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ENVIRONMENTAL SITE ASSESSMENT

MILL STREET

ROME, NEW YORK

Prepared for Atlantic Energy Systems, Inc.

August 1990 GTA-90-75

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PHASE II ENVIRONMENTAL SITE ASSESSMENT INDEPENDENT POWER PLANT ROME, NEW YORK GTA-91-40B

1.0 INTRODUCTION

Empire Soils Investigations, Inc. (Empire Soils) was authorized by Mr. David Palmer of Atlantic Energy Systems, Inc. to perform a Phase II Environmental Site Assessment at the site of a proposed power generation facility cated on Mill Street, the City of Rome, Oneida County, New York (see Drawing No. 1, Appendix A). The investigation has been prepared for the exclusive use of Mr. The work was Palmer and Atlantic Energy Systems, Inc. performed following generally accepted hydrogeologic pro-No other warranty, either expressed or implied, cedures. is made.

Our conclusions regarding the site are based on the observations made and data collected during the study. Therefore, conclusions regarding the conditions of the site do not represent a warranty that all areas within the study area are of the same quality. Empire Soils Investigations, Inc. is not able to represent that the site is free of hazardous materials beyond that detected or observed by Empire Soils Investigations, Inc. during the site study.

1.1 Site Description

The site is located in the City of Rome, Oneida County, New York on Mill Street, approximately 20 feet north of the New York State Barge Canal (see Drawing No. 1, Appendix A). Topographic relief across the site is less than 5 feet.

In general, the area surrounding the site is used for general manufacturing purposes. A vacant building previously occupied by General Cable Corporation is located to the north of the site.

1.2 Previous Investigation

Prior to this investigation, Empire Soils conducted a Phase I Environmental Site Assessment of the proposed dependent Power Plant site (Empire Soils, August 1990). Findings of the Phase I investigation indicated that there a potential that past activities associated with General Cable Corporation facility may have degraded and/or soil quality at the site. groundwater Based these findings, Empire Soils recommended installing monitoring wells in the geotechnical borings groundwater for the proposed Independent Power Plant facility to serve as groundwater monitoring/sampling locations.

Borings B-2, B-6 and B-11 were advanced in May, 1991 (see Subsurface Logs in Appendix B) as part of the geotechnical investigation (Empire Soils, May 1991). Fill materials including cinders were encountered in borings B-2 and B-6 to 2.5 feet below the ground surface and 4.0 feet below the ground surface, respectively.

Monitoring wells were installed in borings B-2, Groundwater samples were obtained from these and B-11. three wells by representatives from O'Brien & Gere, The groundwater samples were analyzed for 1991. in June, volatile organic compounds, polychlorinated biphenyls semivolatile organic compounds, total metals, (PCB's), The results of phenols and total petroleum hydrocarbons. the analyses indicated that concentrations of trichloroethylene were detected in the groundwater samples from monitoring wells B-6 (930 ug/l) and B-11 (490 ug/l) above the NYSDEC groundwater standard of 5 ug/l (NYSDEC,

Vinyl chloride was detected in the sample from well (3 ug/l) above the NYSDEC groundwater standard of 2 ug/l Concentrations of 1,2-dichloroethylene 1990). (NYSDEC, (total) were detected in the samples from wells B-2 ug/l), B-6 (380 ug/l) and B-11 (500 ug/l) above the NYSDEC groundwater standard of 5 ug/l (NYSDEC, 1990). laboratory report from O'Brien & Gere Laboratories, Inc. is enclosed in Appendix C.

A test pit was excavated by O'Brien & Gere Engineers in June, 1991 at the location shown on Drawing No. 2, The test pit was excavated to approximately 9 pendix A. According to Mr. feet below the ground surface. fill materials including cinders were encountered in the test pit excavation to approximately 1 foot below Natural soils were encountered below the ground surface. the fill materials to the bottom of the test pit. soil samples were obtained from the test pit for of "volatile organics." The results of these analyses had not been received by Empire Soils as of the preparation of this report. However, Mr. David Palmer stated that no organic compounds were detected in the soil samples from the excavation.

OBJECTIVES AND SCOPE 2.0

The objective of the Phase II Environmental Site Assessment was to evaluate the groundwater and soil quality In addition, the purpose of the investigawas to further assess the extent of the contaminaat the site. tion previously identified at the site.

Based on the previous investigations at the site, specific environmental concerns included the presence of fill materials such as cinders within the proposed construction areas, and the discovery of chlorinated solvents the groundwater at the site. Due to the size of the site, this investigation was limited to investigating two issues; 1) health and safety risks which might be associated with the subsurface construction proposed for the power plant (depth of up to 9 feet below the ground surface), and 2) groundwater conditions at the site. A thorough investigation of the entire General Cable complex was not performed due to time and budgetary constraints. A preliminary assessment was conducted to identify possible sources of groundwater contamination at the power plant site and potential migration pathways.

For addressing the objectives of the Phase II assessment, the scope of services provided by Empire Soils was limited to:

- o Investigating potential sources of soil and water contamination at the site.
- Drilling five soil borings and obtaining split-spoon soil samples continuously from the ground surface to the bottom of each boring;
- Installing and developing monitoring wells in nine additional borings to provide long-term groundwater sampling points;
- o Monitoring the soil samples from the borings in the field for volatile organic compounds using a photoionization detector (HNU);
- Classifying the soil samples from the borings by an Empire Soils geologist;
- o Surveying the locations and elevations of the borings, monitoring wells and the surface water at one point on the barge canal;
- o Measuring the groundwater levels in each of the monitoring wells to define the groundwater flow direction at the site;
- o Analyzing one soil sample from each of the five soil borings for purgeable halocarbons by EPA Method 8010 and purgeable aromatics by EPA Method 8020.
- o Analyzing one soil sample from each of the three proposed construction areas for TCLP metals.
- o Analyzing groundwater samples from each monitoring well at the site for purgeable halocarbons by EPA Method 601 and purgeable aromatics by EPA Method 602.

3.0 METHODOLOGY

3.1 Soil Borings

The locations of the soil borings and monitoring wells were chosen by Bruce Coulombe and Steven Zientek of Empire Soils Investigations, Inc. (See Drawing No. 2, Appendix A). The borings/wells shown on Drawing No. 2 were advanced on July 25 through August 2, 1991 as part of the current investigation, with the exception of wells B-2, B-6 and MW-11S. These three wells were installed during the geotechnical investigation conducted in May, 1991 (Empire Soils, May 1991). The borings were advanced by drilling with 4 1/4-inch I.D. hollow stem augers.

samples were obtained continuously from ground surface to the bottom of borings B-12 through B-16. Soil samples were obtained at 5-foot intervals in the Additional soil samples were also maining borings. tained at various depths from the well borings to establish the depth to groundwater or the silt/clay layer idenin previous borings advanced at the site tified Soils, May 1991). Soil samples were obtained using a 2-inch O.D. split barrel sample spoon in accordance ASTM Method D1586-84. Soil samples were classified on-site by an Empire Soils geologist.

The bore hole and soil samples were monitored during drilling with a photoionization detector (HNU) to analyze for the presence of volatile organic compounds and as a precautionary health and safety measure. "Head space" analyses were performed on the soil samples by allowing the vapors to collect in the sample jars for approximately 10 minutes prior to analysis with the HNU. The results of the analyses are contained in Table 1.

Borings were terminated at depths ranging from 10.0 feet below the ground surface in borings B-13, B-15 and B-16 to 47.0 feet below ground surface in boring MW-4D. Details for these borings are outlined in the Subsurface Logs contained in Appendix B.

3.2 Soil Sampling

On July 25, 1991 samples of the fill materials and natural soils were obtained from borings B-12, and Based on organic vapor readings, soil samples obtained for laboratory analyses were collected at the bottom of each boring (sample #5 from each boring). cated by Table 2, organic vapor readings generally creased with depth in borings B-12 through B-16. The highest organic vapor reading (10 ppm) was present in jar containing soil sample #5 from the bottom The sample depths are shown on the Subsurface Logs (Appendix B).

The soil samples were taken directly into laboratory supplied bottles. The soil samples were stored on ice and delivered to Huntingdon Analytical Services, Inc. by Fedchain-of-custody eral Express following procedures. from borings B-12, B-14 and B-16 samples analyzed for TCLP metals. Soil samples from borings B-12 through B-16 were analyzed for purgeable halocarbons EPA Method 8010 and for purgeable aromatics by EPA 8020. The analytical results are contained in Appendix C.

The soil sample (S-5) from boring B-16 sent to be analyzed using the TCLP for metals was broken in transit to the laboratory. To replace this sample, soil sample S-4 was sent to the laboratory for analysis.

3.3 Monitoring Well Installation and Development

monitoring well was installed in each of the borings, with the exception of borings B-12 through B-16. The wells are constructed of 2-inch diameter Schedule PVC with 0.01-inch slotted well screens. The well screens are 10 feet long. The tops of the screens were installed at depths ranging from 10.0 feet below the ground surface in wells MW-1S, MW-2S, MW-3S to 33.0 feet below the ground surface in well MW-4D. A clean medium-grained sand pack was placed around the well screens which extends least 2.0 feet above the screen. A bentonite pellet seal 2.0 to 3.0 feet thick was placed in the annular space above the sand pack to minimize vertical migration of surface water runoff and/or contaminants through the annular space into the wells. The remainder of the annular space around the riser pipe was filled with grout from the top of the bentonite seal to the ground surface. Flush-mounted curb boxes were installed on wells MW-3S, MW-4S, MW-4D and locking caps were placed on PVC riser pipes. Locking guard pipes which extend proximately 3 feet above the ground surface were installed at wells MW-1S, MW-1D, MW-2D, MW-3D, and MW-11D to protect the PVC well riser pipes. Well construction details included in the Subsurface Logs in Appendix B.

The new monitoring wells were developed by bailing on August 6, 1991 prior to obtaining groundwater samples. Approximately 10 gallons of water were bailed from wells MW-1S, MW-4S, MW-4D and MW-11D. Wells MW-2S and MW-3S were purged of 15 gallons of water. Approximately 25 gallons of water was bailed from wells MW-1D, MW-2D and MW-3D.

3.4 Site Survey

The locations and elevations of the monitoring wells were surveyed on August 6, 1991. The locations of the wells and borings were determined by tape measurements taken from a baseline established parallel to the northern property boundary. The elevations for the wells, borings and barge canal were established by differential leveling using the manhole shown on Drawing No. 2 as a benchmark (100.06 feet at top of rim). The survey elevations for the ground surface and monitoring wells are presented in Table 2.

3.5 Water Level Measurements

Water levels were measured in each of the wells on August 6, 1991. Measurements were taken using an optical interface probe which was rinsed with distilled water between measurements. The reference elevation used for the water levels is the top of the PVC well pipe, with the exception of well MW-11S. The reference elevation used for the water level at well MW-11S is the top of the guard pipe casing. A summary of groundwater elevations is presented in Table 2.

3.6 Groundwater Sampling

Groundwater samples were obtained from all of the monitoring wells at the site on August 6, 1991. The water samples were taken using pre-cleaned PVC bailers. The wells were bailed prior to sampling to ensure the sampling of fresh formation water. The volume of water bailed from the new wells is discussed above in Section 3.3. Existing wells B-2 and MW-11S were purged of 5 (MW-11S) to 8 (B-2) gallons of water. Well B-6 was bailed dry after removing

approximately 3 gallons of water. All wells were allowed to recharge prior to sampling.

Groundwater samples were stored on ice and delivered to Huntingdon Analytical Services, Inc. by Federal Express following chain-of-custody procedures. The samples were analyzed for purgeable halocarbons by EPA Method 601 and for purgeable aromatics by EPA Method 602. The analytical results are contained in Appendix C.

4.0 FINDINGS OF THE INVESTIGATION

4.1 Site Hydrogeology

Soils composed of silt with varying amounts of sand, gravel, brick fragments and cinders were encountered in the borings to depths of approximately 4 to 10 feet below the ground surface. These soils were interpreted to be fill materials.

The natural soils encountered in the borings were composed predominantly of a brown silt unit with varying amounts of fine to coarse sand, gravel and clay overlaying a sand unit. A gray silt unit with varying amounts of clay was encountered in the deep borings (greater than 20 feet below the ground surface) below the sand unit. These units are interpreted to be alluvial deposits.

The brown silt unit with varying amounts of sand, gravel, and clay was encountered in all the borings to depths ranging from 7.0 feet (B-12) to 20.0 feet (MW-3D) below the ground surface. This silt unit was encountered to the bottom of borings B-13 through B-16 (10.0 to 11.0 feet below the ground surface). Below the brown silt unit, a fine to coarse sand unit with varying amounts of gravel, silt and clay was encountered in the remaining borings.

The sand unit was encountered below the brown silt unit to the bottom of borings MW-1S, MW-3S, MW-4S, MW-4D,

and B-12 (22.0, 20.0, 21.0, 47.0 and 11.0 feet below the ground surface, respectively). In wells MW-1D, MW-2S, MW-2D, MW-3D, and MW-11D the sand unit was encountered to depths ranging from 20.0 to 40.0 feet below the ground surface.

Below the sand unit, a gray silt unit was encountered to the bottom of borings MW-1D, MW-2S, MW-3D, and MW-11D (22.0 to 42.0 below the ground surface). In boring MW-2D, the gray silt unit was underlain by a layer of gray fine sand which extended from 32.0 feet below the ground surface to the bottom of the boring (34.0 feet below the ground surface).

Groundwater elevations in the monitoring wells on August 8, 1991 are listed in Table 2. The groundwater elevations ranged from 85.39 feet at well MW-2D to 87.37 feet at well MW-4S. The surface water elevation at the point shown on Drawing No. 2 was 85.14 feet on August 8, A Water Table Map for August 8, 1991 (Drawing No. 3) is contained in Appendix A. Based on the water levels in the shallow monitoring wells (B-2, B-6, MW-1S, MW-4S and MW-11S) and the surface water elevation at the Barge Canal, the direction of groundwater flow at the site is to the south towards the Barge Canal.

4.2 Soil Quality

Although there was no olfactory evidence of soil contamination in the soil samples from the borings, there was visual evidence of cinders in some of the soil samples. The cinders were apparently used as fill materials. Fill materials including cinders and brick fragments were detected in the soil samples from the borings to depths ranging from 5 feet below the ground surface to 10 feet

below the ground surface. These materials are classified by the NYSDEC as a solid waste according to NYCRR Part 360 regulations.

As shown in Table 1, "head space" analyses indicate that organic vapor concentrations ranged from less than 1 to 10 ppm in the glass jars containing the soil samples from the borings. The highest organic vapor concentration was present in sample #5 from boring B-16.

The results of the EPA Method 8010 analyses ug/l of trichloroethylene was detected The analytical results for soil sample from boring B-14. the soil samples from borings B-12 through B-16 also indithat methylene chloride was detected by EPA Method in all the soil samples and the method blank. The 8010 concentrations of methylene chloride detected ranged ug/kg in the method blank to 290 ug/kg in the This suggests that the sample from boring B-14. trations detected by the EPA Method 8010 analyses caused by laboratory interference. The analytical results the EPA Method 602 analyses indicate that no purgeable hydrocarbons were present the of trations soil samples above the detection limits of the analysis.

