LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VIRGINIA

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SIGNATURE SHEET

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December 15, 2014

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1.0 INTRODUCTION

This report summarizes the Limited Phase II Environmental Site Assessment (Phase II) activities conducted by ICOR, Ltd. (ICOR) at Robinson Terminal North (herein referred to as the SITE) located at 1 and 101 Oronoco Street in the Alexandria, Virginia. The SITE has a long history of industrial and commercial use and is being considered for development into a multi-story residential complex (eastern portion of the SITE) and multi-story residential and hotel complex (western portion of the SITE), both to include street-level retail and commercial use. Both complexes will also include at least 1 level of subsurface parking. Purchase of the SITE and proposed development is being considered by CityInterests, LLC (CI). CI contracted ICOR to review historical environmental documents and conduct a Phase II to further assess and delineate soil and groundwater impacts at the SITE. The historical data and data generated during the Phase II was used to determine what environmental activities may be required at the SITE, prior to and/or during CI's proposed development and to achieve regulatory compliance with applicable and Commonwealth of Virginia Department of Environmental Quality (VDEQ) regulations and cleanup criteria for residential or commercial land use. Land use considerations will ultimately be based on the proposed land use of the complex at grade level (street level/first floor level above subsurface parking). At this time, no residential use on the first floor is anticipated.

The SITE is currently improved with two large warehouses, gravel and asphalt parking areas, a concrete dock, and landscaping. As indicated by CI, the proposed development will include razing the existing buildings and construction of a multi-story residential and hotel complex with street-level retail and commercial use. The complex is expected to overlie the majority of the property. The complex will also include 1 or 2 levels of subsurface parking underlying the majority of the building footprints, which will require excavation and removal of 7 to 16.5 feet of soil underlying most of the SITE.

Based on the findings of historical environmental assessments, hazardous materials requiring special handling and disposal prior to razing of the buildings are present in the buildings, at least three underground storage tanks (USTs) are buried at the SITE, and soil and groundwater beneath the SITE are impacted by the past industrial activities conducted at and adjacent to the SITE. This Phase II only addresses the USTs and soil and groundwater impacts. Past activities of concern conducted at the SITE include petroleum storage and fertilizer production. Adjacent site uses of concern include petroleum storage, chemical production, and coal gasification. Constituents of concern (COCs) identified in soil and groundwater underlying the SITE are mainly related to petroleum fuels; however, metals have been detected at elevated concentrations in some isolated areas. The SITE was the subject to a VDEQ storage tank program required study to assess the three USTs. The SITE is currently in compliance with VDEQ requirements and the case number associated with the USTs was closed.

The Phase II activities conducted by ICOR included advancement of test borings, installation of temporary groundwater wells, and collection of soil and groundwater samples for field screening and laboratory analysis. The assessment targeted areas where historical storage and operations of concern were conducted and areas perceived as "data gaps" based on our review of past

studies. The environmental history of the SITE and Phase II activities and findings are summarized in the following sections.

2.0 SITE DESCRIPTION

The SITE is located at 1 and 101 Oronoco Street in Alexandria, Virginia, at the intersection of Oronoco Street and North Union Street. A site location map is included as Figure 1. The SITE is approximately 3.2 acres in size and is comprised of two parcels separated by North Union Street. For the purpose of this report, the parcel situated on the eastern side of North Union Street will be referred to as the Eastern Parcel and the parcel situated on the eastern side of North Union Street will be referred to as the Western Parcel. The SITE is situated in a mixed commercial and residential land use area. Adjacent property use is depicted on the aerial photograph of the SITE included as Figure 2.

The SITE is currently improved with two 1-story, slab-on-grade brick and concrete warehouses (totaling approximately 91,800 square feet), a large concrete dock, railroad spur, a small wood-frame shed (near the dock), gravel and asphalt parking areas, and landscaping. The warehouses were constructed in 1966. The warehouse situated on the Eastern Parcel is referred to as Warehouse #10, 11, and 12. The warehouse situated on the Western Parcel is referred to as Warehouse #16. Three diesel USTs are buried on the northeastern portion of the Eastern Parcel and an above ground propane tank is located on the southeastern portion of the Eastern Parcel. It should be noted that one of the tanks has been identified as being used to store gasoline in the past. The USTs are currently in use and provide fuel to two dispensers located on the east-central portion of the property, next to the small wood shed. A site plan depicting existing features is included as Figure 3.

Topography at SITE slopes is relatively flat. The SITE is bound to the north by Pendleton Street and railroad tracks across which is Oronoco Bay Park, to the east by the Potomac River, to the south by Oronoco Street across which is Founders Park and a residential building, and to the west by Dalton Wharf Office Center and North Union Street.

3.0 PROPOSED DEVELOPMENT

Proposed development of the SITE will include construction of a multi-story building on each parcel comprising the SITE (one on each side of South Union Street). The building constructed on the Eastern Parcel will be a residential complex with street-level (first floor) retail and commercial use. The building constructed on the Western Parcel will be a residential and hotel complex with street-level (first floor) retail and commercial use. At this time, no residential use on the first floor is anticipated. Both complexes will be constructed on a poured-concrete foundation. The complexes are expected to overlie the majority of the property, with walkways, patios, and landscaping covering the remaining open spaces. Each complex will also include at least 1 level of subsurface parking underlying the majority of the building footprint, which will require excavation and removal of up 16.5 feet of soil within the subsurface garage footprint. Current plans also include raising the grade across much of the SITE by 3.5 feet.

Most of the soil generated during excavation is not expected to meet VDEQ criteria beneficial reuse criteria and will require special handling and disposal or treatment; however, soil excavated from "clean" areas and/or found to meet VDEQ beneficial reuse requirements can be used on site as backfill. Based on groundwater measurement data obtained from SITE, the eastern portion of the subsurface parking level and building footings of the complex proposed on the Eastern Parcel will be constructed at depths situated near or below the soil/groundwater interface (water table). If the water table is breached during excavation, groundwater management will be required. Groundwater management during construction may include dewatering and/or engineering controls (e.g., slurry wall, sheeting and shoring, and mudmat). Groundwater management may also be required following development if the building will be constructed with a foundation dewatering system. Groundwater generated during dewatering or other management activities may require treatment and/or sampling before discharge to meet federal and state regulatory requirements.

4.0 BACKGROUND

The background information presented in this section was obtained from historical environmental reports. A list of the reports is provided below.

- **Site Characterization Report**, Robinson Terminal, 1 Oronoco Street, Alexandria, Virginia, prepared by Total Environmental Concepts, Inc. (TEC), dated January 25, 2007.

- **Soil and Groundwater Testing**, Robinson Terminal Warehouses, 500 and 501 N. Union Street, Alexandria, Virginia, prepared by ECS Mid-Atlantic, LLC (ECS), dated February 8, 2008.

- **Preliminary Subsurface Exploration and Geotechnical Engineering Analysis**, Robinson Terminal at Alexandria Waterfront, City of Alexandria, Virginia, prepared by ECS, dated February 14, 2008.

- **Phase I Environmental Site Assessment**, Robinson Terminal North, Alexandria, Virginia, prepared by WSP Environment & Energy (WSP), dated March 20, 2013.

- **Subsurface Exploration and Geotechnical Engineering Analysis**, Robinson Terminal North, Alexandria, Virginia, prepared by ECS, dated November 14, 2014.

A discussion of the types of assessments conducted and assessment findings related to historical site use and soil and groundwater conditions at the SITE are discussed below. The findings as they relate to soil and groundwater quality at the SITE are discussed in detail in Section 7.0.

Site Characterization Report (TEC, January 2007)
In November 2005, a release of diesel fuel was suspected from one of the diesel USTs located near the northeast corner of the Eastern Parcel. A release was suspected because a small volume of diesel fuel (12 ounces) was recovered from a tankfield monitoring well. Following the suspected release, all three of the tanks were precision (integrity) tested and found to be sound.

The VDEQ assigned the suspect release Pollution Complaint No. (PC#) 2006-3131 and requested that a site characterization study be performed.

In April 2006, TEC advanced 13 test borings (designated TEC-B1 through TEC-B13) adjacent to the USTs and fuel dispensers. Monitoring wells were installed within seven of the borings (designated TEC-MW1 through TEC-MW7). The boring and well locations are depicted on Figure 3. During advancement of the test borings, TEC collected soil samples for field and laboratory analysis. The soil samples were submitted to a laboratory for analysis of gasoline and diesel range total petroleum hydrocarbons (TPH-GRO and TPH-DRO, respectively). TEC also checked the wells for the presence of free product on two occasions and collected groundwater samples for laboratory analysis from the wells on one occasion. The groundwater samples were submitted to a laboratory for analysis of TPH-GRO, TPH-DRO, benzene, toluene, ethylbenzene, total xylenes, methyl tertbutyl either (MTBE), and naphthalene.

Boring logs for the TEC test borings are included in Attachment 2. TEC noted evidence of impact to soil in only a few of the test borings advanced (TEC-B6 and TEC-B9) and the impacts appeared to be limited and localized. TPH-GRO and TPH-DRO were detected in soil samples collected from these borings at relatively low concentrations. A summary of the detections in soil are presented on Table 1A. Free product was not observed in the monitoring wells. MTBE was the only constituent detected in the groundwater samples and was detected in a few of the well samples (TEC-MW1 through TEC-MW4) at relatively low concentrations. A summary of the detections in groundwater are presented on Table 1B.

Groundwater was encountered at depths ranging from approximately 6 to 8 feet below grade and groundwater flow was inferred to the east (towards the Potomac River) under both high and low tide conditions.

TEC did not believe the limited and localized nature of impacts and relatively low detections of petroleum constituents in soil and groundwater warranted further assessment or cleanup and recommended case closure of PC# 2006-3131. According to information included in a recent Phase I Environmental Assessment (Phase I) conducted by WSP, PC# 2006-3131 is listed as closed by the VDEQ.

Soil and Groundwater Testing and Preliminary Subsurface Exploration and Geotechnical Engineering Analysis (ECS, February 2008)

The soil and groundwater testing and subsurface exploration and geotechnical analysis were conducted in conjunction with each other and were conducted by ECS in December 2007 and January 2008. The soil and groundwater testing consisted of collecting soil samples for field and laboratory analysis and collecting groundwater samples for laboratory analysis during advancement of the geotechnical test borings. During the study, a total of six test borings (designated ECS-B1 through ECS-B6) were advanced at the SITE. The groundwater samples were collected from two wells (designated ECS-MW2 and ECS-MW4) installed within the borings (ECS-B2 and ECS-B4, respectively). The boring and well locations are depicted on Figure 3.

The soil samples submitted for laboratory for analysis were analyzed for TPH-DRO, volatile organic compounds (VOCs), metals, polychlorinated bipenyls (PCBs), pesticides, and herbicides. The groundwater samples submitted for laboratory for analysis were analyzed for TPH-DRO, VOCs, semi-VOCs (SVOCs), and Resource Conservation and Recovery Act (RCRA) metals. It should be noted that many of the soil samples were collected at depths situated well below the water table and impacts to these samples may be more reflective or representative of groundwater impacts.

Boring logs for the ECS test borings are included in Attachment 2. No visual, olfactory, or field screening evidence of impact to soil at the boring locations was noted in the ECS reports. ECS stated that samples collected for laboratory analysis were selected based "visual observations and experience". TPH-DRO, 17 VOCs, and 8 RCRA metals were detected in the soil samples submitted for laboratory analysis. Detections of note included TPH-DRO, the VOCs benzene, naphthalene, 1,2,4-trimethylbenzene (1,2,4-TMB), and 1,3,5-trimethylbenezene(1,3,5-TMB) and metals arsenic, and lead. A summary of the detections in soil are presented on Table 2A. TPH-DRO, the VOCs benzene and total xylenes, and 7 SVOCs were detected in the groundwater samples, and with the exception of benzene detected in the sample collected from well ECS-MW2, were detected at relatively low concentrations. A summary of the detections in groundwater are presented on Table 2B.

Groundwater was encountered during advancement of the ECS test borings at depths ranging from approximately 4 to 15 feet below grade and the depth to groundwater in well ECS-MW2 was measured at 3.5 feet below grade approximately 1 week after sampling.

Phase I Environmental Site Assessment (WSP, March 2013)

In February 2008, EE&G conducted a Phase I at the SITE. Based on the Phase I findings, past site uses of concern at the Eastern Parcel include coal storage (1885-1891), fertilizer and acid plant (1902-1941), sulfuric acid plant (1941-1968), and warehouse operations (1968-present). Past site uses of concern at the Western Parcel include bulk oil storage (1891-1941) and fertilizer storage (1907-1912), chemical mixing plant (1941-1966), and warehouse operations (1966-present). The aforementioned past site operations included the storage and manufacturing of raw petroleum products and chemicals and generation of petroleum and chemical wastes. Adjacent property use of concern includes fertilizer storage on the property to the south (1896-1912), city gas works and chemical manufacturing on the property to the southwest (1851-1959), and bulk oil storage (1891-1941) and chemical mixing plant (1941-1966).

WSP identified the presence of impacted soil and groundwater as the only Recognized Environmental Condition (REC) associated with the SITE. WSP identified VOCs, SVOCs, and metals as COCs. Potential sources of the soil and impacts at the SITE identified by WSP included past industrial operations conducted at the SITE (i.e., chemical mixing, acid production, and fertilizer production and storage) and current petroleum storage and handling at the SITE. Additionally, WSP identified industrial activities conducted at adjacent and nearby properties as potential contributing sources of the impacts (i.e., city gas works, bulk oil storage, and chemical mixing). WSP also noted that a storm sewer pipe and associated gravel bed buried beneath Oronoco Street and bounding the SITE to the south has been a preferential pathway of COCs to migrate from the city gas works and during WSP's and ICOR's assessments an in situ

groundwater treatment system was being installed within the roadway to address the impacts. The treatment system is being installed under oversight by the VDEQ (Site Identification No. VRP0024).

Based on the Phase I findings, WSP recommended that impacted soil disturbed during future development be properly managed and disposed in accordance with federal and state waste management requirements. WSP also recommended that further assessment of soil and groundwater be conducted before future development to further delineate impacts to these media and to characterize soil that will be disturbed for proper disposal and groundwater that will be disturbed or require dewatering during construction for disposal or discharge.

Subsurface Exploration and Geotechnical Engineering Analysis (ECS, November 2014)
The subsurface exploration and geotechnical analysis was conducted by ECS in October 2014. During the study, a total of six test borings (designated ECS-B7 through ECS-B8) were advanced at the SITE. The boring locations are depicted on Figure 3. During advancement of the borings, ICOR collected soil samples from select borings for laboratory analysis of metals. ICOR's sampling activities are discussed in detail in Section 5.0.

Boring logs for the ECS test borings are included in Attachment 2. Gasoline odors were noted in shallow soils during advancement of test boring ECS-B7. Groundwater was encountered during advancement of the test borings at depths ranging from approximately 7 to 10 feet below grade.

5.0 RECENT SOIL AND GROUNDWATER ASSESSMENT

This section details the recent assessment activities conducted at the SITE by ICOR. The assessment targeted areas where historical storage and operations of concern were conducted and areas perceived as "data gaps" based on our review of past studies. The soil and groundwater assessment activities conducted by ICOR included advancement of test borings, installation of temporary groundwater wells, and collection of soil and groundwater samples for field screening and laboratory analysis. The assessment targeted areas where historical storage and operations of concern were conducted and areas perceived as "data gaps" based on our review of past studies. The ICOR investigations were conducted under the supervision of a Commonwealth of Virginia Certified Professional Geologist.

On October 8, 2013, ICOR advanced a total of 13 test borings (designated ICOR-SB1 through ICOR-SB13) at the SITE to further assess soil and groundwater quality. The test boring locations are depicted on Figure 3. The test borings were advanced within and adjacent to areas identified as impacted during past studies and areas perceived by ICOR to represent "data gaps" based on our review of past studies. The purpose of each boring is as follows:

- **ICOR-SB1** was advanced to assess soil and groundwater quality adjacent to the in situ treatment system under construction for the Alexandria Town Gas Site.
- **ICOR-SB2** was advanced to assess soil quality adjacent to fuel dispensers.
- ICOR-SB3 was advanced to assess soil quality near a suspect oil house location (identified on a 1902 map).

- **ICOR-SB4** was advanced to assess soil conditions adjacent to the railroad spur.
- **ICOR-SB5** was advanced to assess soil and groundwater quality near a suspect oil house location (identified on a 1907, 1912, and 1921 map).
- **ICOR-SB6** was advanced to assess soil and groundwater quality beneath a suspect aboveground oil storage tank area (identified on an 1891 map).
- **ICOR-SB7** and ICOR-SB8 were advanced to assess soil and groundwater quality along the western property boundary near which a bulk petroleum storage tank facility (identified on a 1896, 1902, 1907, 1912, and 1921 map) and chemical mixing plant was located (identified on a 1941 and 1959 map).
- **ICOR-SB9** was advanced to further assess soil and groundwater quality near an ECS boring where elevated concentrations of petroleum constituents were detected in a soil sample submitted for laboratory analysis.
- **ICOR-SB10 through ICOR-SB13** were advanced to further assess soil quality near an ECS boring where elevated concentrations of petroleum constituents were detected in a soil sample submitted for laboratory analysis.

The test borings were advanced using a direct-push sampling rig and were advanced until a depth of approximately 5 feet below the soil/groundwater interface (groundwater table) was achieved. In locations overlain by thick concrete (borings advanced within the warehouses), a concrete coring- machine was used to core a 3-inch diameter hole through the concrete. The direct-push sampling equipment was advanced through the core holes.

Standard equipment decontamination procedures were observed between test borings. Miss Utility was contacted 3 days prior to the scheduled sampling date to mark out any existing subsurface utility lines (i.e., telephone, sewer, water, electric, and gas) at the SITE.

At the conclusion of sampling, boreholes were backfilled with their respective cuttings and the surface was restored to match pre-sampling conditions.

Between October 6 and 8, 2014, ICOR collected soil samples from select test borings advanced by ECS during their geotechnical investigation. The samples were collected to further assess soil quality, specifically related to metals within the proposed depth of excavation for development. The ECS test boring locations are depicted on Figure 3.

5.1 Soil Sampling Activities

During advancement of the ICOR test borings, soil samples were collected continuously using acetate-lined barrel samplers. The soil samples were collected for lithologic characterization, visual inspection, field screening, and potential laboratory analysis. The entire length of each soil core generated during advancement of the test borings was screened in the field with a PID. Additionally, bag samples were collected at approximate 2 foot intervals for screening with a photo-ionization detector (PID). Field screening was performed to check for the presence of volatile organic vapors. Observations and field screening readings of note were recorded on boring logs. Copies of the boring logs are included in Attachment 2.

Evidence of soil impact was noted during advancement of test borings ICOR-SB2, ICOR-SB3, and ICOR-SB6 through ICOR-SB9. Evidence of impact included oil staining (ICOR-SB3) and petroleum odors and elevated PID readings (all referenced borings). Observations are detailed on the boring logs included in Attachment 2 and summarized on Table 3. A total of 13 grab soil samples were collected for laboratory analysis, with samples collected from 10 of the 13 test borings. Most of the grab samples collected for laboratory analysis were collected from soil exhibiting the most evidence or highest degree of impact. Grab samples were also collected from soil believed to be "clean", from shallow depths to target less mobile constituents (metals), and from multiple depths at a boring location to vertically profile soil. The grab samples were transferred directly from the sample cores to sampling containers and represent an approximately 1 foot interval of soil.

The grab samples were submitted to Phase Separation Sciences (PSS) for analysis of some or all of the following: TPH-DRO and TPH-GRO using United States Environmental Protection Agency (EPA) Method 8015, Target Compound List (TCL) VOCs using EPA Method 8260B, TCL SVOCs using EPA Method 8270C, and Priority Pollutant Metals (PPL) metals using EPA Method 6020A. Based on the analytical findings, one soil sample was additionally analyzed for Toxic Characteristic Leaching Procedure (TCLP) RCRA metals using EPA Method 3010A/6020A and one sample was additionally analyzed for chromium VI using EPA Method 7196A.

During advancement of ECS's geotechnical borings in October 2014, ICOR collected one composite soil samples for laboratory analysis from shallow soil cuttings generated during advancement of each test boring (generated within the upper 10 feet). The grab samples were submitted to PSS for analysis of RCRA metals using EPA Method 6020A. Based on the analytical findings, two of the soil samples were additionally analyzed for TCLP RCRA metals using EPA Method 3010A/6020A.

5.2 Groundwater Sampling Activities

To assess groundwater, groundwater samples were collected from temporary wells installed within the open boreholes of test borings ICOR-SB1 and ICOR-SB5 through ICOR-SB9. Additionally, groundwater samples were collected from existing wells ECS-MW2 and ECS-MW4. Each well was constructed of new, dedicated and disposable 1-inch inner diameter polyvinyl chloride well screen and casing. A 10-foot length of 0.010-slot screen was used during the construction of the wells. The well screen was positioned as to straddle the soil/groundwater interface. Well construction information for the new and historical site wells is summarized on Table 4. Well construction information for the ICOR wells is also described on the boring logs included in Attachment 2.

Immediately after the new wells were installed, they were developed and sampled. Development and sampling was performed using a peristaltic pump fitted with new, dedicated, and disposable high-density polyethylene sample tubing. Development consisted of purging a well until the purge water appeared relatively clear and free of suspended solids (based on a visual inspection). When the purge water appeared clear, a groundwater sample was collected. The groundwater samples were grab samples transferred directly from the discharge tubing to the sample

containers. The samples were collected at a low flow rate (less than 100 milliliters per minute) to minimize agitation and aeration. The groundwater samples were submitted to PSS for analysis of some or all of the following: TPH-DRO and TPH-GRO using EPA Method 8015, TCL VOCs using EPA Method 8260B, TCL SVOCs using EPA Method 8270C, and total and dissolved PPL metals using EPA Method 6020A. Samples collected for dissolved metals analysis were filtered in the field.

Purge water generated during development and sampling was placed in a 55-gallon drum pending proper disposal.

On the day following sampling, the wells were checked for the presence of petroleum free product and the depth to groundwater was measured to the nearest 0.01 foot using an electronic oil/water interface meter. The meter was properly decontaminated between well locations. After collecting the measurements, the temporary wells were removed.

6.0 SITE GEOLOGY AND HYDROGEOLOGY

Topography at SITE is relatively flat. The elevation of SITE is approximately 9 feet above mean sea level. The closest surface water body to SITE is the Potomac River which bounds the SITE to the east. Site and area topography and the location of the above-referenced surface water body are depicted on Figure 1.

The SITE is located within the Atlantic Coastal Plain (ACP) physiographic province. The ACP physiographic province is characterized by a series of south-easterly dipping layers of relatively consolidated sandy clay deposits, with lesser amounts of gravel. The ACP sediments are estimated to be approximately 250 thick and are underlain by the eastward continuation of crystalline bedrock of the Piedmont physiographic province. Portions of the SITE are underlain by Quaternary Age river terrace deposits, Cretaceous Age deposits of the Potomac Group, and fill. The Potomac Group deposits consist of interbedded layers of sand, silt, clay, and gravel.

Based on observations made during past and recent assessments, the upper 4 to 15 feet of the SITE is underlain by fill. The fill varied in composition, with sand, silt, clay, brick, asphalt, organics, wood, and gravel noted. Beneath the fill materials, alluvial soil characterized by interbedded and alternating layers of sand, silty sand, and sandy gravel with varying amounts of clay were encountered to a depth ranging from 45 to 55 feet below grade. Beneath the alluvial soil, marine clay of the Potomac Group was encountered and extended to the maximum explored depth of 80 feet below grade. The encountered soil was consistent with regional geology. The lithology noted at each historical and ICOR test boring location is provided on the boring logs included in Attachment 2.

Based on groundwater measurements obtained from monitoring wells and findings of historical studies, the depth to groundwater at SITE ranges from approximately 5 to 10.5 feet below grade and groundwater flow is to the east towards the Potomac River. The Potomac River is tidally influenced; however, data collected during a past study did not suggest that tidal change has a

significant effect of groundwater flow. Select historical groundwater measurements obtained from the site wells and obtained during the recent ICOR assessment are summarized on Table 4.

Groundwater is not currently used and is not proposed for use in the future as a potable drinking water or irrigation water supply at the SITE. Based on ICOR's past experience, groundwater in the City of Alexandria is not used or approved for use as a potable water supply. Potable drinking water is provided to the SITE and surrounding area by the City of Alexandria. The City's potable water sources are surface water reservoirs.

7.0 SOIL AND GROUNDWATER QUALITY

To date, 31 test borings have been advanced and 9 permanent groundwater monitoring and 6 temporary wells have been installed at the SITE. The test boring and well locations are depicted on Figure 3. A total of 57 soil samples have been collected for laboratory analysis during advancement of the test borings. Groundwater samples were collected for laboratory analysis from each well on at least one occasion, with wells ECS-MW2 and ECS-MW4 sampled on two occasions.

Soil and groundwater quality were assessed at SITE through the collection of samples for visual inspection, field screening, and laboratory analysis. The soil analytical results were compared to the most-current VDEQ Tier II screening concentrations for unrestricted (residential) land use (VDEQ-T2SCUs) and VDEQ Tier III screening concentrations restricted (commercial/industrial) land use (VDEQ-T3SCRs). Applicability of the standards will ultimately be based on street-level (first floor) site use. The groundwater analytical results were compared to the most-current VDEQ Tier III groundwater screening levels for restricted groundwater use unrestricted (residential) and commercial land use inhalation of indoor air (VDEQ-T3RGSLs and VDEQ-T3CGSLs, respectively) and VDEQ groundwater concentrations for a construction worker in a trench, water table not contacted and water table contacted (VDEQ-CWT-WTNCs and VDEQ-CWT-WTCs, respectively).

7.1 Soil Quality

Petroleum staining, petroleum odors, and elevated PID readings (above background) were noted in soil samples collected from test borings TEC-B6, TEC-B9, ICOR-SB2, ICOR-SB3, ICOR-SB6 through ICOR-SB9, and ECS-B7. The highest degree of impact was generally noted on the Western Parcel (area where bulk oil storage was noted at and adjacent to the SITE). Staining and odors noted were consistent with oil and gasoline impacts.

Soil samples collected from the SITE have been analyzed for some of the following analyses: TPH-GRO, TPH-DRO, VOCs, SVOCs, PCBs, pesticides, herbicides, and total and TCLP metals. The historical soil analytical results (obtained during the TEC and ECS studies) are summarized on Tables 1A and 2A, respectively, and the recent ICOR soil analytical results are summarized on Tables 5A and 5B. Laboratory reports of analysis for the recently collected ICOR samples are included as Attachment 3. Detections of note are described below. For the purpose of this report, detections of note include detections in soil samples above VDEQ-

T2SCUs and/or VDEQ-T3SCRs in samples collected above or within close proximity to the water table and within the proposed limits of excavation (aerial extent and depth), and detections likely to restrict or prevent the beneficial reuse of the soil on or off site (i.e., soil requiring special handling and disposal).

TPH-GRO and TPH-DRO

TPH-GRO were detected in 5 of the 18 soil samples submitted for this analysis and was detected at concentrations ranging from 0.62 to 370 milligrams per kilogram (mg/kg). TPH-DRO were detected in 26 of the 41 samples submitted for this analysis and was detected at concentrations ranging from 17 to 10,200 mg/kg. The VDEQ has not been established screening concentrations for TPH-GRO and TPH-DRO; however, concentrations above 50 mg/kg are typically considered elevated and restrictive for beneficial reuse of disturbed soil on or off site. Boring locations where TPH-GRO and/or TPH-DRO were detected above 50 mg/kg in soil likely to be removed during development include boring locations ECS-B1 through ECS-B6, ICOR-SB7, and ICOR-SB8. In general, the TPH-GRO and TPH-DRO concentrations were the highest on the western portion of the SITE, closest to the former bulk petroleum storage facility.

VOCs

A total of 20 VOCs were detected in the soil samples submitted for this analysis. Of these, 4 were detected at concentrations above VDEQ-T2SCUs in soil samples collected above or within close proximity to the water table and within the proposed limits of excavation. VOCs were not detected above VDEQ-T3SCRs. The VOCs detected above VDEQ-T2SCUs are listed below.

- **Benzene** was detected in the soil sample collected from boring ECS-B3 at a concentration above VDEQ-T2SCUs (97.7 micrograms per kilogram [ug/kg]). Benzene was detected in this sample at a concentration of 5,120 ug/kg.
- **Naphthalene** was detected in the soil sample collected from boring ECS-SB1 at a concentration above VDEQ-T2SCUs (26.2 ug/kg). Naphthalene was detected in this sample at a concentration of 136 ug/kg. It should also be noted that naphthalene was detected above VDEQ-T2SCUs in soil samples collected below the proposed depth of excavation from borings ECS-B1 through ECS-B6. As previously noted, many of the soil samples collected by ECS were collected at depths situated well below the water table and impacts to these samples may be more reflective or representative of groundwater impacts.
- **1,2,4-TMB and 1,3,5-TMB** were detected in the soil sample collected from boring ECS-SB6 at concentrations above VDEQ-T2SCUs (115 and 658 ug/kg, respectively). 1,2,4-TMB and 1,3,5-TMB were detected in this sample at concentrations of 1,050 and 1870 ug/kg, respectively.

Total Metals

Twelve total metals were detected in the soil samples submitted for this analysis. Of these, 11 were detected at concentrations above VDEQ-T2SCUs and 5 were detected at concentrations above VDEQ-T3SCRs in soil samples collected above or within close proximity to the water table and within the proposed limits of excavation. The total metals detected above VDEQ-T2SCUs and/or VDEQ-T3SCRs are listed below.

- **Antimony** was detected in the soil sample collected from boring ICOR-SB10 at concentrations above VDEQ-T2SCUs.
- **Arsenic** was detected in all samples submitted for this analysis at concentrations above VDEQ-T2SCUs. The concentration of lead in soil samples collected from borings ECS-B2, ICOR-SB10, ECS-B7, and ECS-B8 were also above VDEQ-T2SCRs.
- **Cadmium** was detected in the soil samples collected from borings ECS-B2, ECS-B7, and ECS-B8 at concentrations above VDEQ-T2SCUs.
- **Chromium** was detected in all but one of the samples submitted for this analysis at concentrations above VDEQ-T2SCUs. The type of chromium detected in the ICOR sample containing the highest concentration of chromium was speciated (to determine if the chromium VI was present, the type of chromium considered most hazardous to human health and the environment). Chromium VI was not detected in the sample; thus, the type of chromium at the SITE is likely chromium III, which is not expected to pose a hazard at the detections noted.
- **Copper** was detected in the soil sample collected from boring ICOR-SB10 at concentrations above VDEQ-T2SCUs.
- **Lead** was detected in the soil samples collected from borings ECS-B2, ICOR-SB10, ECS-B7, ECS-B8, and ECS-B11 at concentrations above VDEQ-T2SCUs. The concentration of lead in soil samples collected from borings ICOR-SB10 and ECS-B7was also above VDEQ-T2SCRs.
- **Mercury** was detected in the soil samples collected from borings ECS-B2, ICOR-SB10, ECS-B7, and ECS-B8 at concentrations above VDEQ-T2SCUs and VDEQ-T2SCRs.
- **Selenium** was detected in the soil samples collected from borings ECS-B2, ICOR-SB10, ECS-B7, and ECS-B8 at concentrations above VDEQ-T2SCUs.
- **Silver** was detected in the soil samples collected from borings ECS-B2, ICOR-SB10, ECS-B7, ECS-B8, and ECS-B11 at concentrations above VDEQ-T2SCUs.
- **Thallium** was detected in the soil sample collected from boring ICOR-SB10 at concentrations above VDEQ-T2SCUs and VDEQ-T2SCRs.
- **Zinc** was detected in the soil samples collected from borings ICOR-SB6, ICOR-SB10, ICOR-SB12, and ICOR-SB13 at concentrations above VDEQ-T2SCUs.

TCLP Metals

Based on the elevated detection of metals in the shallow soil sample collected from ICOR boring ICOR-SB10 and ECS borings ECS-B7 and ECS-B8, these samples were additionally analyzed for TCLP RCRA metals to evaluate disposal options. As many as four TCLP metals (arsenic, barium, cadmium, and lead) were detected in the soil samples submitted for this analysis. Based on the concentrations of TCLP lead detected in the sample, the soil is considered a "hazardous waste" and will require special handling and disposal as such.

Summary

The vast majority of impacts to soil at the SITE appear to be related to the former bulk storage of petroleum and storage and manufacturing of fertilizer. Based on the analytical data, the vast majority of soil proposed for excavation and removal during site development will meet criteria for disposal or treatment as a non-hazardous waste. Soil containing COCs at concentrations below VDEQ beneficial reuse criteria may be beneficially reused on site or off site with VDEQ approval. Soil excavated and removed from and immediately surrounding boring ECS-B2,

ICOR-SB10, and ECS-B7 to a depth of at least 4 feet below grade will require special handling and disposal as a hazardous waste. Additional soil may also be characterized as hazardous waste based on the concentration of total metals detected (e.g., total arsenic detected at location ECS-B8 and total mercury detected at locations ECS-B2, ECS-B7, and ECS-B8). The approximate limits of the soil considered hazardous waste are depicted on Figure 3.

7.2 Groundwater Quality

Petroleum free product was not noted in the permanent and temporary wells during the past and recent assessments. ICOR noted strong petroleum odors during sampling of temporary wells ICOR-SB7 and ICOR-SB8.

Soil samples collected from the SITE have been analyzed for some or all of the following analyses: TPH-GRO, TPH-DRO, VOCs, SVOCs, and total and dissolved PPL metals. The historical groundwater analytical results (obtained during the TEC and ECS studies) are summarized on Tables 1B and 2B, respectively, and the recent ICOR groundwater analytical results are summarized on Table 6. Laboratory reports of analysis for the recently collected ICOR samples are included in Attachment 3. Detections of note are described below. For the purpose of this report, detections of note include detections in groundwater samples above VDEQ-T3RGSLs, VDEQ-T3CGSLs, VDEQ-CWT-WTNCs, and VDEQ-CWT-WTCs.

TPH-GRO and TPH-DRO

TPH-GRO were detected in 6 of the 15 groundwater samples submitted for this analysis and was detected at concentrations ranging from 0.25 to 11 milligrams per liter (mg/l). TPH-DRO were detected in 10 of the 17 groundwater samples submitted for this analysis and was detected at concentrations ranging from 0.11 to 2.87 mg/l. The VDEQ has not established screening levels for TPH-GRO and TPH-DRO; however, concentrations above 1 mg/l are typically considered elevated and may warrant treatment of groundwater generated during dewatering prior to discharge. TPH-GRO were detected above 1 mg/l in the groundwater sample collected from the temporary well installed in boring ICOR-SB7. TPH-DRO were detected above 1 mg/l in the groundwater sample collected from the permanent well ECS-MW2 during the ECS sampling event; however, TPH-DRO was detected below 1 mg/l in the recent sample collected from this well. In general, the TPH-GRO and TPH-DRO concentrations were the highest on the western portion of the SITE, closest to the former bulk petroleum storage facility.

VOCs

A total of 9 VOCs were detected in the groundwater samples submitted for this analysis. Of these, five were detected at concentrations above VDEQ-T3RGSLs and/or VDEQ-T3CGSLs and four were detected above VDEQ-CWT-WTCs. The VOCs detected above VDEQ-T3RGSLs, VDEQ-T3CGSLs, and/or VDEQ-CWT-WTCs are listed below.

- **Cyclohexane, Ethylbenzene, Methylcyclohexane, and Naphthalene** were detected in the groundwater samples at concentrations above VDEQ-T3RGSLs and VDEQ-T3CGSLs. Cyclohexane, ethylbenzene, and methylcyclohexane were detected at concentrations above VDEQ-T3RGSLs and VDEQ-T3CGSLs in the samples collected from wells ECS-MW2 and ICOR-SB8. Naphthalene was detected at concentrations

above VDEQ-T3RGSLs and VDEQ-T3CGSLs in the samples collected from wells ECS-MW2, ICOR-SB5, ICOR-SB6, and ICOR-SB8 and sample collected from well ECS-MW4 by ECS and above VDEQ-T3RGSLs in the sample collected from well ICOR-SB9.

