E	Ea. Blow
		lows to D)rive	Ca	ising	with	1	_ 16.	wlE	Ea. Blow
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Test Boring No. MW - 4 THE SEAR-BROWN () BS MITRO PARK ORK 52011 4 1 Page oſ GROUP 14623 FULL SERVICE DESIGN PROFESSIONALS 716-475-1440 FAX: 716-272-1814 Project Corn Hill Landing, Rochester, NY City of Rochester, Rochester, NV Client Start 5/12/99 Completed 5/12/99 Driller Target Drilling Co. 0 Elevation Inspector P. Smith Water Level - During Drilling Water Level - At Completion Seasonal and climatic changes may alter observed water levels. • Blows on Sampler Soil and Rock Information Sample 0" 6" 127, 18" Remarks С /24" Ν Rec. No Depth 12" 18. 0 Asphalt w/ gravel base lie 1-2:5' ø 1 Block silt sand and survey, 4 Some ash, cinders, coal, dry 4 2 5 8 2,5-4 - Same (FILL) 4 J 4 З 4-6' 7 - Same w/ trace birck, 5 3 4 word 3 4 6-8' 8 - no recovery Ч ч 8-0 4 2 Ч 5 8-10' Gray SILT, some Fine sand, wet 10 5 4 6 10-12' - Same 2 2 2 - same 12.5 Spoon refusal / top of rock <u>50/3</u> 7 12-12.8' 50/3 15 20 N-No. of Blows to Drive 2" Spoon 12" with 130 1b. wt. 30" Es. Blow C=No. of Blows to Drive _____ Casing _____ with _____ 1b. wt. _____ Ea. Blow

Test Boring No. MW - 5THE SAMETRO PARK SEAR-BROWN t ٥ſ GROUP FULL SERVICE DESIGN PROFESSIONALS 716-475-1440 FAX: 716-272-1814 Corn Hill Landing, Rochester, NY Project _ City of Rochester, Rochester, NV Client <u>5/12/99</u> Driller <u>Target Drilling Co.</u> inspector <u>P. Smith</u> 5/12/99 Completed Elevation Start Water Level - During Drilling Water Level - At Completion Seasonal and climatic changes may alter observed water levels. Blows on Sampler Soil and Rock Information Sample 0. 6" 12./ 18" Remarks С 6. 12* Ν Rec. No 18" Depth 0 Asphalt/ shavel 1.0 8 16 1-2.5 Black SILT, Some cindus and coal, gravel, moist 8 20 24 2 2.5-4 - same w/ concrete, sewer 13 odor 11 24 15 3 4-6 -no recovery (FILL) 5 8 6.5 2 6- 8 9 4 4 Bray Fine sand, some silt, 5 6 trace gravel, moist 8-10 10 16 5 8 - Same, w/ tr. wood 8 /0 10-12 2 6 - Same 2 5 12-14 7 - Same 2 ¥ - no vecovery 14.5 Augue refusil @ 14.5 Az 14-14.5 15 50/0 20 N-No. of Blows to Drive 2" Spoon 12" with 130 lb. wt. 30" Es. Blow C=No. of Blows to Drive _____ Casing _____ with _____ Ib. wt. _____Ea. Blow

	DESI		ESSIONA		+475-1440 X: 716-272-					
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	LIOVE	1.100		Star	l <u>5</u>	13 99	_ Comp	leted	5/13/99	Driller Target Drilling Co. J. Ignaszak
			- During L - At Comp)rilling		/			Inspector	J. Ignaszak
			climatic (nay alter	observe	d water	levels		
	1		lows on S					iqme		Soil and Rock Informatio
0	С	0.	6-	12-	18-	N	Rec.			Remarks
Ť			<u> </u>		24		nec.		Deptil	Asphalt and gravel
		19				19		17	1-2,5	
			12	7			· · ·			Gray gravel, some slap and cocyse gra
		7				20		2	2.5-4.0	and coarse gin
ł			_//	9						- Sane
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		13	-		/3	13		4	6-8'	
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		4			5					_
			5			9		2	8-10'	Black slag, course
10				4	6					V
		4	- u			6		6	10-12'	- no recover
			-7	2_	1					
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	-+			6	7					(NATILE)
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N-No	of Bl	ows to i	Drive	<u>2"</u> \$	000n <u>12</u>	with	130	_ Ib. '	WL. <u>30"</u> E	I. Blow
C=No	of Bi	ows lo (wt E	