The laboratory report for the soil sample analyses is included in Appendix C and the analytical results are sum-The results of the TCLP marized in Table 3. analyses indicate that barium was detected in B-14, and B-16) in concentrations (borings B-12, ranging from 0.27 mg/l (boring B-14) to 2.94 mg/l These concentrations are below the EPA regulatory level of 100 mg/l. Cadmium (0.22 mg/l) and lead (100 mg/l) were detected in the soil sample from boring B-16. The concentration of cadmium is below the EPA regulatory level

of 1.0 mg/l. However, the concentration of lead detected in the soil sample exceeds the EPA regulatory level for hazardous waste of 5.0 mg/l.

Based on these findings, soil sample S-2 from boring B-16 was delivered to Buck Environmental Laboratories on August 22, 1991 for analysis using the TCLP Method for lead. The results of the analysis indicated that the concentration of lead in soil sample S-2 was below the detection limit of the analysis (0.10 mg/l).

4.3 Groundwater Quality

There was no visual or olfactory evidence of ground-water contamination detected during the sampling event. However, several compounds were detected by the laboratory analyses indicating that the groundwater quality at the site has been degraded. The laboratory report is included in Appendix C and the analytical results are summarized in Table 4.

Total-1,2 dichloroethylene was detected in the groundwater samples from the monitoring wells by Concentrations of total-1,2 dichloroethylene Method 601. ranged from 1.1 ug/l in the sample from well MW-1S to ug/l in the sample from well B-6. The concentrations total-1,2 dichloroethylene exceed the NYSDEC standard of 5 ug/l in each sample, with the exception of the sample from well MW-1S (NYSDEC, 1990). Total-1,2 dichloroethylene was detected in the field blank ug/l), but was not detected in the method blank.

Trichloroethylene was detected by EPA Method 601 in all of the samples from the monitoring wells, with the exception of wells MW-1S and MW-2S. Concentrations of trichloroethylene detected by the EPA Method 601 analyses ranged from 17 ug/l in well MW-2D to 910 ug/l in well B-6.

Concentrations of trichloroethylene detected in each of the samples, with the exception of wells MW-1S and MW-2S (none detected) exceeds the NYSDEC groundwater quality standard of 5.0 ug/l (NYSDEC, 1990). Trichloroethylene was detected in the field blank (1.7 ug/l), but was not detected in the method blank.

Analytical results indicate that 1,1 dichloroethene (1.0 ug/l) and 1,1 dichloroethane (0.52 ug/l) were detected in the groundwater sample from well MW-4S by EPA Method 601. These concentrations are below the NYSDEC groundwater quality standard of 5.0 ug/l for each compound (NYSDEC, 1990). These compounds were not detected in the field blank or method blank.

Benzene was detected in the groundwater samples from wells MW-1D, MW-11D, B-2 and B-6 by the EPA Method 602 analyses. The concentrations of benzene detected in these samples ranged from 0.56 ug/l in the sample from well MW-11D to 0.86 ug/l in the sample from well B-2. The concentrations of benzene detected in these wells exceed the NYSDEC groundwater standard of none detected (NYSDEC, 1990).

An Isoconcentration Plan was constructed for the August 6, 1991 sampling event (see Drawing No. 4, Appendix A). The concentrations are presented as the sum of total-1,2 dichloroethylene and trichloroethylene.

4.4 Potential Sources

The site of this investigation is a portion of the former General Cable manufacturing facility. The facility began operations in the early 1900s as Rome Wire Company, and became the General Cable Company in 1927. Buildings or property presently owned by several nearby businesses were once part of the General Cable complex. These properties include the HESS Oil terminal, Hubbard Tool and

Die, Mosca Brothers Moving and Storage, Canterbury Press, and the holdings of Mr. George Rossi and Mr. Charles Gaetano. At the time of its closing in 1972 General Cable's operation was limited to the building immediately adjacent to the north side of the proposed power plant site.

Numerous underground utility lines are reportedly present at the site. A complex of storm sewer lines is present throughout the former General Cable complex, with three discharge lines to the barge canal (see Drawing No. 5). A municipal water line enters the complex at the east side along the northern side of the Hess terminal. Underground tunnels are present which carried steam from the boilers at the center of the complex to the General Cable buildings.

A visual inspection was made of portions General Cable. the former General Cable building in order to the potential that hazardous materials had been used or impact disposed of which would have an environmental the proposed power plant site. The inspection was carried out by a representative of Empire Soil, Mr. Charles Henry Mauer (former Gaetano (the present site owner), Mr. superintendent of the facility for General Cable), and Mr. Bob Viscome (the site manager for Gaetano Realty Corp.).

General Cable ceased production at this site in 1972: The building has been vacant since the plant closed except for a portion of the building which was rented to Precision Castings, a golf club manufacturer. A fire occurred in the portion of the building rented by Precision Castings and the company went out of business after occupying the site for approximately two years.

Mr. Mauer was not aware of the use of any solvents at the site while he was employed there. He reported that muriatic (hydrochloric) acid was used to clean the copper The acid was recycled in a small buildused in the wire. ing at the west side of the site (see Drawing No. 5). It was reported by the site manager that acids were found in apexcavation in the vicinity of this a former em-Mr. Sten Boustedt, proximately 3 years ago. reported that acid had once been ployee of General Cable, discovered in a steam tunnel adjacent to this building.

Underground fuel oil tanks are located at the north side of the main General Cable building adjacent to boiler room for the facility. According to Mr. Neil Carrier of the NYSDEC (Utica Petroleum Spill office) tanks are not registered and have not been investigated. tanks were reportedly used for the storage These The large above ground oil tank located fuel oil. the barge canal was used for the storage fuel oil, with transfer lines connecting it to the boiler The transfer lines appear to be disconnected and room. An undetermined quanaccess ports to the tank are open. tity of water is present at the bottom of the tank.

An oil spill was reported to the NYSDEC approximately three years ago as a result of the discovery of petroleum in the manhole at the northwest side of the proposed power plant site (see Drawing No. 2). The spill was reportedly remediated by NYSDEC personnel.

Electrical transformers containing PCB oils were removed from the site approximately one year ago. These transformers were located at the northwest side of the General Cable building near the fuel oil tanks. It is not known whether PCBs were released to the environment.

All major mechanical equipment has been removed from the building. Pits associated with furnaces at the southwest side of the building were filled with sand by Mr. Gaetano. Other open areas beneath floor elevation were

observed during the inspection. Water was observed in some of these pits and catch basins.

Mr. Mauer reported that the concrete paving at the south side of the building was installed in the 1940s during World War II, and that the area was used to store bulk copper. Prior to this time this area was also used for coal storage.

According to Mr. Boustedt underground tanks were also located in basements within the facility for the mixing and heating of "drawing dip". This material consisted of lubricants which were used on the dies during the process of drawing copper into wire. This lubricant also contained copper which would flake-off during the drawing process.

Above and below ground tanks were reported by Mr. Boustedt to have been used by the enamel department of the facility for coating wire coils. These tanks were located near the present Canterbury Press building.

Extensive machine shops were once present at the facility for the manufacturing of dies for the copper wire. (Chlorinated solvents are commonly used as cleaning agents in machine shops.) At the time of the plant closure the machine shop was located in a small building which is now on the Mosca Moving Company property.

Other Vacant General Cable property. To the northeast of the General Cable building closed in 1972 are other former General Cable properties owned by Mr. Gaetano. A portion of a building has been renovated and is presently used as a garage, with a small office fronting Railroad Street. A portion of this property is vacant where the buildings have been torn down. All of the remaining buildings are in poor condition (except for the restored section). Piles of demolition debris are present in some areas, and

empty drums are present in various places around the facility. Due to the age and generally poor condition of the drums no indications could be found of their original contents. A small empty drum labeled trichlor-trifluromethane - Barcon 13 was found in the wooded area along the barge canal.

The Selway company owns two buildings Selway Furniture. are used for the production of wooden cabinets. Selway began operations at the site between 1965 and the former General Cable garage. The main (western) building owned by Selway was reported to have been formerly as a warehouse by Carls Drug Company. Drums were observed on the loading dock of the main (western) buildincluded "Nelsonite" wood stabilizer Labels and ing. "conversion varnish".

Jim Perry reported that The plant manager, Mr. usual odors have been detected associated with the floor drain in the loading bay at the south end of These odors occurred in the spring during sevbuilding. eral successive years and that they were drawn in throughbuilding due to the ventilation system building. These odors were reported to the City Fire Dewith determined that they were not potentially partment, explosive. They were also reported to the NYSDEC, which could not determine their source. Mr. Perry reported that several workers felt ill due to these vapors. drain is downgradient of former General Cable buildings to the north (see Drawing No. 5).

<u>HESS Terminal</u>. The site of the HESS oil terminal was purchased from General Cable. Three above ground bulk oil storage tanks are present at the site which were reported by the HESS site manager to have been constructed between

1961 and 1962. The site was closed for petroleum storage by HESS approximately one year ago, however it is HESS personnel. maintained by The site was reportedly by General Cable as disposal site where scrap insulation was burned. Three groundwater monitoring wells are present at the site. According to the site manager petroleum concentrations in groundwater from these wells does not exceed NYSDEC standards, however drillers groundwater samplers have reported that the water in the wells is unusual, implying that other compounds may be present.

Tool and Die. The Hubbard Tool and Die Company Hubbard started between 1963 and 1965 by a former Cable machinist (Fritz Hubbard), and provided machine shop services to General Cable. A small brick building next to the machine shop was observed to contain several drums including cutting oils and 1-1-1 trichlorochemicals, ethane. These materials are commonly used in The presence of citrus-based solvents was noted in the machine shop.

This building is located at the Canterbury Press. side of the General Cable building. Drums of were stored along the fence bordering General Cable. tents included:

- o Superkleene IC o Ecolo-Clean o Prisco Autowash X

The contents of "Prisco Autowash" were listed on the drum aliphatics, aromatics, creosol, and phalate. The southern end of the Canterbury building is occupied by the Kynex Corp.

An inspection was not made of the former Rossi Building. General Cable building owned by Mr. George Rossi. and pails were observed on the loading dock at the rear of this building. Labels included:

- o SPRA Cure White o Spect o Low T Bleach

Other Buildings and Facilities. Revere Copper Company operated a manufacturing facility at the northwest side of A "heavy equipment" manufacturing facility side. owned by the Pettibone Company formerly occupied a building to the northeast of the site on Dominic Avenue. Neither of these properties were investigated during this The City of Rome Public Works Department garage is located northwest of the site on property formerly by General Cable. A petroleum spill investigation is currently underway at this site, however the water table for that investigation indicates that the direction groundwater flow is to the southwest, away from the ject parcel of this investigation.

No obvious source for the chlorinated Conclusions. the groundwater at the site was found pounds in investigation. A review of historical maps of site showed that machine shops were present in the General Cable building upgradient of the proposed power No information could be found regarding the use, or disposal of solvents at the site. 111 trichloroethane was observed at the Hubbard Tool and Die facility, however this site is hydraulically cross-gradient of the monitoring well network.

network of storm sewer lines and underground steam tunnels may act as a conduit for migration of taminants throughout the former General Cable

complex. It is possible that groundwater quality at the proposed power plant site may have been affected by contaminants which have migrated from present or former industrial sites through this system. A review of a plan of the storm drain system indicates that drain lines from the Canterbury Press, the Rossi Building, and some of the General Cable buildings owned by Mr. Gaetano converge in an area hydraulically upgradient of the proposed power plant site (see Drawing No. 5). Groundwater contamination through leaks in the storm sewer system could occur if contaminants are present in the sewer lines.

4.5 Potential Receptors

The potential receptors of contaminated groundwater and soil vapors were identified in order to evaluate the impact to human life and/or the environment associated with soil and/or groundwater contamination at the site. Potential receptors include public and private water supply wells, commercial and residential structures with basements, surface water bodies, and underground utilities (sanitary and storm sewers, water and gas lines).

There are no known public or private groundwater supply wells downgradient of the site. The water for the commercial and residential properties in the vicinity of the site is supplied by the City of Rome.

Locations of businesses in the area of the site are shown on Drawing No. 5. Properties located in the surrounding the site are used for general manufacturing (industrial). Buildings with basements are of concern due to the potential for impact caused by volatilization contaminants in the groundwater. However, groundwater flows south towards the Barge Canal and are no occupied structures between the site and the Barge there is little likelihood that basements downIndependent Power Plant Rome, New York

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gradient of the site __ ___ __ any contamination from the site.

Surface water bodies which could potentially become contaminated by the groundwater from the site include the barge canal. Groundwater in the vicinity of the site discharges into the barge canal which is located approximately 20 feet south of the site.

As-built drawings of the area indicate that there are utilities (storm and sanitary sewers, catch basins, water and natural gas lines) at the site. Underground utility lines are of concern because they may serve as conduits for the migration of contaminated groundwater and/or vapors. Although no invert elevations were available for these utility lines, the depth of the groundwater (approximately 10 to 15 feet below the ground surface) would minimize the potential of these lines or their excavations acting as conduits for groundwater.

4.6 Construction Considerations

The Geotechnical Engineering Evaluation for the proposed power plant (Empire Soils, August 1991) that structurally unsuitable materials found beneath foundations would need to be excavated and replaced with structurally sound materials. The materials identified for removal included fill and may include natural soils which are unsuitable or must be removed to create a uni÷ Based on the proposed foundation design, form grade. soils will not be excavated beyond 6 feet below grade the vicinity of boring B-16. The final determination the depth of excavation will be made in the field by a qeotechnical engineer during the excavation for the Groundwater is expected to be below dations. the ticipated depth of construction at the site.

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CONCLUSIONS 5.0

- The soils encountered in the borings at the site are composed of fill materials overlying a brown silt unit. Below the brown silt unit, a sand unit with varying amounts of gravel, silt and clay was encountered. A gray silt unit was encountered below the sand unit. The natural soils are interpreted to be alluvial deposits. its.
- Bedrock was not encountered in any of the borings.
- Based upon the Water Table Map constructed for the August 6, 1991 monitoring event, the local direction of groundwater flow is to the south towards the Barge Ca-
- Concentrations of the metals detected in the soil samples from borings B-12, B-14 and B-16 were below the EPA regulatory levels, with the exception of lead. Lead (100 mg/l) was detected in one sample (S-4) from boring B-16 above the EPA regulatory level of 5 mg/l.
- Soil samples analyzed from borings B-12 through B-16 using EPA Methods 8010 and 8020 did not contain concentrations of purgeable halocarbons or purgeable aromatics above the detection limits of the analyses, with exception of methylene chloride in all the samples and trichloroethylene (100 ug/l) in the sample from a trichloroethylene (100 ug/l) in the sample from boring B-14. The concentrations of methylene chloride boring B-14 the soil samples and the method blank detected in all the soil samples and the method blank were most likely caused by laboratory interference.
- Each of the groundwater samples analyzed by EPA Method 601 contained concentrations of total-1,2 dichloroethylene above NYSDEC groundwater quality standards, with the exception of the sample from well MW-1S.
- Each of the groundwater samples analyzed by EPA Method 601 contained concentrations of trichloroethylene above NYSDEC groundwater quality standards, with the exception of the samples from wells MW-1S and MW-2S.
- Groundwater samples analyzed by EPA Method 602 did not contain concentrations of purgeable aromatics above detection limits, with the exception of benzene. Concentrations of benzene were detected in the groundwater trations of benzene were detected in the groundwater samples from monitoring wells MW-1D, MW-11D, B-2, and samples from monitoring wells MW-1D, MW-11D, B-2, and B-6 above NYSDEC groundwater standard/guidance values.
- Potential receptors of contaminated groundwater at site include groundwater and surface water bodies draulically downgradient of the site (to the south).
- There are no known public or private groundwater supply wells in the hydraulically downgradient direction of the site.
- Soil vapors and contaminated groundwater may be migrating off-site towards the south. 0

o No obvious source for the chlorinated compounds in the groundwater at the site was found during this investigation. The direction of groundwater flow and distribution of chlorinated solvents indicates that the source is to the north of the proposed power plant property.