- **Benzene, Ethylbenzene, Naphthalene, and Xylenes (m,p and o)** were detected in the groundwater samples at concentrations above VDEQ-CWT-WTCs. Benzene was detected at concentrations above VDEQ-CWT-WTCs in the samples collected from wells ECS-MW2, ICOR-SB5, ICOR-SB6, and ICOR-SB8. Naphthalene was detected at concentrations above VDEQ-CWT-WTCs in the sample collected from well ICOR-SB8. Benzene was detected at concentrations above VDEQ-CWT-WTCs in the samples collected from wells ECS-MW4, ICOR-SB5, ICOR-SB6, ICOR-SB8, and ICOR-SB9. Xylenes were detected at concentrations above VDEQ-CWT-WTCs in the samples collected from wells ECS-MW2 and ICOR-SB8.

SVOCs

A total of 13 SVOCs were detected in the groundwater samples submitted for this analysis. Of these, two were detected at concentrations above VDEQ-T3RGSLs, VDEQ-T3CGSLs, and/or VDEQ-CWT-WTCs. The VOCs detected above VDEQ-T3RGSLs, VDEQ-T3CGSLs, and/or VDEQ-CWT-WTCs are listed below.

- **Biphenyl (Diphenyl)** was detected in the groundwater sample collected from well ICOR-SB9 at a concentration above VDEQ-T3RGSLs and VDEQ-CWT-WTCs.
- **Naphthalene** was detected in the most recent groundwater sample collected from well ECS-MW2, sample collected from well ECS-MW4 by ECS, and wells ICOR-SB6 and ICOR-SB8 at a concentration above VDEQ-T3RGSLs and VDEQ-CWT-WTCs. Naphthalene was also detected above VDEQ-T3CGSLs in the most recent groundwater sample collected from well ECS-MW2.

Total and Dissolved Metals

A total of 13 total and 10 dissolved metals were detected in the groundwater samples submitted for these analyses. Of these, two were detected at concentrations above VDEQ-T3RGSLs and/or VDEQ-T3CGSLs. The total and dissolved metals detected above VDEQ-T3RGSLs and/or VDEQ-T3CGSLs are listed below.

- **Total Chromium** was detected in the most recent groundwater sample collected from well ECS-MW2 and wells ICOR-SB5 and ICOR-SB6 at concentrations above VDEQ-WTCs. **Dissolved Chromium** was detected in the groundwater sample collected from well ICOR-SB5 at a concentration above VDEQ-WTCs.
- **Total Mercury** was detected in the most recent groundwater sample collected from well ECS-MW2 and wells ICOR-SB1, ICOR-SB5, and ICOR-SB9 at concentrations above VDEQ-WTCs. **Dissolved Mercury** was detected in the groundwater sample collected from well ICOR-SB5 at a concentration above VDEQ-WTCs.

Summary

The vast majority of impacts to groundwater at the SITE appear to be related to the former bulk storage of petroleum and storage and manufacturing of fertilizer. If dewatering is required during construction, the presence of COCs in groundwater may warrant treatment and/or

sampling of the recovered water before discharge. Groundwater treatment and/or sampling of discharge may also be required following development if the building will be constructed with a foundation dewatering system.

8.0 SENSITIVE RECEPTORS

ICOR identified potential pathways of exposure to human receptors associated with development of SITE as proposed by CI. Potential exposure pathways at SITE include direct contact with impacted soil and groundwater and inhalation of vapors of migrating into below or on-grade structures and subsurface utility lines. Potential human receptors at SITE include construction workers and future site users (residents, workers, and visitors). Future site workers refer to retail, residential, commercial, and hotel employees and utility maintenance workers.

As indicated by CI, proposed development of the SITE will include construction of a multi-story building on each parcel comprising the SITE (one on each side of South Union Street). The building constructed on the Eastern Parcel will be a residential complex with street-level (first floor) retail and commercial use. The building constructed on the Western Parcel will be a residential and hotel complex with street-level (first floor) retail and commercial use. At this time, no residential use on the first floor is anticipated. Both complexes will be constructed on a poured-concrete foundation. The complexes are expected to overlie the majority of the property, with walkways, patios, and landscaping covering the remaining open spaces. Each complex will also include 1 level of subsurface parking underlying the majority of the building footprint. The entire SITE surface after development will be covered by structures, concrete and stone pavement, and clean soil and landscaping limiting the potential for contact with impacted soil and groundwater by future site users.

To prepare the SITE for development, all existing structures and features will be razed and removed. Construction of the subsurface parking levels will require excavation and removal of up to 7 feet of soil within the subsurface garage footprint. Current plans also include raising the grade across much of the SITE by 3.5 feet. Most of the soil generated during excavation is not expected to meet VDEQ criteria beneficial reuse criteria and will require special handling and disposal or treatment; however, soil excavated from “clean” areas and/or found to meet VDEQ beneficial reuse requirements will be used on site as backfill. Backfill used in landscaped areas will meet unrestricted residential land use criteria and will be imported if warranted. The excavation and removal of soil to create the parking structures is expected to result in removal of the vast majority of impacted soil underlying the SITE.

Based on groundwater measurement data obtained from SITE, the eastern portion of the subsurface parking level and building footings of the complex proposed on the Eastern Parcel will be constructed at depths situated near or below the soil/groundwater interface (water table). If the water table is breached during excavation, groundwater management will be implemented. Groundwater management during construction may include dewatering and/or engineering controls (e.g., slurry wall, sheeting and shoring, and mudmat). Groundwater management may also be required following development if the building will be constructed with a foundation dewatering system. Groundwater generated during dewatering or other management activities

will be treated and/or sampled before discharge as warranted by federal and state regulatory agencies.

Subsurface utilities proposed at SITE are anticipated to be installed at depths situated above the soil/groundwater interface (water table). Utilities proposed at SITE include natural gas lines, electric lines, water lines, storm sewers, and sanitary sewers.

Groundwater is not currently used or proposed for future use at the SITE as a potable water or irrigation water supply. Groundwater is not currently used at properties surrounding the SITE as a potable water or irrigation water supply. In addition, the City of Alexandria restricts groundwater use within the City limits for potable or irrigation purposes. Potable water is provided to SITE by the City of Alexandria. The City's potable water source is surface water reservoirs.

9.0 HUMAN HEALTH RISK ASSESSMENT

The risk to human health during proposed construction and in the final land use scenario was evaluated by comparing the concentrations of detected constituents to applicable VDEQ screening levels and evaluating the likelihood that construction workers and future site users would come into contact with impacted media.

9.1 Soil

In the proposed land use scenario, the impacted soil will likely not represent a human health risk to future site users and visitors because the vast majority of impacted soil underlying the SITE will be excavated and removed during construction of the subsurface parking levels and upon development the vast majority of the SITE will be covered by site buildings, concrete and stone pavement, or landscaping (preventing direct contact with the impacted soil left in place).

The impacted soil may present a risk to site construction workers during site development, future site maintenance workers if deep excavation is conducted (via direct contact and inhalation of vapors), and/or future site users (via inhalation of vapors migrating into the buildings). The aforementioned risks can be minimized prior to the start of construction by the removal of the impacted soil from the SITE, development of a construction worker health and safety plan, incorporation of engineering controls into the building design, and incorporation institutional controls. An engineering control that can be incorporated into the building design is an adequate vapor barrier. An institutional control that can be incorporated into the property deed are detailed health and safety procedures to be implemented during future maintenance work at the site when excavation is conducted and contact with impacted soil is possible. The deed restriction should also provide guidance for handling and disposing of impacted soil removed during maintenance work.

9.2 Groundwater

In the proposed land use scenario (hotel facility), the impacted groundwater will likely not represent a human health risk to future site users and visitors because the entire SITE will be covered by site buildings, concrete and stone pavement, or landscaping (preventing direct contact with impacted groundwater), the building and associated utilities will be constructed above the soil/groundwater interface (water table), and groundwater is not proposed for any use at the SITE. In addition, much of the grossly-impacted soil underlying the SITE will be excavated and removed from the SITE prior to development (addressing a continuing source of groundwater impact). If the water table will be breached during construction and groundwater management is warranted, groundwater will be managed via dewatering or engineering controls. The removal of impacted soil and dewatering of groundwater represent remedial actions.

The impacted groundwater at the SITE may present a risk to site construction workers during site development and future site maintenance workers if groundwater is encountered during excavation (via direct contact with groundwater and/or inhalation of vapors) and/or future site users (via inhalation of vapors migrating into the buildings). The aforementioned risks can be minimized prior to the start of construction by removing the bulk of impacted soil underlying the SITE, development of a construction worker health and safety plan, incorporation of engineering controls into the building design, and incorporation institutional controls. An engineering control that can be incorporated into the building design is an adequate vapor barrier. Institutional controls that can be incorporated into the property deed include a restriction preventing the use of groundwater beneath the SITE for any purpose and detailed health and safety procedures to be implemented during future maintenance work at the site when deep excavation is conducted and contact with impacted groundwater is possible. The deed restriction should also provide guidance for handling and disposing of impacted groundwater removed during maintenance work.

10.0 CONCLUSIONS

Based on the Phase II findings, the past industrial activities conducted and storage of petroleum and chemicals at and adjacent the SITE has resulted in impact to soil and groundwater underlying the SITE. Several target constituents were detected in soil and groundwater samples collected from the SITE above VDEQ screening levels for residential and commercial land use and construction worker health and safety. The presence of impacted media and USTs buried beneath the SITE warrants the implementation of health and safety measures for site workers and implementation of remedial actions during and potentially after development and incorporation of engineering and institutional controls.

11.0 PROPOSED REMEDIAL ACTIONS AND ENGINEERING AND INSTITUTIONAL CONTROLS

To address the environmental concerns at the SITE, ICOR recommends that the SITE be entered into the VDEQ's Voluntary Remediation Program (VRP). This program allows for assessment

and cleanup to proceed voluntarily by the site owner/developer without assuming liability for the impacts not caused by their actions or operations. The program also allows for the assessment and cleanup to proceed at the pace set by the owner/developer and allows the owner/developer to obtain a no further action decision for the site in the form of a "Letter of Satisfactory Completion" at the conclusion of development.

To address the impacted media, remnant site features, and human health risk concerns in the SITE's proposed land use scenario, ICOR recommends that the below remedial activities be conducted, engineering controls be incorporated into the hotel building design, and institutional controls be placed on the property deed. Additional soil and groundwater assessment should conducted as warranted to satisfy VRP requirements, address potential construction worker health and safety concerns, and verify successful implementation of the remedial actions.

Remedial Activities

- The three 8,000-gallon diesel USTs and associated fuel piping and dispensers should be removed from the SITE and properly disposed prior to the start construction. The removal should be conducted by qualified contractors and with required VDEQ and City of Alexandria required notifications. Remnant tank fluids removed from the tanks and the tanks should be properly manifested and disposed facilities permitted to accept these wastes. Any additional USTs or other subsurface features of concern unearthed during construction (e.g., oil/water separators) should also be removed by qualified contractors, with wastes manifested and disposed at facilities permitted to accept the wastes.

- Impacted soil excavated and removed during construction should be properly manifested and disposed/treated at a facility permitted to accept the soil. The removal of impacted soil should be conducted by qualified contractors. The impacted soil transported off site should be properly manifested and disposed at facilities permitted to accept the soil.

- If groundwater dewatering is implemented, all water generated during dewatering should be characterized prior to discharge and treated if required to meet applicable federal, state, and local discharge requirements. All required federal, state, and local permits should also be obtained before discharge. Sampling and monitoring of the treatment and discharge and associated reporting should be conducted as required by overseeing regulatory agencies and sampling, monitoring, and reporting should be conducted by a qualified environmental contractor.

Engineering Controls

- To prevent vapors from migrating into the newly constructed buildings, an adequate vapor barrier should be incorporated into the building designs. The vapor barrier should be designed by a qualified environmental engineer.

Institutional Controls

- To satisfy VRP requirements, two institutional controls, in the form of deed restrictions, should be placed on the property. The first deed restriction should restrict the use of

groundwater for any purpose. It should be noted that the City of Fairfax already restricts the use of groundwater for any purpose. The second deed restriction should detail health and safety procedures to be implemented during future maintenance work at the site that involves deep excavation and potential contact with impacted soil and groundwater. The deed restriction should also provide guidance for handling and disposing of impacted soil and groundwater removed during maintenance work. The institutional controls should be developed by a qualified environmental professional and CI counsel.

Follow-up Assessment Activities

- Upon approval of the final building design, additional soil and groundwater samples should be collected as warranted to satisfy VRP assessment and remedial planning requirements and allow for better management of excavated soil and construction worker health and safety. The follow-up assessment activities should be conducted by a qualified environmental contractor.

Construction Worker Health and Safety

- A construction worker Health and Safety Plan (H&SP) should be developed prior to implementation of the remedial actions and start of construction to address health and safety risks posed by the presence of impacted soil and groundwater. The plan will be required reading for all site workers. The H&SP should be prepared by a qualified environmental contractor.

Planning and Reporting

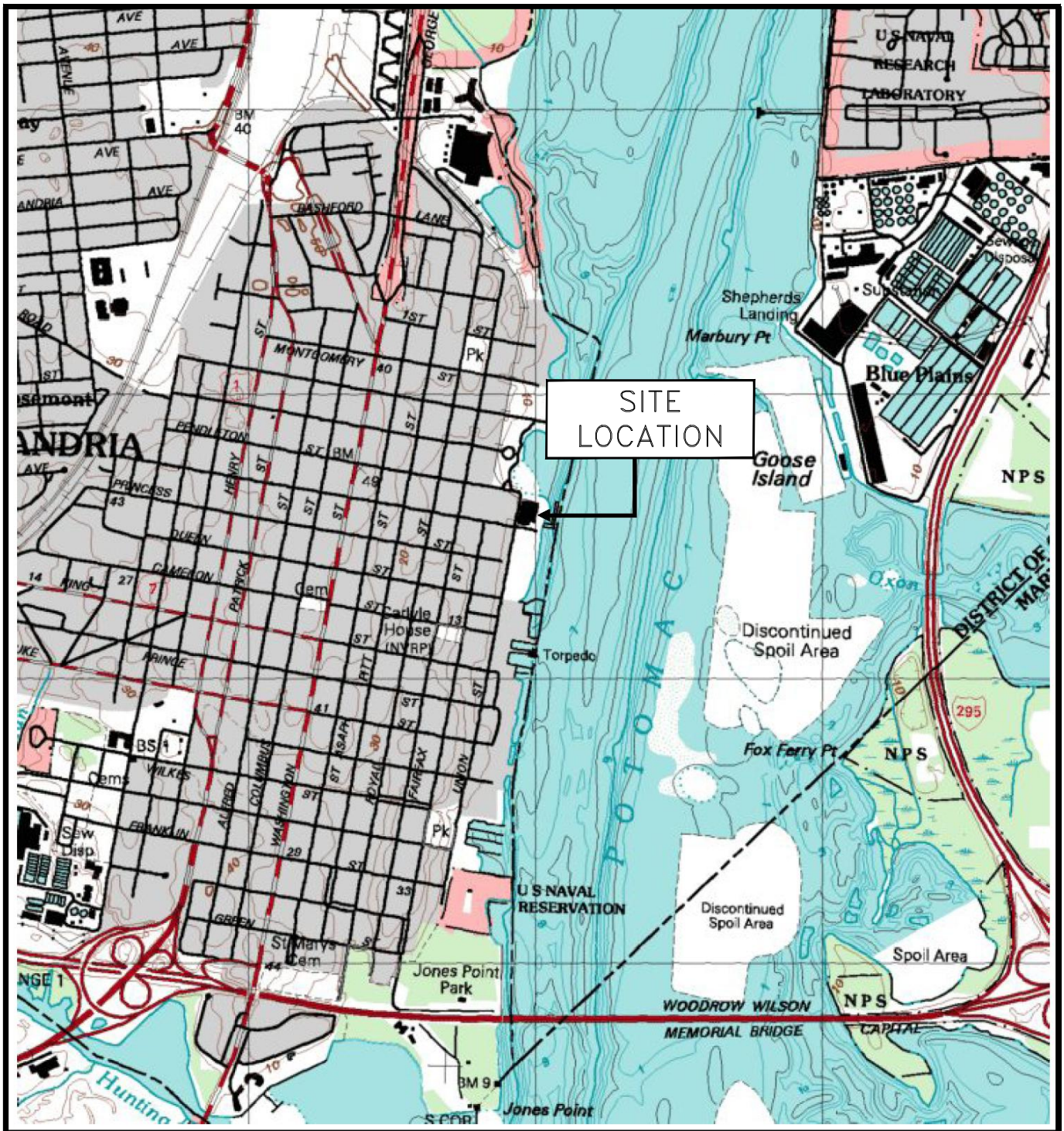
- Following successful removal of the USTs, a Tank Closure Report should be prepared and submitted to the VDEQ storage tank division for review and comment. If evidence of a release is noted during excavation and removal of the tanks, the VDEQ should be notified immediately. The report should be prepared by a qualified environmental contractor.

- Assuming the SITE is entered into the VRP, submittal of two reports will be required prior to the start of construction to satisfy VRP planning and reporting requirements. The reports include a Site Characterization Report (SCR) and Remedial Action Work Plan (RAWP). The SCR provides a detailed description of the extent of impacts identified at the SITE, estimates the risks posed by the impacts to human health and the environment, and evaluates the need for remedial actions and engineering controls to mitigate the risks. The data collected from the SITE to date is expected to satisfy some of the SCR requirements. The RAWP provides a detailed description of the remedial actions, engineering controls, and institutional controls that will be implemented to address identified impacts and minimize risks to human health and the environment. The SCR and RAWP should be prepared by a qualified environmental contractor.

Upon successful implementation of the recommended remedial actions, incorporation of the engineering controls and deed restrictions, and completion of development, ICOR believes that

conditions at the SITE will meet VRP criteria for issuance of a "Certification of Satisfactory Completion of Remediation".

FIGURES



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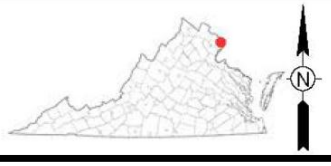


0 1000 2000 4000
SCALE, FEET

SITE LOCATION

DESIGNED BRUZZESI	DATE 12/10/13
DRAWN STOCKTON	DATE 12/10/13

ICOR LTD.
PO BOX 406
MIDDLEBURG, VIRGINIA 20118

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

PROJECT NO. 13-CI.01	SCALE: AS SHOWN
DRAWING NO.	FIGURE 1

GOOGLE 2013

0 100 200 400

SCALE IN FEET

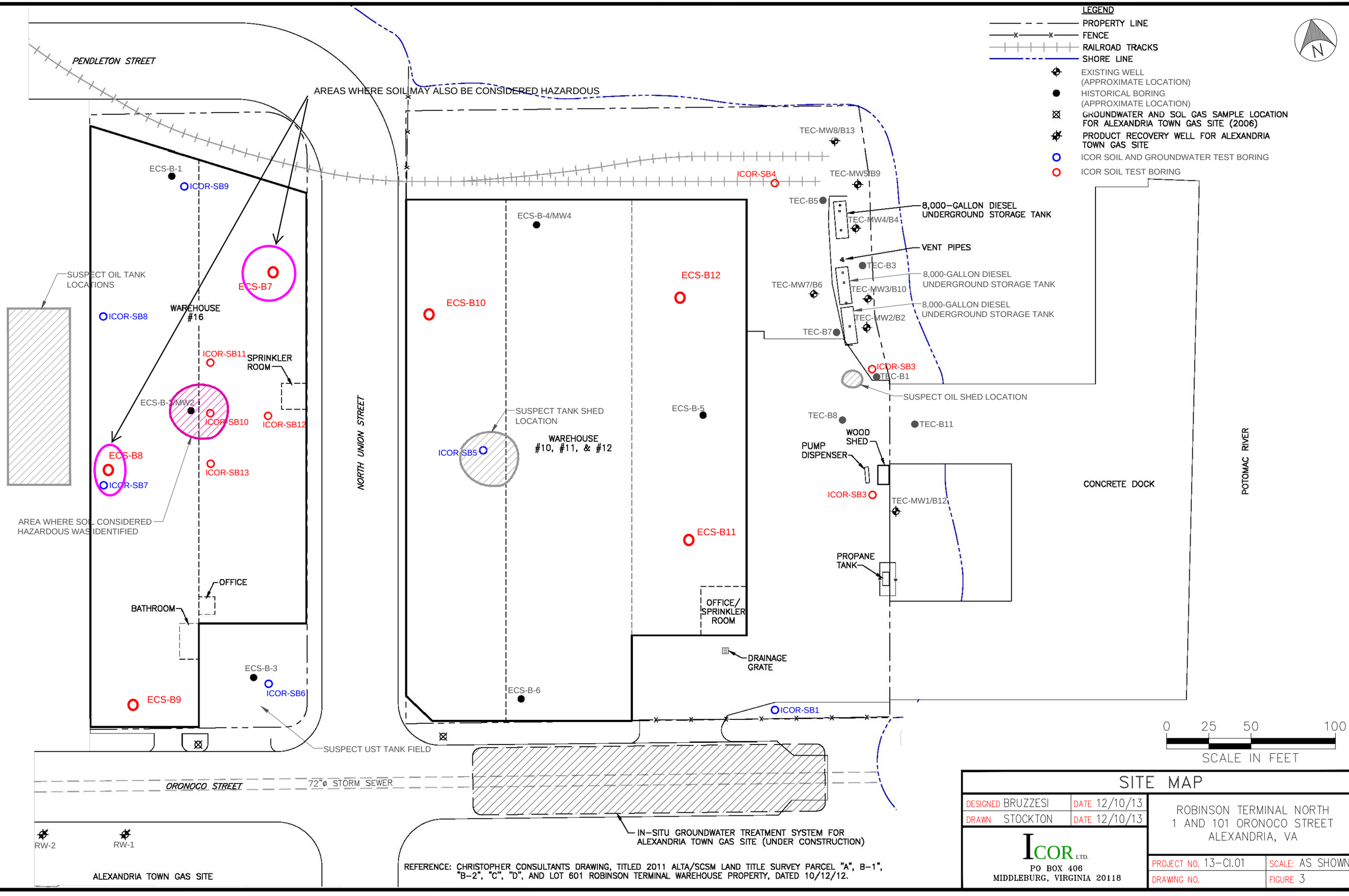
AERIAL PHOTOGRAPH

DESIGNED BRUZZESI	DATE 12/10/13
DRAWN STOCKTON	DATE 12/10/13

ICOR LTD.
PO BOX 406
MIDDLEBURG, VIRGINIA 20118

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

PROJECT NO. 13-CI.01	SCALE: AS SHOWN
DRAWING NO.	FIGURE 2



REFERENCE: CHRISTOPHER CONSULTANTS DRAWING, TITLED 2011 ALTA/SCSM LAND TITLE SURVEY PARCEL "A", B-1", "B-2", "C", "D", AND LOT 601 ROBINSON TERMINAL WAREHOUSE PROPERTY, DATED 10/12/12.

SITE MAP

DESIGNED BRUZZESI	DATE 12/10/13
DRAWN STOCKTON	DATE 12/10/13

ICOR LTD.
PO BOX 406
MIDDLEBURG, VIRGINIA 20118

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

PROJECT NO. 13-CI.01	SCALE: AS SHOWN
DRAWING NO.	FIGURE 3

TABLES

TABLE 1A. TEC SOIL ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T2SCU	VDEQ-T3SCR	TEC-B1 (11-12)	TEC-B2 (12-16)	TEC-B3 (11-12)	TEC-B4 (9-10)	TEC-B6 (11-12)	TEC-B7 (10-12)	TEC-B8 (7-8)	TEC-B9 (12-14)	TEC-B10 (12-14)	TEC-B11 (9-11)	TEC-B12 (7-8)	TEC-B13 (11-12)
Date:				4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06	4/26/06
TPH															
TPH-GRO	mg/kg	**NE**	**NE**	ND	ND	ND	ND	ND	ND	ND	**0.62**	ND	ND	**0.62**	ND
TPH-DRO	mg/kg	**NE**	**NE**	ND	ND	ND	ND	ND	ND	ND	**17**	ND	ND	**17**	**19**

NOTES:
(11-12) = designates depth sample was collected below ground surface
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
mg/kg = milligrams per kilogram
VDEQ-T2SCU = Commonwelath of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
ND = not detected above analytical method reporting limit
Bold and center justification designates target compound was detected at a concentration above RL
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 1B. TEC GROUNDWATER ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T3RGSL	VDEQ-T3CGSL	VDEQ-CWT			TEC-MW1	TEC-MW2	TEC-MW3	TEC-MW4	TEC-MW5	TEC-MW6	TEC-MW7
				WTNC	WTC								
					Dermal Contact & Incidential Ingestion	Inhalation							
Date:							5/1/06	5/1/06	5/1/06	5/1/06	5/1/06	5/1/06	5/1/06
TPH													
TPH-GRO	mg/L	**NE**	**NE**	**NE**	**NE**	**NE**	ND	ND	ND	ND	ND	ND	ND
TPH-DRO	mg/L	**NE**	**NE**	**NE**	**NE**	**NE**	ND	ND	ND	ND	ND	ND	ND
VOCs													
Benzene	ug/L	**941**	**941**	**1050**	**863**	**15**	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/L	**1920**	**8070**	**63100**	**35000**	**1020**	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L	**27.6**	**27.6**	**3380**	**1410**	**61**	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ug/L	**492**	**2070**	**5940**	**11100**	**87.4**	ND	ND	ND	ND	ND	ND	ND
Methyl-t-butyl ether	ug/L	**1330**	**1970**	**397000**	**152000**	**585**	**2**	**2**	**1**	**67**	ND	ND	ND
Naphthalene	ug/L	**3.98**	**20.1**	**73.5**	**557**	**0.722**	ND	ND	ND	ND	ND	ND	ND

NOTES:
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
VOCs = volatile organic compounds
ug/L = micrograms per liter
mg/L = milligrams per liter
VDEQ = Commonwelath of Virginia Department of Environmental Quality
VDEQ-T3RGSL = VDEQ Tier III residential groundwater screening level
VDEQ-T3CGSL = VDEQ Tier III commercial groundwater screening level
VDEQ-CWT = VDEQ contaminants of concern for a construction worker in a trench
WTNC = water table not contacted
WTC = water table contacted
ND = not detected above anaytical method reporting limit
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above the VDEQ screening level in at least 1 sample

TABLE 2A. ECS SOIL ANALYTICAL RESULTS (DETECTIONS ONLY)

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T2SCU	VDEQ-T3SCR	ECS-B1				ECS-B2				ECS-B3			
				(1-2.5)	(2.5-4)	(8.5-10)	(18.5-20)	(2.5-4)	(5-6.5)	(8.5-10)	(13.5-15)	(1-2.5)	(8.5-10)	(13.5-15)	(28.5-30)
Date:				1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08
TPH															
TPH-DRO	mg/kg	**NE**	**NE**	NA	**10200**	**7060**	ND	**56**	NA	**17**	**70**	**115**	**40**	ND	**27**
VOCs															
Benzene	ug/kg	**97.7**	**5400**	NA	ND	**2.8**	ND	ND	NA	ND	**11**	**9.8**	**5120**	ND	ND
2-Butanone (MEK)	ug/kg	**1250**	**20000000**	NA	ND	ND	ND	ND	NA	**7.3**	ND	ND	ND	ND	ND
n-Butylbenzene	ug/kg	**14200**	**5100000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ug/kg	**NE**	**10000000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ug/kg	**NE**	**10000000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/kg	**492**	**370000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	**5400**	**27000**	NA	ND	ND	ND	ND	NA	ND	**17**	**8.6**	ND	ND	ND
Isopropylbenzene (Cumene)	ug/kg	**3410**	**110000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ug/kg	**NE**	**NE**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Methyl-t-butyl ether	ug/kg	**41.7**	**220000**	NA	ND	ND	ND	ND	NA	ND	ND	**4.2**	ND	**2.7**	**3.2**
Naphthalene	ug/kg	**26.2**	**18000**	NA	**136**	**70**	ND	ND	NA	ND	**204**	**7.4**	ND	**84**	ND
n-Propylbenzene	ug/kg	**5360**	**2100000**	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Styrene	ug/kg	**5600**	**3600000**	NA	ND	ND	ND	ND	NA	ND	ND	**4.2**	ND	ND	ND
Toluene	ug/kg	**31100**	**4500000**	NA	**7.7**	**13**	**3.4**	**4.2**	NA	**4.2**	**4.7**	**70**	**196**	**5.6**	**2.7**
1,2,4-Trimethylbenzene	ug/kg	**115**	**26000**	NA	ND	**13**	ND	ND	NA	ND	**14**	**16**	ND	**10**	ND
1,3,5-Trimethylbenzene	ug/kg	**658**	**1000000**	NA	ND	**13**	ND	ND	NA	ND	**14**	**7.5**	ND	**11**	ND
Total Xylenes	ug/kg	**63000**	**270000**	NA	**3.4**	**14.1**	ND	ND	NA	ND	**16.3**	**58**	ND	**11.1**	ND
RCRA Metals															
Arsenic	mg/kg	**3.4**	**30**	**4.3**	NA	NA	NA	NA	**1090**	NA	NA	NA	NA	NA	NA
Barium	mg/kg	**1500**	**19000**	**82.3**	NA	NA	NA	NA	**90.9**	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	**7**	**80**	ND	NA	NA	NA	NA	**23.6**	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	**0.29**	**5.6**	**16.3**	NA	NA	NA	NA	**17.5**	NA	NA	NA	NA	NA	NA
Lead	mg/kg	**270**	**800**	**14.9**	NA	NA	NA	NA	**297**	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	**1**	**4.3**	ND	NA	NA	NA	NA	**75.1**	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	**5.1**	**510**	ND	NA	NA	NA	NA	**10.3**	NA	NA	NA	NA	NA	NA
Silver	mg/kg	**1.19**	**510**	ND	NA	NA	NA	NA	**1.41**	NA	NA	NA	NA	NA	NA

NOTES:
(10-13.5) = designates depth sample was collected below ground surface
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
VOCs = volatile organic compounds
RCRA = Resource Conservation and Recovery Act
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NA = not analyzed
ND = not detected above the analytical method reporting limit
VDEQ-T2SCU = Commonwealth of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 2A. ECS SOIL ANALYTICAL RESULTS (DETECTIONS ONLY)

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T2SCU	VDEQ-T3SCR	ECS-B4				ECS-B5				
				(5-6.5)	(13.5-15)	(23.5-25)	(28.5-30)	(2.5-4)	(5-6.5)	(8.5-10)	(28.5-30)	(33.5-35)
Date:				1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08
TPH												
TPH-DRO	mg/kg	NE	NE	123	22	22	ND	95	NA	20	58	ND
VOCs												
Benzene	ug/kg	97.7	5400	ND	6.3	4.6	ND	ND	NA	ND	ND	3.7
2-Butanone (MEK)	ug/kg	1250	20000000	ND	ND	ND	ND	ND	NA	ND	7.3	ND
n-Butylbenzene	ug/kg	14200	5100000	ND	ND	ND	ND	ND	NA	ND	ND	ND
sec-Butylbenzene	ug/kg	NE	10000000	ND	ND	ND	ND	ND	NA	ND	ND	ND
tert-Butylbenzene	ug/kg	NE	10000000	ND	ND	ND	ND	ND	NA	ND	ND	ND
Carbon Disulfide	ug/kg	492	370000	ND	ND	ND	ND	ND	NA	3.3	ND	11
Ethylbenzene	ug/kg	5400	27000	2.2	5.1	4.9	ND	ND	NA	ND	ND	7
Isopropylbenzene (Cumene)	ug/kg	3410	110000	ND	ND	2.5	ND	ND	NA	ND	ND	ND
p-Isopropyltoluene	ug/kg	NE	NE	ND	ND	ND	ND	ND	NA	166	226	419
Methyl-t-butyl ether	ug/kg	41.7	220000	ND	ND	2.6	ND	ND	NA	ND	ND	ND
Naphthalene	ug/kg	26.2	18000	ND	66	155	4.9	ND	NA	14	5.9	27
n-Propylbenzene	ug/kg	5360	2100000	ND	ND	ND	ND	ND	NA	ND	ND	ND
Styrene	ug/kg	5600	3600000	ND	ND	ND	ND	ND	NA	ND	ND	ND
Toluene	ug/kg	31100	4500000	16	11	29	ND	ND	NA	4.5	5.7	8.4
1,2,4-Trimethylbenzene	ug/kg	115	26000	4.9	6.5	12	ND	4	NA	11	9.8	9.3
1,3,5-Trimethylbenzene	ug/kg	658	1000000	4.7	2.8	5	ND	ND	NA	4.6	3.8	2.8
Total Xylenes	ug/kg	63000	270000	12.2	9	24.7	ND	ND	NA	ND	3.3	3.7
RCRA Metals												
Arsenic	mg/kg	3.4	30	NA	NA	NA	NA	NA	7	NA	NA	NA
Barium	mg/kg	1500	19000	NA	NA	NA	NA	NA	99.7	NA	NA	NA
Cadmium	mg/kg	7	80	NA	NA	NA	NA	NA	3.79	NA	NA	NA
Chromium	mg/kg	0.29	5.6	NA	NA	NA	NA	NA	25.8	NA	NA	NA
Lead	mg/kg	270	800	NA	NA	NA	NA	NA	11.5	NA	NA	NA
Mercury	mg/kg	1	4.3	NA	NA	NA	NA	NA	0.25	NA	NA	NA
Selenium	mg/kg	5.1	510	NA	NA	NA	NA	NA	ND	NA	NA	NA
Silver	mg/kg	1.19	510	NA	NA	NA	NA	NA	ND	NA	NA	NA

NOTES:
(10-13.5) = designates depth sample was collected below ground surface
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
VOCs = volatile organic compounds
RCRA = Resource Conservation and Recovery Act
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NA = not analyzed
ND = not detected above the analytical method reporting limit
VDEQ-T2SCU = Commonwelath of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 2A. ECS SOIL ANALYTICAL RESULTS (DETECTIONS ONLY)

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T2SCU	VDEQ-T3SCR	ECS-B6					
				(5-6.5)	(8.5-10)	(13.5-15)	(18.5-20)	(23.5-25)	(28.5-30)
Date:				1/3/08	1/3/08	1/3/08	1/3/08	1/3/08	1/3/08
TPH									
TPH-DRO	mg/kg	NE	NE	142	111	31	68	NA	33
VOCs									
Benzene	ug/kg	97.7	5400	977	ND	16	ND	NA	ND
2-Butanone (MEK)	ug/kg	1250	20000000	ND	ND	ND	ND	NA	ND
n-Butylbenzene	ug/kg	14200	5100000	366	ND	3.2	ND	NA	3.6
sec-Butylbenzene	ug/kg	NE	10000000	ND	ND	26	ND	NA	ND
tert-Butylbenzene	ug/kg	NE	10000000	ND	ND	11	ND	NA	ND
Carbon Disulfide	ug/kg	492	370000	ND	ND	ND	ND	NA	ND
Ethylbenzene	ug/kg	5400	27000	1360	ND	6.4	ND	NA	ND
Isopropylbenzene (Cumene)	ug/kg	3410	110000	ND	ND	8.4	ND	NA	ND
p-Isopropyltoluene	ug/kg	NE	NE	473	ND	3.8	ND	NA	ND
Methyl-t-butyl ether	ug/kg	41.7	220000	ND	ND	ND	ND	NA	ND
Naphthalene	ug/kg	26.2	18000	ND	ND	5.2	5500	NA	ND
n-Propylbenzene	ug/kg	5360	2100000	ND	ND	5.8	ND	NA	2.7
Styrene	ug/kg	5600	3600000	ND	ND	ND	ND	NA	ND
Toluene	ug/kg	31100	4500000	3800	238	36	ND	NA	2.9
1,2,4-Trimethylbenzene	ug/kg	115	26000	1050	ND	18	ND	NA	19
1,3,5-Trimethylbenzene	ug/kg	658	1000000	1870	ND	11	ND	NA	9.8
Total Xylenes	ug/kg	63000	270000	4209	361	38	ND	NA	3.5
RCRA Metals									
Arsenic	mg/kg	3.4	30	NA	NA	NA	NA	6.6	NA
Barium	mg/kg	1500	19000	NA	NA	NA	NA	46	NA
Cadmium	mg/kg	7	80	NA	NA	NA	NA	ND	NA
Chromium	mg/kg	0.29	5.6	NA	NA	NA	NA	19.9	NA
Lead	mg/kg	270	800	NA	NA	NA	NA	39.5	NA
Mercury	mg/kg	1	4.3	NA	NA	NA	NA	0.06	NA
Selenium	mg/kg	5.1	510	NA	NA	NA	NA	ND	NA
Silver	mg/kg	1.19	510	NA	NA	NA	NA	ND	NA