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	FULL DESI	SERVICE	ESSIONA	716 LS FA	-475-1440 (: 716-272	1014						
		BCL		Can	aing /	Roches	ter, N	<u>17</u>		·		·····
	Clien		ITY OF		ster,	Roche	ster, h	<u> </u>				
	Eleva		0	Stari	<u> </u>	713/99	Comp	leted	5/13	99	_ Dri	iller Target Drilling Co. J. IS noszafe
			During L AL Com						Inś	pector	_	J. ISHUSZAL
					aller vie	observe	i water	Impli		•		······································
			ows on S			1					<u> </u>	
	_	0.	16.	12.	18"	4	Sạ	ampi	le			Soil and Rock Information
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				8				1	4			SAND, some siavel, trace
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			18			1 ~~/~		+=	2-	7		slag, duy
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		9	 	 		· · ·		$\frac{1}{2}$	<u> </u>		4	
5			7			2.3		3	4-	6'		Black stap, some sail
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-					2				{			
Ę		3				2		5	8-1	101	·	
ŀ			_/								1	gray minded sievel
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	-	7			-/	-,-		6	10-	07	4	
			1					2	10-	12.	-	- Same
Ļ				WOH								
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+	-+		2			4		7	12-	14		12.5
E			<u> </u>	2_				┝╌╌┨			L.	ight to dark size silty
F					3.						j.	SAND (NATIVE)
5 F	-+	6	<u></u>			50/2		Ł	14-16	1.8'		(~~~~)
-+-	-+		50/2				··	├				Same except wet 14.8
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No.	of Bl	ows to C	rive	<u>2"</u> Sp	00n _ <i>12</i>	-"_ with	130	L ib.	WL. 30	<u>2″</u> E	a. Bio	₩
No.	of 81	ows to C							wt			
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			ESSIONAL	716 S FA)	475-1440	1814) 	An	4 N ²	. .	i i Na		
ſ	roje	ct	lorn Hi	II Lan	ding, 1	<i>Roches</i>	ter, N	<u>У</u>					
(Clien	l <u>C</u> lion	? My of	Roche	<u>ster, 1</u>	Roches	ster, N	<u>IV</u>	clizlas			.	
			During D		·	<u></u>		eted	<u> </u>	0rj or	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	195Zak	ling Co.
			At Comp		wy alter	ohserver	1 water 1	mais		,	.		
			lows on S					mple	<u> </u>		Soil ar	d Rock In	formation
	С	0.	6.	12-	18-	N	Rec.				oon ui	Remari	
0		10	/ 12	10	/ 24	21	Hel.	1.	Depth 0-2/		<u> </u>	; 	:16 Stard
			11	10				\square			Dave	Stay	ily Stud, brick, gravel
		5			6	6		2			JUNK	Coax	Britk graver
			ч	2					2-41		- Sam	e j	FILL)
ļ					3							<u>(</u>	-
5		3	10			18		3	4-6'		D. Sra	ay silty	sond, wet
}				8	2			\square			str	ong per	t. odor 6.0
[3	3			5		4	6-8'				
				2							Light	- To d 16. co l	ark sing , slight odor
ł		2			_2_	3		5	8-10			ly such	, stight oner
ŀ			<u> </u>	2							- Ser	ne	
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	Proje	ct	lorn Hi	l Lan	ding, A ster, 1	Roches	ter', N	¥		·····
	Lieva Lieva		0	Start	ster, ((oches 114/99	_ Compi	eted	5/14/99	Driller Target Drilling Co. J. Januszak
			During D At Comp	-			·		Inspector	J. Ignaszak
		na) and o	limatic c	thanges m	ay siter	observed	l water i	levels.	•	
	_	0.	ows on S	ampler	18"		Sạ	mple	9	Soil and Rock Information
٥	С	6.	12.	18-	24	N	Rec.	No	Depth	Remarks
		15	14			23			0-2'	Lizit to dark home silt,
				9	2			+-1		Some slag al course Stard, moist
-		6	6			12		2	2-4'	- Same
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5		5				9		3	4-6'	- no vecovery (Fill)
-			4	-5						
		2			<u> </u>	8		4	6-8'	Dark gray silly Sand,
			2	6					- 0	Course gravel and stay, + 8/985, wet
		2_			Ч	ч		5	Q /- 1	8/955, wet
			2			_7_			8-10'	- no recovery
0				2	2					/0
ł						2		6	10 -12'	Light gray silly said, wet
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	1 10	lows to	Drive	2" 9		2" wil	h 13c		WL. <u>30"</u>	Ea. Blow

Test Boring No. MW - 10THE ROCHEETER NEW YORK 5 2 0 2 - 0 SEAR-BROWN Page I of I GROUP FULL SERVICE DESIGN PROFESSIONALS 716-475-1440 FAX: 716-272-1814 Coun Hill Landing, Rochester, NY Project _ City of Rochester, Rochester, NV Client Start 5/14/99 Completed 5/14/99 Driller Target Drilling Co. Inspector J. Ignaszak Elevation Water Level - During Drilling Water Level - At Completion Seasonal and climatic changes may alter observed water levels. Blows on Sampler Soil and Rock Information Sample 12" 18-0" 6* С Remarks 24 6. 12" 18" Ν Rec. No Depth 0 14 29 0-21 Dark burn Saral, Some 12 coarse grand al concrete n 34 22 2 2-4' 40 20 - Same 20 17 (FILL) 17 22 3 4-6 5 10 - Same 12 5 2 4 6-8 3 - same 2 3 810 Ч 5 8-10 D. gray silty sand, net 2 2 10 Woff WOH 6 10-12' -same (NATIL'E) Woff Wolf WOH - no recovery auger refused a 12.4 Az Wolf 7 12-12.4 12.4 Wo H <u>50/0</u> 15 20 N-No. of Blows to Drive 2" Spoon 12" with 130 1b. wt. 30" Es. Blow C=No. of Blows to Drive _____ Casing _____ with ____ Ib. wt. ____ Ea. Blow