6.0 REFERENCES

Empire Soils Investigations, Inc. Phase I Environmental Site Assessment, August, 1990.

Empire Soils Investigations, Inc. Geotechnical Engineering Evaluation, August, 1991.

NYSDEC, 1990. Ambient Water Quality Standards and Guidance Values, Division of Water Technical and Operational Guidance Series 85-W-38.

Respectfully submitted,

EMPIRE SOILS INVESTIGATIONS, INC.

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Karen Seitz / Hydrogeologist

Bruce Coulombe Manager of Environmental Services

TABLES

TABLE 1 ORGANIC VAPOR READINGS INDEPENDENT POWER PLANT ROME, NEW YORK GTA-91-40B

SAMPLE NUMBER	MW-1S	MW-10	MW-2S	MW-2D	MW-3s	MW-3D	MW-4S	MW-4D	MW-11D	B-12	B-13	B-14	B-15	B-16
1 2 3 4 5 6 7 8 9 10	<1 4 <1 <1	4 <1 <1 <1 <1 <1 <1	<1 <1 <1 <1	5 4 2 2 2 2 <1	<1 <1 <1 <1 <1 <1	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	3 3 3 1 1 1 1 1 1	2 3 3 3 2 6 5 5 6	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	4 4 4 4	1 1 1 1 1	<1 <1 <1 <1 <1 <1	1 1 4 4 4	4 4 4 10

- NOTES:

 PHOTOIONIZATION DETECTOR WAS CALIBRATED TO 61 ppm ISOBUTYLENE.
 CORRECTION FACTOR FOR TRICHLOROETHYLENE IS 0.787 MULTIPLIED BY ACTUAL READING.
 ALL READINGS TAKEN USING A PHOTOIONIZATION DETECTOR (HNU).
 ALL READINGS IN ppm.
 FOR SAMPLE DEPTHS, SEE SUBSURFACE LOGS IN APPENDIX B.
 --- NO READING TAKEN.

TABLE 2 SURVEY AND GROUNDWATER ELEVATIONS INDEPENDENT POWER PLANT ROME, NEW YORK GTA-91-40B

and the second	MW-1S	MW-1D	MW-2S	MW-2D	MW-3s	MW-3D	MW-48	MW-4D	MW-11S	MW-11D	B-2 ========	B-6 ======
GROUND SURFACE ELEVATION	99.03	99.06	98.36	100.19	100.15	100.25	97.08	97.18	99.93	99.82	99.69	99.17
REFERENCE ELEVATION	101.56	101.55	98.38	102.27	100.13	102.24	96.79	97.08	102.17	102.28	101.71	101.20
DATE				or 70	86.96	87.20	87.37	86.73	86.82	86.86	86.73	85.93
08-06-91	85.48	86.17	86.63	85.39	00.90							

NOTES:

- ALL GROUNDWATER ELEVATIONS ARE REFERENCED TO THE TOP OF PVC, EXCEPT MW-11S, WHICH IS REFERENCED TO THE TOP OF THE GUARD PIPE.

TABLE 3 SUMMARY OF ANALYTICAL RESULTS SOIL SAMPLES INDEPENDENT POWER PLANT ROME, NEW YORK GTA-91-408

ANALYTICAL METHOD	COMPOUND/METAL	B-12 (S-5)	B-13 (S-5)	B-14 (S-5)	B-15 (S-5)	B-16 (S-2)	B-16 (S-4)	B-16 (S-5)	METHOD BLANK	EPA LIMIT
EPA METHOD 8010 (ug/kg)	METHYLENE CHLORIDE TRICHLOROETHENE	180 <50	190 <50	190 110	190 <50			220 <50	110 <50	
EPA METHOD 8020 (ug/kg)		ND	ND	ND	ND			ND	ND	
TCLP METALS (mg/l)	BARIUM CADMIUM LEAD	0.31 ND ND		0.27 ND ND		 ND	2.94 .22 100		ND ND ND	100 1.0 5.0

NOTES:

ONLY COMPOUNDS OR METALS DETECTED ARE LISTED.

ND - NONE DETECTED.

--- - NOT TESTED.

Ug/kg - MICROGRAMS PER KILOGRAM.

mg/l - MILLIGRAMS PER LITER.

SUMMARY OF ANALYTICAL RESULTS
GROUNDWATER SAMPLES
INDEPENDENT POWER PLANT
ROME, NEW YORK
GTA-91-408

ii														#ETHOO	FIELD
ox	TICAL	MW-1S	MW-10	HW-2S	M4-20	NM-38	MV-3D	M-48	MM-40	Mu-11S	HA-110	8-2	B-6	BLANK	BLANK
1.1 ON		16 11 12 11 11 11 11		:: :::::::::::::::::::::::::::::::::::	11 11 11 11 11 11 11	 	*		*	*	*	*	*		
QX	ABLE HALOCARBONS	4	* 850	* 29	167	221	750	59.52	240	830	1,060	240	1,540	2	2.59
Q.	בוויס סמו לפני	•									‡	‡	ŧ		
2	ABLE AROMATICS		* c	S	S	9	9	웃	2	ð	0.56	9.86	0.74	윷	Q.
	ETHOD 602 (Ug/1)	2	2	2									: : : : :	· · · · · · · · · · · · · · · · · · ·	 -

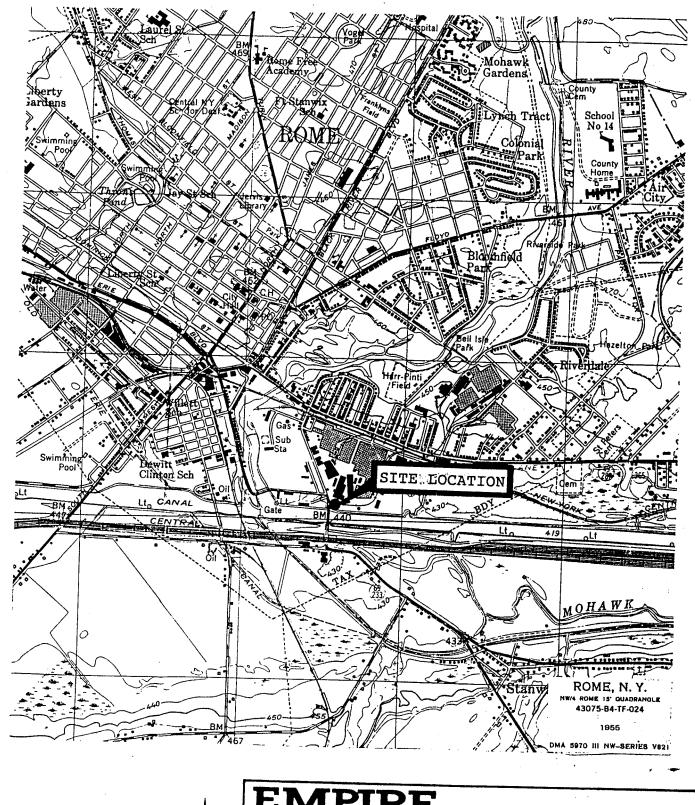
ALL CONCENTRATIONS ARE SUM TOTALS OF NOTES:

REPORTED VALUES.

SAMPLES WERE OBTAINED ON 08/06/91.
CONCENTRATION EXCEEDS NYSDEC GROUNDWATER STANDARDS FOR 1,2 DICHLOROETHYLENE AND/OR TRICHLOROETHYLENE (5 ug/l).
CONCENTRATION EXCEEDS NYSDEC GROUNDWATER STANDARDS FOR BENZENE (NONE DETECTED).

NONE DETECTED. MICROGRAMS PER LITER. 矣

APPENDIX A



EMPIRE SOILS INVESTIGATIONS INC

CONSULTING GEOTECHNICAL ENGINEERS & GEOLOGISTS

SITE LOCATION PLAN
ENVIRONMENTAL SITE ASSESSMENT-PHASE IT
MILL ST.
ROME, NEW YORK

APPENDIX B

DATE STAR FINIS HEET	HED	8 1	-01- -01- _OF_	-91 1			VIPIRE INVESTIGATIONS INC. SUBSURFACE LOC	G. W. DEPTH See Notes
PROJEC	T _		nder TA-9				Plant LOCATION Rome, New	V YORK
SAMPLES	SAMPLE NO	0 6	BLOW SAMP		z	Sample Recovery (Inches)	TEACCILIC ATIONI	GuardpipeNOTES with Lock
							FILL: Brown SILT, Some fine-coarse Sand & Gravel, brick chips & cinders	Schedule 40 2" PVC Riser Pipe
5-7	1	2	3	2	6	6"		Bentonite Seal
°-7	2	7	2 2	2	4	6"	Brown fine-coarse SAND, Some Silt, little fine-coarse gravel, trace clay (Moist-Loose)	3Q Sand
5	3	5	6 5	6	11	6"	becomes(Wet-Firm)	Screen
0 - /	4	7	1 1	2	2	6"		Natural AAAAA Fill AAAA
5							Boring Terminated at 22.0'	Reference Elevation Top of PVC 101.56' Groundwater at 85.48' on 8-6-91.

FIN	1151	HED	8	3-01 3-01 OF	-91		SOILS	INVESTIGATIONS INC. SUBSURFACE LOG	3	
RO	JEC	Τ_			pend 91-0			Plant LOCATION Rome,	New York	
O DEFINITION	SAMPLES	SAMPLE NO	0 6	SAM	VS ON IPLER 12 18-	N	Sample Recovery (Inches)	SOIL OR ROCK CLASSIFICATION	GuardpipeNC with Lock—)TES
								CONCRETE 0.5' FILL: Brown SILT, Some fine-coarse Sand & Gravel, brick chips		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
5	/	1	2	2 2	2	4	12"	(Moist-Loose)		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	/	2	6	3 2	2	5_	NR		Grout with Natural Fill	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	/-	3	8	5	5	10	6"	Brown fine-coarse SAND & GRAVEL, little silt (Wet-Loose)		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
) - - -	/-	4	1	1	1.	2	6"	Brown fine-coarse SAND, little silt, trace fine gravel (Wet-Loose)		
<u>-</u> -// -	/-	5	4	9	24	24	12"	grades to little fine-coarse gravel becomes Gray, (Firm)	Bentonite Seal ————————————————————————————————————	
1		6	24	100	/.1'		12"	cobbles encountered	Pipe ————————————————————————————————————	
1	/ 	8	10	16 15 6 6		31	6"	Brown fine-coarse SAND, little fine gravel, trace silt (Wet-Compact) 34.0' cobbles encountered becomes (Firm)	.01" Slotted Screen	
				•		-				

DA1		RTED		-01-			E	VIPIRE INVESTIGATIONS INC.	SURSUDEA	CELOC	HOLE NO.	MW-1D
		SHED		-01- OF.		-			ODSOKIA	CE LOG		See Notes
			Iı	ndep			Power	Plant	LOCATION	Rome, Nev	W York	
DtP1H-FF	SAMPLES	SAMPLE NO	0/	SAM	12/	N	Sample Recovery (Inches)	SOIL OR CLASSIFIC			NO	TES
40 =	1	9	4	6 5	18		<u>ωæ∵</u> 6"	Gray SILT, Some Cl	ay, little		atural ill	Δ. Δ. Δ.
-					J			Boring Terminated	at 42.0'		eference E	
45-											roundwater n 8-6-91.	at 86.17
-												
-												_
_												
_								.*				
_												
	,											
_	1	-										
												 - -
_	-				-							
	-											- -
								" with 140 lb. pin wt. falli				
								_" withlb. weight falli . Hollow Stem Auger		ow	Geo	logist

· · · · · · · · · · · · · · · · · · ·			····							
1	RT ISH	ED IED		3-02 L_OF	2-91 2-91 1				CATIONS INC. SUBSURFACE LOC	HOLE NO. MW-2S SURF. ELEV. 98.36' G. W. DEPTH See Notes
PROI	ECT	г			pend 91-0			r Plant	LOCATION Rome, Ne	w York
DEPTH-FI	SAMPLES	SAMPLE NO	%	SAM	VS ON PLER 12 18	2 2	Sample Recovery (Inches)		SOIL OR ROCK CLASSIFICATION	NOTES
								FILL: GRAVEI	CONCRETE 0.5' SILT, fine-coarse SAND &	Curb Box with Locking Cap Crout
-10	1	1	4	5 6	10	11	12"	Brown clay	SILT, Some fine Sand, trace (Damp-Loose)	Bentonite Seal Schedule 40 2" PVC Riser Pipe
-/	1	2	28	28	9	56	4"	Brown little	fine-coarse SAND & GRAVEL, silt (Damp-Very Compact)	3Q Sand
15		3		3 13	9	16	6"		fine-coarse SAND & GRAVEL, ilt, trace clay (Wet-Firm)	
		4	5	7 5	12	12	4"		(Wet-Firm)	Natural AAAA Fill AAAA
25					2				Terminated at 22.0' 140 lb. pin wt. falling 30 "per blow. CLASS	Reference Elevation Top of PVC 98.38' Groundwater at 86.63' on 8-6-91.
							on		150 b. pin wt. falling 30 "per blow. CLASS 150	Geologist

Hollow Stem Aug

								1		
DAT	E						777	ADTDE	HOLE NOMW-2D	
S.	AF	RTED	8	3 - 02	- 91		50,4	PIRE SINVESTIGATIONS INC. SUBSURFACE LO	G SURF. ELEV100.19'	-
FI	NIS	SHED		3-02	- 91		SOM	30B30RIACE EO	1	_
SHE	ΕT			L OF.	1				G. W. DEPTH <u>See Note</u>	5
PRC)1F	CT _	:	Inde	pend	lent	Power	plant LOCATION Rome, Ne	w York	_]
	, -				91-0					_
=	T	T =					T 5	T		
DEPTH-FT	SAMPLES	ON 1			VS ON IPLER		very very nes	SOIL OR ROCK	GuardpipeNOTES	
DE P.1	SAM	SAMPLE	0	6	12/	1 N	Sample Recovery (Inches)	CLASSIFICATION	with Lock	l
F 0=	 	1 0	1 6	12	18.	 	NE-	CONCRETE 0.5'	Grout with	
-	1	-	-	-		├		FILL: Brown SILT with fine-coarse	Natural Fill	H
-	1	_	 	 	-	-		SAND & GRAVEL		
-					ļ		<u> </u>			
_	1									
5	7	1	. 3	4	 			Brown SILT, little fine SAND, trace		
-	/			4	5	8	6"	clay (Damp-Loose)		Ц
_										-
_			<u> </u>	<u> </u>		<u> </u>			Schedule 40	ΙЦ
-10-	ļ.,			ļ	ļ				2" PVC	
_	1/	2	4	6	ļ	-		becomes (Firm)	Riser Pipe	H
_	<u>/_</u> .			8	10	14	4"			
_			1	ļ		ļ				
_		ļ			ļ					Н
15-	-	3	3	5	-			Brown fine-coarse SAND & GRAVEL,	Bentonite 2	Н
		-3	3	7	7	12	6"	Some Silt	Seal -	Н
-	_		 	<u> </u>	 	12	-	(Wet-Firm)		П
-			_							П
-									3Q Sand	
-20 -	7	4	3	5						
_	V	-		5	6	10	6"	becomes (Loose)		Ш
									.01" Slotted Screen	Ц
_										Ш
25					ļ					+
_		5	4	7	ļ			be:omes(Firm)		Н
_	_			6	4	13	NR			Н
_	_			-	-					H
		6	3	3	3	6	18"	Gray SILT, Some Clay, little fine sand (Wet-Loose)		Н
-30-	/	7	4	6	3		10	Sand (1100 Hoose)	Natural ASA S	
	/			5	4	11	12"	becomes (Firm)		
_	7	8	11					Gray fine SAND, Some SILT, little	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	П
	/			20	24	35	12"	clay, trace fine gravel (Wet-Compact)	17 (74)	
35-								Boring Terminated at 34.0'	Reference Elevation .	Щ
	1							-	Top of PVC 102.27'	Н
_									Groundwater at 85.39'	·Η
_									on 8-6-91	Н
_										Н
40_				<u> </u>	<u> </u>	<u> </u>			1	للــــ
								"with 140 lb. pin wt. falling 30 "per blow. CLAS	SIFICATIONVisual by	
] = N	o l	blow	to d	rive		_" cas	ing		Geologist	
							11-11	[.D. Hollow Stem Augers		