NOTES:
(10-13.5) = designates depth sample was collected below ground surface
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
VOCs = volatile organic compounds
RCRA = Resource Conservation and Recovery Act
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NA = not analyzed
ND = not detected above the analytical method reporting limit
VDEQ-T2SCU = Commonwelath of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 2B. ECS GROUNDWATER ANALYTICAL RESULTS (DETECTIONS ONLY)

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	VDEQ-T3RGSL	VDEQ-T3CGSL	VDEQ-CWT			ECS-MW2	ECS-MW4
				WTNC	WTC			
					Dermal Contact & Incidential Ingestion	Inhalation		
Date:							1/4/08	1/4/08
TPH								
TPH-DRO	mg/L	**NE**	**NE**	**NE**	**NE**	**NE**	**2.87**	**0.99**
VOCs								
Benzene	ug/L	**941**	**941**	**1050**	**863**	**15**	**60**	ND
Naphthalene	ug/L	**3.98**	**20.1**	**73.5**	**557**	**0.722**	ND	**8.6**
Total Xylenes	ug/L	**492**	**2070**	**5940**	**11100**	**87.4**	**3.1**	**4.2**
SVOCs								
Acenaphthene	ug/L	**NE**	**NE**	**NE**	**2870**	**NE**	ND	**17**
Acenaphthylene	ug/L	**NE**	**NE**	**NE**	**1460**	**NE**	ND	**10**
Dimethyl phthalate	ug/L	**NE**	**NE**	**NE**	**37500**	**NE**	**3.9**	ND
Fluorene	ug/L	**NE**	**NE**	**NE**	**4250**	**NE**	ND	**5.6**
2-Methylnaphthalene	ug/L	**NE**	**NE**	**NE**	**56.5**	**NE**	ND	**2.3**
Naphthalene	ug/L	**3.98**	**20.1**	**73.5**	**557**	**0.722**	ND	**8.3**
Phenanthrene	ug/L	**NE**	**NE**	**NE**	**1430**	**NE**	ND	**2.2**

NOTES:
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
VOCs = volatile organic compounds
SVOCs = semi-VOCs
ug/L = micrograms per liter
mg/L = milligrams per liter
VDEQ = Commonwelath of Virginia Department of Environmental Quality
VDEQ-T3RGSL = VDEQ Tier III residential groundwater screening level
VDEQ-T3CGSL = VDEQ Tier III commercial groundwater screening level
VDEQ-CWT = VDEQ contaminants of concern for a construction worker in a trench
WTNC = water table not contacted
WTC = water table contacted
ND = not detected above analytical method reporting limit
Bold and center justification designates target compound was detected at a concentration above RL
Yellow highlighting designates target compound was detected at a concentration above the VDEQ screening level in at least 1 sample

TABLE 3. ICOR TEST BORING SUMMARY

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Test Boring ID	Date Advanced	Test Boring Depth (feet BGS)	Soil Information					Approximate Depth to Groundwater (feet BGS)	Groundwater Sample Laboratory Analyses
			Staining Observed (feet BGS)	Odors Noted (feet BGS)	PID Reading Range (in PPM)	Laboratory Sample			
						Depth (feet BSG)	Analyses		
ICOR-SB1	10/8/13	13.5	NO	NO	0.0 - 0.0	NO	NO	5.4	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, Total and Dissolved PPL
ICOR-SB2	10/8/13	15.0	NO	3.0 - 10.0 (oil and gasoline)	0.0 - 25.4	3.0 - 4.0	PPL Metals	6.0	NO
						5.0 - 6.0	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs		
ICOR-SB3	10/8/13	15.0	10.0 - 12.0 (oil)	10.0 - 12.0 (oil)	0.0 - 4.0	NO	NO	10.0	NO
ICOR-SB4	10/8/13	10.0	NO	NO	0.0 - 0.0	NO	NO	9.0	NO
ICOR-SB5	10/8/13	15.0	NO	NO	0.0 - 0.0	6.0 - 7.0	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, PPL Metals	9.9	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, Total and Dissolved PPL
ICOR-SB6	10/8/13	15.0	NO	12.0 - 15.0 (oil)	0.0 - 8.2	2.0 - 3.0	PPL Metals	10.5	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, Total and Dissolved PPL
ICOR-SB7	10/8/13	15.0	NO	5.0 - 15.0 (oil from 5.0 - 7.0 and oil and gasoline from 7.0 - 15.0)	0.0 - 163.0	7.5 - 8.5	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, PPL Metals	8.0	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, Total and Dissolved PPL Metals

TABLE 3. ICOR TEST BORING SUMMARY

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Test Boring ID	Date Advanced	Test Boring Depth (feet BGS)	Soil Information					Approximate Depth to Groundwater (feet BGS)	Groundwater Sample Laboratory Analyses
			Staining Observed (feet BGS)	Odors Noted (feet BGS)	PID Reading Range (in PPM)	Laboratory Sample			
						Depth (feet BSG)	Analyses		
ICOR-SB8	10/8/13	15.0	NO	1.0 - 15.0 (oil and gasoline)	46.1 - >451.0	2.0 - 3.0	PPL Metals	8.1	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs
						5.0 - 6.0	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs		
ICOR-SB9	10/8/13	17.0	NO	2.0 - 6.0 (oil)	0.0 - 2.8	4.5 - 5.5	PPL Metals	10.1	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, Total and Dissolved PPL
ICOR-SB10	10/8/13	15.0	NO	NO	0.0 - 0.0	2.0 - 3.0	PPL Metals	8.5	NO
ICOR-SB11	10/8/13	15.0	NO	NO	0.0 - 0.0	5.5 - 6.5	TPH-GRO, TPH-DRO, TCL VOCs, TCL SVOCs, PPL Metals	9.1	NO
ICOR-SB12	10/8/13	15.0	NO	NO	0.0 - 0.0	6.0 - 7.0	PPL Metals	10.0	NO
ICOR-SB13	10/8/13	15.0	NO	NO	0.0 - 0.0	5.5 - 6.5	TPH-GRO, TPH-DRO, PPL Metals, Chromium VI	9.0	NO

NOTES:
Elevations are estimated from site plans
BSG = below surface grade
PPM = parts per million
Yellow highlighting indicates observation of note

TABLE 4. WELL CONSTRUCTION INFORMATION

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

WELL ID	DATE INSTALLED	WELL DIAMETER (inches ID)	WELL MATERIAL	TOTAL DEPTH (feet BSG)	SCREEN INTERVAL (feet BSG)	DEPTH TO GROUNDWATER (feet BSG on 5/4/06)	DEPTH TO GROUNDWATER (feet BSG on 10/9/13)
TEC-MW1	4/27/06	1	PVC	10.0	UKN	5.64	NM
TEC-MW2	4/27/06	1	PVC	16.0	UKN	6.79	NM
TEC-MW3	UKN	1	PVC	UKN	UKN	7.00	NM
TEC-MW4	4/27/06	1	PVC	12.0	UKN	7.05	NM
TEC-MW5	4/27/06	1	PVC	16.0	UKN	7.89	NM
TEC-MW6	4/28/06	1	PVC	16.0	UKN	6.40	NM
TEC-MW7	4/27/06	1	PVC	12.0	UKN	6.49	NM
ECS-MW2	12/20/07	1	PVC	UKN	UKN	NP	10.08
ECS-MW4	12/27/07	1	PVC	UKN	UKN	NP	5.19
ICOR-SB1	10/8/13	1	PVC	13.5	3.5 - 13.5	NP	5.39
ICOR-SB5	10/8/13	1	PVC	14.0	4.0 - 14.0	NP	9.89
ICOR-SB6	10/8/13	1	PVC	13.0	3.0 - 13.0	NP	10.51
ICOR-SB7	10/8/13	1	PVC	13.0	3.0 - 13.0	NP	8.01
ICOR-SB8	10/8/13	1	PVC	13.5	3.5 - 13.5	NP	8.09
ICOR-SB9	10/8/13	1	PVC	18.0	8.0 - 18.0	NP	10.06
ICOR-SB12	10/8/13	1	PVC	14.0	4.0 - 14.0	NP	9.06

NOTES:
ID = inner diameter
BSG = below surface grade
UKN = unknown
NP = well not present
NM = not measured

TABLE 5A. ICOR SOIL ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T2SCU	VDEQ-T3SCR	ICOR-SB2(3-4)	ICOR-SB2(5-6)	ICOR-SB5(6-7)	ICOR-SB6(2-3)	ICOR-SB7(7.5-8.5)	ICOR-SB8(2-3)	ICOR-SB8(7.5-8.5)	ICOR-SB9(4.5-5.5)	ICOR-SB10(2-3)	ICOR-SB10(5.5-6.5)	ICOR-SB11(5.5-6.5)	ICOR-SB12(6-7)	ICOR-SB13(5.5-6.5)
Date:					10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
TPH EPA 8015																	
TPH-GRO	mg/kg		**NE**	**NE**	NA	**1.2**	<0.11	NA	**240**	NA	**370**	NA	NA	NA	<0.12	NA	<0.12
TPH-DRO	mg/kg		**NE**	**NE**	NA	**77**	**420**	NA	**3800**	NA	**42**	NA	NA	NA	<4.8	NA	<5.1
TCL VOCs EPA 8260B																	
1,1,1-Trichloroethane	ug/kg	71-55-6			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,1,2,2-Tetrachloroethane	ug/kg	79-34-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/kg	76-13-1			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,1,2-Trichloroethane	ug/kg	79-00-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,1-Dichloroethane	ug/kg	75-34-3			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,1-Dichloroethene	ug/kg	75-35-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2,3-Trichlorobenzene	ug/kg	87-61-6			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2,4-Trichlorobenzene	ug/kg	120-82-1			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2-Dibromo-3-Chloropropane	ug/kg	96-12-8			NA	<46	<45	NA	<4400	NA	<4800	NA	NA	NA	<47	NA	NA
1,2-Dibromoethane (EDB)	ug/kg	106-93-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2-Dichlorobenzene	ug/kg	95-50-1			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2-Dichloroethane	ug/kg	107-06-2			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,2-Dichloropropane	ug/kg	78-87-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,3-Dichlorobenzene	ug/kg	541-73-1			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
1,4-Dichlorobenzene	ug/kg	106-46-7			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
2-Butanone (MEK)	ug/kg	78-93-3			NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	<24	NA	NA
2-Hexanone	ug/kg	591-78-6			NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	<24	NA	NA
4-Methyl-2-Pentanone	ug/kg	108-10-1			NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	<24	NA	NA
Acetone	ug/kg	67-64-1	**2750**	**63000000**	NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	**77**	NA	NA
Benzene	ug/kg	71-43-2			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Bromochloromethane	ug/kg	74-97-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Bromodichloromethane	ug/kg	75-27-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Bromoform	ug/kg	75-25-2			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Bromomethane	ug/kg	74-83-9			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Carbon Disulfide	ug/kg	75-15-0			NA	<12	<11	NA	<1100	NA	<1200	NA	NA	NA	<12	NA	NA
Carbon Tetrachloride	ug/kg	56-23-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Chlorobenzene	ug/kg	108-90-7			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Chloroethane	ug/kg	75-00-3			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Chloroform	ug/kg	67-66-3			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Chloromethane	ug/kg	74-87-3			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Cyclohexane	ug/kg	110-82-7			NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	<24	NA	NA
Dibromochloromethane	ug/kg	124-48-1			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Dichlorodifluoromethane	ug/kg	75-71-8			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Ethylbenzene	ug/kg	100-41-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Isopropylbenzene	ug/kg	98-82-8	**3410**	**110000**	NA	**15**	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Methyl Acetate	ug/kg	79-20-9			NA	<23	<23	NA	<2200	NA	<2400	NA	NA	NA	<24	NA	NA
Methyl-t-butyl ether	ug/kg	1634-04-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Methylcyclohexane	ug/kg	108-87-2	**NE**	**NE**	NA	**41**	<23	NA	<2200	NA	**16000**	NA	NA	NA	<24	NA	NA
Methylene Chloride	ug/kg	75-09-2			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Naphthalene	ug/kg	91-20-3	**26.2**	**18000**	NA	**14**	**7.4**	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Styrene	ug/kg	100-42-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Tetrachloroethene	ug/kg	127-18-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Toluene	ug/kg	108-88-3			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Trichloroethene	ug/kg	79-01-6			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Trichlorofluoromethane	ug/kg	75-69-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
Vinyl Chloride	ug/kg	75-01-4			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
cis-1,2-Dichloroethene	ug/kg	156-59-2			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
cis-1,3-Dichloropropene	ug/kg	10061-01-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
m,p-Xylenes	ug/kg	108-38-3			NA	<12	<11	NA	<1100	NA	<1200	NA	NA	NA	<12	NA	NA
o-Xylene	ug/kg	95-47-6			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
trans-1,2-Dichloroethene	ug/kg	156-60-5			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
trans-1,3-Dichloropropene	ug/kg	10061-02-6			NA	<5.8	<5.6	NA	<560	NA	<600	NA	NA	NA	<5.9	NA	NA
TCL SVOCs EPA 8270C																	
2,4,5-Trichlorophenol	ug/kg	95-95-4			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2,4,6-Trichlorophenol	ug/kg	88-06-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2,4-Dichlorophenol	ug/kg	120-83-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2,4-Dimethylphenol	ug/kg	105-67-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2,4-Dinitrophenol	ug/kg	51-28-5			NA	<390	<380	NA	<740	NA	<390	NA	NA	NA	<410	NA	NA
2,4-Dinitrotoluene	ug/kg	121-14-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2,6-Dinitrotoluene	ug/kg	606-20-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Chloronaphthalene	ug/kg	91-58-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Chlorophenol	ug/kg	95-57-8			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Methyl phenol	ug/kg	95-48-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Methylnaphthalene	ug/kg	91-57-6			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Nitroaniline	ug/kg	88-74-4			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
2-Nitrophenol	ug/kg	88-75-5			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA

TABLE 5A. ICOR SOIL ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T2SCU	VDEQ-T3SCR	ICOR-SB2(3-4)	ICOR-SB2(5-6)	ICOR-SB5(6-7)	ICOR-SB6(2-3)	ICOR-SB7(7.5-8.5)	ICOR-SB8(2-3)	ICOR-SB8(7.5-8.5)	ICOR-SB9(4.5-5.5)	ICOR-SB10(2-3)	ICOR-SB10(5.5-6.5)	ICOR-SB11(5.5-6.5)	ICOR-SB12(6-7)	ICOR-SB13(5.5-6.5)
Date:					10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
3&4-Methylphenol	ug/kg				NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
3,3-Dichlorobenzidine	ug/kg	91-94-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
3-Nitroaniline	ug/kg	99-09-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
4,6-Dinitro-2-methyl phenol	ug/kg	534-52-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
4-Bromophenylphenyl ether	ug/kg	101-55-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
4-Chloro-3-methyl phenol	ug/kg	59-50-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
4-Chloroaniline	ug/kg	106-47-8			NA	<390	<380	NA	<740	NA	<390	NA	NA	NA	<410	NA	NA
4-Chlorophenyl Phenyl ether	ug/kg	7005-72-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
4-Nitroaniline	ug/kg	100-01-6			NA	<390	<380	NA	<740	NA	<390	NA	NA	NA	<410	NA	NA
4-Nitrophenol	ug/kg	100-02-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Acenaphthene	ug/kg	83-32-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Acenaphthylene	ug/kg	208-96-8			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Acetophenone	ug/kg	98-86-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Anthracene	ug/kg	120-12-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Atrazine	ug/kg	1912-24-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Benzo(a)anthracene	ug/kg	56-55-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Benzo(a)pyrene	ug/kg	50-32-8			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Benzo(b)fluoranthene	ug/kg	205-99-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Benzo(g,h,i)perylene	ug/kg	191-24-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Benzo(k)fluoranthene	ug/kg	207-08-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Biphenyl (Diphenyl)	ug/kg	92-52-4			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Butyl benzyl phthalate	ug/kg	85-68-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Caprolactam	ug/kg	105-60-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Carbazole	ug/kg	86-74-8			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Chrysene	ug/kg	218-01-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Di-n-butyl phthalate	ug/kg	84-74-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Di-n-octyl phthalate	ug/kg	117-84-0			NA	<390	<380	NA	<740	NA	<390	NA	NA	NA	<410	NA	NA
Dibenz(a,h)Anthracene	ug/kg	53-70-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Dibenzofuran	ug/kg	132-64-9			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Diethyl phthalate	ug/kg	84-66-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Dimethyl phthalate	ug/kg	131-11-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Fluoranthene	ug/kg	206-44-0	**230000**	**2200000**	NA	**260**	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Fluorene	ug/kg	86-73-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Hexachlorobenzene	ug/kg	118-74-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Hexachlorobutadiene	ug/kg	87-68-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Hexachlorocyclopentadiene	ug/kg	77-47-4			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Hexachloroethane	ug/kg	67-72-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Indeno(1,2,3-c,d)Pyrene	ug/kg	193-39-5			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Isophorone	ug/kg	78-59-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
N-Nitrosodi-n-propyl amine	ug/kg	621-64-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
N-Nitrosodiphenylamine	ug/kg	86-30-6			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Naphthalene	ug/kg	91-20-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Nitrobenzene	ug/kg	98-95-3			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Pentachlorophenol	ug/kg	87-86-5			NA	<390	<380	NA	<740	NA	<390	NA	NA	NA	<410	NA	NA
Phenanthrene	ug/kg	85-01-8			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Phenol	ug/kg	108-95-2			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Pyrene	ug/kg	129-00-0	**65500**	**1700000**	NA	**210**	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
Pyridine	ug/kg	110-86-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
bis(2-chloroethoxy) methane	ug/kg	111-91-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
bis(2-chloroethyl) ether	ug/kg	111-44-4			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
bis(2-chloroisopropyl) ether	ug/kg	108-60-1			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
bis(2-ethylhexyl) phthalate	ug/kg	117-81-7			NA	<190	<190	NA	<740	NA	<200	NA	NA	NA	<210	NA	NA
PPL Metals EPA 6020A																	
Antimony	mg/kg	7440-36-0	**3.1**	**41**	<2.4	NA	<2.1	<2.6	<2.8	<2.8	<2.2	<2.8	**12**	<2.3	<3.0	<2.0	<2.8
Arsenic	mg/kg	7440-38-2	**3.4**	**30**	**2.8**	NA	**3.8**	**11**	**130**	**600**	**12**	**3.6**	**1300**	**190**	**3.9**	**3.1**	**9.9**
Beryllium	mg/kg	7440-41-7			<2.4	NA	<2.1	<2.6	<2.8	<2.8	<2.2	<2.8	<2.4	<2.3	<3.0	<2.0	<2.8
Cadmium	mg/kg	7440-43-9			<2.4	NA	<2.1	<2.6	<2.8	<2.8	<2.2	<2.8	**5.5**	<2.3	<3.0	**4.4**	**4.3**
Chromium	mg/kg	7440-47-3	**0.29***	**63***	**20**	NA	<2.1	**26**	**11**	**22**	**12**	**10**	**18**	**19**	**24**	**22**	**30**
Copper	mg/kg	7440-50-8	**310**	**4100**	**18**	NA	**4.6**	**200**	**7.6**	**18**	**5.0**	**12**	**1800**	**270**	**21**	**16**	**59**
Lead	mg/kg	7439-92-1	**270**	**800**	**15**	NA	**16**	**32**	**4.7**	**9.1**	**7.2**	**60**	**2200**	**10**	**12**	**14**	**17**
Mercury	mg/kg	7439-97-6	**0.94**	**4**	<0.095	NA	<0.084	<0.10	<0.11	<0.11	<0.089	**0.56**	**7.8**	**0.17**	**0.19**	**0.15**	**0.24**
Nickel	mg/kg	7440-02-0	**39.1**	**2000**	**22**	NA	<2.1	**26**	**5.9**	**21**	**22**	**9.4**	**13**	**18**	**23**	**24**	**21**
Selenium	mg/kg	7782-49-2	**5.1**	**510**	<2.4	NA	<2.1	<2.6	<2.8	<2.8	<2.2	<2.8	**8.2**	<2.3	<3.0	<2.0	<2.8
Silver	mg/kg	7440-22-4	**1.19**	**510**	<2.4	NA	<2.1	<2.6	<2.8	<2.8	<2.2	<2.8	**15**	<2.3	<3.0	<2.0	<2.8
Thallium	mg/kg	7440-28-0	**0.078**	**1**	<1.9	NA	<1.7	<2.1	<2.2	<2.2	<1.8	<2.2	**3.0**	<1.8	<2.4	<1.6	<2.2
Zinc	mg/kg	7440-66-6	**584**	**31000**	**68**	NA	<8.4	**1100**	**33**	**63**	**37**	5000	**2100**	**620**	**61**	**1700**	**1700**
Chromium VI EPA 7196A																	
Chromium VI	mg/kg	18540-29-9	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.97

TABLE 5A. ICOR SOIL ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T2SCU	VDEQ-T3SCR	ICOR-SB2(3-4)	ICOR-SB2(5-6)	ICOR-SB5(6-7)	ICOR-SB6(2-3)	ICOR-SB7(7.5-8.5)	ICOR-SB8(2-3)	ICOR-SB8(7.5-8.5)	ICOR-SB9(4.5-5.5)	ICOR-SB10(2-3)	ICOR-SB10(5.5-6.5)	ICOR-SB11(5.5-6.5)	ICOR-SB12(6-7)	ICOR-SB13(5.5-6.5)
Date:					10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
TCLP RCRA Metals EPA 3010A/6020A																	
Arsenic	ug/L	7440-38-2	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**	NA	NA	NA	NA
Barium	ug/L	7440-39-3	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA
Cadmium	ug/L	7440-43-9	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA
Chromium	ug/L	7440-47-3	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA
Lead	ug/L	7439-92-1	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	**7.8**	NA	NA	NA	NA
Mercury	ug/L	7439-97-6	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	NA	NA	NA	NA
Selenium	ug/L	7782-49-2	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA
Silver	ug/L	7440-22-4	**NE**	**NE**	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA

NOTES:
(0.5-1.5) = designates depth sample was collected below ground surface
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
TCL = Target Compound List
VOCs = volatile organic compounds
SVOCs = semi-VOCs
PCBs = polychlorinated biphenyls
PPL = Priority Pollutant List
TCLP = Toxic Characteristic Leaching Procedure
RCRA = Resource Conservation and Recovery Act
EPA 8260B = United States Environmental Protection Agency SW-846 analytical method
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ug/L = micrograms per liter
NA = not analyzed
VDEQ-T2SCU = Commonwelath of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
<1.0 = not detected above analytical method reporting limit (RL)
* = total chromium (chromium III and VI)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 5B. 2014 GEOTECHNICAL INVESTIGATION SOIL ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T2SCU	VDEQ-T3SCR	ECS-B7(2.5-10)	ECS-B8(2.5-4)	ECS-B9(2.5-10)	ECS-B10(4-10)	ECS-B11(5-10)	ECS-B12(5-10)
Date:					10/6/14	10/7/14	10/7/14	10/8/14	10/10/14	10/8/14
RCRA Metals EPA 6020A										
Arsenic	mg/kg	7440-38-2	**3.4**	**30**	**1600**	**1900**	**11**	**6.8**	**18**	**7.7**
Barium	mg/kg	7440-39-3	**1500**	**22000**	**320**	**190**	**81**	**170**	**140**	**81**
Cadmium	mg/kg	7440-43-9	**7**	**98**	**17**	**12**	<2.7	<2.6	<2.7	<2.9
Chromium	mg/kg	7440-47-3	**3***	**63***	**27**	**20**	**21**	**5.4**	**15**	**3.4**
Lead	mg/kg	7439-92-1	**270**	**800**	**1500**	**370**	**15**	**59**	**600**	**160**
Mercury	mg/kg	7439-97-6	**0.94**	**4**	**27**	**20**	<0.11	**0.18**	**0.23**	**0.27**
Selenium	mg/kg	7782-49-2	**5.1**	**580**	**10**	**6.0**	<2.7	<2.6	**3.2**	<2.9
Silver	mg/kg	7440-22-4	**1.58**	**580**	**12**	**2.8**	<2.7	<2.6	**5.9**	<2.9
TCLP RCRA Metals EPA 3010A/6020A										
Arsenic	ug/L	7440-38-2	**NE**	**NE**	**2.0**	**6.3**	NA	NA	NA	NA
Barium	ug/L	7440-39-3	**NE**	**NE**	<1.0	**1.0**	NA	NA	NA	NA
Cadmium	ug/L	7440-43-9	**NE**	**NE**	**0.063**	**0.070**	NA	NA	NA	NA
Chromium	ug/L	7440-47-3	**NE**	**NE**	<0.050	<0.050	NA	NA	NA	NA
Lead	ug/L	7439-92-1	**NE**	**NE**	**0.75**	<0.050	NA	NA	NA	NA
Mercury	ug/L	7439-97-6	**NE**	**NE**	<0.0020	<0.0020	NA	NA	NA	NA
Selenium	ug/L	7782-49-2	**NE**	**NE**	<0.050	<0.050	NA	NA	NA	NA
Silver	ug/L	7440-22-4	**NE**	**NE**	<0.050	<0.050	NA	NA	NA	NA

NOTES:
(2.5-4) = designates depth sample was collected below ground surface
TCLP = Toxic Characteristic Leaching Procedure
RCRA = Resource Conservation and Recovery Act
EPA 6020A = United States Environmental Protection Agency SW-846 analytical method
mg/kg = milligrams per kilogram
ug/L = micrograms per liter
NA = not analyzed
VDEQ-T2SCU = Commonwelath of Virginia Department of Environmental Quality (VDEQ) Tier II screening concentration for unrestricted use soil (residential)
VDEQ-T3SCR = VDEQ Tier III screening concentration for restricted use soil (commercial/industrial)
<1.0 = not detected above analytical method reporting limit (RL)
* = total chromium (chromium III and VI)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above a VDEQ screening concentration in at least 1 sample

TABLE 6. ICOR GROUNDWATER ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T3RGSL	VDEQ-T3CGSL	VDEQ-CWT			ECS-MW2	ECS-MW4	ICOR-SB1(GW)	ICOR-SB5(GW)	ICOR-SB6(GW)	ICOR-SB7(GW)	ICOR-SB8(GW)	ICOR-SB9(GW)
					WTNC	WTC									
						Dermal Contact & Incidential Ingestion	Inhalation								
Date:								10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
TPH EPA 8015															
TPH-GRO	mg/L		NE	NE	NE	NE	NE	**2.8**	<0.1	<0.1	**0.25**	**0.21**	**0.18**	**11**	**0.25**
TPH-DRO	mg/L		NE	NE	NE	NE	NE	**0.91**	**0.15**	**0.17**	**0.30**	**0.11**	**0.16**	**0.93**	**0.77**
TCL VOCs EPA 8260B															
1,1,1-Trichloroethane	ug/L	71-55-6						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,1,2,2-Tetrachloroethane	ug/L	79-34-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/L	76-13-1						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,1,2-Trichloroethane	ug/L	79-00-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,1-Dichloroethane	ug/L	75-34-3						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,1-Dichloroethene	ug/L	75-35-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2,3-Trichlorobenzene	ug/L	87-61-6						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2,4-Trichlorobenzene	ug/L	120-82-1						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2-Dibromo-3-Chloropropane	ug/L	96-12-8						<10	<10	<10	<10	<10	<10	<100	<10
1,2-Dibromoethane (EDB)	ug/L	106-93-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2-Dichlorobenzene	ug/L	95-50-1						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2-Dichloroethane	ug/L	107-06-2						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,2-Dichloropropane	ug/L	78-87-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,3-Dichlorobenzene	ug/L	541-73-1						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
1,4-Dichlorobenzene	ug/L	106-46-7						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
2-Butanone (MEK)	ug/L	78-93-3						<10	<10	<10	<10	<10	<10	<100	<10
2-Hexanone	ug/L	591-78-6						<10	<10	<10	<10	<10	<10	<100	<10
4-Methyl-2-Pentanone	ug/L	108-10-1						<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0
Acetone	ug/L	67-64-1						<10	<10	<10	<10	<10	<10	<100	<10
Benzene	ug/L	71-43-2	**941**	**941**	**1050**	**863**	**15**	**160**	<1.0	<1.0	**49**	**50**	**1.7**	**57**	**7.4**
Bromochloromethane	ug/L	74-97-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Bromodichloromethane	ug/L	75-27-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Bromoform	ug/L	75-25-2						<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0
Bromomethane	ug/L	74-83-9						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Carbon Disulfide	ug/L	75-15-0						<10	<10	<10	<10	<10	<10	<100	<10
Carbon Tetrachloride	ug/L	56-23-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Chlorobenzene	ug/L	108-90-7						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Chloroethane	ug/L	75-00-3						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Chloroform	ug/L	67-66-3						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Chloromethane	ug/L	74-87-3						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Cyclohexane	ug/L	110-82-7	**102**	**429**	**9780**	**NE**	**3420**	**150**	<10	<10	<10	<10	<10	**710**	<10
Dibromochloromethane	ug/L	124-48-1						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Dichlorodifluoromethane	ug/L	75-71-8						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Ethylbenzene	ug/L	100-41-4	**27.6**	**27.6**	**3380**	**1410**	**61**	**47**	<1.0	<1.0	**15**	**7.7**	<1.0	**80**	<1.0
Isopropylbenzene	ug/L	98-82-8	**88.7**	**373**	**3450**	**6400**	**92.5**	**6.7**	<1.0	<1.0	**3.5**	<1.0	**1.2**	<10	<1.0
Methyl Acetate	ug/L	79-20-9						<10	<10	<10	<10	<10	<10	<100	<10
Methyl-t-butyl ether	ug/L	1634-04-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Methylcyclohexane	ug/L	108-87-2	**17.7**	**74.5**	**650**	**NE**	**624**	**230**	<10	<10	<10	<10	<10	**520**	<10
Methylene Chloride	ug/L	75-09-2						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Naphthalene	ug/L	91-20-3	**3.98**	**20.1**	**73.5**	**557**	**0.722**	**73**	<1.0	<1.0	**29**	**27**	<1.0	**50**	**19**
Styrene	ug/L	100-42-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Tetrachloroethene	ug/L	127-18-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Toluene	ug/L	108-88-3	**1920**	**8070**	**63100**	**35000**	**1020**	**5.8**	<1.0	<1.0	<1.0	<1.0	<1.0	**16**	**1.7**
Trichloroethene	ug/L	79-01-6						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Trichlorofluoromethane	ug/L	75-69-4						<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0
Vinyl Chloride	ug/L	75-01-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
cis-1,2-Dichloroethene	ug/L	156-59-2						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
cis-1,3-Dichloropropene	ug/L	10061-01-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
m,p-Xylenes	ug/L	108-38-3	**71.5**	**149**	**1330**	**5270**	**21.8**	**17**	<2.0	<2.0	**4.8**	**2.9**	<2.0	**76**	<2.0
o-Xylene	ug/L	95-47-6	**51.9**	**207**	**1830**	**5870**	**21.9**	**28**	<1.0	<1.0	**21**	**3.2**	<1.0	<10	<1.0
trans-1,2-Dichloroethene	ug/L	156-60-5						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
trans-1,3-Dichloropropene	ug/L	10061-02-6						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0

TABLE 6. ICOR GROUNDWATER ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T3RGSL	VDEQ-T3CGSL	VDEQ-CWT			ECS-MW2	ECS-MW4	ICOR-SB1(GW)	ICOR-SB5(GW)	ICOR-SB6(GW)	ICOR-SB7(GW)	ICOR-SB8(GW)	ICOR-SB9(GW)
					WTNC	WTC									
						Dermal Contact & Incidential Ingestion	Inhalation								
Date:								10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
TCL SVOCs EPA 8270C															
2,4,5-Trichlorophenol	ug/L	95-95-4						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2,4,6-Trichlorophenol	ug/L	88-06-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2,4-Dichlorophenol	ug/L	120-83-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2,4-Dimethylphenol	ug/L	105-67-9						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2,4-Dinitrophenol	ug/L	51-28-5						<22	<10	<10	<10	<10	<10	<22	<10
2,4-Dinitrotoluene	ug/L	121-14-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2,6-Dinitrotoluene	ug/L	606-20-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Chloronaphthalene	ug/L	91-58-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Chlorophenol	ug/L	95-57-8						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Methyl phenol	ug/L	95-48-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Methylnaphthalene	ug/L	91-57-6						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Nitroaniline	ug/L	88-74-4						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
2-Nitrophenol	ug/L	88-75-5						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
3&4-Methylphenol	ug/L							<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
3,3-Dichlorobenzidine	ug/L	91-94-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
3-Nitroaniline	ug/L	99-09-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
4,6-Dinitro-2-methyl phenol	ug/L	534-52-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
4-Bromophenylphenyl ether	ug/L	101-55-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
4-Chloro-3-methyl phenol	ug/L	59-50-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
4-Chloroaniline	ug/L	106-47-8						<22	<10	<10	<10	<10	<10	<22	<10
4-Chlorophenyl Phenyl ether	ug/L	7005-72-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
4-Nitroaniline	ug/L	100-01-6						<22	<10	<10	<10	<10	<10	<22	<10
4-Nitrophenol	ug/L	100-02-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Acenaphthene	ug/L	83-32-9	**NE**	**NE**	**NE**	**2870**	**NE**	<11	**17**	**7.2**	<5.0	<5.0	<5.0	<11	**27**
Acenaphthylene	ug/L	208-96-8	**NE**	**NE**	**NE**	**1460**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**8.5**
Acetophenone	ug/L	98-86-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Anthracene	ug/L	120-12-7	**NE**	**NE**	**NE**	**7660**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**7.3**
Atrazine	ug/L	1912-24-9						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Benzo(a)anthracene	ug/L	56-55-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Benzo(a)pyrene	ug/L	50-32-8						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Benzo(b)fluoranthene	ug/L	205-99-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Benzo(g,h,i)perylene	ug/L	191-24-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Benzo(k)fluoranthene	ug/L	207-08-9						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Biphenyl (Diphenyl)	ug/L	92-52-4	**3.31**	**13.9**	**1800**	**1160**	**1.23**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**9.3**
Butyl benzyl phthalate	ug/L	85-68-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Caprolactam	ug/L	105-60-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Carbazole	ug/L	86-74-8	**NE**	**NE**	**NE**	**NE**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**8.7**
Chrysene	ug/L	218-01-9						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Di-n-butyl phthalate	ug/L	84-74-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Di-n-octyl phthalate	ug/L	117-84-0						<22	<10	<10	<10	<10	<10	<22	<10
Dibenz(a,h)Anthracene	ug/L	53-70-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Dibenzofuran	ug/L	132-64-9	**NE**	**NE**	**NE**	**47.1**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**22**
Diethyl phthalate	ug/L	84-66-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Dimethyl phthalate	ug/L	131-11-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Fluoranthene	ug/L	206-44-0	**NE**	**NE**	**NE**	**304**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**12**
Fluorene	ug/L	86-73-7	**NE**	**NE**	**NE**	**4250**	**NE**	<11	**5.9**	<5.0	<5.0	<5.0	<5.0	<11	**30**
Hexachlorobenzene	ug/L	118-74-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Hexachlorobutadiene	ug/L	87-68-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Hexachlorocyclopentadiene	ug/L	77-47-4						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Hexachloroethane	ug/L	67-72-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Indeno(1,2,3-c,d)Pyrene	ug/L	193-39-5						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Isophorone	ug/L	78-59-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
N-Nitrosodi-n-propyl amine	ug/L	621-64-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
N-Nitrosodiphenylamine	ug/L	86-30-6						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Naphthalene	ug/L	91-20-3	**3.98**	**20.1**	**73.5**	**557**	**0.722**	**36**	<5.0	<5.0	<5.0	**8.4**	<5.0	<11	**13**
Nitrobenzene	ug/L	98-95-3						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Pentachlorophenol	ug/L	87-86-5						<22	<10	<10	<10	<10	<10	<22	<10