DAT	E					1	7	ATT	75.47 E-1			
ST	'AR1	ED	7	-30	-91		上		PIRE GATIONS INC. SUBSURFACE LOG	HOLE NOMW-3S		
}		HED	-	-30			SOILS	INVEST	GATIONS INC. SUBSURFACE LO	G SURF. ELEV		
1				OF.	1	_				C. W. DEPTH See Notes		
								-1				
PRO	JEC	Τ_					Power	Plant	LOCATION Rome, N	lew York		
			G	TA-9	91-0	40B						
_	_\	Q		BLOW	/S ON		0 27.00					
DEPTH-FT	SAMPLES	2		SAM			p Me		SOIL OR ROCK	NOTES		
DEP	3	SAMPLE	0/6	6/	12/	N	Sample Recovery (Inches)		CLASSIFICATION			
F 0=			<u> </u>	12	18-		<u>Голи, О</u>		COVERTED OF L	Curb Box		
-	-				 		 -	-	CONCRETE 0.5'	with		
-				ļ				GRAVEI	SILT, fine-coarse SAND &	Locking Cap		
-								GRAVEI	# 	Grout V		
-	╁											
5-	/ }	_1	2	3	5	7	18"	ł	SILT with trace fine-coarse			
-	+			4	3	- ' -	10	sand	(Damp-Loose)	Bentonite		
-										Seal -		
										Schedule 40		
	7	2	3	3		ļ <u>-</u>		grades	to Some fine-coarse Sand	2" PVC Riser Pipe		
-10-	/			2	4	5	18"					
	7	3	3	4					12.0'	3Q Sand		
	/			4	4	8	24"	Grav S	ILT, little clay			
	7	4	1	3					(Damp-Loose)	.01" Slotted		
15	/			3	2	6	18"	<u> </u>	14.7'	Screen -		
15-	7	5	2	2				Gray S	ILT, Some Peat			
7	/ [2	2	4	24"	arades	(Moist-Loose) to little peat			
1 7	7	6	11	4				grades	co ilucie peac			
	/ [4	4	8	12"		18.8'			
-20-								_	ine-coarse SAND & GRAVEL,			
									tle silt (Wet-Loose)	Reference Elevation		
								Boring	Terminated at 20.0'	Top of PVC 100.13'		
										Groundwater encountered		
										at 10.0'.		
25									·	Groundwater at 86.96'		
[2]										on 8-6-91.		
	L											
	L											
├	_	_										
	-	_								·		
	_	_										
	-											
	_											
-	-									1		
4	-											
4	-											
-	-	-+								·		
4	-	+										
N = NC	o bl	ows	to dr	ive	2	" spo	on12	" with_ <u>_</u>	40 lb. pin wt. falling 30 "per blow. CLAS			
C = No	bl	OWN	to dri	ve		' cası	ng	" with	lb. weight falling"per blow.	Geologist		
METHO	DD (DE IN	NVES	TIGAT	NOIT	4	1 ₄ " I.I	D. Holl	ow Stem Augers			

DATE STA	RTEC	' —	7-31				MPIRE	11011110.	MW-3D
FIN	SHEE		7-31	-91		SOILS	SINVESTIGATIONS INC. SUBSURFACE LOG	l l	.00.25'
HEET			1OF.	1				G. W. DEPTH	ee Notes
ROII	CT		Inde	pend	dent	Power	r Plant LOCATION Rome,	New York	
			GTA-	91-0	040E	3			
. T.	c g	T	8LOV	vs on		100 200		T	
TARILLE OF	BLE N		SAM	PLER	,	Sample Recovery (Inches)	SOIL OR ROCK	NOT	ES
	SAMPLE	0/6	6/12	12/18	N	Sam Rec (Inc	CLASSIFICATION	Guardpipe with lock	
T	Ī	1			Ī		CONCRETE 0.5'		7
٦							FILL: Silt & fine-coarse SAND &		
							GRAVEL, brick chips	Grout with	
								Natural Fill —	73 73
٦			1						3 3
	/	1 2	2				Brown SILT, little fine sand, trace		
\mathcal{J}			3	4	5	12"	clay		
							(Damp-Loose)		
$\sqrt{}$							·	g_1, 3, 1, 40	
	/ 2	2 3	4				becomes (Wet)	Schedule 40 2" PVC	
1			4	5	8	12"		Riser Pipe	
\int									
-									> >
<i>ا</i> ل		2	3				Dark Gray SILT, Some Peat, trace		
\mathbb{Z}			4	4	7	18"	clay (Moist-Loose)		
							(MOISC-LOOSE)		
\Box	4	8	15				Gray fine-coarse SAND & GRAVEL,	Bentonite	
\mathcal{I}			21	16	36	18"	little silt	Seal -	
	5	38	16				(Wet-Compact)	3Q Sand	
\rfloor			15	13	31	18"	becomes (Firm)	~	
J /	6	3	5						
1			15	22	20	12"	Cobbles encountered, becomes Compact	.01" Slotted	
1/	7	10	15					Screen ———	
1	 	<u> </u>	40	20	55	12"	becomes (Very Compact)		
4/	8	12					20.01		
<u> </u>			27	15	55	6"	30.0'		
4/	9	12	8				Gray SILT, Some fine Sand, little		
1			2	6	10	12"	clay (Wet-Firm)		
1/	10	6	3						
1			3	5	6	18"	becomes (Moist-Loose)	** ·	
H/	11	5	3					Natural Fill 	A A A A
1	ļ		_ 3	7	6	12"			A. L. A
_								Reference Ele	
								Top of PVC 10	
		, ,						Groundwater a	it 87.20'
1								on 8-6-91.	_
No	hlow	c to d.	ive :	2	" cno	on 12	2" with 140 lb. pin wt. falling 30 "per blow. CLAS!	SIEICATION VISI	al by
	.,,				, spu	~··	per blow. CLAS:	,,,,c/,,,O/,	

DAT	Ε						7777	AT		
ST	TAR	RTED		7-26	-91			VIL	TIRE SATIONS INC. SUBSURFACE LOG	HOLE NO. MW-4S
FI	NIS	SHED		7-26	-91		SOILS	INVESTIC	SUBSURFACE LO	SURF. ELEV. <u>97.08</u>
SHE	ΕT		1	OF.	1					C. W. DEPTH See Notes
						l	Power	Plant	Rome N	lew York
rkc)	LI _			1-04		1001		LOCATION Rome, N	
										
14-	ES	Q			VS ON PLER		le sry		SOIL OR ROCK	
DEPTH-FT	SAMPLES	SAMPLE	0/	16/	12/	1	Sample Recovery (Inches)		CLASSIFICATION	NOTES
·	1	\ \S	6	12	18.	N	LE W.T.			
_	Ļ,	ļ				_		ļ		Curb Box yith
_	1/	1	4	3	 		ļ	7	ILT, fine-coarse SAND &	Locking cap
_	۲,			3	5	6	18"	GRAVEL		
	//	2	4	5		7.4	18"		5.0'	Grout
5-	1	3.	1	9	6	14	19	Brown (
	/	3	1	3	4	5	18"		SILT, little gray clay, trace parse sand	Bentonite /
	7	4	3	4	 	 			(Damp-Loose)	Seal Seal
-	/			5	5	9	18"			Schedule 40
- -10	7	5	3	3						2" PVC Riser Pipe
				4	4	7	18"	grades	to Some fine-coarse Sand	
-		6	4	4						.01" Slotted
_	\angle			5	5	9	18"	becomes	(Moist)	Screen -
		7	_1	1					14.0'	
15	//			1	1	2	18"		LT, Some fine-coarse Sand,	3Q Sand
-		8	1	1		2	12"	little	<pre>fine-coarse gravel (Wet-Loose)</pre>	
-	4	9		1	1	2	12		(Wet-moose)	
	/	- 9	1	1 	27	3	6"		19.0'	
-	7	10	10	8				Grav fi	ne-coarse SAND & GRAVEL, Some	
20-	/			8	15	16	6"	Silt	(Wet-Firm)	
7								Boring	Terminated at 21.0'	Reference Elevation
٦								,		Top of PVC 96.79'
										Groundwater at 87.37'
25										at 8-6-91.
_	-									
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4	-									
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4	-									
\perp										·
= No	o b	lows	to dri	ve	2	" spo	on_12	_" with_ <u>14</u>	O lb. pin wt. falling 30 "per blow. CLASS	SIFICATION Visual by
									lb. weight falling "per blow.	Geologist

STARTED 7-29-91 FINISHED 7-30-91 SHEET 1 OF 2 PROJECT Independent Power Plant GTA-91-040B SOILS INVESTIGATIONS INC SUBSURFACE LOG SURF ELEV. 97.18' G. W. DEPTH See Note CLASSIFICATION SOIL OR ROCK CLASSIFICATION SOIL OR ROCK CLASSIFICATION SOIL OR ROCK CLASSIFICATION FILL: SILT, fine-coarse SAND & With Locking Cap The state of the sta
SOILS INVESTIGATIONS INC SHEET 1 OF 2 PROJECT Independent Power Plant GTA-91-040B SOIL OR ROCK CLASSIFICATION CONCRETE 0.5' SAMPLER GRAVEL FILL: SILT, fine-coarse SAND & Locking Cap FILL: SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout SUBSURFACE LOG SURF. ELEV. 97.18' G. W. DEPTH See Note C. W. DE
SHEET 1 OF 2 PROJECT Independent Power Plant GTA-91-040B SOIL OR ROCK CLASSIFICATION CONCRETE 0.5' Curb Box with Locking Cap GRAVEL FILL: SILT, fine-coarse SAND & GRAVEL GRAVEL Gray Company Cap Grout
PROJECT Independent Power Plant LOCATION Rome, New York GTA-91-040B SOIL OR ROCK CLASSIFICATION O 6 12 12 18 N DOLL CONCRETE 0.5' Curb Box with Locking Cap FILL: SILT, fine-coarse SAND & With Locking Cap The state of the
SOIL OR ROCK CLASSIFICATION SAMPLER O O O O O O O O O O O O O
CONCRETE 0.5' Curb Box with Locking Cap 1 1 2 Brown SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout
CONCRETE 0.5' Curb Box with Locking Cap 1 1 2 Brown SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout
CONCRETE 0.5' Curb Box with Locking Cap
CONCRETE 0.5' Curb Box with Locking Cap 1 1 2 Brown SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout
GRAVEL STBT, Time-Coarse SAND & Locking Cap 1 1 2 Brown SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout
GRAVEL GRAVEL Cap Y 1 1 2 Brown SILT, little gray clay, trace fine-coarse sand (Damp-Loose) Grout
1 3 3 24" fine-coarse sand (Damp-Loose) Grout 7 7 7 7 7 7 7 7 7
1 3 3 24" fine-coarse sand (Damp-Loose) Grout
(Damp-Loose) Grout
Brown SILT, Some fine-coarse Sand, 7, 5 6 10 24" trace clay
(Moist-Loose)
Gray SILT, Some fine-coarse Sand,
1 1 2 20" little fine-coarse gravel (Wet-Loose)
(wet-loose)
Gray fine-coarse SAND & GRAVEL,
8 14 15 16" Some Silt (Wet-Firm)
5 21 16 grades to little silt
17 42 33 16" becomes (Compact)
6 12 26 becomes (Very Compact)
grades to Some Silt Schedule 40
7 12 14 12" becomes (Firm) 2" PVC Riser Pipe
Bentonite Seal
0 / 8 17 18 cobbles encountered
becomes (Very Compact)
5 / 9 46 100 / 4 ' 6" .01" Slotted
9 46 100 / .4' 6" Screen S
No blows to drive 2 "spoon 12 " with 140 lb. pin wt. falling 30 "per blow. CLASSIFICATION Visual by
No blows to drive casing "with lb. weight falling "per blow Geologist THOD OF INVESTIGATION 44" I.D. Hollow Stem Augers

DATE						T'	ADIDE		May 4D
STA	RTED		<u>-29</u>				MPIRE	HOLE NO	
FINI	SHED	7	-30	-91		SOIL	SUBSURFACE LO		
SHEET		2	OF	2				G. W. DEPTH	See Notes
					7	Dougo	- Dlant Dane Nov	Vork	
KOJE	CI_		TA-9				Plant LOCATION Rome, New	IOLK	
			IA-	91 - 0	1400				
: \	2 2			s on		3) ty e			
SAMPLES	SAMPLE			PLER	<u> </u>	g S g	SOIL OR ROCK	NO	OTES
	× ×	0/6	6/12	12/18	N	Sample Recovery (Inches)	CLASSIFICATION		
T	10	13	48		Ī		Gray fine-coarse SAND & GRAVEL, Some		
7				.4'		14"	fine Sand, little silt		
1	 		1 7	-	 		(Wet-Very Compact)		
7			 	1	 		·	Natural	Δ' Δ' Δ'
_ 🗂			 					Fill -	
5 /	11	7	19				Gray fine-medium SAND, Some Silt,	†	27/4/20
7/		- 	14	8	33	12"	trace gravel (Wet-Compact)	ļ	444
				<u> </u>		 	Boring Terminated at 47.0'	Reference E	levation
								Top of PVC	
)]								Groundwater	at 86.73
								on 8-6-91.	
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									_
4									
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-	-+								
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No b	lows	to dri	ve	2	' spoc	on_12	" with 140 lb. pin wt. falling 30 "per blow. CLASS		isual by
No b	lows	to driv	ve		casir	יי	" withlb. weight falling"per blow	G	eologist
			IGAT		44"	I.D.	Hollow Stem Augers		