TABLE 6. ICOR GROUNDWATER ANALYTICAL RESULTS

ROBINSON TERMINAL NORTH
1 AND 101 ORONOCO STREET
ALEXANDRIA, VA

Sample ID:	Units	CAS No.	VDEQ-T3RGSL	VDEQ-T3CGSL	VDEQ-CWT			ECS-MW2	ECS-MW4	ICOR-SB1(GW)	ICOR-SB5(GW)	ICOR-SB6(GW)	ICOR-SB7(GW)	ICOR-SB8(GW)	ICOR-SB9(GW)
					WTNC	WTC									
						Dermal Contact & Incidential Ingestion	Inhalation								
Date:								10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013	10/08/2013
Phenanthrene	ug/L	85-01-8	**NE**	**NE**	**NE**	**1430**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**25**
Phenol	ug/L	108-95-2						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Pyrene	ug/L	129-00-0	**NE**	**NE**	**NE**	**866**	**NE**	<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	**8.7**
Pyridine	ug/L	110-86-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
bis(2-chloroethoxy) methane	ug/L	111-91-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
bis(2-chloroethyl) ether	ug/L	111-44-4						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
bis(2-chloroisopropyl) ether	ug/L	108-60-1						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
bis(2-ethylhexyl) phthalate	ug/L	117-81-7						<11	<5.0	<5.0	<5.0	<5.0	<5.0	<11	<5.0
Total PPL Metals EPA 6020A															
Antimony	ug/L	7440-36-0	**NE**	**NE**	**NE**	**NE**	**NE**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	**9.9**
Arsenic	ug/L	7440-38-2	**NE**	**NE**	**NE**	**NE**	**NE**	**95**	**38**	**120**	**480**	**400**	**15**	NA	**370**
Beryllium	ug/L	7440-41-7	**NE**	**NE**	**NE**	**NE**	**NE**	**26**	<1.0	<1.0	**60**	**1.8**	<1.0	NA	<1.0
Cadmium	ug/L	7440-43-9	**NE**	**NE**	**NE**	**36**	**NE**	**31**	<1.0	**13**	**32**	**6.7**	<1.0	NA	**2.5**
Chromium	ug/L	7440-47-3	**NE**	**NE**	**NE**	**26.6**	**NE**	**180**	<1.0	**24**	**270**	**39**	**3.7**	NA	**3.5**
Copper	ug/L	7440-50-8	**NE**	**NE**	**NE**	**24600**	**NE**	**3300**	<1.0	**700**	**2000**	**790**	**1.4**	NA	**150**
Lead	ug/L	7439-92-1	**NE**	**NE**	**NE**	**NE**	**NE**	**1100**	**14**	**530**	**610**	**290**	**3.2**	NA	**76**
Mercury	ug/L	7439-97-6	**0.067**	**0.281**	**5.59**	**NE**	**0.895**	**0.72**	<0.20	**0.38**	**0.26**	<0.20	<0.20	NA	**0.40**
Nickel	ug/L	7440-02-0	**NE**	**NE**	**NE**	**4750**	**NE**	**160**	<1.0	**38**	**1500**	**33**	**2.9**	NA	**6.6**
Selenium	ug/L	7782-49-2	**NE**	**NE**	**NE**	**3080**	**NE**	<5.0	<1.0	**3.7**	**5.8**	**7.6**	<1.0	NA	<1.0
Silver	ug/L	7440-22-4	**NE**	**NE**	**NE**	**469**	**NE**	<1.0	<1.0	**3.7**	<1.0	<1.0	<1.0	NA	<1.0
Thallium	ug/L	7440-28-0	**NE**	**NE**	**NE**	**24.6**	**NE**	1.1	<1.0	**1.0**	1.0	<1.0	<1.0	NA	<1.0
Zinc	ug/L	7440-66-6	**NE**	**NE**	**NE**	**220000**	**NE**	**19000**	<20	**6900**	**21000**	**1800**	**28**	NA	**8200**
Dissolved PPL Metals EPA 6020A															
Antimony	ug/L	7440-36-0	**NE**	**NE**	**NE**	**NE**	**NE**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0
Arsenic	ug/L	7440-38-2	**NE**	**NE**	**NE**	**NE**	**NE**	**1.4**	<1.0	**14**	**420**	**38**	5.0	NA	**25**
Beryllium	ug/L	7440-41-7	**NE**	**NE**	**NE**	**NE**	**NE**	<1.0	<1.0	<1.0	**32**	<1.0	<1.0	NA	<1.0
Cadmium	ug/L	7440-43-9	**NE**	**NE**	**NE**	**36**	**NE**	<1.0	<1.0	**6.4**	**39**	<1.0	<1.0	NA	<1.0
Chromium	ug/L	7440-47-3	**NE**	**NE**	**NE**	**26.6**	**NE**	<1.0	<1.0	<1.0	**250**	<1.0	<1.0	NA	<1.0
Copper	ug/L	7440-50-8	**NE**	**NE**	**NE**	**24600**	**NE**	<1.0	<1.0	**52**	**1000**	**3.0**	<1.0	NA	<1.0
Lead	ug/L	7439-92-1	**NE**	**NE**	**NE**	**NE**	**NE**	<1.0	<1.0	**2.9**	**820**	<1.0	<1.0	NA	<1.0
Mercury	ug/L	7439-97-6	**0.067**	**0.281**	**5.59**	**NE**	**0.895**	<0.20	<0.20	<0.20	**0.25**	<0.20	<0.20	NA	<0.20
Nickel	ug/L	7440-02-0	**NE**	**NE**	**NE**	**4750**	**NE**	**1.5**	<1.0	**24**	**1500**	**3.8**	<1.0	NA	**3.0**
Selenium	ug/L	7782-49-2	**NE**	**NE**	**NE**	**3080**	**NE**	<1.0	<1.0	**1.7**	**4.3**	**7.2**	<1.0	NA	<1.0
Silver	ug/L	7440-22-4						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0
Thallium	ug/L	7440-28-0						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0
Zinc	ug/L	7440-66-6	**NE**	**NE**	**NE**	**220000**	**NE**	**130**	<20	**4200**	**23000**	**530**	<20	NA	**6400**

NOTES:
TPH = total petroleum hydrocarbons
TPH-DRO = diesel range TPH
TPH-GRO = gasoline range TPH
TCL = Target Compound List
VOCs = volatile organic compounds
SVOCs = semi-VOCs
PCBs = polychlorinated biphenyls
PPL = Priority Pollutant List
EPA 8260B = United States Environmental Protection Agency SW-846 analytical method
ug/L = micrograms per liter
mg/L = milligrams per liter
VDEQ = Commonwealth of Virginia Department of Environmental Quality
VDEQ-T3RGSL = VDEQ Tier III residential groundwater screening level
VDEQ-T3CGSL = VDEQ Tier III commercial groundwater screening level
VDEQ-CWT = VDEQ contaminants of concern for a construction worker in a trench
WTNC = water table not contacted
WTC = water table contacted
<1.0 = not detected above analytical method reporting limit (RL)
Bold and center justification designates target compound was detected at a concentration above RL
Green highlighting designates target compound was detected at a concentration above the RL in at least 1 sample
Yellow highlighting designates target compound was detected at a concentration above the VDEQ screening level in at least 1 sample

ATTACHMENT 1

PHOTOGRAPHS OF PHASE II FIELD WORK

View of direct-push sampling rig during advancement of test boring ICOR-SB1.

View of coring machine used to core a hole through concrete floor within warehouses.

View of direct-push sampling rig during advancement of test boring ICOR-SB2.

View of direct-push sampling rig during advancement of test boring ICOR-SB12.

View of direct-push sampling rig during advancement of test boring ICOR-SB4.

View of sample cores generated during advancement of test boring ICOR-SB6.

View of direct-push sampling rig during advancement of test boring ICOR-SB6.

View of soil samples collected for laboratory analysis from cores generated during advancement of test boring ICOR-SB8.

View of oil-stained soil encountered during advancement of test boring ICOR-SB3.

View of temporary well installed at sampling location ICOR-SB8.

View of intermixed cinder and brick encountered during advancement of test boring ICOR-SB12.

View of existing well MW2.

View of sample cores generated during advancement of test boring ICOR-SB7.

View of groundwater sample being collected from temporary well installed at location ICOR-SB3.

View of soil being screened with a PID.

View of dissolved metals groundwater sample being filtered during collection.

ATTACHMENT 2

BORING LOGS

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-1
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 14'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Gravel FILL, dry	
-2.1	2-4'		0.0	Brown Sandy Clay FILL, with gravel, moist	
-3.1				Tan Rock FILL, dry	
-3.6				Brown Lean Clay FILL, with gravel and some sand,	
--5	5-6'		0.0	moist	
-6.1	6-8'		0.0	Brown Lean Clay FILL, moist	
-					
-					With sand below 8'
-9.6				Light Brown Fat Clay FILL, moist	
--10.6				Brown Lean Clay FILL, with some sand, moist	
-	11-12'		0.0		
-12	12-14'		0.0	Black Gravel FILL, with sand	No petroleum odor
-13				Brown Lean Clay FILL, with sand	
-14				Bottom of Boring at 14'	
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-2/MW-2
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 16'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Gravel FILL, dry	
-4	2-4'		0.0	Brown Sandy Clay FILL, with gravel, moist	
-					
-					
--5					
-6	6-8'		0.0	Tan Rock FILL, dry	
-7				Brown Lean Clay FILL, moist	
-7.2				Tan Pea Gravel FILL, moist	
-7.4				Brown Sandy Clay FILL, with gravel, moist	
-8				Brown Lean Clay FILL, moist	
-9.11				Gravel FILL, moist	
--10	10-12'		0.0	Brown Lean Clay FILL, moist	
-					Fat clay below 10.6'
-					Lean clay with sand
-					below 11'
-12				Red Brick FILL, dry	
-12.2				Brown Sand FILL, with clay, moist	
-					With gravel below 14'
--15.6	15-16'	SP	0.0	Grey Poorly Graded SAND, wet	No petroleum odor
-				Bottom of Boring at 16'	
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-3
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6	0-4'	FILL	0.0	Brown Sandy Gravel FILL, dry	
-					
-					
-					
--5					
-6				Brown Lean Clay FILL, with sand, moist	
-7.10	7-8'		0.0	Brown Fat Clay FILL, moist	
-					Light brown below 8'
-					
--10				Brown Sand FILL, with quartz fragments, moist	
-10.2				Brown Lean Clay FILL, moist	
-					Fat clay below 10.8'
-11.6	11-12'		0.0	Light Brown Lean Clay FILL, with some sand,	
-				moist	
-				Bottom of Boring at 12'	
--15					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-4/MW-4
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Gravel FILL, dry	
-	2-4'		0.0		
-3.9				Brown Lean Clay FILL, with sand and gravel, moist	
-4				Brown Gravel FILL, moist	
--5.6				Brown Fat Clay FILL, moist	
-6.10				Brown Crushed Rock FILL, moist	
-7	7-8'		0.0	Brown Fat Clay FILL, moist	
-					Lean clay below 8'
-8.6				Brown Sand FILL, with quartz fragments, moist	
-9	9-10'		1.4	Brown Fat Clay FILL, moist	No petroleum odor
--10					
-	11-12'		0.0		
-				Bottom of Boring at 12'	
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-5
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0		FILL		Grey Gravel FILL, dry	
-0.6				Brown Sandy Gravel FILL, dry	
-	2-4'		0.0		
-3.8				Grey Rock FILL, dry	
-					
--5					
-					
-7	7-8'		0.0	Brown Lean Clay FILL, with gravel, moist	
-7.6				Brown Fat Clay FILL, moist	
-7.9				Crushed Rock FILL, moist	
-					Water at 8'
--10				Brown Sand FILL, with gravel, wet	
-	11-12'		0.0		
-				Bottom of Boring at 12'	
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					

TOTAL
ENVIRONMENTAL
CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-6/MW-7
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0		FILL		Grey Gravel FILL, dry	
-0.6				Brown Sandy Clay FILL, with gravel, dry	
-	2-4'		0.0		
-3				Brown Fat Clay FILL, with sand, moist	
-					
--5					
-	6.6-7.6'		0.0		Slight petroleum odor
-					below 6-6'
-					With sand below 8'
-9				Brown Sandy Clay FILL, moist	
--10					
-	11-12'		0.8		
-				Bottom of Boring at 12'	Water at 12'
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-7
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0		FILL		Gravel FILL, dry	
-					
-2	2-4'		0.0	Brown Fat Clay FILL, moist	
-2.6				Brown Well Graded Sand FILL, with gravel, moist	
-2.9				Brown Fat Clay FILL, moist	
--5					
-	6-8'		0.0		
-					
-					
-					Lean clay below 9'
--10	10-12'		0.0		
-					
-				Bottom of Boring at 12'	Water at 12'
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-8
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Concrete	
-					
-2	2-4'		0.0	Brown Well Graded Sand FILL, moist	
-3				Brown Fat Clay FILL, moist	
-					
--5				Grey Sandy Lean Clay FILL, moist	No petroleum odor
-					
-7	7-8'		1.0	Brown Lean Clay FILL, moist	
-7.8				Red Brick FILL, dry	
-7.10				Brown Fat Clay FILL, moist	
-					Lean clay below 8'
-					
--10	10-12'		0.0		
-					
-				Bottom of Boring at 12'	
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
--30					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-9/MW-5
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 16'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Clay FILL, with gravel, moist	
-	2-4'		0.0		
-3				Brown Fat Clay FILL, moist	
-					
--5	5-7'		0.0		
-					Lean clay below 6.6'
-					Fat clay below 7'
-					
-					
--10					
-	11-12'		1.3		Lean clay below 11.3'
-12	12-14'		49.2	Grey Lean Clay FILL, with some sand, moist	
-					Moderate petroleum odor
-					at 13'
--15					
-	15-16'		0.0	Bottom of Boring at 16'	
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL
ENVIRONMENTAL
CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-10
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-27-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Gravel FILL, dry	
-	2-4'		0.0		
-					
-4				Brown Fat Clay FILL, moist	
--5					
-	6-8'		0.0		
-					
-					
-					
--10					
-11.6	11-12'		0.2	Brown Lean Clay FILL, with sand, moist	
-				Bottom of Boring at 12'	
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-11
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-28-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 12'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0		FILL		Concrete	
-					
-2	2-4'		0.0	Brown Fat Clay FILL, with sand and gravel, moist	
-3.2				Grey Gravel FILL, moist	
-3.8				Brown Sandy Clay FILL, with gravel, moist	
-4	4-8'		0.0	Red-Brown Poorly Graded Sand FILL, moist	
-4.6				Brown Lean Clay FILL, moist	
--5					
-6.6				Asphalt	
-7				Brown Lean Clay FILL, moist	
-7.10				Brown Sandy Clay FILL, moist	
-8.6				Brown and Grey Lean Clay FILL, moist	No petroleum odor
-	9-11'		0.0		
--10				Red Brick FILL, dry	
-10.2				Brown Fat Clay FILL, moist	
-				Bottom of Boring at 12'	
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-12/MW-1
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-28-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 10'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0	0-4'		0.0	Topsoil	
-0.8		FILL		Brown Sandy Gravel FILL, dry	
-					
-3.10				Brown Sandy Clay FILL, with gravel, moist	
-4	4-6'		0.0	Brown Fat Clay FILL, moist	
--5					
-					
-7	7-8'		0.0	Brown Fat Clay FILL, with some sand, moist	
-					
-8	8-10'		0.0	Dark Grey Gravel FILL, with sand, wet	No petroleum odor
-					Water at 8'
--10				Bottom of Boring at 10'	
-					
-					
-					
--15					
-					
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

TOTAL ENVIRONMENTAL CONCEPTS, INC.

DIRECT-PUSH LOG

TEC/PC#: 650.002/06-3131	**Site:** Robinson Terminal	**Boring No.:** B-13/MW-6
City, State: Alexandria, VA	**Client:** Robinson Terminal Warehouse Corp.	**Date:** 4-28-2006
Site Geologist: A. Weatherly	**Sample Type:** 4-ft poly tube	**Total Depth:** 16'

Depth (feet)	Sample Interval (feet)	USCS	PID (ppm)	Lithologic Description	Comments
--0				Topsoil	
-0.6		FILL		Brown Sandy Clay FILL, with gravel, moist	
-	2-4'		0.0		
-					
-4				Light Brown Lean Clay FILL, with sand, moist	
--5					
-	6-8'		0.0		
-					
-8				Light Brown Lean Clay FILL, moist	
-					
--10					With some sand and
-	11-12'		1.4		gravel below 10'
-					
-					
-	14-16'		0.0		
--15					
-				Bottom of Boring at 16'	
-					
-					
-					
--20					
-					
-					
-					
-					
--25					
-					
-					
-					
-					
--30					
-					
-					
-					
-					

REFERENCE NOTES FOR BORING LOGS

I. Drilling and Sampling Symbols:

SS	-	Split Spoon Sampler	RB	-	Rock Bit Drilling
ST	-	Shelby Tube Sampler	BS	-	Bulk Sample of Cuttings
RC	-	Rock Core; NX, BX, AX	PA	-	Power Auger (no sample)
PM	-	Pressuremeter	HSA	-	Hollow Stem Auger
DC	-	Dutch Cone Penetrometer	WS	-	Wash Sample

Standard Penetration Test (SPT) resistance refers to the blows per foot (bpf) of a 140 lb hammer falling 30 inches on a 2 in. O.D. split-spoon sampler as specified in ASTM D-1586. The blow count is commonly referred to as the N-value.

II. Correlation of Penetration Resistances to Soil Properties:

Relative Density-Sands, Silts

SPT-N (bpf)	Relative Density
0 – 5	Very Loose
6 – 10	Loose
11 – 30	Medium Dense
31 – 50	Dense
51+	Very Dense

Consistency of Cohesive Soils

SPT-N (bpf)	Consistency	Unconfined Compressive Strength, Qp, tsf
0 – 3	Very Soft	Under 0.25
4 – 5	Soft	0.25 - 0.49
6 – 10	Medium Stiff	0.50 - 0.99
11 – 15	Stiff	1.00 - 1.99
16 – 30	Very Stiff	2.00 - 3.99
31 – 50	Hard	4.00 - 8.00
51+	Very Hard	Over 8.00

Weathered Rock (WR) may be defined as SPT-N values exceeding 100 bpf depending on site specific conditions. Refer carefully to boring logs.

Rock Fragments, gravel, cobbles, boulders, or debris may produce N-values that are not representative of actual soil properties.

III. Unified Soil Classification Symbols:

GP – Poorly Graded Gravel
GW – Well Graded Gravel
GM – Silty Gravel
GC – Clayey Gravels
SP – Poorly Graded Sands
SW – Well Graded Sands
SM – Silty Sands
SC – Clayey Sands

ML – Low Plasticity Silts
MH – High Plasticity Silts
CL – Low Plasticity Clays
CH – High Plasticity Clays
OL – Low Plasticity Organics
OH – High Plasticity Organics
CL-ML – Dual Classification (Typical)

IV. Water Level Measurement Symbols:

WL - Water Level
WS - While Sampling
WD - While Drilling

BCR – Before Casing Removal
ACR – After Casing Removal
WCI – Wet Cave In
DCI – Dry Cave In

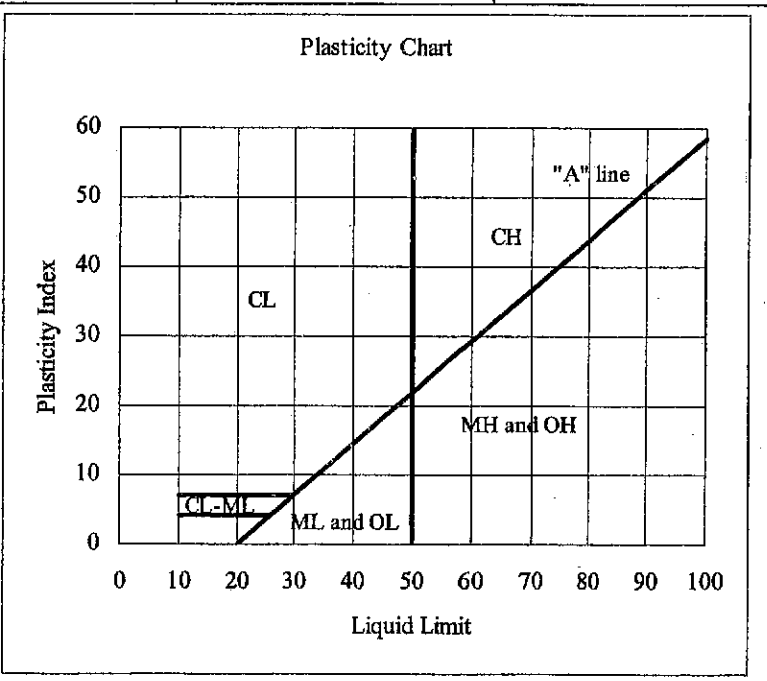
The water levels are those water levels actually measured in the bore hole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in a granular soil. In clays and plastic silts, the accurate determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally required.

Unified Soil Classification System (ASTM D-2487)

Major Divisions			Group Symbols		Typical Names	Laboratory Classification Criteria	
Coarse-grained soils (More than half of material is larger than No. 200 Sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW		Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = D_{60}/D_{10}$ greater than 4 $C_c = (D_{30})^2/(D_{10}xD_{60})$ between 1 and 3	
			GP		Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW	
		Gravels with fines (Appreciable amount of fines)	GM[a]	d u	Silty gravels, gravel-sand mixtures	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg limits below "A" line or P.I. less than 7	
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW		Well-graded sands, gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ greater than 6 $C_c = (D_{30})^2/(D_{10}xD_{60})$ between 1 and 3	
			SP		Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW	
		Sands with fines (Appreciable amount o fines)	SM[a]	d u	Silty sands, sand-silt mixtures	Atterberg limits above "A" line or P.I. less than 4	Limits plotting in CL-ML zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7	
Fine-grained soils (More than half material is smaller than No. 200 Sieve)	Silts and clays (Liquid limit less than 50)		ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity		
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays		
			OL		Organic silts and organic silty clays of low plasticity		
	Silts and clays (Liquid limit greater than 50)		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
			CH		Inorganic clays of high plasticity, fat clays		
			OH		Organic clays of medium to high plasticity, organic silts		
	Highly Organic soils		Pt		Peat and other highly organic soils		

Determine percentage of sand and gravel from grain-size curve.
Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent	GW, GP, SW, SP
More than 12 percent	GM, GC, SM, SC
5 to 12 percent	Border 4 line cases requiring dual symbols[b]



[a] Division of GM and SM groups into subdivisions of d and u are for roads and airfields only. Subdivision is based on Atterberg limits; suffix d used when L.L. is 28 or less and the P.I. is 6 or less; the suffix u used when L.L. is greater than 28.

[b] Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group symbols. For example: GW-GC, well-graded gravel-sand mixture with clay binder.

From Winterkorn and Fang. 1975.

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-1	1 OF 2

PROJECT NAME	ARCHITECT–ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.% ——— 20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 11.80

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0	1	SS	18	18	Concrete Depth 12"			9
					Gravel Depth 4"			
	2	SS	18	18	Sandy SILT, Some Clay, Trace Brick and Asphalt, Dark Gray, Moist, Very Loose to Medium Dense, (FILL)			30
5	3	SS	18	14				5
	4	SS	18	10		▽	5	7
10	5	SS	18	16	SILT, With Fine Sand, Trace Clay and Mica, Brown to Purplish Brown, Moist, Loose to Medium Dense, (ML)		0	6
15	6	SS	18	18			−5	15
20	7	SS	18	0	No Recovery		−10	33
25	8	SS	18	12	Silty SAND, With Gravel, Trace Quartz, Brown, Moist to Wet, Dense, (SM)		−15	34
30								

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED	12/19/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/19/2007	CAVE IN DEPTH ● 17.0'
▽WL	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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dmclan(01/03/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-1	2 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2}
1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT.
10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 11.80

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
30					20	
	9	SS	18	1		54
35					25	
	10	SS	9	2		50/3
40					30	
	11	SS	18	3		12
45					35	
	12	SS	18	3		20
50					40	
	13	SS	18	3		20
55					45	
	14	SS	18	18		29
60						

Silty SAND, With Gravel, Trace Quartz, Brown, Moist to Wet, Dense, (SM)

GRAVEL, Trace Silty Sand, Gray, Wet, Very Dense, (GP)

Silty SAND, With Gravel, Dark Gray, Wet, Very Dense, (SM)

Marine CLAY, Trace Fine Sand and Gravel, Dark Purplish Brown, Moist to Wet, Medium Dense, (CH)

END OF BORING @ 60.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR ▽D	BORING STARTED	12/19/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/19/2007	CAVE IN DEPTH ● 17.0'
▽WL	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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dmdon(01/03/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-2	1 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT.
10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 11.80

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0					Concrete Depth 12"		
	1	SS	18	18	Gravel Depth 6"		27
	2	SS	18	14	Silty SAND, Trace CLAY, Gravel, Quartz and Organics, Dark Gray to Brown, Moist, Medium Dense, (FILL)		18
5	3	SS	18	16			8
					CLAY, Trace Fine Sand and Silt, Brown, Moist, Medium Stiff, (CL)		
	4	SS	18	18	Clayey SILT, Trace Fine Sand, Dull Brown, Moist to Wet, Very Loose, (ML)		2
10							
	5	SS	18	18			4
15					Silty SAND, With Gravel, Dark Gray, Moist to Wet, Medium Dense to Dense, (SM)		25
	6	SS	18	18			
20							
	7	SS	18	14			54
25							
					GRAVEL, Some Silty Sand, Brown, Wet, Medium Dense to Dense, (GW)		
	8	SS	18	14			26
30							

WATER LEVELS ELEVATION (FT): 10, 5, 0, −5, −10, −15

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5'	WS OR WD	BORING STARTED 12/20/2007	
▽WL(BCR) N/A	▽WL(ACR) N/A	BORING COMPLETED 12/20/2007	CAVE IN DEPTH @ N/A
▽WL 27.9' @ 7DAYS		RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

dmaden(01/03/2008)

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CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-2	2 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} (1 2 3 4 5+)
PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ
ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% ——— 20% 40% 60% 80% 100%
⊗ STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50+)

DESCRIPTION OF MATERIAL — ENGLISH UNITS
BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%
SURFACE ELEVATION 11.80

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
30							
						20	
	9	SS	18	8			36
35						25	
	10	SS	18	10			42
40						30	
	11	SS	18	14			21
45						35	
	12	SS	18	16			25
50						40	
	13	SS	18	10			28
55						45	
	14	SS	18	18			22
60							

GRAVEL, Some Silty Sand, Brown, Wet, Medium Dense to Dense, (GW)

Silty CLAY, Trace Fine Sand, Brown, Moist, Very Stiff, (CL)

Marine CLAY, Grayish Brown, Moist, Very Stiff, (CH)

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED	12/20/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/20/2007	CAVE IN DEPTH @ N/A
▽WL 27.9' @ 7DAYS	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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drnlan(01/03/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-2	3 OF 3
PROJECT NAME	ARCHITECT-ENGINEER		
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT			

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2}: 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT.
10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 11.80

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)
60					
	15	SS	18	18	
65					
	16	SS	18	18	
70					
	17	SS	18	18	
75					
	18	SS	18	18	
80					
85					
90					

Marine CLAY, Grayish Brown, Moist, Very Stiff, (CH)

END OF BORING @ 80.00'

WATER LEVELS ELEVATION (FT): 50, 55, 60, 65, 70, 75

⊗ 23, ⊗ 21, ⊗ 21, ⊗ 26

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED	12/20/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/20/2007	CAVE IN DEPTH @ N/A
▽WL 27.9' @ 7DAYS	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

dmalon(01/03/2008)

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CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-3	1 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.00

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0					Concrete Depth 12"		
	1	SS	18	16	Sandy SILT, With Clay, Brown and Dark Gray, Moist, Loose to Medium Dense, (FILL)		7
	2	SS	18	16			15
5	3	SS	18	10		5	9
	4	SS	18	18		0	5
10					Silty SAND, Trace Gravel, Brown, Moist to Wet, Medium Dense, (SM)		
	5	SS	18	16		-5	20
15							
	6	SS	18	18		-10	22
20					GRAVEL, With Silty Sand, Brown, Moist to Wet, Dense to Very Dense, (GW)		
	7	SS	18	14		-15	39
25							
	8	SS	18	12		-20	37
30							

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 14.0' WS OR ▽D	BORING STARTED 12/26/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED 12/26/2007	CAVE IN DEPTH ● N/A
▽WL	RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-3	2 OF 2
PROJECT NAME	ARCHITECT-ENGINEER		
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT			

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2}
1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT.
10 20 30 40 50+

DESCRIPTION OF MATERIAL ENGLISH UNITS

BOTTOM OF CASING ▶ LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.00

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)
30					
	9	SS	18	12	25
35					
	10	SS	18	14	30
40					
	11	SS	18	16	35
45					
	12	SS	18	14	40
50					
	13	SS	18	16	45
55					
	14	SS	18	16	50
60					

GRAVEL, With Silty Sand, Brown, Moist to Wet, Dense to Very Dense, (GW)

Marine CLAY, Reddish Brown and Gray, Moist, Very Stiff, (CH)

⊗45 ⊗80 ⊗19 ⊗30 ⊗34 ⊗39

END OF BORING @ 60.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 14.0' WS OR WD	BORING STARTED	12/26/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/26/2007	CAVE IN DEPTH @ N/A
▽WL	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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PA (01-09-08) RC (01-10-08) RC (01-29-08)

dflanders(01/04/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-4	1 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. ⊗
10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0					Concrete Depth 12"			
	1	SS	18	14	Silty SAND, With Gravel, Concrete, Brick and Roots, Trace Clay, Brown to Tannish Brown, Moist to Wet, Loose to Medium Dense, (FILL)		5	13
	2	SS	18	10				11
5	3	SS	18	12				9
	4	SS	18	10			0	9
10	5	SS	18	12	Silty SAND, With Gravel, Brown, Moist to Wet, Medium Dense, (SM)		-5	14
15	6	SS	18	18			-10	19
20	7	SS	18	16			-15	10
25	8	SS	18	18			-20	23
30								

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▼WL 8.5' WS OR WD	BORING STARTED	12/27/2007	
▼WL(BCR) N/A ▼WL(ACR) N/A	BORING COMPLETED	12/27/2007	CAVE IN DEPTH @ N/A
▼WL 3.5' @ 7DAYS	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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arflanders(01/04/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-4	2 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% 20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL ENGLISH UNITS

BOTTOM OF CASING ▶ LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)
30						
						25
35	9	SS	18	9		
						30
40	10	SS	18	18		
						35
45	11	SS	18	18		
						40
50	12	SS	18	18		
						45
55	13	SS	18	18		
						50
60	14	SS	18	13		

Silty SAND, With Gravel, Brown, Moist to Wet, Medium Dense, (SM)

Marine CLAY, Trace Sand, Reddish Brown and Gray, Moist, Very Stiff to Hard, (CH)

⊗ 9 ⊗ 18 ⊗ 16 ⊗ 24 ⊗ 29 ⊗ 27

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED 12/27/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED 12/27/2007	CAVE IN DEPTH @ N/A
▽WL 3.5' @ 7DAYS	RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

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CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-4	3 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY RQD% — — — REC.% ——— 20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL ENGLISH UNITS

BOTTOM OF CASING ▶ LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)
60					
	15	SS	18	16	55
65					
	16	SS	18	17	60
70					
	17	SS	18	16	65
75					
	18	SS	18	18	70
80					
85					75
90					80

Marine CLAY, Trace Sand, Reddish Brown and Gray, Moist, Very Stiff to Hard, (CH)

⊗28 ⊗32 ⊗37 ⊗42

END OF BORING @ 80.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED	12/27/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/27/2007	CAVE IN DEPTH ● N/A
▽WL 3.5' @ 7DAYS	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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cfanders(01/04/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-5	1 OF 2
PROJECT NAME	ARCHITECT-ENGINEER		
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT			

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL ENGLISH UNITS

BOTTOM OF CASING ▶ LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0					Concrete Depth 12"		
	1	SS	18	5	Silty SAND, With Gravel, Concrete, Brick and Wood, Trace Clay, Brown, Moist, Loose to Medium Dense, (FILL)		8
	2	SS	18	12			11
5	3	SS	18	18		5	34
	4	SS	18	12		0	13
10							
	5	SS	18	14		-5	14
15					No Recovery		
	6	SS	18	0		-10	3
20							
	7	SS	18	0		-15	2
25					Silty SAND, Trace Gravel, Dark Brown to Purplish Brown, Moist to Wet, Very Loose to Loose, (SM)		
	8	SS	18	6		-20	2
30							

CONTINUED ON NEXT PAGE.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED 1/2/2008	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED 1/2/2008	CAVE IN DEPTH @ N/A
▽WL	RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-5	2 OF 2

PROJECT NAME: ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT

ARCHITECT-ENGINEER:

SITE LOCATION: ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

ECS LLC MID-ATLANTIC

CALIBRATED PENETROMETER TONS/FT.^{2} (1, 2, 3, 4, 5+)

PLASTIC LIMIT % (X) — WATER CONTENT % — LIQUID LIMIT % (Δ)

ROCK QUALITY DESIGNATION & RECOVERY: RQD% — — — REC.% (20%, 40%, 60%, 80%, 100%)

STANDARD PENETRATION BLOWS/FT. (⊗) (10, 20, 30, 40, 50+)

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	STANDARD PENETRATION BLOWS/FT.
30							Silty SAND, Trace Gravel, Dark Brown to Purplish Brown, Moist to Wet, Very Loose to Loose, (SM)	
	9	SS	18	16		25		9
35							GRAVEL, With Silty Sand, Dark Brown, Wet, Very Dense, (GP)	
	10	SS	15	1		30		72/9
40							Sandy CLAY, Brown and Gray, Moist to Wet, Stiff, (CL)	
	11	SS	18	16		35		13
45								
	12	SS	18	16		40		5
50								
	13	SS	18	16		45		8
55								
	14	SS	18	18		50	Marine CLAY, Trace Rock Fragment, Reddish Brown and Gray, Moist, Very Stiff, (CH)	17
60								

END OF BORING @ 60.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 8.5' WS OR WD	BORING STARTED	1/2/2008	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	1/2/2008	CAVE IN DEPTH @ N/A
▽WL	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

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enlandern(01/04/2008)

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-6	1 OF 3
PROJECT NAME	ARCHITECT-ENGINEER		
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT			

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

STANDARD PENETRATION BLOWS/FT. ⊗ 10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▼ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS ELEVATION (FT)	STANDARD PENETRATION BLOWS/FT.
0					Concrete Depth 12"		
	1	SS	18	8	Silty SAND, With Gravel and Brick, Brown to Purplish Brown, Moist, Loose to Medium Dense, (FILL)		10
	2	SS	18	8			4
5	3	SS	18	18		5	16
	4	SS	18	18		0	5
10					Silty SAND, Trace Gravel, Dark Brown, Moist to Wet, Medium Dense, (SM)		
	5	SS	18	12		-5	14
15							
	6	SS	18	14		-10	11
20							
	7	SS	18	12		-15	12
25							
	8	SS	18	14	Silty SAND, With Gravel, Dark Brown, Moist, Medium Dense to Very Dense, (SM)	-20	55
30							

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 5.0' WS OR WD	BORING STARTED	12/28/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED	12/28/2007	CAVE IN DEPTH ● 14.0'
▽WL	RIG T-1	FOREMAN CONNELLY	DRILLING METHOD HSA

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-6	2 OF 3
PROJECT NAME	ARCHITECT-ENGINEER		
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT			

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2} 1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)
30					
	9	SS	18	14	25
35					
	10	SS	18	16	30
40					
	11	SS	18	16	35
45					
	12	SS	18	16	40
50					
	13	SS	18	18	45
55					
	14	SS	18	18	50
60					

Silty SAND, With Gravel, Dark Brown, Moist, Medium Dense to Very Dense, (SM)

Marine CLAY, Trace Sand, Reddish Brown and Gray, Moist, Very Stiff, (CH)

81 37 19 18 18 19

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 5.0' WS OR WD	BORING STARTED 12/28/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED 12/28/2007	CAVE IN DEPTH @ 14.0'
▽WL	RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

CLIENT	JOB #	BORING #	SHEET
GRAHAM COMPANIES, LTD	13983	B-6	3 OF 3

PROJECT NAME	ARCHITECT-ENGINEER
ROBINSON TERMINAL AT ALEXANDRIA WATERFRONT	

ECS LLC MID-ATLANTIC

SITE LOCATION
ALEXANDRIA, VIRGINIA (500 N. UNION STREET)

CALIBRATED PENETROMETER TONS/FT.^{2}
1 2 3 4 5+

PLASTIC LIMIT % X — WATER CONTENT % ● — LIQUID LIMIT % Δ

ROCK QUALITY DESIGNATION & RECOVERY
RQD% — — — REC.%
20% 40% 60% 80% 100%

⊗ STANDARD PENETRATION BLOWS/FT.
10 20 30 40 50+

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING ▶ — LOSS OF CIRCULATION 100%

SURFACE ELEVATION 9.20

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS ELEVATION (FT)
60					
	15	SS	18	16	55
65					
	16	SS	18	16	60
70					
	17	SS	18	16	65
75					
	18	SS	18	16	70
80					
85					75
90					80

Marine CLAY, Trace Sand, Reddish Brown and Gray, Moist, Very Stiff, (CH)

⊗23 ⊗23 ⊗24 ⊗26

END OF BORING @ 80.00'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽WL 5.0' WS OR WD	BORING STARTED 12/28/2007	
▽WL(BCR) N/A ▽WL(ACR) N/A	BORING COMPLETED 12/28/2007	CAVE IN DEPTH @ 14.0'
▽WL	RIG T-1 FOREMAN CONNELLY	DRILLING METHOD HSA

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Boring Number:	ICOR-SB1			Page 1 of 1	
Location:	Robinson Terminal North		**Date and Time:**	10/8/13	7:30
Site Address:	1 and 101 Oronoco Street		**Total Depth of Boring:**		15'
	Alexandria, VA		**Depth to Groundwater:**		4'
Project Number:	13-CI.01		**Geologist/Scientist:**		M. Bruzzesi
Drill Rig Type:	Direct-Push		**Driller:**		G. Burke
Sampling Equipment:	Track-Mounted GeoProbe 6620DT		**ICOR, Ltd.**		
Borehole Diameter:	2-inch		**PO Box 406, Middleburg, VA 20118**		

Depth	Sample	PID	USCS	Description	Notes
1				0-3" Grass and roots.	
2		0.0		3"-4.75' Dark brown and black FILL comprised of intermixed F.-C. SAND, Gravel, Cinder, and little SILT.	Dry. No odors.
3					
4	ICOR-SB1(3-4)	0.0			
5				4.75'-6' Reddish brown F.-C. SAND with little SILT.	Wet. No odors.
6					
7				6'-9' Gray silty F. SAND with little CLAY.	Wet. No odors.
8					
9					
10				9'-15' Gray rounded GRAVEL with little F. SAND.	Wet. No odors.
11					
12					
13					
14					
15					
16					Boring terminated at 15'.
17					Temporary well installed to 13.5'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB2			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	7:45	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		6'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-6" Concrete.	
2		0.0		6"-14' Gray and dark brown fairly tight SILT with little F. SAND and very little CLAY.	Wet at 6'. Faint petroleum odors from 3'-5' (oil) and stronger odors from 5'-10' (oil and gasoline).
3					
4	ICOR-SB2(3-4)	15.7			
5					
6	ICOR-SB2(5-6)	25.4			
7					
8					
9					
10				9'-15' Gray rounded GRAVEL with little F. SAND.	Wet. No odors.
11					
12					
13					
14				14'-15' Wood (timber, railroad tie, pile?).	Wet. Treated wood odor.
15					
16					Boring terminated at 15'.
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB3				Page 1 of 1
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	8:15	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		10'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-3" Grass and roots.	
2		0.0		3"-4' Brown FILL comprised of intermixed BRICK, GRAVEL, F.-C. SAND, CONCRETE, and little SILT.	Dry. No odors.
3					
4		0.0			
5				4'-10' Gray silty F. SAND with little CLAY.	Moist. No odors.
6		0.0			
7					
8		0.0			
9					
10		4.0			
11				10'-12' Black oil-stained F.-C. SAND with little SILT.	Wet. Oil staining and petroleum odors (oil).
12					
13				12'-15' Gray silty F. SAND with little CLAY.	Wet. No odors.
14					
15					
16					Boring terminated at 15'.
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB4				Page 1 of 1
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	8:35	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		10'	
	Alexandria, VA	**Depth to Groundwater:**		9'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-4" Gravel.	
2		0.0		4"-4' Brown FILL comprised of intermixed GRAVEL, BRICK, F.-C. SAND and little SILT.	Dry. No odors.
3					
4		0.0			
5				4'-6' Brown F.-M. SAND with little SILT.	Moist. No odors.
6		0.0			
7				6'-10' Brown and reddish brown FILL comprised of intermixed BRICK, GRAVEL, F.-C. SAND, and little SILT.	Wet at 9'. No odors.
8		0.0			
9					
10					
11					Boring terminated at 10'.
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB5				Page 1 of 1
Location:	Robinson Terminal North		**Date and Time:**	10/8/13	9:10
Site Address:	1 and 101 Oronoco Street		**Total Depth of Boring:**		15'
	Alexandria, VA		**Depth to Groundwater:**		9.5'
Project Number:	13-CI.01		**Geologist/Scientist:**		M. Bruzzesi
Drill Rig Type:	Direct-Push		**Driller:**		G. Burke
Sampling Equipment:	Track-Mounted GeoProbe 6620DT		**ICOR, Ltd.**		
Borehole Diameter:	2-inch		**PO Box 406, Middleburg, VA 20118**		

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-6' Concrete debris.	Dry. No odors.
3					
4		0.0			
5					
6		0.0			
7	ICOR-SB5(6-7)			6'-9.5' Brown tight SILT and CLAY with little F. SAND.	Moist. No odors.
8		0.0			
9					
10				9.5'-13' Brown F.-M. SAND with little SILT and very little CLAY.	Wet. No odors.
11					
12					
13					
14				13'-15' Brown tight SILT and CLAY with little F. SAND.	Wet. No odors.
15					
16					Boring terminated at 15'.
17					Temporary well installed to 14'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB6				Page 1 of 1
Location:	Robinson Terminal North		**Date and Time:**	10/8/13	10:15
Site Address:	1 and 101 Oronoco Street		**Total Depth of Boring:**		15'
	Alexandria, VA		**Depth to Groundwater:**		6'
Project Number:	13-CI.01		**Geologist/Scientist:**		M. Bruzzesi
Drill Rig Type:	Direct-Push		**Driller:**		G. Burke
Sampling Equipment:	Track-Mounted GeoProbe 6620DT		**ICOR, Ltd.**		
Borehole Diameter:	2-inch		**PO Box 406, Middleburg, VA 20118**		

Depth	Sample	PID	USCS	Description	Notes
1				0-6" Concrete.	
2		0.0		6"-4' Brown very tight silty F. SAND with little CLAY.	Dry. No odors.
3	ICOR-SB6(2-3)				
4		0.0			
5				4'-4.25' Concrete debris.	Dry. No odors.
6		0.0		4.25'-8.5' Reddish brown F.-M. SAND with little SILT and CLAY.	Wet at 6'. No odors.
7					
8					
9				8.5'-12' Black organic-rich F. SAND with little to some SILT and very little CLAY.	Wet. No odors.
10					
11					
12					
13				12'-15' Grayish brown silty F. SAND with little CLAY.	Wet. Faint petroleum odors (oil) from 12'-15'.
14					
15					
16					Boring terminated at 15'.
17					Temporary well installed to 13'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB7			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	10:45	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		8.5'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-7' Brown and brownish gray tight F. SAND, SILT, and little CLAY.	Dry to moist. Faint petroleum odors (oil) from 5'-7'.
3					
4		23.0			
5					
6		155.0			
7		163.0			
8	ICOR-SB7(7.5-8.5)			7'-8.5' Gray F.-M. SAND with little SILT.	Moist. Strong petroleum odors (oil and gasoline).
9				8.5'-15' Gray and reddish brown F.-M. SAND with little SILT and CLAY.	Wet. Strong petroleum odors (oil and gasoline).
10					
11					
12					
13					
14					
15					
16					Boring terminated at 15'.
17					Temporary well installed to 13'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB8			Page 1 of 1	
Location:	Robinson Terminal North		**Date and Time:**	10/8/13	11:15
Site Address:	1 and 101 Oronoco Street		**Total Depth of Boring:**		15'
	Alexandria, VA		**Depth to Groundwater:**		9'
Project Number:	13-CI.01		**Geologist/Scientist:**		M. Bruzzesi
Drill Rig Type:	Direct-Push		**Driller:**		G. Burke
Sampling Equipment:	Track-Mounted GeoProbe 6620DT		**ICOR, Ltd.**		
Borehole Diameter:	2-inch		**PO Box 406, Middleburg, VA 20118**		

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		46.1		8"-8' Brown and brownish gray tight SILT with some CLAY and little F. SAND.	Moist. Petroleum odors (oil and gasoline) from 1'-8'.
3	ICOR-SB8(2-3)				
4		231.0			
5					
6		357.0			
7		>451			
8	ICOR-SB8(7.5-8.5)				
9				8'-14.5' Grayish brown F.-M. SAND with some to little SILT and very little CLAY.	Wet at 9'. Strong petroleum odors (oil and gasoline).
10					
11					
12					
13					
14					
15				14.5'-15' Reddish brown F.-M. SAND, SILT, and little CLAY.	Wet. Strong petroleum odors (oil and gasoline).
16					Boring terminated at 15'.
17					Temporary well installed to 13.5'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB9			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	11:15	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		20'	
	Alexandria, VA	**Depth to Groundwater:**		15'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		1.1		8"-2' Dark brown FILL comprised of intermixed F.-M. SAND and brick.	Dry. No odors.
3				2'-6' Brown F. SAND, SILT, and little to very little CLAY.	Dry. Faint petroleum odors (oil).
4		1.0			
5	ICOR-SB9(4.5-5.5)	2.8			
6		1.1			
7		0.0		6'-20' Dark brown FILL comprised of intermixed F.-M. SAND and brick.	Wet at 15'. No odors.
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					Boring terminated at 20'.
22					Temporary well installed to 18'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
23					
24					
25					

Boring Number:	ICOR-SB10			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	12:20	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		8.5'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-5' Black and red FILL comprised of intermixed CINDER, BRICK, F. SAND, and SILT.	Dry. No odors.
3	ICOR-SB10(2-3)				
4		0.0			
5					
6	ICOR-SB10(5.5-6.5)	0.0		5'-14' Light reddish brown tight silty F. SAND with little to some CLAY.	Wet at 8.5'. No odors.
7					
8		0.0			
9					
10					
11					
12					
13					
14					
15				14'-15' Light gray clayey SILT.	Wet. No odors.
16					Boring terminated at 15'.
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB11				Page 1 of 1
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	12:45	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		13'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-2' Gray and reddish brown FILL comprised of intermixed SILT, BRICK, F. SAND, and little CLAY.	Dry. No odors.
3				2'-5' Black CINDER and BRICK.	Dry. No odors.
4		0.0			
5					
6	ICOR-SB11(5.5-6.5)	0.0		5'-15' Brown and grayish brown silty CLAY and clayey SILT with little F. SAND.	Wet at 13'. No odors.
7					
8		0.0			
9					
10					
11					
12					
13					
14					
15					
16					Boring terminated at 15'.
17					Temporary well installed to 14'. Well constructed of 1" diameter new, dedicated, and disposable PVC (with 10' of screen).
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB12			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	13:15	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		10'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-4' Black and red CINDER and BRICK.	Dry. No odors.
3					
4		0.0			
5				4'-15' Light brown grading into gray tight silty CLAY with very little F. SAND.	Wet at 10'. No odors.
6		0.0			
7	ICOR-SB12(6-7)				
8		0.0			
9					
10					
11					
12					
13					
14					
15					
16					Boring terminated at 15'.
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Number:	ICOR-SB13			Page 1 of 1	
Location:	Robinson Terminal North	**Date and Time:**	10/8/13	13:45	
Site Address:	1 and 101 Oronoco Street	**Total Depth of Boring:**		15'	
	Alexandria, VA	**Depth to Groundwater:**		9'	
Project Number:	13-CI.01	**Geologist/Scientist:**		M. Bruzzesi	
Drill Rig Type:	Direct-Push	**Driller:**		G. Burke	
Sampling Equipment:	Track-Mounted GeoProbe 6620DT	**ICOR, Ltd.**			
Borehole Diameter:	2-inch	**PO Box 406, Middleburg, VA 20118**			

Depth	Sample	PID	USCS	Description	Notes
1				0-8" Concrete.	
2		0.0		8"-1.5' Brown tight SILT, F. SAND, and little CLAY.	Moist. No odors.
3				1.5'-3' Dark brown intermixed CINDER, BRICK, CONCRETE, and F. SAND.	Dry. No odors.
4		0.0		3'-15' Light brown, light reddish brown, and gray F.-M. SAND with little to some SILT, and very little CLAY.	Wet at 9'. No odors.
5					
6	ICOR-SB13(5.5-6.5)	0.0			
7					
8		0.0			
9					
10					
11					
12					
13					
14					
15					
16					Boring terminated at 15'.
17					
18					
19					
20					
21					
22					
23					
24					
25					

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-7	1 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

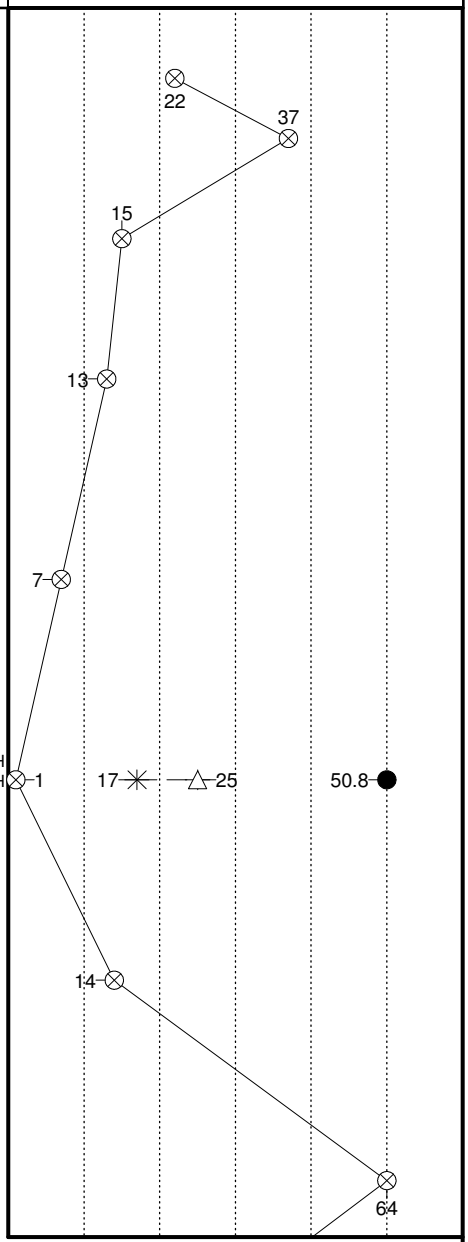
PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION | SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [7"]			
	S-1	SS	18	12	(CL FILL) SANDY LEAN CLAY WITH GRAVEL, Contains Asphalt, Grayish Brown, Moist, Very Stiff			9 11 11
	S-2	SS	18	16	(SC FILL) CLAYEY SAND WITH GRAVEL, Brown, Moist, Dense [Sample Smells Of Gasoline]			8 19 18
5	S-3	SS	18	12	(SP-SM FILL) SAND WITH SILT, Brown, Moist, Medium Dense [Sample Smells Of Gasoline]			6 7 8
	S-4	SS	18	10	(SC FILL) CLAYEY SAND, Contains Brick Fragments , Brown, Moist, Medium Dense	▽		4 6 7
10								
	S-5	SS	18	8	(SC) CLAYEY SAND, Brown and Gray, Wet, Loose			4 4 3
15								
	S-6	SS	18	16	(CL) LEAN CLAY WITH SAND, Gray, Wet, Very Soft			WOH WOH 1
20								
	S-7	SS	18	12	(SC) CLAYEY SAND, Contains Mica, Grayish Brown, Moist, Medium Dense			4 8 6
25								
	S-8	SS	18	6	(GC) CLAYEY GRAVEL WITH SAND, Gray, Moist, Very Dense			5 31 33
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 9.50 WS ☐ WD ☐	BORING STARTED 10/07/14	
▽ WL(BCR) ▽ WL(ACR)	BORING COMPLETED 10/07/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-7	2 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

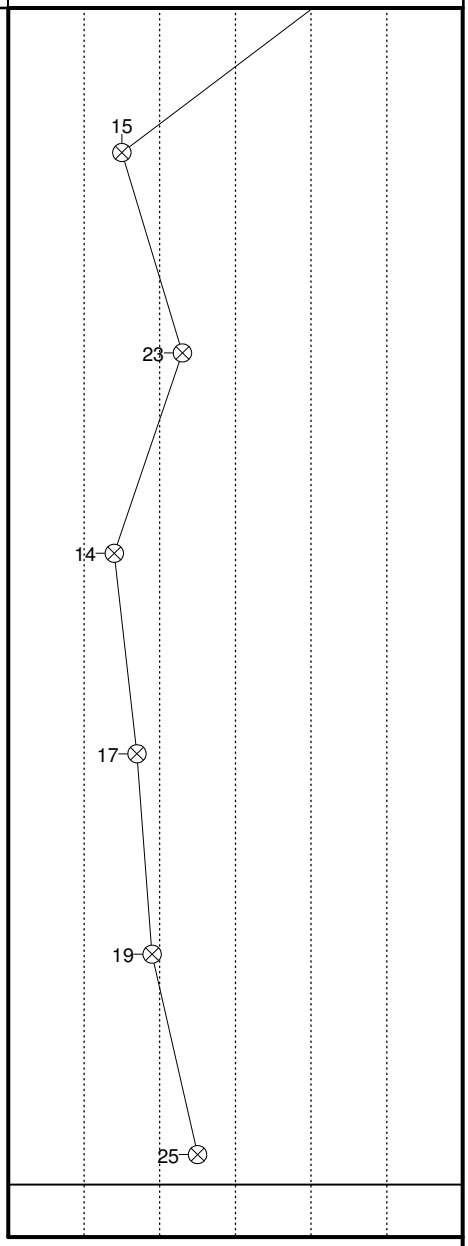
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					BOTTOM OF CASING; LOSS OF CIRCULATION (100%); SURFACE ELEVATION			
					(GC) CLAYEY GRAVEL WITH SAND, Gray, Moist, Very Dense			
					(CL) SANDY LEAN CLAY, Brownish Gray, Wet, Stiff			
35	S-9	SS	18	12				10 6 9
					(CH) FAT CLAY, Gray to Brown, Moist, Stiff to Very Stiff			
40	S-10	SS	18	14				4 7 16
45	S-11	SS	18	16				3 5 9
50	S-12	SS	18	14				4 6 11
55	S-13	SS	18	10				4 10 9
60	S-14	SS	18	16				8 13 12
					END OF BORING @ 60.00'			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 9.50 WS ☐ WD ☐	BORING STARTED 10/07/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/07/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-8	1 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION

500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

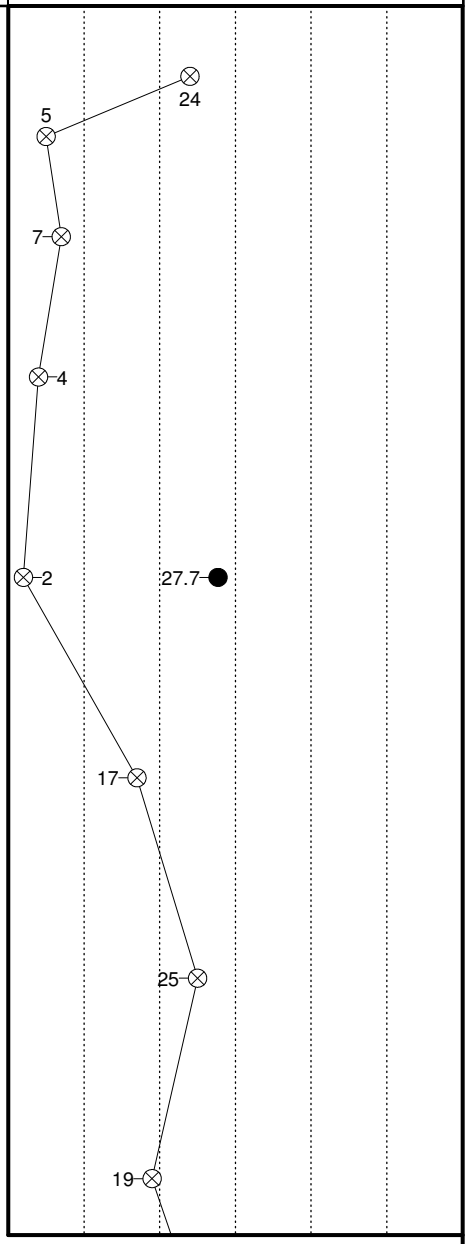
PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION | SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [7"]			
	S-1	SS	18	10	(CL FILL) SANDY LEAN CLAY, Contains Brick, Brown, Moist, Very Stiff			16 14 10
	S-2	SS	18	10	(CL FILL) GRAVELLY LEAN CLAY, Brown, Moist, Medium Stiff			2 2 3
5	S-3	SS	18	12	(CL) LEAN CLAY WITH SAND, Tan, Moist, Medium Stiff			2 3 4
	S-4	SS	18	8	(CH) FAT CLAY, Gray, Moist to Wet, Very Soft to Soft	▽		2 3 1
10	S-5	SS	18	12				1 1 1
15	S-6	SS	18	16	(SC) CLAYEY SAND, Contains Mica, Brown, Wet, Medium Dense			2 5 12
20	S-7	SS	18	18	(SC) CLAYEY SAND, Brown, Moist, Medium Dense			13 13 12
25	S-8	SS	18	16				14 9 10
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 9.00 WS ☐ WD ☐	BORING STARTED 10/06/14	
▽ WL(BCR) ▼ WL(ACR)	BORING COMPLETED 10/06/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-8	2 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION

500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

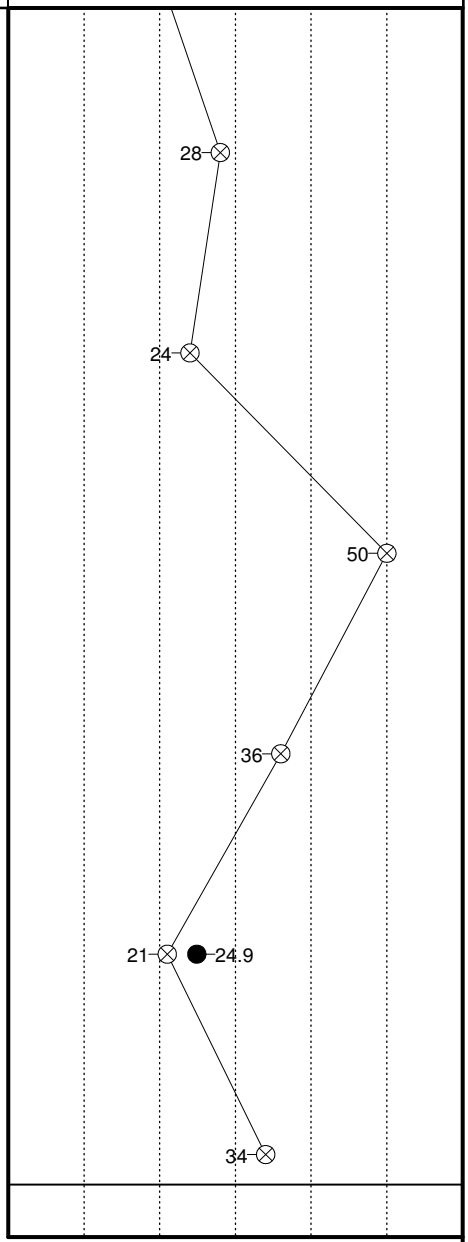
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS ELEVATION (FT)	BLOWS/6"
					BOTTOM OF CASING ➧ LOSS OF CIRCULATION (100%)		
					SURFACE ELEVATION		
					(SC) CLAYEY SAND, Brown, Moist, Medium Dense		
					(SC) CLAYEY SAND WITH GRAVEL, Brown to Gray, Moist, Dense to Very Dense		
35	S-9	SS	18	8			11 13 15
40	S-10	SS	18	10			13 12 12
45	S-11	SS	18	16			11 32 18
50	S-12	SS	18	14			13 16 20
					(CH) FAT CLAY WITH SAND, Gray to Brown, Moist, Very Stiff to Hard		
55	S-13	SS	18	18			10 13 8
60	S-14	SS	18	16			9 17 17
					END OF BORING @ 60.00'		



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 9.00 WS ☐ WD ☐	BORING STARTED 10/06/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/06/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-9	1 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

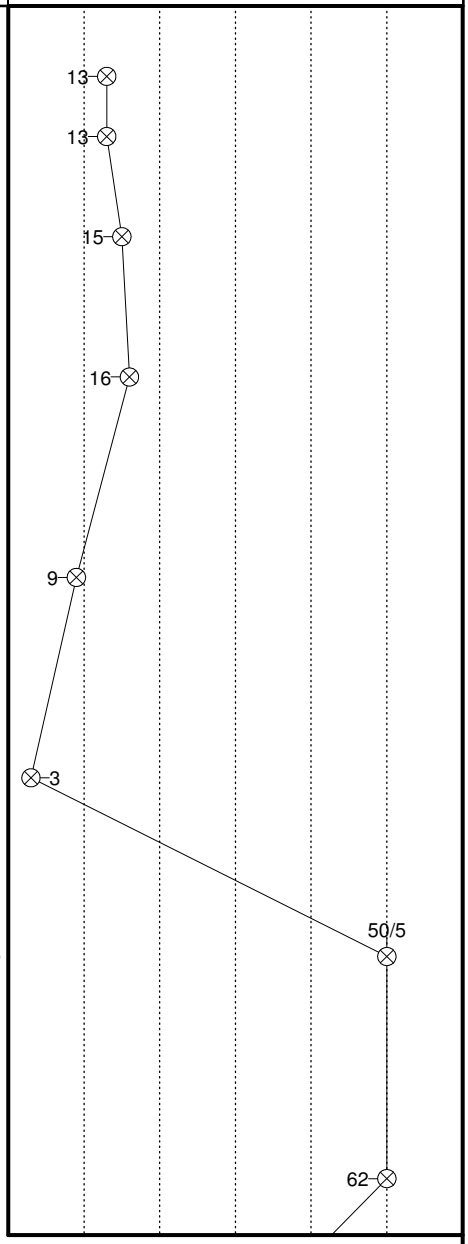
PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION | SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [7"]			
	S-1	SS	18	16	(CL FILL) LEAN CLAY WITH SAND, Light Brown, Moist, Stiff			4 5 8
	S-2	SS	18	18				5 6 7
5	S-3	SS	18	18	(CH) FAT CLAY, Orangish Brown, Moist, Stiff			4 7 8
	S-4	SS	18	12	(SP-SM) SAND WITH SILT, Gray, Moist, Medium Dense	▽		5 6 10
10								
	S-5	SS	18	18	(CH) FAT CLAY, Gray, Moist, Stiff			5 5 4
15								
	S-6	SS	18	18	(SC) CLAYEY SAND, Contains Mica, Brownish Gray, Moist, Very Loose			2 1 2
20								
	S-7	SS	5	5	(NO RECOVERY)			50/5
25								
	S-8	SS	18	16	(SC) CLAYEY SAND WITH GRAVEL, Gray, Moist to Wet, Medium Dense to Very Dense			24 34 28
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 9.50 WS ☐ WD ☐	BORING STARTED 10/02/14	
▽ WL(BCR) ▽ WL(ACR)	BORING COMPLETED 10/02/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-9	2 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION

500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

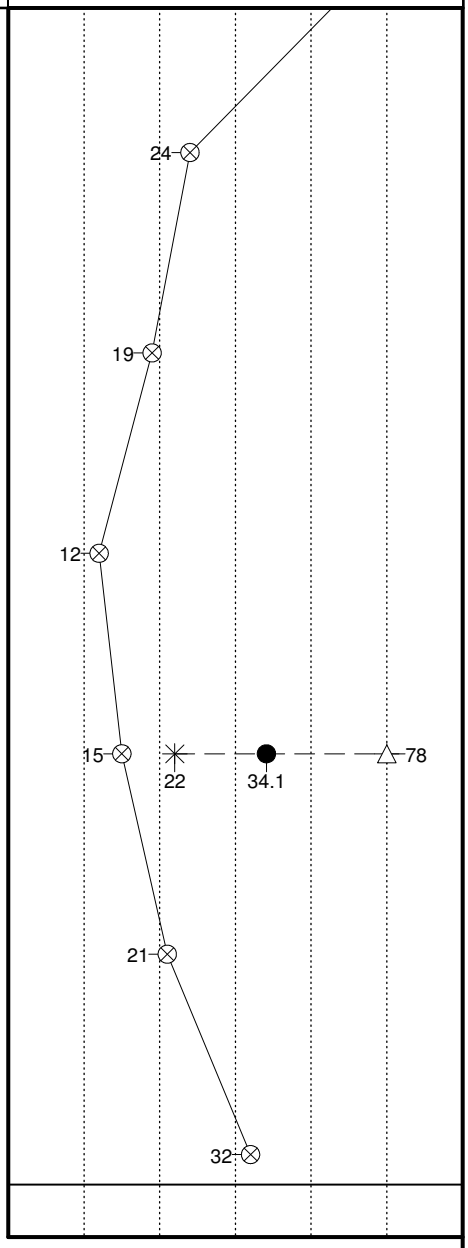
STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION (100%)

SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					(SC) CLAYEY SAND WITH GRAVEL, Gray, Moist to Wet, Medium Dense to Very Dense			
35	S-9	SS	18	8				9 13 11
					(GP-GC) GRAVEL WITH CLAY, Gray and Light Brown, Moist to Wet, Medium Dense			
40	S-10	SS	18	8				3 4 15
45	S-11	SS	18	12				2 4 8
					(CH) FAT CLAY, Grayish Brown, Moist, Stiff to Hard			
50	S-12	SS	18	14				4 5 10
55	S-13	SS	18	6				4 10 11
60	S-14	SS	18	8				8 13 19
					END OF BORING @ 60.00'			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 9.50 WS ☐ WD ☐	BORING STARTED 10/02/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/02/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-10	1 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

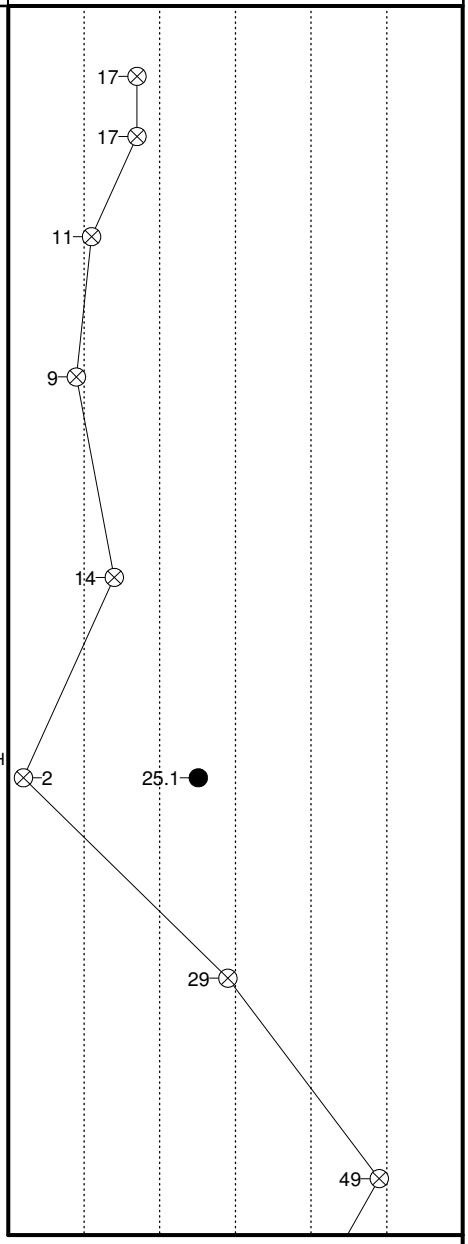
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [7"]			
	S-1	SS	18	10	(SC FILL) CLAYEY SAND WITH GRAVEL, Light Gray, Moist, Medium Dense			6 8 9
	S-2	SS	18	12	(SC) CLAYEY SAND, Light Brown to Red, Moist, Medium Dense			8 8 9
5	S-3	SS	18	14				9 9 2
					(GC) CLAYEY GRAVEL, Dark Gray, Wet, Loose	▽		
	S-4	SS	18	10				5 5 4
10					(CL) LEAN CLAY, Pinkish Gray, Moist, Stiff			
	S-5	SS	18	12				4 6 8
15					(CL) LEAN CLAY, Brown, Wet, Very Soft			
	S-6	SS	18	16				WOH 1 1
20					(SC) CLAYEY SAND WITH GRAVEL, Brown, Moist to Wet, Medium Dense to Dense			
	S-7	SS	18	12				10 16 13
25								
	S-8	SS	18	14				19 23 26
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 7.50 WS ☐ WD ☐	BORING STARTED 10/07/14	
▽ WL(BCR) ▼ WL(ACR)	BORING COMPLETED 10/07/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-10	2 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION

500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

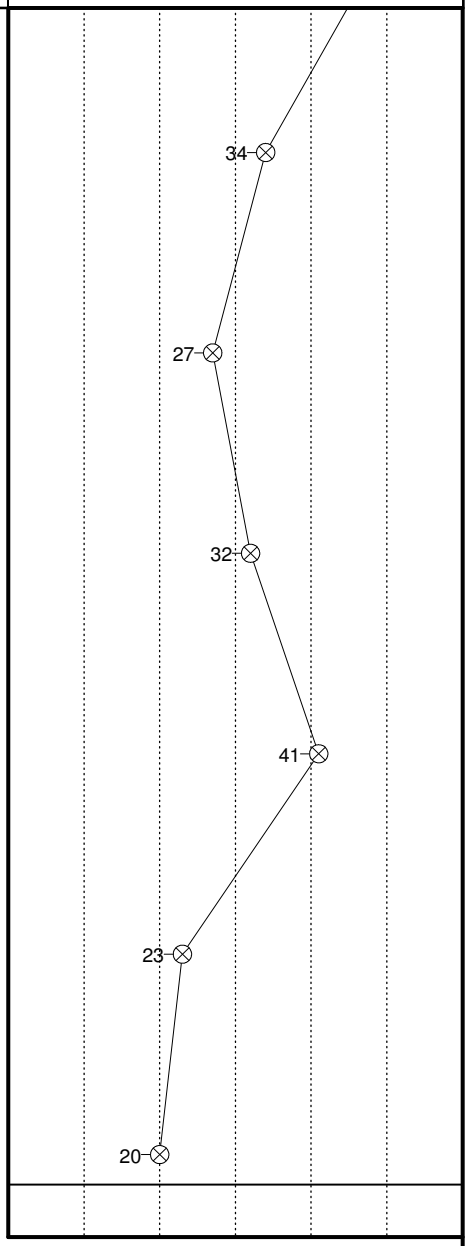
PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION | SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					(SC) CLAYEY SAND WITH GRAVEL, Brown, Moist to Wet, Medium Dense to Dense			
	S-9	SS	18	16				14 20 14
35								
					(CL) LEAN CLAY, Gray, Moist, Very Stiff to Hard			
	S-10	SS	18	14				12 16 11
40								
	S-11	SS	18	16				10 15 17
45								
					(SC) CLAYEY SAND, Brown, Moist, Medium Dense to Dense			
	S-12	SS	18	18				13 18 23
50								
	S-13	SS	18	14				16 14 9
55								
					(CL) SANDY LEAN CLAY, Brownish Gray, Moist, Very Stiff			
	S-14	SS	18	16				7 12 8
60					END OF BORING @ 60.00'			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 7.50 WS ☐ WD ☐	BORING STARTED 10/07/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/07/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-11	1 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