			•								
DATE				0.1		FI	ME	IRE	HOLE NO.	MW-11D	_
	ARTEC		8-01			SOIL!	INVESTIC	ATIONS INC. SUBSURFACE LO	G SURF. ELEV	99.82'	
FIN	HSHEE								l	See Notes	_
SHEE	т		<u>1</u> _0F	1					G. W. DEFTH		_
PROI	ECT		Inde	pen	dent	Power	r Plant	LOCATION Rome,	New York		
			GTA-								
T	T.						T T		T		Mari-
=	SAMPLES AMPLE NO			VS ON APLER		Sample Recovery (Inches)		SOIL OR ROCK	Guardpipe)TES _r ———	
DEPTH-FT	SAMPI	0	16/	12/	1 N			CLASSIFICATION	with Lock—	-	
- 0-	1~	 	5 / 12	18	1	NO PE		CONCRETE 0.5'			T
-	-	-		-	 		FILL: I	rown SILT, fine-coarse SAND &			\vdash
4	-	-			-	ļ <u> </u>	GRAVEL	brick chips	Grout with		H
\dashv	-	+	-		┼	 			Natural Fill	<u></u>	-
+	+	+-		 	┼─		Dark 0	own SILT, Some fine Sand,	-		1
5	/├∸	3	4	5	8	6"	trace of	1			十
+	+	+-	+	 	 	 		(Damp-Loose)			r
+	-		 	 	 						
╛			†	1							
10	/ 2	3	3	1							
-10-			7	9	10	12"	becomes	(Moist)	Schedule 40 2" PVC		1
T							j		Riser Pipe —		
							·	· ·			-
									4		-
15	/ 3	1	3	<u> </u>	<u> </u>			ne-coarse SAND & GRAVEL, Some			\downarrow
			3	4	6	6"	Silt, t	race clay (Wet-Loose)			-
					<u> </u>			(wet-Loose)			F
			ļ	<u> </u>	<u> </u>						-
1		<u> </u>	<u> </u>		ļ				Bentonite -		-
20-	$\sqrt{\frac{4}{}}$	3	+	<u> </u>		1011		<u>:-</u> .	Seal		+
4	-	-	4	5	8	18"	grades	to trace silt	20 0 3		ŀ
4	-		ļ	-					3Q Sand——		H
4		<u> </u>		 							\vdash
+	/ 5	-	10	 			•				+
2 5 /	/ 	0	15	11	25	12"	becomes	(Firm)			t
+		ļ	123	1.4	23	12			.01" Slotted-		r
\dashv	-		-	<u> </u>					Screen		r
		 	1	:	 	 				器圖刻	1
		<u> </u>	 								
30+	6	6	14		·		becomes	(Compact)			T
7			24	6	38	18"					
1	7	7	6				grades	to Some Silt			
			8	10	14	12"	becomes	(Firm) 34.0'	_		
35-/	8	2						LT, Some Clay, trace	Natural Fill	Δ(* Δ * Δ -	_
\mathcal{I}			3	6	6	18"	fine-co	arse sand (Wet-Loose)	LTTT		\downarrow
							Boring	Terminated at 36.0'	Reference E		L
									Top of PVC		L
				ļ					Groundwater	at 86.86'	-
40									on 8-6-91.		1
= No	blow	s to d	rive	2	_" spc	on_12	" with_ <u>14</u>	O_lb. pin wt. falling30"per blow. CLAS	SIFICATION Vist	ual by	_
								lb. weight falling"per blow.		logist	
		u				4½" [.D. Holl	ow Stem Augers			-

DA	TE								T
1		RTED	n	7-25	-91			MPIRE	HOLE NOB-12
							SOILS	INVESTIGATIONS INC. SUBSURFACE LOG	
1				7-25				30 B30KI /KCE E0 G	
SHE	ET		1	OF.	1				G. W. DEPTH See Notes
00/			т.	nden	end	ent	Power	Plant LOCATION Rome, New	York
PRO	JIE	CT _					101101	LOCATION Rome, New	
			G.	TA-9	1-0	40B			
_	2	Q	I	BLOW	'S ON		0 2 0		
DEPTH-FT	SAMPLES	1 E		SAMI	PLER		P & P	SOIL OR ROCK	NOTES
9	₹	SAMPLE NO	0/	6/	12/	N	Sample Recovery (Inches)	CLASSIFICATION	
⊨ 0 =	┿	1 ~	6	12	18.	<u> </u>	<u>(28.5)</u>	CONCRETE 1.0'	
-	+			ļ		<u> </u>	ļ	CONCRETE 1.0'	_
-	4/	1	7	1		ļ			
_	\mathcal{L}	<u> </u>		11	6	23	NR	FILL: Brown Silt, Some fine-coarse Sand,	
_] /	2	6	8				trace fine-coarse gravel	
_	V			8	5	16	4"	Janes Janes Janes	Γ
1 2	17	3	7	2			Ţ		
} -	V			2	3	4	12"	(Moist-Loose) 7.0'	<u></u>
-	17	4	3	2		-		Brown fine-coarse SAND, trace silt	<u> </u>
-	1/	<u> </u>	_	3	2	5	10"	(Moist-Loose)	.
	17	5	4	2				(110250 20050)	<u> </u>
10-	1/			2	4	4	8"		
~	M		-					Boring Terminated at 11.0'	
-	1							Jozany Torminated at 11.0	<u> -</u>
-	1							' '	 -
-	1								-
15—	1 1								
-	} }								<u> </u>
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		1-		2		,	12	" 140 ₁	Wigned Les
								with140b. pin wt. falling30per blow. CLASSII	
= No	o bl	lows	to driv	ve	· · ·			ib. weight falling"per blow.	Geologist
IETHO	סס מכ	OF IN	IVEST	IGAT	ION		4¼" I.	D. Hollow Stem Augers	

METHOD OF INVESTIGATION __

ļ	'AR NIS	TED		07-2 07-2 L_OF.	5 - 91		SOILS	MPIRE INVESTIGATIONS INC. SUBSURFACE LOG	HOLE NO SURF. ELEV. G. W. DEPTH	99.70'
PPO	IF C	Τ_	3	Inde	pend	lent	Power	Plant LOCATION Rome, New 1	York	
1.00	,,,,	-' -		TA-				LOCATION		
_	~	Ş		BLOW	rs on		0 Z G			
D£ PTH-f I	SAMPLES	=		SAM	PLER		Per P	SOIL OR ROCK	١	NOTES
0.50	3	SAMPLE	0/	6/	12/	N	Sample Recovery (Inches)	CLASSIFICATION		
= O=	 -		6	12	18.	<u> </u>	SEC.	CONCRETE 1.0'		T T
-				┼_	 _	1.0				}
_		1	6	5	5	10	2"	FILL: Bronw SILT, little fine sand,		-
	7				ļ	<u> </u>		trace clay (Damp-Loose)		-
_	\angle	2	7	7	8	15	2"	becomes(Firm)		-
5		3	3	+				becomes(Loose)		
				4	4	7	2"			
	A	4	4	1						
				6	7	11	2"	becomes(Firm)		
		5	5	5						
-10	/ [6	7	11	2"			
								Boring Terminated at 10.0'		
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انا سمال	, L	la:	۔۔۔		2	··	. 12	" with 140 lb. pin wt. falling 30 "per blow. CLASSIF	ICATION	Jisual by
										Geologist
: = No JETHO										

HEE	Τ_		1 In	_of_ dep	5-91 ende	ent 1		Plant LOCATION Rome, New	G. W. DEPTH See Note
DEPTH-FI	SAMPLES	SAMPLE NO	0 /	BLOW SAMI	'S ON		Sample Recovery (Inches)	SOIL OR ROCK CLASSIFICATION	NOTES
م		3	6	12		N	Sa. Fee Tr		
	1	1	5	6				CONCRETE 1.0' FILL: Brown SILT, little fine sand,	
+	/	2	8	5 8	9	11	18"	trace brick fragments 4.0'	•
5	4	3	2	8	9	16	10"	Brown SILT, little clay, trace fine sand (Damp-Firm)	
-	<u>/</u>			3	3	5	6"	becomes (Loose)	
	<u>/</u>	-4	2	3	2		4"		
$0 - \frac{1}{2}$	4	_5	5	5	5	10	6"	Boring Terminated at 10.5'	
+	-	_						5	
7	F	1							
5	-								
-								·	
\exists	L								
$\frac{1}{2}$	-					_		·	
7	-								
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	F			-	7.				
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DAT			0	7-25	5-91		E	MI	PIRE SATIONS INC. SUBSURFACE LOG	HOLE NO
FI	NIS	SHED	0	7-25 OF.	5-91 1					C. W. DEPTH See Notes
PRC	DJEG	CT -		depe A-91			ower	Plant	LOCATION Rome, New Y	York
DEPTH-FT	SAMPLES	SAMPLE NO	0/6	SAM.	PLER 12	×	Sample Recovery (Inches)		SOIL OR ROCK CLASSIFICATION	NOTES
_	L								CONCRETE 1.0'	
- -	K	1_	18	24		48	6"	fine-c	fine-coarse SAND, Some barse Gravel, little brick	
_	Z,	2	17		8	19	8"	fragme	4.0	
5	\mathbb{Z}	3	6	8	7	15	8"	Brown Gravel	SILT, Some fine-coarse Sand & (Moist-Firm)	- -
_		4		17 17	18	34	10"	become	(Compact)	
- 10-		5	17	9	11	24	6"			
	-							Boring	Terminated at 10.0'	
15	-								··	
									,	
1					•					
									;	
<u></u>	<u> </u>		lo dei	10	2		12	" with 14	O_lb. pin wt. falling 30 "per blow. CLASSIF	Visual by
							ġ		lb. weight falling	Geologist

	AR	TED			25 - 9		SOILS	MESTIC	IRE SATIONS INC. SUBSURFACE LOC	HOLE NOB-16 SURF. ELEV99.09'
SHEE		HED		L_OF.		1			JOBSONI ACE EOC	G. W. DEPTH See Notes
PRO	IEC	ΞT			end 1-0		Power	Plant	LOCATION Rome, Net	w York
DEPTH-11	SAMPLES	SAMPLE NO	0 6	BLOW SAM 6		z	Sample Recovery (Inches)		SOIL OR ROCK CLASSIFICATION	NOTES
									CONCRETE 1.0'	
_	4	1	8		5			Sand,	Brown SILT, Some fine-coarse little fine-coarse gravel, orick fragments & ash cinders	
<u> </u>		3	6 3	5 4	6	11	6"	02000	5.0'	-
	4			5	5	9	6"	Brown	SILT, little fine sand, trace	-
_		4	5	5 5	5	10	8"	fine-c	oarse gravel (Moist-Loose)	•
-	/	5	5	6 5	6	11	2"	become	s(Firm)	
-10-								Boring	Terminated at 10.0'	
4	-									}
	-									<u> </u>
15	-									+
1	<u> </u>								<i>:</i>	
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-	-			_						
1										
									O_lb. pin wt. falling 30 "per blow. CLASSI	
					 ION				lb. weight falling"per blow low_Stem_Augers	Geologist

METHOD OF INVESTIGATION

FII	AR VIS	HED	_5-	07-9 07-9 OF_	91		SOILS	MP SINVESTIGAT	IRE IONS INC. SUBSURFACE LOG	G. W. DEPTH <u>See Notes</u>	
' o []) E	СТ _		depe			Power 040	Plant	LOCATION Rome, New	York	
DEPTH-FT	SAMPLES	SAMPLE NO	0 6	BLOW SAMI	PLER 12	×	BLOW ON CASING C		SOIL OR ROCK CLASSIFICATION	NOTES Guardpipe w/Lock	2
	Z	1	10	7	7	14		FILL: SAN	CONCRETE 0.5' D, little gravel, silt,	Concrete X X X	
- 5-	/	3	10 6 3	7		13		Brown SII (Mois	sh. cinders (Moist) 2.5' T, trace fine sand st-Loose)	Bentonite // X	5
-	/	4	9 7 6	8	6	14_		Brown SII (Firm)	LT	2" PVC	
10-	/	6	8 10 14	11		12 26				2" PVC Well : Screen, .010 Slot	10
15-	7	7	1	1	1	2		Brown fin	15.0' e-medium SAND, trace silt		
-	<u>/_</u>		1	•				Prove fin	(Saturated-Loose)		20
-20 - - -	/	8	6	7	6	13		trace sil	e-coarse SAND and GRAVEL, t (Wet-Firm) 24.0'	Boring caved to 20.0'. Natural Material	
25 - - -	_	9	12 19	24	26	50		Brown fin	e-coarse SAND, Some Gravel,		
-30 - -	/	10	3	4	3	7		Brown SIL	T, Some fine Sand, trace (Moist-Loose)		
35-	/	11	3 3	3	3	6		Brown SIL	T, Some Clay, trace fine (Moist-Loose)		
-40							12	, 140			
= N	o l	olows	to dri	ve		" cas	ing	" with	_lb. pin wt. falling <u>30</u> "per blow. CLAS! _lb. weight falling "per blow.& <u>Eng:</u> Stem Augers	-	1

METHOD OF INVESTIGATION

FI	NIS		5· 2		·91 2	1	SOIL	SINVESTI	SATIONS INC. SUBSURFACE LO		
PRC	JEC				end GTA			Plant	LOCATION Rome, Ne	w York	
DEPTH-FT	SAMPLES	SAMPLE NO	0/6		/S ON PLER 12 18	N	BLOW ON CASING C		SOIL OR ROCK CLASSIFICATION	NO	OTES
40= - - - 4 5	/	12	5 15	<u> </u>	10	18		Brown gravel	SILT, little fine sand and (Wet-Firm) 43.5'	Natural Material	
- - - -		13	8	19	24	43		Grey f	ine-coarse SAND, Some Gravel, silt (Wet-Firm)		
_			24						(Wet-Compact)		
5 1 1								boring	Terminated at 52.0'	1 - 1 - 1	d at 14.2', at 15.0'. etion, at 17.4', at 50.0'. s in well:
										5/13/91 1	2.5' 2.8' 2.9'
											_
1	<u></u>	lows	to dri	, 2		" spor	n 12	" with 1	40 lb. pin wt. falling 30 "per blow. CLA	surrantio Vi sua	l by Drillo

STARTED 5-06-91 FINISHED										\neg
SUBSINESTICATION SUBSURFACE LOC SURFIETY 100.21' C.W. DEPTH See Notes See No	DATE					****	101	ATOTOT	B=6	
O C	-						SOUS	SINUSSING SURSUIDEACE LO	11022 110	
O	FINI	SHED	5-	-06-	91			SUBSURFACE LO	1	
SOIL OR ROCK SOURCE SOIL OR ROCK CLASSFICATION CONCEPTS O.5 Oncrete On	SHEET		_1	OF.	1				G. W. DEPTHSee Notes	
Soli OR ROCK Shownist Solid OR ROCK CLASSFICATION Guardpipe W/Lock	.0)1	CT _	Ir	dep	ende	ent	Power	Plant LOCATION Rome, New	York	
Solid Or ROCK CLASSIFICATION CALCALLY Compact Calcally Classification Calcally Classification Calcally			ES	SI#	GTA-	-91-	-040			
Solid Or ROCK CLASSIFICATION CALCALLY Compact Calcally Classification Calcally Classification Calcally	T	To		Rt CVA	/S ON	·	1		T	1
	H	Z Z					NO N		NOTES	
1 1 1 1 2 2 2 2 2 3 4 2 2 3 4 2 3 4 2 3 4 4 5 5 10 4 4 5 5 9 12 7 19 No Recovery on Sample No. 5 7 4 3 4 7 4 4 5 5 9 12 7 19 No Recovery on Sample No. 5 7 4 3 4 7 4 5 5 9 12 7 19 No Recovery on Sample No. 5 7 4 3 4 7 4 5 5 9 12 7 19 No Recovery on Sample No. 5 7 4 3 4 7 8 8 7 8 8 7 8 8 8	DEP	SAMP	1 /	6/	12/	1 N	BLO L	CLASSIFICATION	Guardpipe	
1 10 16 12 28 FILL: Brown SILT, Some Sand, little	: 0+		1 6	12	18.	1	 	CONCRETE 0.51		
2 8 5 6 11	-	/	10	16	12	20			Concrete	1
	+				1	1		gravel, cinders, ash (Moist)2.0'		
S	7	<u> </u>	+				ļ			1
		/ 3	 	20	14	34	<u> </u>			
	<u> </u>								Pellets	11
10	\int	4	4	5	5	10		(MOTSC)	2" PVC	
10	7		+ -			ļ				
10	4	/ 5		12	7	19	<u> </u>	No Recovery on Sample No. 5		$ \ $
10	10 /	1	ļ	7.0	7.0	2.4		Province CTUTE Come Country		$\ \cdot \ $
Screen, 0.010 slot	\dashv	/ 	+	12	12	24	 			$\ \cdot \ $
S		-	10					· (IIOLSC IIIII)		1
7	\dashv	-								
7	, –	-	 							
(Wet-Loose) 1	19-	7	4	3	4	7		Brown fine-coarse SAND, Some Silt,		
Brown fine-coarse SAND, little silt (Saturated-Loose) 25.0' 9 14 19 24 43 Brown fine-coarse SAND, little gravel, trace silt (Wet-Compact) 10 11 39 42 81 Wet-Very Compact) Boring Terminated at 32.0' Water levels in well: 5/08/91 13.1' 5/08/91 13.1' 5/08/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 " spoon 12 " with 140 lb. pin wt falling 30 "per blow CLASSIFICATIONVisual by Driller(S	7/		4					· · · · · · · · · · · · · · · · · · ·		
Brown fine-coarse SAND, little silt (Saturated-Loose) 25.0' 9 14 19 24 43 Brown fine-coarse SAND, little silt (Saturated-Loose) 25.0' 9 14 19 24 43 Brown fine-coarse SAND, little gravel, trace silt (Wet-Compact) 10 11 39 42 81 Wet-Very Compact) Boring Terminated at 32.0' Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0', water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/14/91 13.25' E No blows to drive 2 "spoon 12" with 140 b pin wt falling 30 "per blow CLASSIFICATIONVisual by Driller(Served and the coarse sand) E No blows to drive 2 "spoon 12" with 140 b pin wt falling 30 "per blow & Engineering Technician (J.M.)								(Wet-Loose)		
8				•						
2	20									
25.0' 25.0' 9 14 19 24 43 Brown fine-coarse SAND, little gravel, trace silt (Wet-Compact) 10 11 39 42 81 41 Wet-Very Compact) Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0', water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3'	4/	/ 8		1	2	3	ļ <u>.</u>			
25.0' 9 14 19 24 43 Brown fine-coarse SAND, little gravel, trace silt (Wet-Compact) 10 11 39 42 81 (Wet-Very Compact) Boring Terminated at 32.0' Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/08/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb pin wt. falling 30 "per blow CLASSIFICATIONVisual by Driller(S		<u> </u>	2					(Saturated-Loose)	30 Sand	
9 14 19 24 43 Brown fine-coarse SAND, little	4								~ · · . -	
9 14 19 24 43 Brown fine-coarse SAND, little	\dashv	-						25.0'		
30	25	a	14	19	24	43			+	
(Wet-Compact) (Wet-Very Compact) (Wet-Very C	\dashv /				27	15				
10 11 39 42 81 (Wet-Very Compact) Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25'	1	<u> </u>								
10 11 39 42 81 (Wet-Very Compact) Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25'										
10 11 39 42 81 (Wet-Very Compact) Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25'	30									
Boring Terminated at 32.0' Boring Terminated at 32.0' Groundwater at 14.0', with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 "spoon 12 "with 140 b. pin wt. falling 30 "per blow. CLASSIFICATIONVisual by Driller(S No blows to drive "casing "with b. weight falling "per blow. Engineering Technician (J.M.)	- /	10		39	42	81		(Wet-Very Compret)		
with augers at 15.0'. Upon completion, groundwater at 14.0'. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/13/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow CLASSIFICATIONVisual by Driller(S	4	-	41							
Upon completion, groundwater at 14.0°. Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/13/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow CLASSIFICATIONVisual by Driller(S	4					-		Boring Terminated at 32.0'	(' 	
groundwater at 14.0 Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow CLASSIFICATIONVisual by Driller(S	+								1 -	
Water levels in well: 5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow. CLASSIFICATIONVisual by Driller(S	3 5	-								
5/08/91 13.1' 5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25' No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow CLASSIFICATIONVisual by Driller(S No blows to drive "casing "with lb. weight falling "per blow & Engineering Technician (J.M.)	4								l ⁻	
5/09/91 13.3' 5/13/91 13.3' 5/14/91 13.25' 5/14/91	-								5/08/91 13.1'	
= No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow. CLASSIFICATIONVisual by Driller(S = No blows to drive "casing "with lb. weight falling "per blow. Engineering Technician (J.M.)	-								5/09/91 13.3'	
= No blows to drive 2 "spoon 12 "with 140 lb. pin wt. falling 30 "per blow. CLASSIFICATIONVisual by Driller(S = No blows to drive "casing "with lb. weight falling "per blow. Engineering Technician (J.M.)	10								5/13/91 13.3' 5/14/91 13.25'	
No blows to drive casing with					'	.,	10	" 140 IL	·	
No blows to drive casing with								- ,		- 1
THOD OF INVESTIGATION 44" I.D. HOLLOW Stem Augers							ing Lir + r		ineering recumician (J.M.	1

FIN		IED .		-08-		_	SOIL	MP S INVESTIGA	SUBSURFACE LOC		101.1' See Notes	_
HEE	T _			_OF.	2]				G. W. DEPTH .	Dee Note:	_
RO	JECT							Plant	LOCATION Rome, New	York		\Box
			E	SI#	GTA	-91	-040					.
_	<u>ν</u>	9		BLOW	/5 ON		T					뒥
OCCUR.	SAMPLES	SAMPLE	0/6	5AM	12 18-	1	BLOW ON CASING C		SOIL OR ROCK CLASSIFICATION	NO Guardpipe w/Lock	TES	
٦		Ī			ĺ				CONCRETE 1.0'	W/ LOOK		ᅥ
									GRAVEL 2.0'			Н
	1	1	4	5	6	11		Brown S	LLT, trace fine sand	Concrete-	 X X	Н
			6						ist-Loose)	Bentonite		П
5		2	3	3	5	8				Pellets	<i>V/\ V/\</i> L	
	4		6									
		3	5	6	7	13						
-	4		7						·	2" PVC		
4	/ -	4	3	4	4	8		-		Riser Pipe		Ц
.⊖∤	/ -		6			-						4
\dashv	/ -	5	6 9	- 8	12	20		(Firm)	Ţ		1.1	Н
+	+		-					1				Н
\dashv	\vdash		_					1	14.0'		· . · .	Н
\exists	-	+	_						14.0		. 	Н
5	T	6	2	2	5	7		Grev fine	e-coarse SAND, little gravel,	2" PVC Well		${\sf H}$
\exists	/卜	+	5			•		silt	(Wet-Loose)	Screen,	 	Η
1		\top								0.010 Slot		Н
	Г								·			Н
											· · .	Н
	Æ	7	2	5	7	12			(Wet-Firm)			П
1			10						(//			П
1												П
4	_		_									
5	1	+	-								. _	Ш
4.	/ -	8	8	- 8	16	24		Grey fine	-coarse SAND, Some Gravel,	30 Sand-	<u> </u>	Ц
4	-		18					little si	.lt (Wet-Firm)	-	• •	Ц
\dashv	-	+							(Wet-Film)			H
-	-	+	\dashv	-+		\dashv					•	H
9	+	9	10	5	6	11					' '	H
7/	/ -	1	5	7	- 0			i		•		H
1		\dashv	$\neg \uparrow$.		!	·			H
										•		H
5											. • •	П
	/ 1	.0	3	4	4	8		Grey fine	SAND and SILT		• . • •	
$ \downarrow $	4	_	3					-	(Wet-Loose)		·	
4	_										· . · .	
1	_								1			
ل	<u></u>										. ' . · _	\coprod
Nο	blo			2	,		12	140	_lb. pin wt. falling 30 "per blow. CLASSI	Vicus	l bu Dwille:	~/0

DATE	RADIDI	B-11
STARTED 5-07-91	MPIRE	HOLE NO.
FINISHED	LS INVESTIGATIONS INC. SUBSURFACE LOC	
SHEET $\frac{2}{OF}$		C. W. DEPTH See Notes
ROJECT Independent Pow	er Plant LOCATION Rome, New	York
ESI# GTA-91-040	LOCATION	
SAMPLER SAMPLER OF BLOWS ON SAMPLER OF BLOWS O	SOIL OR ROCK	NOTES
	CLASSIFICATION	NOTES
40	Grey fine SAND and SILT, trace clay	
$-\sqrt{\begin{array}{c cccccccccccccccccccccccccccccccccc$	(Wet-Loose)	
		• •
1		
15 / 12 2 2 3 5	Brown CLAY, Some Silt	
3	(Wet-Soft)	
		3Q Sand
50		
13WOR WORWOH -	Brown CLAY, Some fine Sand and Silt	
	(Wet-Very Soft)	
	- 	• . •
	-	1
5 / 14 3 3 3 6	-	-
-/	Brown CLAY, Some Silt	
	(Wet-Medium)	• • • • • • • • • • • • • • • • • • •
	<u>-</u>	'
	-	
50 / 15 6 7 6 13	61.0'	
7 7 7 7	Brown fine SAND, Some Silt	
16 9 11 24 35	(Wet-Firm)	
12	same, Some Silt, Gravel	.
5 / 17 14 24 19 43	(Wet-Compact) 65.0'	
/ 24	Brown fine-coarse SAND, Some Gravel,	
		Groundwater first
		encountered at 17.0', with augers at 20.0'.
		Jpon completion,
0-		roundwater at 27.5',
	- · · · · · ·	ith augers at 60.0'.
		Water levels in well:
	·	5/08/91 12.4'
	i i	5/09/91 12.7'
	,	
	_	7/13/91 12.8' L
		5/13/91 12.8'
		5/13/91 12.8' 5/14/91 12.9'
		/14/91 12.9' OR=Weight of Rod
		/14/91 12.9'
= No blows to drive 2 "spoon 1		OR=Weight of Rod OH=Weight of Hammer

APPENDIX C



Division of **EMPIRE SOILS INVESTIGATIONS INC.**

PO Box 250 Middleport New York 14105 Tel: (716) 735-3400 FAX (716) 735-3653

Environmental Analytical Report For:

EMPIRE SOILS INVESTIGATIONS, INC. - GROTON

PROJECT NAME: ROME GOGEN

HAS Ref. # 91-1220

August 15, 1991



HUNTINGDON ANALYTICAL SERVICES ELAP #10833 ENVIRONMENTAL REPORT

HAS Reference Numbers: #91-1220

August 15, 1991

Statement of Work Performed

I hereby declare that the work was performed under my supervision according to the procedures outlined by the following references and that this report provides a correct and faithful record of the results obtained.

- 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act," October 26, 1984 (Federal Register) U. S. Environmental Protection Agency.
- U. S. Environmental Protection Agency, "Test Methods of Evaluating Solid Waste - Physical/Chemical Methods, " Office of Solid Waste and Emergency Response, SW-846, 2nd Edition and 3rd Edition.
 - New York State Department of Health, Analytical Toxicology Laboratory Handbook, August 1982.

Katherine A. Syracuse Lab Director, Environmental

REPORT CODE LEGEND:

<DL = Less than detection limit</pre>

ND = Not detected

NA = Not applicable

INP = Information not provided

MB = Method Blank

METHOD 501 PURGEABLE HALOCARBONS

SAMPLE IDENTIFICATION :	METHOD 31 ANY	MN-15	MW-15	MW-25	MW-2D	MW-38	MW-3D	77-48
Januar (Deally load load)	HETHOD DENNK	23 44	(1877.77)	(14-75	N#-ZD	.IM-33	nw-5D	ביי־און:
HAS SAMPLE #91-1220-		001	002	003	004	005	005	007
DATE ANALYZED:	8-8-91	8-8-91	8-8-91	8-8-91	9-8-91	8-8-91	8-8-91	9-8-91
COMPOUND	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
	ug/l	ug/l	ug/l	1g/l	ug/l	ug/l	ug/l	ug/1
CHLOROMETHANE		<1.0	₹20	<10	<10	₹10	⟨20	<1.0
BROMOMETHANE		<1.0	⟨20	<19	<10	<10	< 20	(1.0
AINAT CAFOSIDE		(1.0)	∴ <20	V	<10	<10	(20	⟨1.0
DICHLORODIFLOOROMETHANE -	<1.0	(1.0	₹20	₹10	<10	<10	⟨20	(1.0
CHLOROETHANE		⟨1.0	<20	<10	<10	(10	⟨20	<1.0
METHYLENE CHLORIDE	⟨0.50	<0.50	(10 -	⟨5.0	(5. 0	(5. 0	₹10	(0.50
TRICHLOROFLUOROMETHANE		(0.50	<10	⟨5.∅	(5.0	⟨5.0	(10)	(0.50
1,1-DICHLOROETHENE		<0.50	<10	(5. 0	(5. 0	(5.0	⟨10	1.0
1,1-DICHLOROETHANE		(0.50	(10	45.0	45.0	(5.0	<10	0.52
total-1,2-DICHLOROETHENE	<0.50	1.1	410	. 52	150	170	210	32
CHLOROFORM		<0.50	<10	⟨5.0	<5.0	⟨5.0	<10	<0.50
1,2-DICHLOROETHANE		<0.50	₹10	₹5.0	⟨5.0	<5.0	₹10	<0.50
1,1,1-TRICHLOROETHANE		<0.50	⟨10	<5.0	⟨5.0	(5.0	<10	<0.50
CARBON TETRACHLORIDE	<0.50	⟨0.50	<10	⟨5.0	<5.0	<5.0	<10	<0 . 50
BROMODICHLOROMETHANE		<0.50	<10	(5. 0	<5.0	⟨5.0	<10	<0.50
1,2-DICHLOROPROPANE	(0.50	<0 . 50	(10	<5.0	(5.)	⟨5.0	₹10	. <0.50
cis-1,3-DICHLOROPROPENE -		⟨0.50	<10	<5.0	⟨5.0	(5.0	(10	. ⟨0.50
TRICHLORDETHENE	(0.50	(0.50	510	(5.0	17	51	250	. 26
trans-1,3-DICHLOROPROPENE		<0.50	<10	(5. 0	⟨5.0	(5.0	<10	<0.50
DIBROMOCHLOROMETHANE	<0.50	(0.50	<10	⟨5.0	<5. 0	<5. 0	<10	<0.50
i, i, 2-TRICHLOROETHANE		⟨0.50	<10	(5.0	< 5. 0	<5.0	<10	<0.50
2-CHLOROETHYLVINYL ETHER	⟨5,0	(5.)	<100	⟨50	⟨50	₹50	(100	⟨5.0
BRONOFORM		⟨5.0	<100	⟨50	⟨50	<50	<100	<5.0
1,1,2,2-TETRACHLOROETHANE	(0.50	<0.5Q	<10	< 5. 0	<5.0	⟨5.0	<10	<0.50
TETRACHLORGETHENE	< 0.5 0	<0.50	<10	< 5. 0	< 5. 0	(5.0	<10	(0.50
CHLOROBENZENE	<0.50	<0.50	⟨10	<5.0	< 5. 0	⟨5.0	₹10	(0.50
1,4-DICHLOROBENZENE	<1.0	(1.0)	<20	<10	<10	<10	₹20	<1.0
1,2-DICHLOROBENZENE	<1.0	(1.0	(20	<10	(10	<10	⟨20	<1.0
1,3-DICHLOROBENZENE	(1.0	⟨1.0	⟨20	<10	<10	<10	<20	<1.0