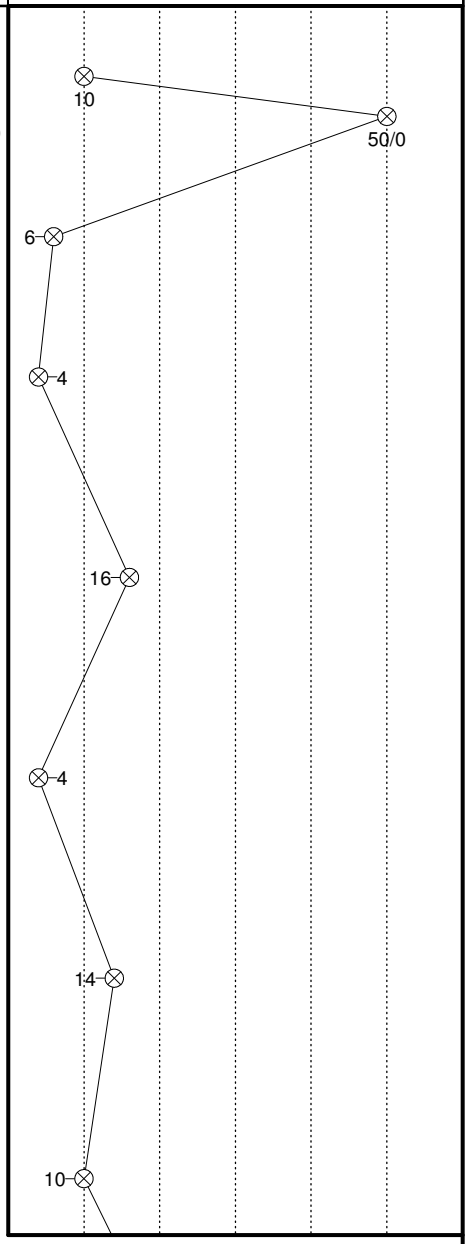
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [7"]			
	S-1	SS	18	3	(GW-GM FILL) WELL-GRADED GRAVEL WITH SILT, Gray, Moist, Loose to Extremely Dense			4 5 5 7 50/0
	S-2	SS	6	2				
5	S-3	SS	18	12	(CL) SANDY LEAN CLAY, Brownish Red to Brown, Moist, Soft to Medium Stiff			3 4 2
	S-4	SS	18	16		▽		2 2 2
10					(SP-SC) SAND WITH CLAY, Grayish Brown, Moist, Medium Dense			10 10 6
	S-5	SS	18	18				
15					(NO RECOVERY)			3 1 3
	S-6	SS	18	0				
20					(SC) CLAYEY SAND, Gray, Moist, Loose to Medium Dense			10 7 7
	S-7	SS	18	16				
25								7 6 4
	S-8	SS	18	14				
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 9.50 WS ☐ WD ☐	BORING STARTED 10/09/14	
▽ WL(BCR) ▽ WL(ACR)	BORING COMPLETED 10/09/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-11	2 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

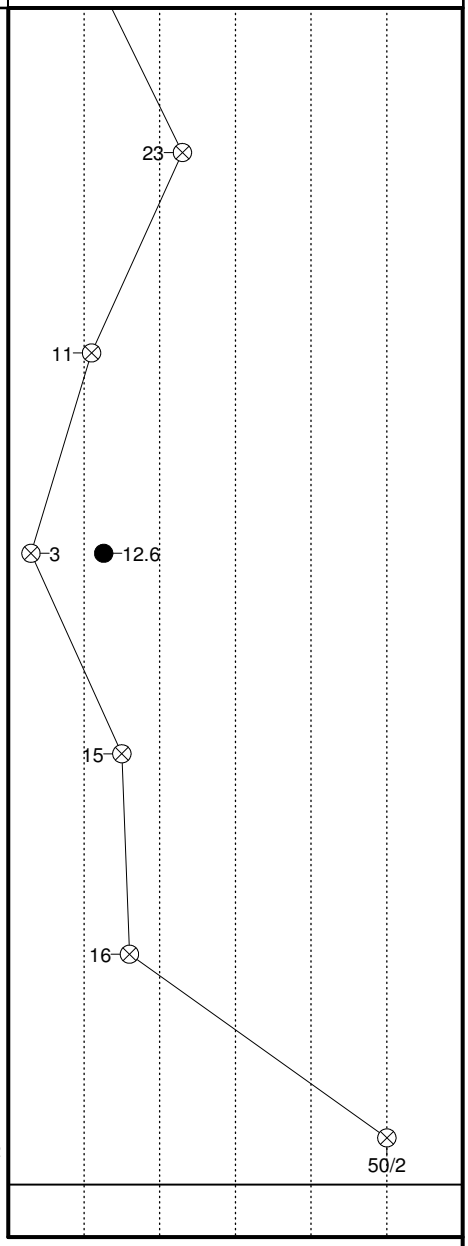
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					BOTTOM OF CASING ➧ LOSS OF CIRCULATION (100%)			
					SURFACE ELEVATION			
					(SC) CLAYEY SAND, Gray, Moist, Loose to Medium Dense			
					(CL) GRAVELLY LEAN CLAY WITH SAND, Gray, Moist, Very Stiff			
	S-9	SS	18	18				8 10 13
35								
					(CL) LEAN CLAY, Dark Gray, Wet, Stiff			
	S-10	SS	18	8				7 5 6
40								
					(CL) SANDY LEAN CLAY WITH GRAVEL, Brown to Gray, Moist to Wet, Soft to Stiff			
	S-11	SS	18	16				4 2 1
45								
	S-12	SS	18	14				4 6 9
50								
					(CL) LEAN CLAY WITH SAND, Brown, Wet, Very Stiff			
	S-13	SS	18	14				5 8 8
55								
					(WOOD Fragments) [No Soil Recovered]			
	S-14	SS	8	1				10 50/2
60					END OF BORING @ 60.00'			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 9.50 WS ☐ WD ☐	BORING STARTED 10/09/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/09/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-12	1 OF 2

PROJECT NAME: Robinson Terminal North - Final Geotechnical Study

ARCHITECT-ENGINEER: Ehlert-Bryan

SITE LOCATION: 500 N. Union Street, Alexandria, City of Alexandria

NORTHING | EASTING | STATION

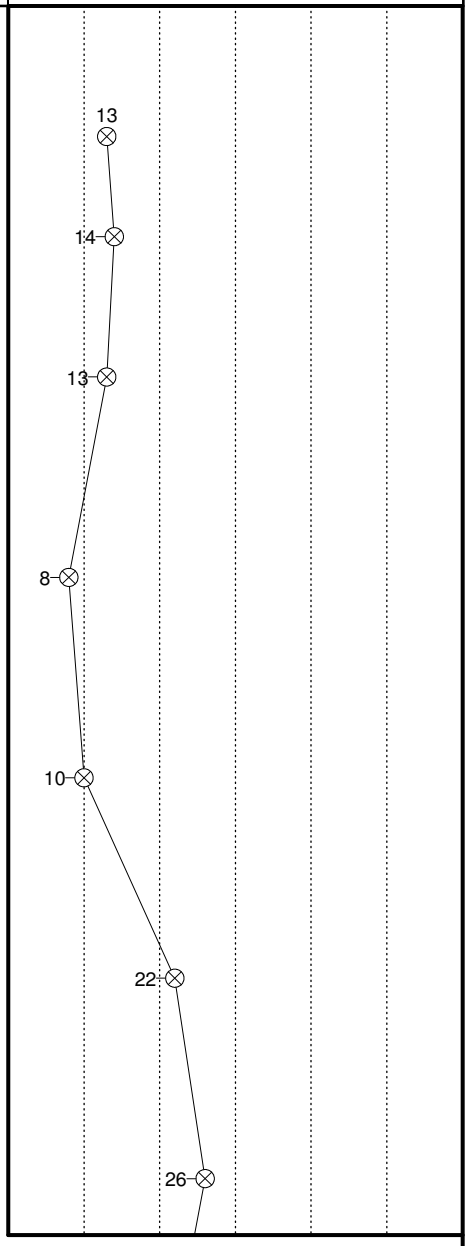
CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL (ENGLISH UNITS)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Concrete Depth [14"]			
					(CL FILL) SANDY LEAN CLAY WITH GRAVEL, Brownish Gray, Moist, Stiff			
	S-1	SS	18	10				6 6 7
5	S-2	SS	18	10				7 8 6
					(CL) GRAVELLY LEAN CLAY, Brownish Gray, Moist to Wet, Medium Stiff to Stiff			
	S-3	SS	18	8		▽		4 7 6
10								
	S-4	SS	18	18				5 5 3
15								
					(CL) SANDY LEAN CLAY, Contains Wood, Gray, Wet, Stiff			
	S-5	SS	18	14				4 7 3
20								
					(SC) CLAYEY SAND WITH GRAVEL, Gray, Wet, Medium Dense			
	S-6	SS	18	10				10 13 9
25								
					(CH) FAT CLAY, Gray to Brownish Red, Moist, Medium Stiff to Very Stiff			
	S-7	SS	18	16				20 15 11
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 9.50 WS ☐ WD ☐	BORING STARTED 10/08/14	
▽ WL(BCR) ▼ WL(ACR)	BORING COMPLETED 10/08/14	CAVE IN DEPTH
▽ WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

CLIENT	JOB #	BORING #	SHEET
Alexandria North Terminal, LLC	13983-B	B-12	2 OF 2

PROJECT NAME	ARCHITECT-ENGINEER
Robinson Terminal North - Final Geotechnical Study	Ehlert-Bryan

SITE LOCATION

500 N. Union Street, Alexandria, City of Alexandria

NORTHING	EASTING	STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

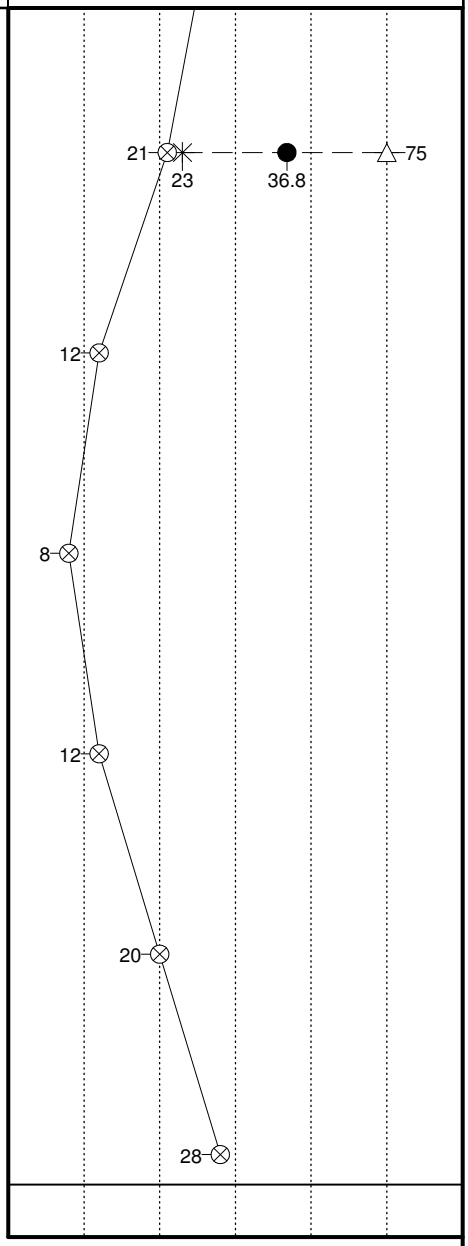
BOTTOM OF CASING | LOSS OF CIRCULATION 100%

SURFACE ELEVATION

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
	S-8	SS	18	14			9, 11, 10
35							
	S-9	SS	18	12			4, 5, 7
40							
	S-10	SS	18	14			3, 6, 2
45							
	S-11	SS	18	10			6, 4, 8
50							
	S-12	SS	18	16			5, 9, 11
55							
	S-13	SS	18	16			7, 11, 17
60							

(CH) FAT CLAY, Gray to Brownish Red, Moist, Medium Stiff to Very Stiff

END OF BORING @ 60.00'



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 9.50 WS ☐ WD ☐	BORING STARTED 10/08/14	
WL(BCR) WL(ACR)	BORING COMPLETED 10/08/14	CAVE IN DEPTH
WL	RIG 55 LC ATV FOREMAN Nadal	DRILLING METHOD 3.25 HSA/MUD ROTARY

ATTACHMENT 3

LABORATORY REPORTS OF ANALYSIS FOR ICOR SAMPLES

Analytical Report for

Icor Ltd.

Certificate of Analysis No.: 13100923

Project Manager: Mike Bruzzesi

Project Name : Robinson Terminal North

Project Location: Alexandria, VA

October 16, 2013

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

October 16, 2013

Mike Bruzzesi
Icor Ltd.
PO Box 406
Middleburgh, VA 20118

Reference: PSS Work Order(s) No: **13100923**
Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Dear Mike Bruzzesi :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **13100923**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on November 13, 2013. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt , the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

Sample Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 13100923

The following samples were received under chain of custody by Phase Separation Science (PSS) on 10/09/2013 at 03:05 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13100923-001	ICOR-SB2(3-4)	SOIL	10/08/13 08:05
13100923-002	ICOR-SB2(5-6)	SOIL	10/08/13 08:10
13100923-003	ICOR-SB5(6-7)	SOIL	10/08/13 09:40
13100923-004	ICOR-SB6(2-3)	SOIL	10/08/13 10:20
13100923-005	ICOR-SB7(7.5-8.5)	SOIL	10/08/13 11:00
13100923-006	ICOR-SB8(2-3)	SOIL	10/08/13 11:20
13100923-007	ICOR-SB8(7.5-8.5)	SOIL	10/08/13 11:25
13100923-008	ICOR-SB9(4.5-5.5)	SOIL	10/08/13 11:55
13100923-009	ICOR-SB10(2-3)	SOIL	10/08/13 12:25
13100923-010	ICOR-SB11(5.5-6.5)	SOIL	10/08/13 12:55
13100923-011	ICOR-SB12(6-7)	SOIL	10/08/13 13:25
13100923-012	ICOR-SB13(5.5-6.5)	SOIL	10/08/13 13:55
13100923-013	ICOR-SB1(GW)	GROUND WATER	10/08/13 08:15
13100923-014	ICOR-SB1(GW)	GROUND WATER	10/08/13 08:15
13100923-015	ICOR-SB5(GW)	GROUND WATER	10/08/13 10:30
13100923-016	ICOR-SB5(GW)	GROUND WATER	10/08/13 10:30
13100923-017	ICOR-SB6(GW)	GROUND WATER	10/08/13 11:30
13100923-018	ICOR-SB6(GW)	GROUND WATER	10/08/13 11:30
13100923-019	ICOR-SB8(GW)	GROUND WATER	10/08/13 13:00
13100923-020	ICOR-SB9(GW)	GROUND WATER	10/08/13 13:20
13100923-021	ICOR-SB9(GW)	GROUND WATER	10/08/13 13:20
13100923-022	MW2	GROUND WATER	10/08/13 14:15
13100923-023	MW2	GROUND WATER	10/08/13 14:15
13100923-024	MW4	GROUND WATER	10/08/13 14:45
13100923-025	MW4	GROUND WATER	10/08/13 14:45
13100923-026	ICOR-SB10(5.5-6.5)	SOIL	10/08/13 12:20
13100923-027	ICOR-SB7(GW)	GROUND WATER	10/08/13 12:40
13100923-028	ICOR-SB7(GW)	GROUND WATER	10/08/13 12:40

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Sample Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 13100923

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.
6. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.

Standard Flags/Abbreviations:

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C Results Pending Final Confirmation.
E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J The target analyte was positively identified below the reporting limit but greater than the LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** An LOD is analyte and matrix specific.
ND Not Detected at or above the reporting limit.
RL PSS Reporting Limit.
U Not detected.

Case Narrative Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 13100923

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Sample Receipt:

2 coolers were received. All sample receipt conditions were acceptable. The temperatures observed were 3 and 4 Celcius.
Preserved the Total Metals container for sample MW4 with HNO3 upon receipt.
Container label for COC sample ICOR-SB8(2-3) reads 1125 for the sampling time.
One amber for MW4 reads MW.
No dates or times on all groundwater containers.
Received one 4oz container and one 2oz container in the cooler labeled ICOR-SB3(2-3), sampled 10/8/13 @ 1125, not on the COC.
Received two 4oz containers and one 2oz container in the cooler labeled ICOR-SB7(2-3), sampled 10/8/13 @ 1050, not on the COC.
Received one amber for sample ICOR-SB8(GW) to analyze for DRO and SVOCs. Per client, split volume received evenly and analyze half for DRO and the other half for SVOCs.

General Comments:

Internal standard recoveries of semi-volatile analysis affected by sample matrix.
Sem-volatile matrix spike and matrix spike duplicate samples diluted due to matrix interference.

Analytical:

Total Metals

Batch: 109450

Blank Spike exceeds acceptance criteria (80-120%) for: Zinc, 144%. Only affects sample 027.

Sample Preparation:

TCL Semivolatile Organic Compounds

Preparation Batch: 47780

'Matrix spike/ matrix spike duplicate analyses were not performed due to insufficient sample quantity.'

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(3-4) **Date/Time Sampled: 10/08/2013 08:05** **PSS Sample ID: 13100923-001**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 83**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Arsenic	**2.8**	mg/kg	0.47		1	10/11/13	10/14/13 15:33	1033
Beryllium	ND	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Cadmium	ND	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Chromium	**20**	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Copper	**18**	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Lead	**15**	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Mercury	ND	mg/kg	0.095		1	10/11/13	10/15/13 15:34	1033
Nickel	**22**	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Selenium	ND	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Silver	ND	mg/kg	2.4		1	10/11/13	10/14/13 15:33	1033
Thallium	ND	mg/kg	1.9		1	10/11/13	10/14/13 15:33	1033
Zinc	**68**	mg/kg	9.5		1	10/11/13	10/14/13 15:33	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

LF - Lighter fuel/oil pattern observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**77**	mg/kg	4.8	LF	1	10/09/13	10/10/13 12:39	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**1,200**	ug/kg	110		1	10/10/13	10/10/13 12:25	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Chloromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Vinyl Chloride	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Bromomethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Chloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Acetone	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
Cyclohexane	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
Trichlorofluoromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1-Dichloroethene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Methylene Chloride	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
trans-1,2-Dichloroethene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Methyl-t-butyl ether	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1-Dichloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
2-Butanone (MEK)	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
cis-1,2-Dichloroethene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Bromochloromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Chloroform	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1,1-Trichloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,2-Dichloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Carbon Tetrachloride	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Benzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,2-Dichloropropane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Carbon Disulfide	ND	ug/kg	12		1	10/10/13	10/10/13 17:29	1011
Methylcyclohexane	**41**	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
Trichloroethene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Methyl Acetate	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
Bromodichloromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
cis-1,3-Dichloropropene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
4-Methyl-2-Pentanone	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1,2-Trichloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Toluene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
2-Hexanone	ND	ug/kg	23		1	10/10/13	10/10/13 17:29	1011
1,2-Dibromoethane (EDB)	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Dibromochloromethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Bromoform	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Tetrachloroethene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Chlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Ethylbenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
m,p-Xylenes	ND	ug/kg	12		1	10/10/13	10/10/13 17:29	1011
Styrene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
o-Xylene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Isopropylbenzene	**15**	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,3-Dichlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,4-Dichlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,2-Dichlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,2-Dibromo-3-Chloropropane	ND	ug/kg	46		1	10/10/13	10/10/13 17:29	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
Naphthalene	**14**	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5.8		1	10/10/13	10/10/13 17:29	1011

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No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Acenaphthylene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Acetophenone	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Benzo(a)anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Benzo(a)pyrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Benzo(b)fluoranthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Benzo(g,h,i)perylene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Benzo(k)fluoranthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Biphenyl (Diphenyl)	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Butyl benzyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
bis(2-chloroethoxy) methane	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
bis(2-chloroethyl) ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Bromophenylphenyl ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Di-n-butyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Carbazole	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Chloro-3-methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Chloroaniline	ND	ug/kg	390		1	10/14/13	10/15/13 06:14	1014
2-Chloronaphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2-Chlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Chlorophenyl Phenyl ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Chrysene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Dibenz(a,h)Anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Dibenzofuran	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
3,3-Dichlorobenzidine	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2,4-Dichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Diethyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Dimethyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2,4-Dimethylphenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2,4-Dinitrophenol	ND	ug/kg	390		1	10/14/13	10/15/13 06:14	1014
2,4-Dinitrotoluene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2,6-Dinitrotoluene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Fluoranthene	**260**	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Fluorene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Hexachlorobenzene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Hexachlorobutadiene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Hexachlorocyclopentadiene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Hexachloroethane	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Isophorone	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2-Methylnaphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2-Methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
3&4-Methylphenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Naphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Nitroaniline	ND	ug/kg	390		1	10/14/13	10/15/13 06:14	1014
3-Nitroaniline	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2-Nitroaniline	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Nitrobenzene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2-Nitrophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
4-Nitrophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
N-Nitrosodi-n-propyl amine	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
N-Nitrosodiphenylamine	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Di-n-octyl phthalate	ND	ug/kg	390		1	10/14/13	10/15/13 06:14	1014
Pentachlorophenol	ND	ug/kg	390		1	10/14/13	10/15/13 06:14	1014
Phenanthrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Atrazine	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014

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CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB2(5-6) **Date/Time Sampled: 10/08/2013 08:10** **PSS Sample ID: 13100923-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 86**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Pyrene	**210**	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Pyridine	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
Caprolactam	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2,4,6-Trichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014
2,4,5-Trichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:14	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North

Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**

Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Arsenic	**3.8**	mg/kg	0.42		1	10/11/13	10/14/13 17:03	1033
Beryllium	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Cadmium	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Chromium	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Copper	**4.6**	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Lead	**16**	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Mercury	ND	mg/kg	0.084		1	10/11/13	10/15/13 15:40	1033
Nickel	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Selenium	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Silver	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:03	1033
Thallium	ND	mg/kg	1.7		1	10/11/13	10/14/13 17:03	1033
Zinc	ND	mg/kg	8.4		1	10/11/13	10/14/13 17:03	1033

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

DF/HF - No. 2/diesel fuel and heavier fuel/oil patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**420**	mg/kg	46	DF	10	10/09/13	10/10/13 12:17	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/kg	110		1	10/10/13	10/10/13 12:53	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Chloromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Vinyl Chloride	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Bromomethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Chloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Acetone	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
Cyclohexane	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
Trichlorofluoromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1-Dichloroethene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Methylene Chloride	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
trans-1,2-Dichloroethene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Methyl-t-butyl ether	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1-Dichloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
2-Butanone (MEK)	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
cis-1,2-Dichloroethene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Bromochloromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Chloroform	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1,1-Trichloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,2-Dichloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Carbon Tetrachloride	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Benzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,2-Dichloropropane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Carbon Disulfide	ND	ug/kg	11		1	10/15/13	10/15/13 23:45	1035
Methylcyclohexane	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
Trichloroethene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Methyl Acetate	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
Bromodichloromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
cis-1,3-Dichloropropene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
4-Methyl-2-Pentanone	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1,2-Trichloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Toluene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
2-Hexanone	ND	ug/kg	23		1	10/15/13	10/15/13 23:45	1035
1,2-Dibromoethane (EDB)	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Dibromochloromethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Bromoform	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Tetrachloroethene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Chlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Ethylbenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
m,p-Xylenes	ND	ug/kg	11		1	10/15/13	10/15/13 23:45	1035
Styrene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
o-Xylene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Isopropylbenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,3-Dichlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,4-Dichlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,2-Dichlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,2-Dibromo-3-Chloropropane	ND	ug/kg	45		1	10/15/13	10/15/13 23:45	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
Naphthalene	**7.4**	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5.6		1	10/15/13	10/15/13 23:45	1035

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No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Acenaphthylene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Acetophenone	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Benzo(a)anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Benzo(a)pyrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Benzo(b)fluoranthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Benzo(g,h,i)perylene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Benzo(k)fluoranthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Biphenyl (Diphenyl)	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Butyl benzyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
bis(2-chloroethoxy) methane	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
bis(2-chloroethyl) ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Bromophenylphenyl ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Di-n-butyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Carbazole	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Chloro-3-methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Chloroaniline	ND	ug/kg	380		1	10/14/13	10/15/13 06:43	1014
2-Chloronaphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2-Chlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Chlorophenyl Phenyl ether	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Chrysene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Dibenz(a,h)Anthracene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Dibenzofuran	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
3,3-Dichlorobenzidine	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2,4-Dichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Diethyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Dimethyl phthalate	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2,4-Dimethylphenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2,4-Dinitrophenol	ND	ug/kg	380		1	10/14/13	10/15/13 06:43	1014
2,4-Dinitrotoluene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2,6-Dinitrotoluene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Fluoranthene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Fluorene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Hexachlorobenzene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Hexachlorobutadiene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Hexachlorocyclopentadiene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Hexachloroethane	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Isophorone	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2-Methylnaphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2-Methyl phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
3&4-Methylphenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Naphthalene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Nitroaniline	ND	ug/kg	380		1	10/14/13	10/15/13 06:43	1014
3-Nitroaniline	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2-Nitroaniline	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Nitrobenzene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2-Nitrophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
4-Nitrophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
N-Nitrosodi-n-propyl amine	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
N-Nitrosodiphenylamine	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Di-n-octyl phthalate	ND	ug/kg	380		1	10/14/13	10/15/13 06:43	1014
Pentachlorophenol	ND	ug/kg	380		1	10/14/13	10/15/13 06:43	1014
Phenanthrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Phenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Atrazine	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(6-7) **Date/Time Sampled: 10/08/2013 09:40** **PSS Sample ID: 13100923-003**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Pyrene	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Pyridine	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
Caprolactam	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2,4,6-Trichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014
2,4,5-Trichlorophenol	ND	ug/kg	190		1	10/14/13	10/15/13 06:43	1014

Sample ID: ICOR-SB6(2-3) **Date/Time Sampled: 10/08/2013 10:20** **PSS Sample ID: 13100923-004**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Arsenic	**11**	mg/kg	0.52		1	10/11/13	10/14/13 17:08	1033
Beryllium	ND	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Cadmium	ND	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Chromium	**26**	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Copper	**200**	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Lead	**32**	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Mercury	ND	mg/kg	0.10		1	10/11/13	10/15/13 15:46	1033
Nickel	**26**	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Selenium	ND	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Silver	ND	mg/kg	2.6		1	10/11/13	10/14/13 17:08	1033
Thallium	ND	mg/kg	2.1		1	10/11/13	10/14/13 17:08	1033
Zinc	**1,100**	mg/kg	100		10	10/11/13	10/15/13 14:02	1033

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CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North

Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**

Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Arsenic	**130**	mg/kg	0.55		1	10/11/13	10/14/13 17:14	1033
Beryllium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Cadmium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Chromium	**11**	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Copper	**7.6**	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Lead	**4.7**	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Mercury	ND	mg/kg	0.11		1	10/11/13	10/15/13 15:53	1033
Nickel	**5.9**	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Selenium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Silver	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:14	1033
Thallium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:14	1033
Zinc	**33**	mg/kg	11		1	10/11/13	10/14/13 17:14	1033

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**3,800**	mg/kg	450		100	10/09/13	10/10/13 12:39	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**240,000**	ug/kg	1,100		10	10/10/13	10/10/13 14:14	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Chloromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Vinyl Chloride	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Bromomethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Chloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Acetone	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
Cyclohexane	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
Trichlorofluoromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1-Dichloroethene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Methylene Chloride	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
trans-1,2-Dichloroethene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Methyl-t-butyl ether	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1-Dichloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
2-Butanone (MEK)	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
cis-1,2-Dichloroethene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Bromochloromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Chloroform	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1,1-Trichloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,2-Dichloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Carbon Tetrachloride	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Benzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,2-Dichloropropane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Carbon Disulfide	ND	ug/kg	1,100		100	10/15/13	10/16/13 01:40	1035
Methylcyclohexane	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
Trichloroethene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Methyl Acetate	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
Bromodichloromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
cis-1,3-Dichloropropene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
4-Methyl-2-Pentanone	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1,2-Trichloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Toluene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
2-Hexanone	ND	ug/kg	2,200		100	10/15/13	10/16/13 01:40	1035
1,2-Dibromoethane (EDB)	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Dibromochloromethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Bromoform	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Tetrachloroethene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Chlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Ethylbenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
m,p-Xylenes	ND	ug/kg	1,100		100	10/15/13	10/16/13 01:40	1035
Styrene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
o-Xylene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Isopropylbenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,3-Dichlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,4-Dichlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,2-Dichlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,2-Dibromo-3-Chloropropane	ND	ug/kg	4,400		100	10/15/13	10/16/13 01:40	1035
1,2,4-Trichlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
Naphthalene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035
1,2,3-Trichlorobenzene	ND	ug/kg	560		100	10/15/13	10/16/13 01:40	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Acenaphthylene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Acetophenone	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Anthracene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Benzo(a)anthracene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Benzo(a)pyrene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Benzo(b)fluoranthene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Benzo(g,h,i)perylene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Benzo(k)fluoranthene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Biphenyl (Diphenyl)	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Butyl benzyl phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
bis(2-chloroethoxy) methane	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
bis(2-chloroethyl) ether	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Bromophenylphenyl ether	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Di-n-butyl phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Carbazole	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Chloro-3-methyl phenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Chloroaniline	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Chloronaphthalene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Chlorophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Chlorophenyl Phenyl ether	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Chrysene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Dibenz(a,h)Anthracene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Dibenzofuran	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
3,3-Dichlorobenzidine	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,4-Dichlorophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Diethyl phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Dimethyl phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2,4-Dimethylphenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,4-Dinitrophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,4-Dinitrotoluene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,6-Dinitrotoluene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Fluoranthene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Fluorene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Hexachlorobenzene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Hexachlorobutadiene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Hexachlorocyclopentadiene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Hexachloroethane	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Isophorone	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Methylnaphthalene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Methyl phenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
3&4-Methylphenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Naphthalene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Nitroaniline	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
3-Nitroaniline	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Nitroaniline	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Nitrobenzene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2-Nitrophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
4-Nitrophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
N-Nitrosodi-n-propyl amine	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
N-Nitrosodiphenylamine	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Di-n-octyl phthalate	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Pentachlorophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Phenanthrene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Phenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Atrazine	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:00** **PSS Sample ID: 13100923-005**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 90**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Pyrene	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Pyridine	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
Caprolactam	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,4,6-Trichlorophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014
2,4,5-Trichlorophenol	ND	ug/kg	740		20	10/14/13	10/15/13 08:09	1014

Sample ID: ICOR-SB8(2-3) **Date/Time Sampled: 10/08/2013 11:20** **PSS Sample ID: 13100923-006**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Arsenic	**600**	mg/kg	5.5		10	10/11/13	10/15/13 14:09	1033
Beryllium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Cadmium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Chromium	**22**	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Copper	**18**	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Lead	**9.1**	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Mercury	ND	mg/kg	0.11		1	10/11/13	10/15/13 15:58	1033
Nickel	**21**	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Selenium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Silver	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:20	1033
Thallium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:20	1033
Zinc	**63**	mg/kg	11		1	10/11/13	10/14/13 17:20	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North

Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**

Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Arsenic	**12**	mg/kg	0.44		1	10/11/13	10/14/13 17:26	1033
Beryllium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Cadmium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Chromium	**12**	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Copper	**5.0**	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Lead	**7.2**	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Mercury	ND	mg/kg	0.089		1	10/11/13	10/15/13 16:04	1033
Nickel	**22**	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Selenium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Silver	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:26	1033
Thallium	ND	mg/kg	1.8		1	10/11/13	10/14/13 17:26	1033
Zinc	**37**	mg/kg	8.9		1	10/11/13	10/14/13 17:26	1033

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

LF/DF - Lighter fuel/oil and No. 2/diesel fuel patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**42**	mg/kg	4.7	LF	1	10/09/13	10/10/13 10:47	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**370,000**	ug/kg	12,000		100	10/10/13	10/10/13 14:42	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Chloromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Vinyl Chloride	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Bromomethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Chloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Acetone	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
Cyclohexane	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
Trichlorofluoromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1-Dichloroethene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Methylene Chloride	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
trans-1,2-Dichloroethene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Methyl-t-butyl ether	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1-Dichloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
2-Butanone (MEK)	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
cis-1,2-Dichloroethene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Bromochloromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Chloroform	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1,1-Trichloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,2-Dichloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Carbon Tetrachloride	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Benzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,2-Dichloropropane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Carbon Disulfide	ND	ug/kg	1,200		100	10/15/13	10/16/13 02:08	1035
Methylcyclohexane	**16,000**	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
Trichloroethene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Methyl Acetate	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
Bromodichloromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
cis-1,3-Dichloropropene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
4-Methyl-2-Pentanone	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1,2-Trichloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Toluene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
2-Hexanone	ND	ug/kg	2,400		100	10/15/13	10/16/13 02:08	1035
1,2-Dibromoethane (EDB)	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Dibromochloromethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Bromoform	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Tetrachloroethene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Chlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Ethylbenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
m,p-Xylenes	ND	ug/kg	1,200		100	10/15/13	10/16/13 02:08	1035
Styrene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
o-Xylene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Isopropylbenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,3-Dichlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,4-Dichlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,2-Dichlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,2-Dibromo-3-Chloropropane	ND	ug/kg	4,800		100	10/15/13	10/16/13 02:08	1035
1,2,4-Trichlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
Naphthalene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035
1,2,3-Trichlorobenzene	ND	ug/kg	600		100	10/15/13	10/16/13 02:08	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Acenaphthylene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Acetophenone	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Anthracene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Benzo(a)anthracene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Benzo(a)pyrene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Benzo(b)fluoranthene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Benzo(g,h,i)perylene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Benzo(k)fluoranthene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Biphenyl (Diphenyl)	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Butyl benzyl phthalate	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
bis(2-chloroethyl) ether	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Bromophenylphenyl ether	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Di-n-butyl phthalate	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Carbazole	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Chloro-3-methyl phenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Chloroaniline	ND	ug/kg	390		1	10/14/13	10/15/13 03:21	1014
2-Chloronaphthalene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2-Chlorophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Chlorophenyl Phenyl ether	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Chrysene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Dibenz(a,h)Anthracene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Dibenzofuran	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
3,3-Dichlorobenzidine	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2,4-Dichlorophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Diethyl phthalate	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Dimethyl phthalate	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2,4-Dimethylphenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2,4-Dinitrophenol	ND	ug/kg	390		1	10/14/13	10/15/13 03:21	1014
2,4-Dinitrotoluene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2,6-Dinitrotoluene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Fluoranthene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Fluorene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Hexachlorobenzene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Hexachlorobutadiene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Hexachlorocyclopentadiene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Hexachloroethane	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Isophorone	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2-Methylnaphthalene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2-Methyl phenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
3&4-Methylphenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Naphthalene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Nitroaniline	ND	ug/kg	390		1	10/14/13	10/15/13 03:21	1014
3-Nitroaniline	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2-Nitroaniline	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Nitrobenzene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2-Nitrophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
4-Nitrophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
N-Nitrosodi-n-propyl amine	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
N-Nitrosodiphenylamine	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Di-n-octyl phthalate	ND	ug/kg	390		1	10/14/13	10/15/13 03:21	1014
Pentachlorophenol	ND	ug/kg	390		1	10/14/13	10/15/13 03:21	1014
Phenanthrene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Phenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Atrazine	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(7.5-8.5) **Date/Time Sampled: 10/08/2013 11:25** **PSS Sample ID: 13100923-007**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Pyrene	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Pyridine	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
Caprolactam	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2,4,6-Trichlorophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014
2,4,5-Trichlorophenol	ND	ug/kg	200		1	10/14/13	10/15/13 03:21	1014