METHOD 501 PURGEABLE HALOCARBONS

SAMPLE IDENTIFICATION:	MW-4D	B-2	B-6	8-115	5-11D	BLANK
HAS SAMPLE #91-1220-	800	009	010	011	012	014
DATE ANALYZED:	3-8-91	8-8-91	5-8-91	8-8-91	8-8-91	8-8-91
COMPOUND	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
CHLOROMETHANEBROMOMETHANE VINYL CHLORIDE	<20 <20 - <20	<20 <20 <20	<20 <20 <20	<20 <20 <20	⟨20 ⟨20 ⟨20	<1.0 <1.0 <1.0
DICHLORODIFLOOROMETHANE -	<20	<20	<20	<20	<20	<1.0
CHLORGETHANE	<20	<20	<20	<20	<20	<1.0
METHYLENE CHLORIDE	<10	<10	<10 .	<10	<10	<0.50
TRICHLOROFLUOROMETHANE 1,1-DICHLGROETHENE 1,1-DICHLOROETHANE	<10	<10	(10	<10	<10	(0.50
	<10	<10;	(10	<10	<10	(0.50
	<10	<10	(10	<10	<10	(0.50
total-1,2-DICHLOROETHENE CHLOROFORM 1,2-DICHLOROETHANE	250 <10 <10	330 	530 <10 <10	460 <10 <10	570 ⟨10 ⟨10	0.89 (0.50 (0.50
1,1,1-TRICHLOROETHANE	<10	<10,	<10	<10	<10	<0.50
CARBON TETRACHLORIDE	<10	<10,	<10	<10	<10	<0.50
BROMODICHLOROMETHANE	<10	<10,	<10	<10	<10	<0.50
1,2-DICHLOROPROPANE	<10	<10	<10	<10	<10	<0.50
cis-1,3-DICHLOROPROPENE -	<10	<10	<10	<10	<10	<0.50
TRICHLOROETHENE	490	410	910	37 0	490	1.7
trans-1,3-DICHLOROPROPENE	<10	<10	<10	<10	<10	<0.50
DIBROMOCHLOROMETHANE	<10	<10	<10	<10	<10	<0.50
1,1,2-TRICHLOROETHANE	<10	<10	<10	<10	<10	<0.50
2-CHLOROETHYLVINYL ETHER	<100	<100	<100	<100	<100	<5.0
BROMOFORM	<100	<100	<100	<100	<100	<5.0
1,1,2,2-TETRACHLOROETHANE	<10	<10 ⁰	<10	<10	<10	<0.50
TETRACHLOROETHENE CHLOROBENZENE 1,4-DICHLOROBENZENE	<10	<10	<10	<10	<10	<0.50
	<10	<10	<10	<10	<10	<0.50
	<20	<20	<20	<20	<20	<1.0
1,2-DICHLOROBENZENE 1,3-DICHLOROBENZENE	<20	⟨20	⟨20	<20	<20	<1.0
	<20	⟨20	⟨20	<20	<20	<1.0

METHOD 602 PURGEABLE AROMATICS

SAMPLE IDENTIFICATION: M	ETHOD BLANK	MW-18	MW-1D	M₩-2S	MW-2D	MW-35	MW-3D	MW-45
HAS SAMPLE #91-1220-		001	002	003	004	005	006	007
DATE ANALYZED:	8-8-91	8-8-91	8-8-91	8-6-31	8-8-91	8-8-91	8-8-91	8-8-91
COMPOUND	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
	ug/1	ug/l	ug/l	ug/l	ug/1	ug/l	ng/l	ug/1
BENZENE TOLUENE ETHYL BENZENE	<0.50	<0.30	0.58	<0.50	<0.50	(0.50	<0.50	<0.50
	<0.50	<0.50	<0.50	<0.50	<0.50	(0.50	<0.50	<0.50
	<0.50	<0.50	<0.50	<0.50	<0.50	(0.50	<0.50	<0.50
TOTAL XYLENES	<1.0	<1.0	<1.0	<1.0	<1.0	(1.0	(1.0	(1.0
	<0.50	<0.50	<0.50	<0.50	<0.50	(0.50	(0.50	(0.50
1,4-DICHLOROBENZENE 1,3-DICHLOROBENZENE	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50 <	<0.50 <0.50	(0.50 (0.50	<0.50 <0.50	<0.50 <0.50	(0.50 (0.50
OHLOROBENZENE	<0.50	<0.50	<0.50	(0.50	<0.50	<0.50	(0.50	<0.5
1,4-DICHLOROBENZENE	<0.50	<0. 50	<0.50	(0.50	<0.50	<0.50	(0.50	<0.5

METHOD 602 PURGEABLE AROMATICS

SAMPLE IDENTIFICATION:	MW-4D	8-2	8-6	B-11S	B-11D	BLANK
HAS SAMPLE #91-1220-	008	009	010	011	012	013
DATE ANALYZED:	8-8-91	8-8-91	8-8-91	8- 8-31	8-9-91	8-8-91
COMPOUND	RESULT ug/l	RESULT ug/l	RESULT ug/l	RESULT ug/l	RESULT ug/l	RESULT ug/l
BENZENE TOLUENE ETHYL BENZENE TOTAL XYLENES CHLCROBENZENE 1,4-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE	<0.50 <0.50 <0.50 <1.0 <0.50 <0.50 <0.50	0.38 <0.50 <0.50 <1.0 <0.50 <0.50 <0.50	0.74 <0.50 <0.50 <1.0 <0.50 <0.50 <1.0	<0.50 (0.50 (0.50 (1.0 (0.50 (0.50 (0.50 (1.0	0.56 <0.50 <0.50 <1.0 <0.50 <0.50 <1.0	<0.50 <0.50 <0.50 <1.0 <0.50 <0.50 <1.0

DETAL TIME! Received By:	Relinguished by:	Pate/ Ifmer Received by:	T /STEG T	Relingulated by:
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Division of EMPIRE SOILS INVESTIGATIONS INC.

PO Box 250 Middleport New York 14105 Tel: (716) 735-3400 FAX (716) 735-3653

Environmental Analytical Report For:

EMPIRE SOILS INVESTIGATIONS, INC. - GROTON

PROJECT NAME: ROME CO-GENERATION

HAS Ref. # 91-1170

August 9, 1991



HUNTINGDON ANALYTICAL SERVICES ELAP #10833 ENVIRONMENTAL REPORT

HAS Reference Numbers: #91-1170

August 6, 1991

Statement of Work Performed

I hereby declare that the work was performed under my supervision according to the procedures outlined by the following references and that this report provides a correct and faithful record of the results obtained.

- 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act," October 26, 1984 (Federal Register) U. S. Environmental Protection Agency.
- U. S. Environmental Protection Agency, "Test Methods of Evaluating Solid Waste Physical/Chemical Methods, " Office of Solid Waste and Emergency Response, SW-846, 2nd Edition and 3rd Edition.
 - New York State Department of Health, Analytical Toxicology Laboratory Handbook, August 1982.

Katherine A. Syracuse
Lab Director, Environmental

REPORT CODE LEGEND:

<DL = Less than detection limit</pre>

ND = Not detected

NA = Not applicable

INP = Information not provided

MB = Method Blank

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: B - 12 ROME COGENERATION

HAS Sample #91-1170-006 Date Sampled: 7/25/91

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	DETECTION LIMIT	RESULT mg/l	QC
ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER	6010 6010 6010 6010 6010 7470 7740 6010	5.0 mg/l 100 mg/l 1.0 mg/l 5.0 mg/l 5.0 mg/l 0.2 mg/l 1.0 mg/l 5.0 mg/l	8/02/91 8/02/91 8/02/91 8/02/91 8/02/91 7/31/91 8/06/91 8/02/91	0.50 0.10 0.050 0.10 0.40 0.0002 0.60 0.10	<dl 0.31 <dl <dl <dl <dl <dl <dl< td=""><td>*95 *95 *95 *95 *95 *95 *95</td></dl<></dl </dl </dl </dl </dl </dl 	*95 *95 *95 *95 *95 *95 *95

^{*}THIS INDICATES A 95% CONFIDENCE LIMIT ACHIEVED WITH AN EPA C''ALITY CONTROL SOLUTION ANALYZED ALONG WITH YOUR SAMPLE.

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: B - 14 ROME COGENER ATION HAS Sample #91-1170-007

Date · Sampled: 7/25/91

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	DETECTION LIMIT	RESULT mg/l	QC
ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM	6010 6010 6010 6010 6010 7470 7740	5.0 mg/l 100 mg/l 1.0 mg/l 5.0 mg/l 5.0 mg/l 0.2 mg/l 1.0 mg/l	8/02/91 8/02/91 8/02/91 8/02/91 8/02/91 7/31/91 8/06/91	0.50 0.10 0.050 0.10 0.40 0.0002 0.60	<dl 0.27 <dl <dl <dl <dl <dl <dl< td=""><td>*95 *95 *95 *95 *95 *95 *95</td></dl<></dl </dl </dl </dl </dl </dl 	*95 *95 *95 *95 *95 *95 *95
SILVER	6010	5.0 mg/l	8/02/91	0.10	<dl< td=""><td>*95</td></dl<>	*95

^{*}THIS INDICATES A 95% CONFIDENCE LIMIT ACHIEVED WITH AN EPA QUALITY CONTROL SOLUTION ANALYZED ALONG WITH YOUR SAMPLE.

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: METHOD BLANK HAS Sample #91-1170-MB

Date Sampled: NA

	EPA	EPA	DATE	DETECTION	RESULT		
ANALYTE	METHOD	LIMITS	ANALYZED	LIMIT	mg/l	QC	
ARSENIC	6010	5.0 mg/l	8/02/91	0.05	<dl< td=""><td>*95</td><td></td></dl<>	*95	
BARIUM	6010	100 mg/l	8/02/91	0.01	<dl< td=""><td>*95</td><td></td></dl<>	* 95	
CADMIUM	6010	1.0 mg/l	8/02/91	0.005	<dl< td=""><td>*95</td><td></td></dl<>	* 95	
CHROMIUM	6010	5.0 mg/l	8/02/91	0.01	<dl< td=""><td>*95</td><td></td></dl<>	* 95	
LEAD	6010	5.0 mg/l	8/02/91	0.04	<dl< td=""><td>*95</td><td></td></dl<>	* 95	
MERCURY	7470	0.2 mg/l	7/31/91	0.0002	<dl< td=""><td>*95</td><td></td></dl<>	*95	
SELENIUM	7740	1.0 mg/l	8/06/91	0.06	<dl< td=""><td>*95</td><td></td></dl<>	* 95	
SILVER	6010	5.0 mg/l	8/02/91	0.01	<dl< td=""><td>*95</td><td></td></dl<>	* 95	

^{*}THIS INDICATES A 95% CONFIDENCE LIMIT ACHIEVED WITH AN EPA O''ALITY CONTROL SOLUTION ANALYZED ALONG WITH YOUR SAMPLE.

METHOD 8010 PURGEABLE HALOCARBONS

SAMPLE IDENTIFICATION :	METHOD BLANK	B-12	B-13	B-14	B-15	B-16
HAS SAMPLE #91-1170-		001	002	003	004	005
DATE ANALYZED :	7-29-91	7-29-91	7-29-91	7-29-91	7-29-91	7-29-91
COMPOUND	RESULT ug/kg	RESULT ug/kg	RESULT ug/kg	RESULT ug/kg	RESULT ug/kg	RESULT ug/kg
CHLOROMETHANE	<pre>< <100 < <100 < <100 < <100 < <100 < <100 < <50 <</pre>	<100 <100 <100 <100 <100 <100 <180 <50 <50 <50 <50 <50 <50 <50 <50 <50 <5	<100 <100 <100 <100 <100 <100 <190 <50 <50 <50 <50 <50 <50 <50 <50 <50 <5	<100 <100 <100 <100 <100 <100 <190 <50 <50 <50 <50 <50 <50 <50 <50 <50 <5	<100 <100 <100 <100 <100 <100 190 <50 <50 <50 <50 <50 <50 <50 <50 <50 <5	<100 <100 <100 <100 <100 <20 <50 <50 <50 <50 <50 <50 <50 <50 <50 <5
2-CHLOROETHYLVINYL ETHER BROMOFORM 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE CHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,3-DICHLOROBENZENE	<500 <500 <50 <50 <50	<500 <500 <50 <50 <50 <100 <100	<500 <500 <50 <50 <50 <100 <100	<500 <500 <50 <50 <50 <100 <100	<500 <500 <50 <50 <50 <100 <100 <100	<500 <500 <50 <50 <50 <100 <100 <100

DISCREPANCY/DEFICIENCY REPORT FORM

TO:	Laboratory Manager	¥.
FRCM:	K Grocuse 7/29/91	
DATE:	7 (39 191	
e:	Sample I.D. No	
EXPLAN	· · · · · · · · · · · · · · · · · · ·	all troken
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Division of **EMPIRE SOILS INVESTIGATIONS INC.**

PO Box 250 Middleport New York 14105 Tel: (716) 735-3400 FAX (716) 735-3653

Environmental Analytical Report For:

EMPIRE SOILS INVESTIGATIONS, INC. - GROTON

PROJECT NAME: ROME CO-GENERATION

HAS Ref. # 91-1199

August 18, 1991



HUNTINGDON ANALYTICAL SERVICES ELAP #10833 ENVIRONMENTAL REPORT

HAS Reference Numbers: #91-1199

August 18, 1991

Statement of Work Performed

I hereby declare that the work was performed under my supervision according to the procedures outlined by the following references and that this report provides a correct and faithful record of the results obtained.

- 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act," October 26, 1984 (Federal Register) U. S. Environmental Protection Agency.
- U. S. Environmental Protection Agency, "Test Methods of Evaluating Solid Waste Physical/Chemical Methods, " Office of Solid Waste and Emergency Response, SW-846, 2nd Edition and 3rd Edition.

New York State Department of Health, Analytical Toxicology Laboratory Handbook, August 1982.

Katherine A. Syracuse Lab Director, Environmental

REPORT CODE LEGEND:

<DL = Less than detection limit</pre>

ND = Not detected

NA = Not applicable

INP = Information not provided

MB = Method Blank

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: B-16 S-4 ROME COGENERATION HAS Sample #91-1199-001

Date Sampled: 7/26/91

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	DETECTION LIMIT	RESULT mg/l	QC
ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER	6010 6010 6010 6010 6010 7470 6010	5.0 mg/l 100 mg/l 1.0 mg/l 5.0 mg/l 5.0 mg/l 0.2 mg/l 1.0 mg/l 5.0 mg/l	8/09/91 8/09/91 8/09/91 8/09/91 8/09/91 8/15/91 8/09/91 8/09/91	0.50 0.10 0.050 0.10 0.40 0.0002 0.60 0.10	<dl 2.94 0.22 <dl 100 <dl <dl <dl< td=""><td>*95 *95 *95 *95 *95 *95 *95</td></dl<></dl </dl </dl </dl 	*95 *95 *95 *95 *95 *95 *95

^{*}THIS INDICATES A 95% CONFIDENCE LIMIT ACHIEVED WITH AN EPA QUALITY CONTROL SOLUTION ANALYZED ALONG WITH YOUR SAMPLE.