Sample ID: ICOR-SB9(4.5-5.5) **Date/Time Sampled: 10/08/2013 11:55** **PSS Sample ID: 13100923-008**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Arsenic	**3.6**	mg/kg	0.55		1	10/11/13	10/14/13 17:32	1033
Beryllium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Cadmium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Chromium	**10**	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Copper	**12**	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Lead	**60**	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Mercury	**0.56**	mg/kg	0.11		1	10/11/13	10/15/13 16:39	1033
Nickel	**9.4**	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Selenium	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Silver	ND	mg/kg	2.8		1	10/11/13	10/14/13 17:32	1033
Thallium	ND	mg/kg	2.2		1	10/11/13	10/14/13 17:32	1033
Zinc	**5,000**	mg/kg	1,100		100	10/11/13	10/15/13 14:16	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB10(2-3) **Date/Time Sampled: 10/08/2013 12:25** **PSS Sample ID: 13100923-009**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 87**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	**12**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Arsenic	**1,300**	mg/kg	4.9		10	10/11/13	10/15/13 14:23	1033
Beryllium	ND	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Cadmium	**5.5**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Chromium	**18**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Copper	**1,800**	mg/kg	24		10	10/11/13	10/15/13 14:23	1033
Lead	**2,200**	mg/kg	24		10	10/11/13	10/15/13 14:23	1033
Mercury	**7.8**	mg/kg	0.97		10	10/11/13	10/15/13 14:23	1033
Nickel	**13**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Selenium	**8.2**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Silver	**15**	mg/kg	2.4		1	10/11/13	10/14/13 17:38	1033
Thallium	**3.0**	mg/kg	1.9		1	10/11/13	10/14/13 17:38	1033
Zinc	**2,100**	mg/kg	97		10	10/11/13	10/15/13 14:23	1033

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CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North

Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**

Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Arsenic	**3.9**	mg/kg	0.60		1	10/11/13	10/14/13 18:07	1033
Beryllium	ND	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Cadmium	ND	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Chromium	**24**	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Copper	**21**	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Lead	**12**	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Mercury	**0.19**	mg/kg	0.12		1	10/11/13	10/14/13 18:07	1033
Nickel	**23**	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Selenium	ND	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Silver	ND	mg/kg	3.0		1	10/11/13	10/14/13 18:07	1033
Thallium	ND	mg/kg	2.4		1	10/11/13	10/14/13 18:07	1033
Zinc	**61**	mg/kg	12		1	10/11/13	10/14/13 18:07	1033

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/kg	4.8		1	10/09/13	10/10/13 11:10	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/kg	120		1	10/10/13	10/10/13 13:20	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Chloromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Vinyl Chloride	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Bromomethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Chloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Acetone	**77**	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
Cyclohexane	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
Trichlorofluoromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1-Dichloroethene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Methylene Chloride	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
trans-1,2-Dichloroethene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Methyl-t-butyl ether	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1-Dichloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
2-Butanone (MEK)	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
cis-1,2-Dichloroethene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Bromochloromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Chloroform	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1,1-Trichloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,2-Dichloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Carbon Tetrachloride	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Benzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,2-Dichloropropane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Carbon Disulfide	ND	ug/kg	12		1	10/15/13	10/16/13 01:11	1035
Methylcyclohexane	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
Trichloroethene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Methyl Acetate	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
Bromodichloromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
cis-1,3-Dichloropropene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
4-Methyl-2-Pentanone	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1,2-Trichloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Toluene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
2-Hexanone	ND	ug/kg	24		1	10/15/13	10/16/13 01:11	1035
1,2-Dibromoethane (EDB)	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Dibromochloromethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Bromoform	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Tetrachloroethene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Chlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Ethylbenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
m,p-Xylenes	ND	ug/kg	12		1	10/15/13	10/16/13 01:11	1035
Styrene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
o-Xylene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Isopropylbenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,3-Dichlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,4-Dichlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,2-Dichlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,2-Dibromo-3-Chloropropane	ND	ug/kg	47		1	10/15/13	10/16/13 01:11	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
Naphthalene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5.9		1	10/15/13	10/16/13 01:11	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Acenaphthylene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Acetophenone	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Anthracene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Benzo(a)anthracene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Benzo(a)pyrene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Biphenyl (Diphenyl)	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Butyl benzyl phthalate	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Di-n-butyl phthalate	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Carbazole	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Chloro-3-methyl phenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Chloroaniline	ND	ug/kg	410		1	10/14/13	10/15/13 07:40	1014
2-Chloronaphthalene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2-Chlorophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Chlorophenyl Phenyl ether	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Chrysene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Dibenz(a,h)Anthracene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Dibenzofuran	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Diethyl phthalate	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Dimethyl phthalate	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2,4-Dimethylphenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2,4-Dinitrophenol	ND	ug/kg	410		1	10/14/13	10/15/13 07:40	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Fluoranthene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Fluorene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Hexachlorobenzene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Hexachlorobutadiene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Hexachloroethane	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Isophorone	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2-Methylnaphthalene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2-Methyl phenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
3&4-Methylphenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Naphthalene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Nitroaniline	ND	ug/kg	410		1	10/14/13	10/15/13 07:40	1014
3-Nitroaniline	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2-Nitroaniline	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Nitrobenzene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2-Nitrophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
4-Nitrophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
N-Nitrosodi-n-propyl amine	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Di-n-octyl phthalate	ND	ug/kg	410		1	10/14/13	10/15/13 07:40	1014
Pentachlorophenol	ND	ug/kg	410		1	10/14/13	10/15/13 07:40	1014
Phenanthrene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Phenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Atrazine	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB11(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:55** **PSS Sample ID: 13100923-010**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Pyrene	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Pyridine	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
Caprolactam	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2,4,6-Trichlorophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	10/14/13	10/15/13 07:40	1014

Sample ID: ICOR-SB12(6-7) **Date/Time Sampled: 10/08/2013 13:25** **PSS Sample ID: 13100923-011**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 84**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Arsenic	**3.1**	mg/kg	0.41		1	10/11/13	10/14/13 18:13	1033
Beryllium	ND	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Cadmium	**4.4**	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Chromium	**22**	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Copper	**16**	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Lead	**14**	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Mercury	**0.15**	mg/kg	0.082		1	10/11/13	10/14/13 18:13	1033
Nickel	**24**	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Selenium	ND	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Silver	ND	mg/kg	2.0		1	10/11/13	10/14/13 18:13	1033
Thallium	ND	mg/kg	1.6		1	10/11/13	10/14/13 18:13	1033
Zinc	**1,700**	mg/kg	82		10	10/11/13	10/15/13 14:30	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB13(5.5-6.5) **Date/Time Sampled: 10/08/2013 13:55** **PSS Sample ID: 13100923-012**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Arsenic	**9.9**	mg/kg	0.56		1	10/11/13	10/14/13 18:18	1033
Beryllium	ND	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Cadmium	**4.3**	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Chromium	**30**	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Copper	**59**	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Lead	**17**	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Mercury	**0.24**	mg/kg	0.11		1	10/11/13	10/14/13 18:18	1033
Nickel	**21**	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Selenium	ND	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Silver	ND	mg/kg	2.8		1	10/11/13	10/14/13 18:18	1033
Thallium	ND	mg/kg	2.2		1	10/11/13	10/14/13 18:18	1033
Zinc	**1,700**	mg/kg	110		10	10/11/13	10/15/13 15:15	1033

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/kg	5.1		1	10/09/13	10/10/13 10:25	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/kg	120		1	10/10/13	10/10/13 13:47	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 14:39	1034
Arsenic	**120**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Beryllium	ND	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Cadmium	**13**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Chromium	**24**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Copper	**700**	ug/L	10		10	10/14/13	10/15/13 13:58	1034
Lead	**530**	ug/L	10		10	10/14/13	10/15/13 13:58	1034
Mercury	**0.38**	ug/L	0.20		1	10/14/13	10/14/13 14:39	1034
Nickel	**38**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Selenium	**3.7**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Silver	**3.7**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Thallium	**1.0**	ug/L	1.0		1	10/14/13	10/14/13 14:39	1034
Zinc	**6,900**	ug/L	200		10	10/14/13	10/15/13 13:58	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.17**	mg/L	0.10		1	10/10/13	10/10/13 22:27	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/L	100		1	10/10/13	10/10/13 15:47	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Acetone	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/11/13 15:10	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Benzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/11/13 15:10	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Toluene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/11/13 15:10	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Ethylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
m,p-Xylenes	ND	ug/L	2.0		1	10/11/13	10/11/13 15:10	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
o-Xylene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Isopropylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/11/13 15:10	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
Naphthalene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:10	1011

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	**7.2**	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Acenaphthylene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Biphenyl (Diphenyl)	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Carbazole	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 12:32	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Dibenzofuran	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds | Analytical Method: SW-846 8270 C | Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 12:32	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Fluorene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Naphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 12:32	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 12:32	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 12:32	1014
Phenanthrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-013**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:32	1014

Sample ID: ICOR-SB1(GW) **Date/Time Sampled: 10/08/2013 08:15** **PSS Sample ID: 13100923-014**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:28	1033
Arsenic	**14**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:35	1033
Cadmium	**6.4**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Copper	**52**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Lead	**2.9**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 18:28	1033
Nickel	**24**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Selenium	**1.7**	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:28	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:35	1033
Zinc	**4,200**	ug/L	200		10	10/10/13	10/11/13 15:00	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 15:09	1034
Arsenic	**480**	ug/L	1.0		1	10/14/13	10/14/13 15:09	1034
Beryllium	**60**	ug/L	5.0		5	10/14/13	10/15/13 15:04	1034
Cadmium	**32**	ug/L	1.0		1	10/14/13	10/14/13 15:09	1034
Chromium	**270**	ug/L	1.0		1	10/14/13	10/14/13 15:09	1034
Copper	**2,000**	ug/L	100		100	10/14/13	10/15/13 14:04	1034
Lead	**610**	ug/L	100		100	10/14/13	10/15/13 14:04	1034
Mercury	**0.26**	ug/L	0.20		1	10/14/13	10/14/13 15:09	1034
Nickel	**1,500**	ug/L	100		100	10/14/13	10/15/13 14:04	1034
Selenium	**5.8**	ug/L	5.0		5	10/14/13	10/15/13 15:04	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 15:09	1034
Thallium	**1.0**	ug/L	1.0		1	10/14/13	10/14/13 15:09	1034
Zinc	**21,000**	ug/L	2,000		100	10/14/13	10/15/13 14:04	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.30**	mg/L	0.10		1	10/10/13	10/10/13 21:19	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**250**	ug/L	100		1	10/10/13	10/10/13 16:12	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Acetone	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/11/13 16:38	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Benzene	**49**	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/11/13 16:38	1011

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Toluene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/11/13 16:38	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Ethylbenzene	**15**	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
m,p-Xylenes	**4.8**	ug/L	2.0		1	10/11/13	10/11/13 16:38	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
o-Xylene	**21**	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Isopropylbenzene	**3.5**	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/11/13 16:38	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
Naphthalene	**29**	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:38	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Acenaphthylene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Biphenyl (Diphenyl)	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Carbazole	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 12:03	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Dibenzofuran	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 12:03	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Fluorene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Naphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 12:03	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 12:03	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 12:03	1014
Phenanthrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-015**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 12:03	1014

Sample ID: ICOR-SB5(GW) **Date/Time Sampled: 10/08/2013 10:30** **PSS Sample ID: 13100923-016**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:34	1033
Arsenic	**420**	ug/L	1.0		1	10/10/13	10/10/13 18:34	1033
Beryllium	**32**	ug/L	1.0		1	10/10/13	10/11/13 18:41	1033
Cadmium	**39**	ug/L	1.0		1	10/10/13	10/10/13 18:34	1033
Chromium	**250**	ug/L	1.0		1	10/10/13	10/10/13 18:34	1033
Copper	**1,000**	ug/L	50		50	10/10/13	10/11/13 15:07	1033
Lead	**820**	ug/L	50		50	10/10/13	10/11/13 15:07	1033
Mercury	**0.25**	ug/L	0.20		1	10/10/13	10/10/13 18:34	1033
Nickel	**1,500**	ug/L	50		50	10/10/13	10/11/13 15:07	1033
Selenium	**4.3**	ug/L	1.0		1	10/10/13	10/10/13 18:34	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:34	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:41	1033
Zinc	**23,000**	ug/L	1,000		50	10/10/13	10/11/13 15:07	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 15:15	1034
Arsenic	**400**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Beryllium	**1.8**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Cadmium	**6.7**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Chromium	**39**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Copper	**790**	ug/L	5.0		5	10/14/13	10/15/13 14:10	1034
Lead	**290**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Mercury	ND	ug/L	0.20		1	10/14/13	10/14/13 15:15	1034
Nickel	**33**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Selenium	**7.6**	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Thallium	ND	ug/L	1.0		1	10/14/13	10/14/13 15:15	1034
Zinc	**1,800**	ug/L	100		5	10/14/13	10/15/13 14:10	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.11**	mg/L	0.11		1	10/10/13	10/10/13 21:41	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**210**	ug/L	100		1	10/10/13	10/10/13 16:38	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Acetone	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/11/13 17:08	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Benzene	**50**	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/11/13 17:08	1011

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Toluene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/11/13 17:08	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Ethylbenzene	**7.7**	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
m,p-Xylenes	**2.9**	ug/L	2.0		1	10/11/13	10/11/13 17:08	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
o-Xylene	**3.2**	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Isopropylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/11/13 17:08	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
Naphthalene	**27**	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 17:08	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Acenaphthylene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Biphenyl (Diphenyl)	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Carbazole	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 11:35	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Dibenzofuran	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds | Analytical Method: SW-846 8270 C | Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 11:35	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Fluorene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Naphthalene	**8.4**	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 11:35	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 11:35	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 11:35	1014
Phenanthrene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-017**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 11:35	1014

Sample ID: ICOR-SB6(GW) **Date/Time Sampled: 10/08/2013 11:30** **PSS Sample ID: 13100923-018**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:40	1033
Arsenic	**38**	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:46	1033
Cadmium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Copper	**3.0**	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Lead	ND	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 18:40	1033
Nickel	**3.8**	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Selenium	**7.2**	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:40	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:46	1033
Zinc	**530**	ug/L	20		1	10/10/13	10/10/13 18:40	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.93**	mg/L	0.22		1	10/10/13	10/10/13 21:41	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**11,000**	ug/L	100		1	10/10/13	10/10/13 18:18	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Chloromethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Vinyl Chloride	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Bromomethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Chloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Acetone	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
Cyclohexane	**710**	ug/L	100		10	10/11/13	10/12/13 02:25	1011
Trichlorofluoromethane	ND	ug/L	50		10	10/11/13	10/12/13 02:25	1011
1,1-Dichloroethene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Methylene Chloride	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
trans-1,2-Dichloroethene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Methyl-t-butyl ether	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,1-Dichloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
2-Butanone (MEK)	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
cis-1,2-Dichloroethene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Bromochloromethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Chloroform	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,1,1-Trichloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,2-Dichloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Carbon Tetrachloride	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Benzene	**57**	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,2-Dichloropropane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Methyl Acetate	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
Methylcyclohexane	**520**	ug/L	100		10	10/11/13	10/12/13 02:25	1011
Trichloroethene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Carbon Disulfide	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
Bromodichloromethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
cis-1,3-Dichloropropene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
4-Methyl-2-Pentanone	ND	ug/L	50		10	10/11/13	10/12/13 02:25	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,1,2-Trichloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Toluene	**16**	ug/L	10		10	10/11/13	10/12/13 02:25	1011
2-Hexanone	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
1,2-Dibromoethane (EDB)	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Dibromochloromethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Bromoform	ND	ug/L	50		10	10/11/13	10/12/13 02:25	1011
Tetrachloroethene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Chlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Ethylbenzene	**80**	ug/L	10		10	10/11/13	10/12/13 02:25	1011
m,p-Xylenes	**76**	ug/L	20		10	10/11/13	10/12/13 02:25	1011
Styrene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
o-Xylene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Isopropylbenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,3-Dichlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,4-Dichlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,2-Dichlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	100		10	10/11/13	10/12/13 02:25	1011
1,2,4-Trichlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011
Naphthalene	**50**	ug/L	10		10	10/11/13	10/12/13 02:25	1011
1,2,3-Trichlorobenzene	ND	ug/L	10		10	10/11/13	10/12/13 02:25	1011

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No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Acenaphthylene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Acetophenone	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Anthracene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Caprolactam	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Biphenyl (Diphenyl)	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Atrazine	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Benzo(a)anthracene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Benzo(a)pyrene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Benzo(b)fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Benzo(g,h,i)perylene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Benzo(k)fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Butyl benzyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
bis(2-chloroethoxy) methane	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
bis(2-chloroethyl) ether	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
bis(2-chloroisopropyl) ether	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Bromophenylphenyl ether	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Di-n-butyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Carbazole	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Chloro-3-methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Chloroaniline	ND	ug/L	22		1	10/10/13	10/11/13 11:06	1014
2-Chloronaphthalene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2-Chlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Chrysene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Dibenz(a,h)Anthracene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Dibenzofuran	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
3,3-Dichlorobenzidine	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,4-Dichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds | Analytical Method: SW-846 8270 C | Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Dimethyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,4-Dimethylphenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,4-Dinitrophenol	ND	ug/L	22		1	10/10/13	10/11/13 11:06	1014
2,4-Dinitrotoluene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,6-Dinitrotoluene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Fluorene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Hexachlorobenzene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Hexachlorobutadiene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Hexachlorocyclopentadiene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Hexachloroethane	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Isophorone	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2-Methylnaphthalene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2-Methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
3&4-Methylphenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Naphthalene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Nitroaniline	ND	ug/L	22		1	10/10/13	10/11/13 11:06	1014
3-Nitroaniline	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2-Nitroaniline	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Nitrobenzene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2-Nitrophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
4-Nitrophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
N-Nitrosodiphenylamine	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Di-n-octyl phthalate	ND	ug/L	22		1	10/10/13	10/11/13 11:06	1014
Pentachlorophenol	ND	ug/L	22		1	10/10/13	10/11/13 11:06	1014
Phenanthrene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB8(GW) **Date/Time Sampled: 10/08/2013 13:00** **PSS Sample ID: 13100923-019**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Pyrene	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
Pyridine	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,4,6-Trichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014
2,4,5-Trichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 11:06	1014

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CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	**9.9**	ug/L	5.0		1	10/14/13	10/14/13 15:51	1034
Arsenic	**370**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Beryllium	ND	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Cadmium	**2.5**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Chromium	**3.5**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Copper	**150**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Lead	**76**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Mercury	**0.40**	ug/L	0.20		1	10/14/13	10/14/13 15:51	1034
Nickel	**6.6**	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Selenium	ND	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Thallium	ND	ug/L	1.0		1	10/14/13	10/14/13 15:51	1034
Zinc	**8,200**	ug/L	200		10	10/14/13	10/15/13 14:16	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.77**	mg/L	0.10		1	10/10/13	10/10/13 22:50	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**250**	ug/L	100		1	10/10/13	10/10/13 17:03	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Acetone	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/12/13 01:56	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Benzene	**7.4**	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/12/13 01:56	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Toluene	**1.7**	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/12/13 01:56	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Ethylbenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
m,p-Xylenes	ND	ug/L	2.0		1	10/11/13	10/12/13 01:56	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
o-Xylene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Isopropylbenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/12/13 01:56	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
Naphthalene	**19**	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 01:56	1011

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	**27**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Acenaphthylene	**8.5**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Anthracene	**7.3**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Biphenyl (Diphenyl)	**9.3**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Carbazole	**8.7**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 13:01	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Dibenzofuran	**22**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 13:01	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Fluoranthene	**12**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Fluorene	**30**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Naphthalene	**13**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 13:01	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 13:01	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 13:01	1014
Phenanthrene	**25**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-020**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Pyrene	**8.7**	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 13:01	1014

Sample ID: ICOR-SB9(GW) **Date/Time Sampled: 10/08/2013 13:20** **PSS Sample ID: 13100923-021**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:46	1033
Arsenic	**25**	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:52	1033
Cadmium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Copper	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Lead	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 18:46	1033
Nickel	**3.0**	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Selenium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:46	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:52	1033
Zinc	**6,400**	ug/L	2,000		100	10/10/13	10/11/13 15:14	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 15:56	1034
Arsenic	**95**	ug/L	5.0		5	10/14/13	10/15/13 15:10	1034
Beryllium	**26**	ug/L	1.0		1	10/14/13	10/14/13 15:56	1034
Cadmium	**31**	ug/L	1.0		1	10/14/13	10/14/13 15:56	1034
Chromium	**180**	ug/L	5.0		5	10/14/13	10/15/13 15:10	1034
Copper	**3,300**	ug/L	100		100	10/14/13	10/15/13 14:21	1034
Lead	**1,100**	ug/L	100		100	10/14/13	10/15/13 14:21	1034
Mercury	**0.72**	ug/L	0.20		1	10/14/13	10/14/13 15:56	1034
Nickel	**160**	ug/L	5.0		5	10/14/13	10/15/13 15:10	1034
Selenium	ND	ug/L	5.0		5	10/14/13	10/15/13 15:10	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 15:56	1034
Thallium	**1.1**	ug/L	1.0		1	10/14/13	10/14/13 15:56	1034
Zinc	**19,000**	ug/L	2,000		100	10/14/13	10/15/13 14:21	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.91**	mg/L	0.25		1	10/10/13	10/10/13 22:04	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**2,800**	ug/L	100		1	10/10/13	10/10/13 15:22	1035

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Acetone	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
Cyclohexane	**150**	ug/L	10		1	10/11/13	10/12/13 03:24	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/12/13 03:24	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Benzene	**160**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
Methylcyclohexane	**230**	ug/L	10		1	10/11/13	10/12/13 03:24	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/12/13 03:24	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Toluene	**5.8**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/12/13 03:24	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Ethylbenzene	**47**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
m,p-Xylenes	**17**	ug/L	2.0		1	10/11/13	10/12/13 03:24	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
o-Xylene	**28**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Isopropylbenzene	**6.7**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/12/13 03:24	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
Naphthalene	**73**	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/12/13 03:24	1011

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Acenaphthylene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Acetophenone	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Anthracene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Caprolactam	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Biphenyl (Diphenyl)	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Atrazine	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Benzo(a)anthracene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Benzo(a)pyrene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Benzo(b)fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Benzo(g,h,i)perylene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Benzo(k)fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Butyl benzyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
bis(2-chloroethoxy) methane	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
bis(2-chloroethyl) ether	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
bis(2-chloroisopropyl) ether	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Bromophenylphenyl ether	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Di-n-butyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Carbazole	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Chloro-3-methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Chloroaniline	ND	ug/L	22		1	10/10/13	10/11/13 09:40	1014
2-Chloronaphthalene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2-Chlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Chrysene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Dibenz(a,h)Anthracene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Dibenzofuran	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
3,3-Dichlorobenzidine	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,4-Dichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Dimethyl phthalate	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,4-Dimethylphenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,4-Dinitrophenol	ND	ug/L	22		1	10/10/13	10/11/13 09:40	1014
2,4-Dinitrotoluene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,6-Dinitrotoluene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Fluoranthene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Fluorene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Hexachlorobenzene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Hexachlorobutadiene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Hexachlorocyclopentadiene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Hexachloroethane	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Isophorone	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2-Methylnaphthalene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2-Methyl phenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
3&4-Methylphenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Naphthalene	**36**	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Nitroaniline	ND	ug/L	22		1	10/10/13	10/11/13 09:40	1014
3-Nitroaniline	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2-Nitroaniline	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Nitrobenzene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2-Nitrophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
4-Nitrophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
N-Nitrosodiphenylamine	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Di-n-octyl phthalate	ND	ug/L	22		1	10/10/13	10/11/13 09:40	1014
Pentachlorophenol	ND	ug/L	22		1	10/10/13	10/11/13 09:40	1014
Phenanthrene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-022**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Pyrene	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
Pyridine	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,4,6-Trichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014
2,4,5-Trichlorophenol	ND	ug/L	11		1	10/10/13	10/11/13 09:40	1014

Sample ID: MW2 **Date/Time Sampled: 10/08/2013 14:15** **PSS Sample ID: 13100923-023**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:51	1033
Arsenic	**1.4**	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:58	1033
Cadmium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Copper	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Lead	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 18:51	1033
Nickel	**1.5**	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Selenium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:51	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 18:58	1033
Zinc	**130**	ug/L	20		1	10/10/13	10/10/13 18:51	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 16:02	1034
Arsenic	**38**	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Beryllium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Cadmium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Chromium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Copper	ND	ug/L	1.0		1	10/14/13	10/15/13 14:27	1034
Lead	**14**	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Mercury	ND	ug/L	0.20		1	10/14/13	10/14/13 16:02	1034
Nickel	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Selenium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Thallium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:02	1034
Zinc	ND	ug/L	20		1	10/14/13	10/16/13 13:40	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.15**	mg/L	0.10		1	10/10/13	10/10/13 22:04	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/L	100		1	10/10/13	10/10/13 17:28	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Acetone	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/11/13 15:39	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Benzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/11/13 15:39	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Toluene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/11/13 15:39	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Ethylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
m,p-Xylenes	ND	ug/L	2.0		1	10/11/13	10/11/13 15:39	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
o-Xylene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Isopropylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/11/13 15:39	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
Naphthalene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 15:39	1011

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CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	**17**	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Acenaphthylene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Biphenyl (Diphenyl)	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Carbazole	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 10:37	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Dibenzofuran	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 10:37	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Fluorene	**5.9**	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Naphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 10:37	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 10:37	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 10:37	1014
Phenanthrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-024**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:37	1014

Sample ID: MW4 **Date/Time Sampled: 10/08/2013 14:45** **PSS Sample ID: 13100923-025**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 18:57	1033
Arsenic	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 19:04	1033
Cadmium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Copper	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Lead	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 18:57	1033
Nickel	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Selenium	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 18:57	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 19:04	1033
Zinc	ND	ug/L	20		1	10/10/13	10/10/13 18:57	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB10(5.5-6.5) **Date/Time Sampled: 10/08/2013 12:20** **PSS Sample ID: 13100923-026**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 83**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Arsenic	**190**	mg/kg	0.45		1	10/11/13	10/14/13 18:24	1033
Beryllium	ND	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Cadmium	ND	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Chromium	**19**	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Copper	**270**	mg/kg	23		10	10/11/13	10/15/13 15:22	1033
Lead	**10**	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Mercury	**0.17**	mg/kg	0.091		1	10/11/13	10/14/13 18:24	1033
Nickel	**18**	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Selenium	ND	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Silver	ND	mg/kg	2.3		1	10/11/13	10/14/13 18:24	1033
Thallium	ND	mg/kg	1.8		1	10/11/13	10/14/13 18:24	1033
Zinc	**620**	mg/kg	91		10	10/11/13	10/15/13 15:22	1033

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923

Icor Ltd., Middleburgh, VA

October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/14/13	10/14/13 16:08	1034
Arsenic	**15**	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Beryllium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Cadmium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Chromium	**3.7**	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Copper	**1.4**	ug/L	1.0		1	10/14/13	10/15/13 14:34	1034
Lead	**3.2**	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Mercury	ND	ug/L	0.20		1	10/14/13	10/14/13 16:08	1034
Nickel	**2.9**	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Selenium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Silver	ND	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Thallium	ND	ug/L	1.0		1	10/14/13	10/14/13 16:08	1034
Zinc	**28**	ug/L	20		1	10/14/13	10/16/13 13:46	1034

Total Petroleum Hydrocarbons - DRO — Analytical Method: SW-846 8015 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	**0.16**	mg/L	0.10		1	10/10/13	10/10/13 22:27	1040

Total Petroleum Hydrocarbons-GRO — Analytical Method: SW-846 8015C — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	**180**	ug/L	100		1	10/10/13	10/10/13 17:53	1035

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Chloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Vinyl Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Bromomethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Chloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Acetone	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
Cyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	10/11/13	10/11/13 16:09	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Methylene Chloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
2-Butanone (MEK)	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Bromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Chloroform	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Benzene	**1.7**	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Methyl Acetate	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
Methylcyclohexane	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
Trichloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Carbon Disulfide	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
Bromodichloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	10/11/13	10/11/13 16:09	1011

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Volatile Organic Compounds — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Toluene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
2-Hexanone	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Dibromochloromethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Bromoform	ND	ug/L	5.0		1	10/11/13	10/11/13 16:09	1011
Tetrachloroethene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Chlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Ethylbenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
m,p-Xylenes	ND	ug/L	2.0		1	10/11/13	10/11/13 16:09	1011
Styrene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
o-Xylene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Isopropylbenzene	**1.2**	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	10/11/13	10/11/13 16:09	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
Naphthalene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	10/11/13	10/11/13 16:09	1011

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No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Acenaphthylene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Acetophenone	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Caprolactam	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Biphenyl (Diphenyl)	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Atrazine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Benzo(a)anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Benzo(a)pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Benzo(b)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Benzo(g,h,i)perylene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Benzo(k)fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Butyl benzyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
bis(2-chloroethoxy) methane	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
bis(2-chloroethyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
bis(2-chloroisopropyl) ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
bis(2-ethylhexyl) phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Bromophenylphenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Di-n-butyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Carbazole	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Chloro-3-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Chloroaniline	ND	ug/L	10		1	10/10/13	10/11/13 10:09	1014
2-Chloronaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2-Chlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Chlorophenyl Phenyl ether	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Chrysene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Dibenz(a,h)Anthracene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Dibenzofuran	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
3,3-Dichlorobenzidine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,4-Dichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Diethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Dimethyl phthalate	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,4-Dimethylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4,6-Dinitro-2-methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,4-Dinitrophenol	ND	ug/L	10		1	10/10/13	10/11/13 10:09	1014
2,4-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,6-Dinitrotoluene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Fluoranthene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Fluorene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Hexachlorobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Hexachlorobutadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Hexachlorocyclopentadiene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Hexachloroethane	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Isophorone	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2-Methylnaphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2-Methyl phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
3&4-Methylphenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Naphthalene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Nitroaniline	ND	ug/L	10		1	10/10/13	10/11/13 10:09	1014
3-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2-Nitroaniline	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Nitrobenzene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
4-Nitrophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
N-Nitrosodi-n-propyl amine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
N-Nitrosodiphenylamine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Di-n-octyl phthalate	ND	ug/L	10		1	10/10/13	10/11/13 10:09	1014
Pentachlorophenol	ND	ug/L	10		1	10/10/13	10/11/13 10:09	1014
Phenanthrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014

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CERTIFICATE OF ANALYSIS

No: 13100923
Icor Ltd., Middleburgh, VA
October 16, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-027**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

TCL Semivolatile Organic Compounds — Analytical Method: SW-846 8270 C — Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Phenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Pyrene	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
Pyridine	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,4,6-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014
2,4,5-Trichlorophenol	ND	ug/L	5.0		1	10/10/13	10/11/13 10:09	1014

Sample ID: ICOR-SB7(GW) **Date/Time Sampled: 10/08/2013 12:40** **PSS Sample ID: 13100923-028**
Matrix: GROUND WATER **Date/Time Received: 10/09/2013 15:05**

Dissolved PP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	ug/L	5.0		1	10/10/13	10/10/13 19:03	1033
Arsenic	**5.0**	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Beryllium	ND	ug/L	1.0		1	10/10/13	10/11/13 19:10	1033
Cadmium	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Chromium	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Copper	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Lead	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Mercury	ND	ug/L	0.20		1	10/10/13	10/10/13 19:03	1033
Nickel	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Selenium	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Silver	ND	ug/L	1.0		1	10/10/13	10/10/13 19:03	1033
Thallium	ND	ug/L	1.0		1	10/10/13	10/11/13 19:10	1033
Zinc	ND	ug/L	20		1	10/10/13	10/10/13 19:03	1033

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

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email: info@phaseonline.com

(1) CLIENT: ICOR, Ltd. OFFICE LOC.: Middleburg, VA
PROJECT MGR: M. Bruzzesi PHONE NO.: 703-980-8515
EMAIL: landstrat@aol.com FAX NO.:
PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria, VA P.O. NO.:
SAMPLERS: M. Bruzzesi & I. Singh DW CERT NO.:

PSS Work Order #: 1310092 3 PAGE 1 OF 3

Matrix Codes: SW=Surface Wtr DW=Drinking Wrt GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil WL=Waste Liquid WS=Waste Solid W= Wipe

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	TPH-DRO 8015	TPH-GRO 8015	TCL VOCs 8260	TCL SVOCs 8270	PCBs 8082	Total PPL Metals 6010	Dissolved PPL metals 6010				HOLD	Preservative Used / Analysis/ Method Required / REMARKS
1	ICOR-SB2(3-4)	10/8/13	805	S	2	G						X						Click to enter Remarks
2	ICOR-SB2(5-6)	10/8/13	810	S	2	G	X	X	X	X								
3	ICOR-SB5(6-7)	10/8/13	940	S	2	G	X	X	X	X		X						
4	ICOR-SB6(2-3)	10/8/13	1020	S	1	G						X						
5	ICOR-SB7(7.5-8.5)	10/8/13	1100	S	3	G	X	X	X	X		X						
6	ICOR-SB8(2-3)	10/8/13	1120	S	1	G						X						
7	ICOR-SB8(7.5-8.5)	10/8/13	1125	S	3	G	X	X	X	X		X						
8	ICOR-SB9(4.5-5.5)	10/8/13	1155	S	3	G						X						
9	ICOR-SB10(2-3)	10/8/13	1225	S	1	G						X						
10	ICOR-SB11(5.5-6.5)	10/8/13	1255	S	1	G	X	X	X	X		X						

(5)

	Date	Time	
Relinquished By: (1)	10/9/13	0700	Received By:
Relinquished By: (2)	10-9-13		Received By:
Relinquished By: (3)	10/9/13	1505	Received By:
Relinquished By: (4)			Received By:

(4)

Requested Turnaround Time
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

# of Coolers: 2
Custody Seal: ABS
Ice Present: YES Temp: 3°C & 4°C
Shipping Carrier: FTE

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1) CLIENT: ICOR, Ltd. OFFICE LOC.: Middleburg, VA
PROJECT MGR: M. Bruzzesi PHONE NO.: 703-980-8515
EMAIL: landstrat@aol.com FAX NO.:
PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria, VA P.O. NO.:
SAMPLERS: M. Bruzzesi & I. Singh DW CERT NO.:

PSS Work Order #: 1310092 3 PAGE 2 OF 3

Matrix Codes: **SW**=Surface Wtr **DW**=Drinking Wrt **GW**=Ground Wtr **WW**=Waste Wtr **O**=Oil **S**=Soil **WL**=Waste Liquid **WS**=Waste Solid **W**= Wipe

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	TPH-DRO 8015	TPH-GRO 8015	TCL VOCs 8260	TCL SVOCs 8270	PCBs 8082	Total PPL Metals 6010	Dissolved PPL metals 6010				HOLD	REMARKS
							Preservative Used →											← Analysis/ Method Required
11	ICOR-SB12(6-7)	10/8/13	1325	S	1	G						X						Click to enter Remarks
12	ICOR-SB13(5.5-6.5)	10/8/13	1355	S	2	G	X	X				X						
13/14	ICOR-SB1(GW)	10/8/13	815	GW	6/1	G	X	X	X	X		X	X					
15/16	ICOR-SB5(GW)	10/8/13	1030	GW	6/1	G	X	X	X	X		X	X					
17/18	ICOR-SB6(GW)	10/8/13	1130	GW	6/1	G	X	X	X	X		X	X					
19	ICOR-SB8(GW)	10/8/13	1300	GW	4	G	X	X	X	X								
20/21	ICOR-SB9(GW)	10/8/13	1320	GW	6/1	G	X	X	X	X		X	X					
22/23	MW2	10/8/13	1415	GW	6/1	G	X	X	X	X		X	X					SEE SPECIAL INSTRUCTIONS *
24/25	MW4	10/8/13	1445	GW	6/1	G	X	X	X	X		X	X					
26	ICOR-SB10(5.5-6.5)	10/8/13	1220	S	1	G						X						

(5)

Relinquished By: (1)	Date	Time	Received By:
	10/9/13	0700	
Relinquished By: (2)	Date	Time	Received By:
	10/9/13		
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Requested Turnaround Time
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

# of Coolers: 2
Custody Seal: ABS
Ice Present: Yes Temp: 3°C & 4°C
Shipping Carrier: FE

Special Instructions:
* ALL DISSOLVED METALS SAMPLES WERE FILTERED IN FIELD WITH THE EXCEPTION OF MW2. SAMPLE MW2 NEEDS TO BE FILTERED IN LAB.

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1) CLIENT: ICOR, Ltd. OFFICE LOC.: Middleburg, VA
PROJECT MGR: M. Bruzzesi PHONE NO.: 703-980-8515
EMAIL: landstrat@aol.com FAX NO.:
PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria, VA P.O. NO.:
SAMPLERS: M. Bruzzesi & I. Singh DW CERT NO.:

PSS Work Order #: 1310092 3 PAGE 3 OF 3

Matrix Codes:
SW=Surface Wtr **DW**=Drinking Wrt **GW**=Ground Wtr **WW**=Waste Wtr **O**=Oil **S**=Soil **WL**=Waste Liquid **WS**=Waste Solid **W**= Wipe

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	TPH-DRO 8015	TPH-GRO 8015	TCL VOCs 8260	TCL SVOCs 8270	PCBs 8082	Total PPL Metals 6010	Dissolved PPL Metals 6010				HOLD	Preservative Used / Analysis/ Method Required / REMARKS
21/28	ICOR-SB7(GW)	10/8/13	1240	GW	6/1	G	X	X	X	X		X	X					Click to enter Remarks

(5)

Relinquished By: (1)	Date	Time	Received By:
	10/9/13	0700	
Relinquished By: (2)	Date	Time	Received By:
	10/9/13		
Relinquished By: (3)	Date	Time	Received By:
	10/9/13	1505	
Relinquished By: (4)	Date	Time	Received By:

(4)

Requested Turnaround Time
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

# of Coolers: 2
Custody Seal: A/S
Ice Present: YES Temp: 3°C+4°C
Shipping Carrier: FTE

Special Instructions:

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Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	13100923	**Received By**	Rachel Davis
Client Name	Icor Ltd.	**Date Received**	10/09/2013 03:05:00 PM
Project Name	Robinson Terminal North	**Delivered By**	Trans Time Express
Disposal Date	11/13/2013	**Tracking No**	Not Applicable
		Logged In By	Rachel Davis

Shipping Container(s)

No. of Coolers 2

Custody Seal(s) Intact?	N/A	Ice	Present
Seal(s) Signed / Dated?	N/A	Temp (deg C)	3
		Temp Blank Present	No

Documentation

COC agrees with sample labels?	No	Sampler Name	Mike Bruzzesi
Chain of Custody	Yes	MD DW Cert. No.	N/A

Sample Container

Appropriate for Specified Analysis?	No	Custody Seal(s) Intact?	Not Applicable
Intact?	Yes	Seal(s) Signed / Dated	Not Applicable
Labeled and Labels Legible?	Yes		

Total No. of Samples Received 30

Total No. of Containers Received 82

Preservation

Metals	(pH<2)	No
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(ph<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	Yes
Do VOA vials have zero headspace?		Yes

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

2 coolers were received. All sample receipt conditions were acceptable. The temperatures observed were 3 and 4 Celcius.
Preserved the Total Metals container for sample MW4 with HNO3 upon receipt.
Container label for COC sample ICOR-SB8(2-3) reads 1125 for the sampling time.
One amber for MW4 reads MW.
No dates or times on all groundwater containers.
Received one 4oz container and one 2oz container in the cooler labeled ICOR-SB3(2-3), sampled 10/8/13 @ 1125, not on the COC.
Received two 4oz containers and one 2oz container in the cooler labeled ICOR-SB7(2-3), sampled 10/8/13 @ 1050, not on the COC.
Received one amber for sample ICOR-SB8(GW) to analyze for DRO and SVOCs. Per client, split volume received evenly and analyze half for DRO and the other half for SVOCs.

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	13100923	**Received By**	Rachel Davis
Client Name	Icor Ltd.	**Date Received**	10/09/2013 03:05:00 PM
Project Name	Robinson Terminal North	**Delivered By**	Trans Time Express
		Tracking No	Not Applicable
		Logged In By	Rachel Davis

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservation added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By: Rachel Davis Date: 10/09/2013

Rachel Davis

PM Review and Approval: Date: 10/10/2013

Simon Crisp

Analytical Report for

Icor Ltd.

Certificate of Analysis No.: 13102110

Project Manager: Mike Bruzzesi
Project Name : Robinson Terminal North
Project Location: Alexandria, VA

October 28, 2013

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

October 28, 2013

Mike Bruzzesi
Icor Ltd.
PO Box 406
Middleburgh, VA 20118

Reference: PSS Work Order(s) No: **13102110**
Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Dear Mike Bruzzesi :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **13102110**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on November 13, 2013. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt , the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

Sample Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 13102110

The following samples were received under chain of custody by Phase Separation Science (PSS) on 10/09/2013 at 03:05 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13102110-001	ICOR-SB10 (2-3)	SOIL	10/08/13 12:25
13102110-002	ICOR-SB13 (5.5-6.5)	SOIL	10/08/13 13:55

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.
6. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.

Standard Flags/Abbreviations:

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C Results Pending Final Confirmation.
E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J The target analyte was positively identified below the reporting limit but greater than the LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** An LOD is analyte and matrix specific.
ND Not Detected at or above the reporting limit.
RL PSS Reporting Limit.
U Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 2200
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBA MWAA LD1997-0041-2015

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 13102110

Icor Ltd., Middleburgh, VA

October 28, 2013

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: ICOR-SB10 (2-3) **Date/Time Sampled: 10/08/2013 12:25** **PSS Sample ID: 13102110-001**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05**

TCLP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	TCLP Limit	Prepared	Analyzed	Analyst
Arsenic	**1.4**	mg/L	0.050		1	5	10/25/13	10/25/13 14:58	1034
Barium	ND	mg/L	1.0		1	100	10/25/13	10/25/13 14:58	1034
Cadmium	ND	mg/L	0.050		1	1	10/25/13	10/25/13 14:58	1034
Chromium	ND	mg/L	0.050		1	5	10/25/13	10/25/13 14:58	1034
Lead	**7.8**	mg/L	0.50	Fail	10	5	10/25/13	10/28/13 12:42	1034
Mercury	ND	mg/L	0.0020		1	0.2	10/25/13	10/25/13 14:58	1034
Selenium	ND	mg/L	0.050		1	1	10/25/13	10/25/13 14:58	1034
Silver	ND	mg/L	0.050		1	5	10/25/13	10/25/13 14:58	1034

Sample ID: ICOR-SB13 (5.5-6.5) **Date/Time Sampled: 10/08/2013 13:55** **PSS Sample ID: 13102110-002**
Matrix: SOIL **Date/Time Received: 10/09/2013 15:05** **% Solids: 81**

Chromium, Hexavalent — Analytical Method: SW-846 7196 A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Chromium, Hexavalent	ND	mg/kg	0.97		2	10/22/13	10/22/13 08:10	1047

Case Narrative Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 13102110

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Sample Receipt:

Refer to previous Work Order 13100923.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

13102410

www.phaseonline.com
email: info@phaseonline.com

(1) CLIENT: ICOR, Ltd. OFFICE LOC.: Middleburg, VA
PROJECT MGR: M. Bruzzesi PHONE NO.: 703-980-8515
EMAIL: landstrat@aol.com FAX NO.:
PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria, VA P.O. NO.:
SAMPLERS: M. Bruzzesi & I. Singh DW CERT NO.:

PAGE 1 OF 3

Matrix Codes: SW=Surface Wtr DW=Drinking Wrt GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil WL=Waste Liquid WS=Waste Solid W= Wipe

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	TPH-DRO 8015	TPH-GRO 8015	TCL VOCs 8260	TCL SVOCs 8270	PCBs 8082	Total PPL Metals 6010	Dissolved PPL metals 6010				HOLD	REMARKS
																		Preservative Used →
																		← Analysis/ Method Required
1	ICOR-SB2(3-4)	10/8/13	805	S	2	G						X						Click to enter Remarks
2	ICOR-SB2(5-6)	10/8/13	810	S	2	G	X	X	X	X								
3	ICOR-SB5(6-7)	10/8/13	940	S	2	G	X	X	X	X		X						
4	ICOR-SB6(2-3)	10/8/13	1020	S	1	G						X						
5	ICOR-SB7(7.5-8.5)	10/8/13	1100	S	3	G	X	X	X	X		X						
6	ICOR-SB8(2-3)	10/8/13	1120	S	1	G						X						
7	ICOR-SB8(7.5-8.5)	10/8/13	1125	S	3	G	X	X	X	X		X						
8	ICOR-SB9(4.5-5.5)	10/8/13	1155	S	3	G						X						
9	ICOR-SB10(2-3)	10/8/13	1225	S	1	G						X						
10	ICOR-SB11(5.5-6.5)	10/8/13	1255	S	1	G	X	X	X	X		X						

(5)

	Date	Time	Received By:
Relinquished By: (1)	10/9/13	0700	
Relinquished By: (2)	10-9-13		
Relinquished By: (3)	10/9/13	1505	
Relinquished By: (4)			

(4)

Requested Turnaround Time
■ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC. 13102110

www.phaseonline.com
email: info@phaseonline.com

(1) CLIENT: ICOR, Ltd. OFFICE LOC.: Middleburg, VA
PROJECT MGR: M. Bruzzesi PHONE NO.: 703-980-8515
EMAIL: landstrat@aol.com FAX NO.:
PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria, VA P.O. NO.:
SAMPLERS: M. Bruzzesi & I. Singh DW CERT NO.:

PAGE 2 OF 3

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(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	TPH-DRO 8015	TPH-GRO 8015	TCL VOCs 8260	TCL SVOCs 8270	PCBs 8082	Total PPL Metals 6010	Dissolved PPL metals 6010	HOLD	REMARKS
11	ICOR-SB12(6-7)	10/8/13	1325	S	1	G						X			Click to enter Remarks
12	ICOR-SB13(5.5-6.5)	10/8/13	1355	S	2	G	X	X				X			
13	ICOR-SB1(GW)	10/8/13	815	GW	6/1	G	X	X	X	X		X	X		
14	ICOR-SB5(GW)	10/8/13	1030	GW	6/1	G	X	X	X	X		X	X		
15	ICOR-SB6(GW)	10/8/13	1130	GW	6/1	G	X	X	X	X		X	X		
16	ICOR-SB8(GW)	10/8/13	1300	GW	4	G	X	X	X	X					
17	ICOR-SB9(GW)	10/8/13	1320	GW	6/1	G	X	X	X	X		X	X		
18	MW2	10/8/13	1415	GW	6/1	G	X	X	X	X		X	X		SEE SPECIAL INSTRUCTIONS *
19	MW4	10/8/13	1445	GW	6/1	G	X	X	X	X		X	X		
20	ICOR-SB10(5.5-6.5)	10/8/13	1220	S	1	G						X			

(5)

Relinquished By: (1)	Date	Time	Received By:
	10/9/13	0700	
Relinquished By: (2)	Date	Time	Received By:
	10/9/13		
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Requested Turnaround Time
■ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Special Instructions:
* ALL DISSOLVED METALS SAMPLES WERE FILTERED IN FIELD WITH THE EXCEPTION OF MW2. SAMPLE MW2 NEEDS TO BE FILTERED IN LAB.

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Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	13102110	**Received By**	Rachel Davis
Client Name	Icor Ltd.	**Date Received**	10/09/2013 03:05:00 PM
Project Name	Robinson Terminal North	**Delivered By**	Trans Time Express
Disposal Date	11/13/2013	**Tracking No**	Not Applicable
Shipping Container(s)		**Logged In By**	Robyn Rhudy

No. of Coolers 1

Custody Seal(s) Intact?	N/A	Ice	Present
Seal(s) Signed / Dated?	N/A	Temp (deg C)	3
		Temp Blank Present	No

Documentation

COC agrees with sample labels?	Yes	Sampler Name	Mike Bruzzesi
Chain of Custody	Yes	MD DW Cert. No.	N/A

Sample Container

Appropriate for Specified Analysis?	Yes	Custody Seal(s) Intact?	Not Applicable
Intact?	Yes	Seal(s) Signed / Dated	Not Applicable
Labeled and Labels Legible?	Yes		

Total No. of Samples Received 2 Total No. of Containers Received 2

Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(ph<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Refer to previous Work Order 13100923.

Samples Inspected/Checklist Completed By: Robyn Rhudy Date: 10/21/2013

Robyn Rhudy

PM Review and Approval: Lynn Moran Date: 10/21/2013

Lynn Moran

Analytical Report for

Icor Ltd.

Certificate of Analysis No.: 14101016

Project Manager: Ike Singh
Project Name : Robinson Terminal North
Project Location: Alexandria, VA

October 17, 2014

Phase Separation Science, Inc.
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PHASE SEPARATION SCIENCE, INC.

October 17, 2014

Ike Singh
Icor Ltd.
PO Box 406
Middleburgh, VA 20118

Reference: PSS Work Order(s) No: **14101016**
Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Dear Ike Singh :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **14101016**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on November 14, 2014. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt , the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

Sample Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 14101016

The following samples were received under chain of custody by Phase Separation Science (PSS) on 10/10/2014 at 02:23 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14101016-001	GTB7 (2.5-10)	SOIL	10/06/14 10:00
14101016-002	GTB8 (2.5-4)	SOIL	10/07/14 09:00
14101016-003	GTB9 (2.5-10)	SOIL	10/07/14 12:00
14101016-004	GTB10 (4-10)	SOIL	10/08/14 10:00
14101016-005	GTB11 (5-10)	SOIL	10/10/14 09:00
14101016-006	GTB12 (5-10)	SOIL	10/08/14 13:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].

Standard Flags/Abbreviations:

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C Results Pending Final Confirmation.
E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J The target analyte was positively identified below the reporting limit but greater than the LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** An LOD is analyte and matrix specific.
ND Not Detected at or above the reporting limit.
RL PSS Reporting Limit.
U Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14101016

Icor Ltd., Middleburgh, VA

October 17, 2014

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: GTB7 (2.5-10) **Date/Time Sampled: 10/06/2014 10:00** **PSS Sample ID: 14101016-001**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 86**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**1,600**	mg/kg	4.9		10	10/10/14	10/14/14 13:11	1034
Barium	**320**	mg/kg	24		10	10/10/14	10/14/14 13:11	1034
Cadmium	**17**	mg/kg	2.4		1	10/10/14	10/13/14 17:02	1034
Chromium	**27**	mg/kg	2.4		1	10/10/14	10/13/14 17:02	1034
Lead	**1,500**	mg/kg	24		10	10/10/14	10/14/14 13:11	1034
Mercury	**27**	mg/kg	1.9		20	10/10/14	10/14/14 15:38	1034
Selenium	**10**	mg/kg	2.4		1	10/10/14	10/13/14 17:02	1034
Silver	**12**	mg/kg	2.4		1	10/10/14	10/13/14 17:02	1034

Sample ID: GTB8 (2.5-4) **Date/Time Sampled: 10/07/2014 09:00** **PSS Sample ID: 14101016-002**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 86**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**1,900**	mg/kg	4.8		10	10/10/14	10/14/14 13:17	1034
Barium	**190**	mg/kg	2.4		1	10/10/14	10/13/14 17:08	1034
Cadmium	**12**	mg/kg	2.4		1	10/10/14	10/13/14 17:08	1034
Chromium	**20**	mg/kg	2.4		1	10/10/14	10/13/14 17:08	1034
Lead	**370**	mg/kg	24		10	10/10/14	10/14/14 13:17	1034
Mercury	**20**	mg/kg	1.9		20	10/10/14	10/14/14 15:44	1034
Selenium	**6.0**	mg/kg	2.4		1	10/10/14	10/13/14 17:08	1034
Silver	**2.8**	mg/kg	2.4		1	10/10/14	10/13/14 17:08	1034

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14101016

Icor Ltd., Middleburgh, VA

October 17, 2014

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: GTB9 (2.5-10) **Date/Time Sampled: 10/07/2014 12:00** **PSS Sample ID: 14101016-003**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 83**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**11**	mg/kg	0.54		1	10/10/14	10/13/14 17:14	1034
Barium	**81**	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034
Cadmium	ND	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034
Chromium	**21**	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034
Lead	**15**	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034
Mercury	ND	mg/kg	0.11		1	10/10/14	10/14/14 12:41	1034
Selenium	ND	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034
Silver	ND	mg/kg	2.7		1	10/10/14	10/13/14 17:14	1034

Sample ID: GTB10 (4-10) **Date/Time Sampled: 10/08/2014 10:00** **PSS Sample ID: 14101016-004**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 76**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**6.8**	mg/kg	0.52		1	10/10/14	10/13/14 17:20	1034
Barium	**170**	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034
Cadmium	ND	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034
Chromium	**5.4**	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034
Lead	**59**	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034
Mercury	**0.18**	mg/kg	0.10		1	10/10/14	10/14/14 12:47	1034
Selenium	ND	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034
Silver	ND	mg/kg	2.6		1	10/10/14	10/13/14 17:20	1034

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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14101016

Icor Ltd., Middleburgh, VA

October 17, 2014

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: GTB11 (5-10) **Date/Time Sampled: 10/10/2014 09:00** **PSS Sample ID: 14101016-005**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 80**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**18**	mg/kg	0.54		1	10/10/14	10/13/14 17:26	1034
Barium	**140**	mg/kg	2.7		1	10/10/14	10/13/14 17:26	1034
Cadmium	ND	mg/kg	2.7		1	10/10/14	10/13/14 17:26	1034
Chromium	**15**	mg/kg	2.7		1	10/10/14	10/13/14 17:26	1034
Lead	**600**	mg/kg	27		10	10/10/14	10/14/14 13:23	1034
Mercury	**0.23**	mg/kg	0.11		1	10/10/14	10/14/14 12:53	1034
Selenium	**3.2**	mg/kg	2.7		1	10/10/14	10/13/14 17:26	1034
Silver	**5.9**	mg/kg	2.7		1	10/10/14	10/13/14 17:26	1034

Sample ID: GTB12 (5-10) **Date/Time Sampled: 10/08/2014 13:00** **PSS Sample ID: 14101016-006**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23** **% Solids: 81**

RCRA Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	**7.7**	mg/kg	0.58		1	10/10/14	10/13/14 17:32	1034
Barium	**81**	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034
Cadmium	ND	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034
Chromium	**3.4**	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034
Lead	**160**	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034
Mercury	**0.27**	mg/kg	0.12		1	10/10/14	10/14/14 12:59	1034
Selenium	ND	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034
Silver	ND	mg/kg	2.9		1	10/10/14	10/13/14 17:32	1034

Case Narrative Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 14101016

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for drinking water and non-potable samples tested for compliance have a maximum holding time of 15 minutes. As such, all laboratory analyses for these analytes exceed holding times.

Sample Receipt:

All sample receipt conditions were acceptable.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

Analytical Data Package Information Summary

Work Order(s): **14101016**
Report Prepared For: Icor Ltd., Middleburgh, VA
Project Name: Robinson Terminal North
Project Manager: Ike Singh

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
ASTM D2216 05	GTB7 (2.5-10)	Initial	14101016-001	1047	S	117420	117420	10/06/2014	10/13/2014 08:40	10/13/2014 08:40
	GTB8 (2.5-4)	Initial	14101016-002	1047	S	117420	117420	10/07/2014	10/13/2014 08:40	10/13/2014 08:40
	GTB9 (2.5-10)	Initial	14101016-003	1047	S	117420	117420	10/07/2014	10/13/2014 08:40	10/13/2014 08:40
	GTB10 (4-10)	Initial	14101016-004	1047	S	117420	117420	10/08/2014	10/13/2014 08:40	10/13/2014 08:40
	GTB11 (5-10)	Initial	14101016-005	1047	S	117420	117420	10/10/2014	10/13/2014 08:40	10/13/2014 08:40
	GTB12 (5-10)	Initial	14101016-006	1047	S	117420	117420	10/08/2014	10/13/2014 08:40	10/13/2014 08:40
SW-846 6020 A	GTB7 (2.5-10)	Initial	14101016-001	1034	S	52491	117460	10/06/2014	10/10/2014 16:02	10/13/2014 17:02
	GTB8 (2.5-4)	Initial	14101016-002	1034	S	52491	117460	10/07/2014	10/10/2014 16:02	10/13/2014 17:08
	GTB9 (2.5-10)	Initial	14101016-003	1034	S	52491	117460	10/07/2014	10/10/2014 16:02	10/13/2014 17:14
	GTB10 (4-10)	Initial	14101016-004	1034	S	52491	117460	10/08/2014	10/10/2014 16:02	10/13/2014 17:20
	GTB11 (5-10)	Initial	14101016-005	1034	S	52491	117460	10/10/2014	10/10/2014 16:02	10/13/2014 17:26
	GTB12 (5-10)	Initial	14101016-006	1034	S	52491	117460	10/08/2014	10/10/2014 16:02	10/13/2014 17:32
	52491-1-BKS	BKS	52491-1-BKS	1034	S	52491	117460	--------	10/10/2014 16:02	10/13/2014 15:38
	52491-1-BLK	BLK	=	1034	S	52491	117460	--------	10/10/2014 16:02	10/13/2014 15:32
	TEN-TS-10 (1) S	MS	14100911-011 S	1034	S	52491	117460	10/08/2014	10/10/2014 16:02	10/13/2014 15:50
	TEN-TS-10 (1) SD	MSD	14100911-011 SD	1034	S	52491	117460	10/08/2014	10/10/2014 16:02	10/13/2014 15:56
	GTB9 (2.5-10)	Reanalysis	14101016-003	1034	S	52491	117488	10/07/2014	10/10/2014 16:02	10/14/2014 12:41
	GTB10 (4-10)	Reanalysis	14101016-004	1034	S	52491	117488	10/08/2014	10/10/2014 16:02	10/14/2014 12:47
	GTB11 (5-10)	Reanalysis	14101016-005	1034	S	52491	117488	10/10/2014	10/10/2014 16:02	10/14/2014 12:53
	GTB12 (5-10)	Reanalysis	14101016-006	1034	S	52491	117488	10/08/2014	10/10/2014 16:02	10/14/2014 12:59
	GTB7 (2.5-10)	Reanalysis	14101016-001	1034	S	52491	117488	10/06/2014	10/10/2014 16:02	10/14/2014 13:11
	GTB8 (2.5-4)	Reanalysis	14101016-002	1034	S	52491	117488	10/07/2014	10/10/2014 16:02	10/14/2014 13:17
	GTB11 (5-10)	Reanalysis	14101016-005	1034	S	52491	117488	10/10/2014	10/10/2014 16:02	10/14/2014 13:23

PHASE SEPARATION SCIENCE, INC.

QC Summary 14101016

Icor Ltd.
Robinson Terminal North

Analytical Method: SW-846 6020 A Prep Method: SW3050B
Seq Number: 117460 Matrix: Solid Date Prep: 10/10/14
MB Sample Id: 52491-1-BLK LCS Sample Id: 52491-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Arsenic	18.98	19.08	18.98	99	80-120	mg/kg	10/13/14 15:38	
Barium	19.86	19.08	19.86	104	80-120	mg/kg	10/13/14 15:38	
Cadmium	18.92	19.08	18.92	99	80-120	mg/kg	10/13/14 15:38	
Chromium	18.61	19.08	18.61	98	80-120	mg/kg	10/13/14 15:38	
Lead	19.76	19.08	19.76	104	80-120	mg/kg	10/13/14 15:38	
Mercury	0.4914	0.4771	0.4914	103	80-120	mg/kg	10/13/14 15:38	
Selenium	17.07	19.08	17.07	89	80-120	mg/kg	10/13/14 15:38	
Silver	19.92	19.08	19.92	104	80-120	mg/kg	10/13/14 15:38	

Analytical Method: SW-846 6020 A Prep Method: SW3050B
Seq Number: 117460 Matrix: Solid Date Prep: 10/10/14
MB Sample Id: =

Parameter	MB Result	LOD	RL	Units	Analysis Date	Flag
Arsenic	ND	0.2196	0.4393	mg/kg	10/13/14 15:32	
Barium	ND	1.098	2.196	mg/kg	10/13/14 15:32	
Cadmium	ND	1.098	2.196	mg/kg	10/13/14 15:32	
Chromium	ND	1.098	2.196	mg/kg	10/13/14 15:32	
Lead	ND	1.098	2.196	mg/kg	10/13/14 15:32	
Mercury	ND	0.04393	0.08785	mg/kg	10/13/14 15:32	
Selenium	ND	1.098	2.196	mg/kg	10/13/14 15:32	
Silver	ND	1.098	2.196	mg/kg	10/13/14 15:32	

F = RPD exceeded the laboratory control limits
X = Recovery of MS, MSD or both outside of QC Criteria
H= Recovery of BS,BSD or both exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1) *CLIENT: ICOR *OFFICE LOC.
*PROJECT MGR: Singh *PHONE NO.:( )
EMAIL: icor21@aol.com FAX NO.: ( )
*PROJECT NAME: Robinson Terminal North PROJECT NO.:
SITE LOCATION: Alexandria Va P.O. NO.:
SAMPLER(S): Singh DW CERT NO.:

PSS Work Order #: 14101016 PAGE ____ OF ____

Matrix Codes: **SW**=Surface Wtr **DW**=Drinking Wtr **GW**=Ground Wtr **WW**=Waste Wtr **O**=Oil **S**=Soil **L**=Liquid **SOL**=Solid **A**=Air **WI**=Wipe

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	(3) * Analysis/ Method Required: RCRA Metals	REMARKS
1	GT B7 (2.5-10)	10/6/14	1000	S	1	C		X	
2	GT B8 (2.5-4)	10/7/14	900					X	
3	GT B9 (2.5-10)	10/7/14	1200					X	
4	GT B10 (4-10)	10/8/14	1000					X	
5	GT B11 (5-10)	10/10/14	900					X	
6	GT B12 (5-10)	10/8/14	1300					X	

(5)

Relinquished By: (1)	Date	Time	Received By:
	10/14/14	1130	
Relinquished By: (2)	Date	Time	Received By:
	10/10/14	2:23	
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☒ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☐ QC SUMM ☐ CLP LIKE ☐ OTHER ____

# of Coolers: 1
Custody Seal: ABS
Ice Present: ABS Temp: 5°C
Shipping Carrier: FTE

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE ____
STATE RESULTS REPORTED TO: MD ☐ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

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Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14101016	**Received By**	Rachel Davis
Client Name	Icor Ltd.	**Date Received**	10/10/2014 02:23:00 PM
Project Name	Robinson Terminal North	**Delivered By**	Trans Time Express
Disposal Date	11/14/2014	**Tracking No**	Not Applicable
		Logged In By	Rachel Davis

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Ike Singh
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

		Custody Seal(s) Intact?	Not Applicable
Appropriate for Specified Analysis?	Yes	Seal(s) Signed / Dated	Not Applicable
Intact?	Yes		
Labeled and Labels Legible?	Yes		

Total No. of Samples Received 6

Total No. of Containers Received 6

Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By: Rachel Davis — Date: 10/10/2014

Rachel Davis

PM Review and Approval: Simon Crisp — Date: 10/13/2014

Simon Crisp

Analytical Report for

Icor Ltd.

Certificate of Analysis No.: 14101713

Project Manager: Ike Singh
Project Name : Robinson Terminal North
Project Location: Alexandria, VA

October 24, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
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ROUTE 40 WEST
BALTIMORE, MD 21228
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PHASE SEPARATION SCIENCE, INC.

October 24, 2014

Ike Singh
Icor Ltd.
PO Box 406
Middleburgh, VA 20118

Reference: PSS Work Order(s) No: **14101713**
Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Dear Ike Singh :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **14101713**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on November 14, 2014. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt , the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

Sample Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 14101713

The following samples were received under chain of custody by Phase Separation Science (PSS) on 10/10/2014 at 02:23 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14101713-001	GTB7 (2.5-10)	SOIL	10/06/14 10:00
14101713-002	GTB8 (2.5-4)	SOIL	10/06/14 09:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].

Standard Flags/Abbreviations:

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C Results Pending Final Confirmation.
E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J The target analyte was positively identified below the reporting limit but greater than the LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** An LOD is analyte and matrix specific.
ND Not Detected at or above the reporting limit.
RL PSS Reporting Limit.
U Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

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6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
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PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14101713
Icor Ltd., Middleburgh, VA
October 24, 2014

Project Name: Robinson Terminal North
Project Location: Alexandria, VA

Sample ID: GTB7 (2.5-10) **Date/Time Sampled: 10/06/2014 10:00** **PSS Sample ID: 14101713-001**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23**

TCLP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	TCLP Limit	Prepared	Analyzed	Analyst
Arsenic	**2.0**	mg/L	0.050		1	5	10/21/14	10/21/14 13:48	1034
Barium	ND	mg/L	1.0		1	100	10/21/14	10/21/14 13:48	1034
Cadmium	**0.063**	mg/L	0.050		1	1	10/21/14	10/21/14 13:48	1034
Chromium	ND	mg/L	0.050		1	5	10/21/14	10/21/14 13:48	1034
Lead	**0.75**	mg/L	0.050		1	5	10/21/14	10/21/14 13:48	1034
Mercury	ND	mg/L	0.0020		1	0.2	10/21/14	10/21/14 13:48	1034
Selenium	ND	mg/L	0.050		1	1	10/21/14	10/21/14 13:48	1034
Silver	ND	mg/L	0.050		1	5	10/21/14	10/21/14 13:48	1034

Sample ID: GTB8 (2.5-4) **Date/Time Sampled: 10/06/2014 09:00** **PSS Sample ID: 14101713-002**
Matrix: SOIL **Date/Time Received: 10/10/2014 14:23**

TCLP Metals — Analytical Method: SW-846 6020 A — Preparation Method: 3010A

	Result	Units	RL	Flag	Dil	TCLP Limit	Prepared	Analyzed	Analyst
Arsenic	**6.3**	mg/L	0.50	Fail	10	5	10/21/14	10/21/14 16:11	1034
Barium	**1.0**	mg/L	1.0		1	100	10/21/14	10/21/14 13:54	1034
Cadmium	**0.070**	mg/L	0.050		1	1	10/21/14	10/21/14 13:54	1034
Chromium	ND	mg/L	0.050		1	5	10/21/14	10/21/14 13:54	1034
Lead	ND	mg/L	0.050		1	5	10/21/14	10/21/14 13:54	1034
Mercury	ND	mg/L	0.0020		1	0.2	10/21/14	10/21/14 13:54	1034
Selenium	ND	mg/L	0.050		1	1	10/21/14	10/21/14 13:54	1034
Silver	ND	mg/L	0.050		1	5	10/21/14	10/21/14 13:54	1034

Case Narrative Summary

Client Name: Icor Ltd.

Project Name: Robinson Terminal North

Work Order Number(s): 14101713

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for drinking water and non-potable samples tested for compliance have a maximum holding time of 15 minutes. As such, all laboratory analyses for these analytes exceed holding times.

Sample Receipt:

Refer to previous Work Order 14101016.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

Analytical Data Package Information Summary

Work Order(s): **14101713**
Report Prepared For: Icor Ltd., Middleburgh, VA
Project Name: Icor Master Price List
Project Manager: Ike Singh

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 6020 A	GTB7 (2.5-10)	Initial	14101713-001	1034	W	52593	117636	10/06/2014	10/21/2014 08:40	10/21/2014 13:48
	GTB8 (2.5-4)	Initial	14101713-002	1034	W	52593	117636	10/06/2014	10/21/2014 08:40	10/21/2014 13:54
	52593-1-BKS	BKS	52593-1-BKS	1034	W	52593	117636	--------	10/21/2014 08:40	10/21/2014 13:12
	52593-1-BLK	BLK	52593-1-BLK	1034	W	52593	117636	--------	10/21/2014 08:40	10/21/2014 13:06
	GTAESI-WC S	MS	14101707-002 S	1034	W	52593	117636	10/16/2014	10/21/2014 08:40	10/21/2014 13:24
	GTAESI-WC SD	MSD	14101707-002 SD	1034	W	52593	117636	10/16/2014	10/21/2014 08:40	10/21/2014 13:30
	GTB8 (2.5-4)	Reanalysis	14101713-002	1034	W	52593	117636	10/06/2014	10/21/2014 08:40	10/21/2014 16:11

PHASE SEPARATION SCIENCE, INC.

QC Summary 14101713

Icor Ltd.
Robinson Terminal North

Analytical Method: SW-846 6020 A

Prep Method: SW3010A

Seq Number: 117636

Matrix: Water

Date Prep: 10/21/14

MB Sample Id: 52593-1-BLK

LCS Sample Id: 52593-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Arsenic	<0.05000	0.4000	0.4107	103	80-120	mg/L	10/21/14 13:12	
Barium	<1.000	2.000	2.306	115	80-120	mg/L	10/21/14 13:12	
Cadmium	<0.05000	0.4000	0.4025	101	80-120	mg/L	10/21/14 13:12	
Chromium	<0.05000	0.4000	0.3780	95	80-120	mg/L	10/21/14 13:12	
Lead	<0.05000	0.4000	0.3994	100	80-120	mg/L	10/21/14 13:12	
Mercury	<0.002000	0.01000	0.01020	102	80-120	mg/L	10/21/14 13:12	
Selenium	<0.05000	0.4000	0.3901	98	80-120	mg/L	10/21/14 13:12	
Silver	<0.05000	0.4000	0.4020	101	80-120	mg/L	10/21/14 13:12	

F = RPD exceeded the laboratory control limits
X = Recovery of MS, MSD or both outside of QC Criteria
H= Recovery of BS,BSD or both exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

14101713

www.phaseonline.com
email: info@phaseonline.com

(1) *CLIENT: TCOR *OFFICE LOC.

*PROJECT MGR: Singh *PHONE NO.:( )

EMAIL: tcor210@dom.com FAX NO.: ( )

*PROJECT NAME: Robinson Terminal North PROJECT NO.:

SITE LOCATION: Alexandria Va P.O. NO.:

SAMPLER(S): Singh DW CERT NO.:

PSS Work Order #: 14101016 PAGE ____ OF ____

Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid SOL=Solid A=Air WI=Wipe

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	Analysis/ Method Required (3) * RCRA Metals	REMARKS
1	GT B7 (2.5-10)	10/6/14	1000	S	1	C		X	
2	GT B8 (2.5-4)	10/7/14	900					X	
3	GT B9 (2.5-10)	10/7/14	1200					X	
4	GT B10 (4-10)	10/8/14	1000					X	
5	GT B11 (5-10)	10/10/14	900					X	
6	GT B12 (5-10)	10/8/14	1300					X	

(5)

Relinquished By: (1)	Date	Time	Received By:
	10/14/14	1130	
Relinquished By: (2)	Date	Time	Received By:
	10/10/14	2:23	
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4) *Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required: COA ☐ QC SUMM ☐ CLP LIKE ☐ OTHER ____

# of Coolers: 1

Custody Seal: ABS

Ice Present: ABS Temp: 5°C

Shipping Carrier: FTE

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE ____

STATE RESULTS REPORTED TO: MD ☐ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14101713	**Received By**	Rachel Davis
Client Name	Icor Ltd.	**Date Received**	10/10/2014 02:23:00 PM
Project Name	Robinson Terminal North	**Delivered By**	Trans Time Express
Disposal Date	11/14/2014	**Tracking No**	Not Applicable
		Logged In By	Rachel Davis

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Ike Singh
COC agrees with sample labels?	N/A	MD DW Cert. No.	N/A
Chain of Custody	N/A		

Sample Container

		Custody Seal(s) Intact?	Not Applicable
Appropriate for Specified Analysis?	N/A	Seal(s) Signed / Dated	Not Applicable
Intact?	N/A		
Labeled and Labels Legible?	N/A		

Total No. of Samples Received 2 Total No. of Containers Received 2

Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Refer to previous Work Order 14101016.

Samples Inspected/Checklist Completed By: Rachel Davis Date: 10/17/2014

Rachel Davis

PM Review and Approval: Date: 10/20/2014

Simon Crisp