HUMMINGDON ANALYTICAL SERVICES
METALS ANALYSIS-TCLP DATA SHEET

Sample ID: METHOD BLANK HAS Sample #91-1199-MB

Date Sampled: NA

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	DETECTION LIMIT	RESULT mg/l	QC
ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER	6010 6010 6010 6010 6010 7470 6010	5.0 mg/l 100 mg/l 1.0 mg/l 5.0 mg/l 5.0 mg/l 0.2 mg/l 1.0 mg/l 5.0 mg/l	8/09/91 8/09/91 8/09/91 8/09/91 8/09/91 8/15/91 8/09/91 8/09/91	0.05 0.01 0.005 0.01 0.04 0.0002 0.06 0.01	<dl <dl="" <dl<="" td=""><td>*95 *95 *95 *95 *95 *95 *95</td></dl>	*95 *95 *95 *95 *95 *95 *95

^{*}THIS INDICATES A 95% CONFIDENCE LIMIT ACHIEVED WITH AN EPA QUALITY CONTROL SOLUTION ANALYZED ALONG WITH YOUR SAMPLE.

Client Name EST		Client Contact	1	Karen Seita	¥; +;	HAS Quote
Address 202	1000 NY 13073	Phone	109	1885-868-209	1881	* . O · d
A-91-40	Project/Site Name: IRO M (CORNECA) HAS Ref. #90-	Containers	Sonseiner Size	Size & Type		Analysis Requested/ Resarks
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Relinguished by:	Dare/ Time: Recolded	for tab by:	75166-1	Date/ Time: Remarks:	on Gd :	MP

BIN #: UND -SECTION LEADER: Laboratory LEVEL OF REPORT: Report 6-25-91 DATE SCHEDULED: LABORATORIES, INC. D. CRAMER JOB NO. <u>13435,001.04</u>0 #! 5036.002. DATE COLLECTED 10-24-91 well Ba well Bowell B1 Freed Sup Field Sample no: Black Bu mu732 mu733 mu734 mu735 mu734 <0.065 30.10 <0.065 065 ppb <0.065 ×0.065 10:1 -30-1 تاه،می 40. 5 × 40.5 × 40.05 40.05 20.0 0.05 0.5% 0.61 10.05 0.06 0.61 1,1 0.80 40.5 . 40.05 40.05 40.5 0.56 0.89 0.07 0.01 1.3 4.2 <0.01 < 0.01 <0.01 <0.01 <0.01 7.9 6.8 6.3 7.1 6.8 10.005 <0.005 < 0.005 <0.005 <0.005 HELIX Total Petroleum Hextrocarbons+ Ι, </l> < 1. Cordination No.: 10155 Comments: & RIA TR Unite: MA Q ۴,

COMMENTS:

st Elevated detection limits due to matrix complexity and/or interferences & exercited istanting Simil due

QBG Laboratories, Inc., an O'Brien & Gere Limited Company

to live sample Authorize



Volatile Organics Method 8010/8020

CLIENT O'Brien & Gara	z Engin	eers In	nc .		435.001.	.040
DEBCRIPTION Otlantic E	nergy,	General	1 Cable	Ground:	5	
					trix', wa	
DATE COLLECTED 62491	DATE R	ECEIVED 6-	24-91	DATE ANALY	17ED 6 26	27-91
DESCRIPTION:	Well B2	Well B6	WellBII	Field Oup	•	QC Trip Blank
SAMPLE NO.:	M6732	M6733	M 6734	M6735	M6736	M6737
t.t-Dichloroethane	< E.	<10.	22.	<2.	41.	41.
1,2-Dichiproethane					1	1
1,1-Dichloroethylene					_	
1,2-Dichloroethylene (total)	170.	380.	500.	490.	7	
Dichloromethane	4	40.	~2·	Z2.	in . And when	
1,2-Dichloropropane	4).		£20.	<20·	***	
cis-1,3-Dichloropropylenæ		7,000				
trans-1,3-Dichloropropylene	1 11 12 12 12	9 * [5			,	
Ethylbenzenes		The state of the s	2 2	2 2,		A STATE OF THE STA
1,1,2,2-Tetrachloroethane	Planer N Trans by / ModPle 4	The last of the la	Policy is not a series of the control of the contro	1	/, r	AT at the all to be seen to be se
1.1.1.2-Tetrachioroethanes				HER CO.		
Tetrachloroethylene		Service Company	SCHOOL SCHOOL SCHOOL			Pari, ng at Tayanan (mgi Aliant Tara) ak
Toluene	·		`\	-:	1	· · · · · · · · · · · · · · · · · · ·
1,1,1-Trichioroethane						
1,1,2-Trichlomethane:			× 20.	Z20·		
Trichloroethylene	4.	930.	490.	480.		
Trichiorofluoromethanes	Z	< 10.	42.	22.		
1,2,3-Trichioropropane			<2.	<2·		A Tray of the Street of the St
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Comments:

Methodology: USEPA.SW - 846, November 1988, 3rd Edition

Certification No.: 10155

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Page 2 of 2



WELL BY MATRIX: LUATER	CLIENT O'BRIEN ! GERE ENGIN	UKERS	JOB NO.	3435.001,040
DATE COLLECTED O.6/24/9 DATE RECEIVED D.6/24/9 DATE EXTRACTED O.6/24/9 DATE ANALYZED O.6/27/9 DATE EXTRACTED O.6/26/9 DATE ANALYZED O.6/27/9 Phenol C/O 4-Chioro-3-methylphenol C/O Bis (2-chloroethyl) ether 2-Methylnaphthalene 1.3-Dichlorobenzene 2.4.5-Trichlorophenol 1.4-Dichlorobenzene 2.4.5-Trichlorophenol C/O 1.2-Dichlorobenzene 2.4.5-Trichlorophenol C/O 1.2-Dichlorobenzene 2.4-Trichlorophenol C/O 1.2-Dichlorobenzene 2.4-Trichlorophenol C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorobenzene C/O 1.2-Dichlorophenol C/O	DESCRIPTION ATLANTIC ENERGY	- GENERA	L CABLE GROUN	03
Pheno	WELL AZ		MATRIX	: LUATER
Phenol	BAMPLE NO DATE	COLLECTED 06	/24 /9 / DATE RE	CEIVED 06/24/91
Phenol	DATE	EXTRACTED 06	/26/91 DATE AN	ALYZED 06/27/91
Bis (2-chloroethyl) ether				
Bis (2-chloroethyl) ether	8	The state of the s	t kr	and the state of t
2-Chlorophenol		/0	4-Chioro-3-methylphenol	</td
1.3-Dichlorobenzene 2.4.5-Trichlorophenol 1,4-Dichlorobenzene 2.4.5-Trichlorophenol 6enzyl alcohol 2-Chitoronaphthalene 1,2-Dichlorobenzene 2-Nitroankine 2-Methylphenol Dimethylphthalate Bis (2-chlorolsopropyl) sthar Acenaphthylene 4-Methylphenol 2.5-Dinitrosolusne N-Nitroso-di-n-propylamine 3-Nitroaniline 4-Methylphenol 2.4-Dinitrophenol Nitrobenzene 2.4-Dinitrophenol 4-Kasaphthane 4-Nitrophenol 2-Nitrophenol 2.4-Dinitrotokene 2-Nitrophenol 2.4-Dinitrotokene Benzolo acid 4-Chlorophenyl-phenyl	Bis (2-chloroethyl) ether		2-Methylnaphthalene	10 to
1,4-Dichlorobenzene 2,4,5-Trichlorophenol <5 / Discription Commonstration Commonstratio	2-Chiorophenol		Haxachtorocyclopentadiene	
Banzyl alcohol 1,2-Dichlorobenzene 2-Nitroaniline 2-Nitroaniline 2-Nitroaniline 2-Nitroaniline 2-Nitroaniline 3-Nitroaniline 4-Methylphenol N-Nitroao-di-n-propylamine N-Nitroaniline 3-Nitroaniline 3-Nitroaniline 4-S Acenaphthylene 3-Nitroaniline 4-S Acenaphthylene 2,4-Dinitrotokuene 2,4-Dinitrophenol 2,4-Dinitrophenol 2,4-Dinitrotokuene 3-Nitrophenol 2,4-Dinitrophenol 2,4-Dinitrotokuene 3-Nitrophenol 2,4-Dinitrotokuene 3-Nitrophenol 4-Nitrophenol 2,4-Dinitrotokuene 3-Nitrophenol 4-Nitrophenol 2,4-Dinitrotokuene 3-Nitroaniline 4-Chiorophenyl-pheny	1.3-Dichlorobenzene		2,4,6-Trichlorophenol	
Benzyl alcohol 1,2-Dichlorobenzene 2-Nitroaniline 2-Nitroaniline 3-Nitroaniline 4-Methylphenol N-Nitroso-di-n-propylamine Nitrobenzene 2-Nitrophenol 2-Dinitrotebusne 3-Nitroaniline 4-Chlorosthoxy) methane 4-Chlorosthoxy) methane 2-Chlorosthoxy) methane 4-Chlorophenol 2-Chlorosthoxy) methane 4-Chlorophenol	1,4-Dichlorobenzene	- m	2,4,5-Trichlorophenol	451
1,2-Dichlorobenzene 2-Nitroaniline <5 Dimethylphthalate	Benzyl alcohol	in a contract and the	2-Chloronaphthalene	Maria Caracteria Carac
2-Methylphenol Dimethylphthalate	1,2-Dichlorobenzene		2-Nitroaniline	and the same of th
Bis (2-chlorolaopropyl) ether 4-Methylphenol N-Nitroso-di-n-propylamine Nitrobenzene Nitrobenzene Nitrobenzene Nitrophenol 2,4-Dinitrolalisene 2,4-Dinitrolalisene 2,4-Dinitrophenol 2,5-I Isophorone 4-Nitrophenol 2,4-Dinitrolalisene 2,4-Dinitrophenol 2,4-Dinitrophenol 2,4-Dinitrolalisene 2,4-Dinitrophenol 2,4-Dinitrolalisene Bis (2-chloroethoxy) methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline 4-Chloroaniline N-Nitrosodiphenylamine 4-Chloroaniline	2-Methylphenol	المنافقة الم	Dimethylphthalate	Application of the Control of the Co
N-Nitroan-di-n-propylamine Acsnaphthene: Acsnaphthene: 2,4-Dinitrophenol 2,4-Dinitrophenol 2,4-Dinitrophenol 2,4-Dinitrotoluene Benzolo acid Bis (2-chloroethoxy) methane 2,4-Dinitrophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline N-Nitrosodiphenylamine Acsnaphthalene 2,4-Dinitrophenol 2,4-Dinitrophenol 4-Chloroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene 4-Nitroaniline Acsnaphthalene Acs	Bis (2-chlorolsopropyl) ether		and the contract of the state o	
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Nitrobenzene 2,4-Dinitrophenol 451 2-Nitrophenol Dibenzoturan 4/0 2,4-Dimethylphenol 2,4-Dinitrotolusne Diethylphthalate Benzolo acid Diethylphthalate Bis (2-chloroethoxy) methane 4/0 4-Chlorophenyl-phenylether 2,4-Dichlorophenol Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol 451 Naphthalene 4,6-Dinitro-2-methylphenol 4/0 N-Nitrosodiphenylamine 4/0	Hexachloroethane	All the state of the part	Acenaphthene:	. (*)
leophorone 2-Nitrophenol 2,4-Dimethylphenol 2,4-Dimethylphenol Benzolo acid Bis (2-chloroethoxy) methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Nitroaniline 4-Chloroaniline 4-Nitrosodiphenylamine 4-Nitrosodiphenylamine	Nitrobenzene		2,4-Dinitrophenoi	Printer and the second
2-Nitrophenol 2,4-Dimethylphenol 2,4-Dinitrotolusne Benzolo acid Diethylphthalate Bis (2-chloroethoxy) methane 2,4-Dichlorophenol Fluorene 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline N-Nitrosodiphenylamine Dibenzoturan 2,4-Dinitrotolusne 4-Chlorophenyl-phenylather 4-Chlorophenyl-phenylather 4-Chloroaniline A6-Dinitro-2-methylphenol 4-Chloroaniline	Isophorone	مالد د د د		
2,4-Dimitrotoluene Benzolo acid Diethylphthalata Bis (2-chloroethoxy) methane 2,4-Dichlorophenyl-phenylether 2,4-Dichlorophenol Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol 4,5-Dinitro-2-methylphenol 4,7-Chloroaniline 4,7-Chloroaniline 4,8-Dinitro-2-methylphenol 4,7-Chloroaniline 4,8-Dinitro-2-methylphenol 4,7-Chloroaniline	2-Nitrophenol	THE STATE OF THE S	ar ar i de la companio	
Benzolo acid Complete phonomy in the property of the property	2,4-Dimethylphenol	The state of the second	2.4-Dinitrotolusne	
Bis (2-chloroethoxy) methane	Programme Control of the Control of			
2,4-Dichlorophenol Fluorene 1,2,4-Trichlorobenzene 4-Nitroaniline ∠51 Naphthalene 4,6-Dinitro-2-methylphenol ∠51 N-Nitrosodiphenylamine ∠10	71-70-71		ms roller n 💌	California de la constanta de
1,2,4-Trichlorobenzene 4-Nitroaniline 4-Nitroaniline 4-Nitroaniline 4-Nitrosodiphenylamine 4-Nitrosodiphenylamine 4-Nitrosodiphenylamine 4-Nitrosodiphenylamine			بوبعا والمستوان والمستوان والمارا	and a part of the second
Naphthalene 4,6-Dinitro-2-methylphenol 4-Chioroaniline N-Nitrosodiphenylamine A.10			est of the second	<u> </u>
4-Chloroaniline N-Nitrosodiphanylamine & 10	i	•	,	
Have all and the second of the	and the second of the second o	re seem of the see	والها والمساعدة والمادان	
4-Bromophenyl-phenylether		regionse gymente pr		er flys and the second of the
	Transcritoroputagiana	Z	4-Bromopheryi-phenylather	<u> </u>



November 1888, 3rd Edition Certification No.: 10155 Units: pg/L	WELL BZ	MATRIX: WATER
Hexachlorobenzane Pentachlorophenol Phenanthrene Anthracene Di-n-octylphthalate Di-n-octylphthalate Banzo (b) fluoranthene Benzo (k) fluoranthene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (c) pyrene Buylbenzylphthalate Jideno (1,23-cd) pyrene Benzo (g,h.i) perylene Certification No.: /0/55 Units:	SAMPLE NO DATE COLLECTE	D 06/24/91 DATE RECEIVED 06/24/91
Pentachlorophenot Phenanthrene Anthracene Anthracene Di-n-octylphthalate Benzo (b) fluoranthene Pyrene Butylbenzylphthalate Butylbenzylphthalate Butylbenzylphthalate Dibenz (a,h) anthracene Benzo (g,h,l) perylene Dibenz (a,h) anthracene Genzo (g,h,l) perylene Certification No.: /0/55 Unita: Lag /L	DATE EXTRACTE	D 96/36/91 DATE ANALYZED 06/37/91
Pentachlorophenot Phenanthrene Anthracene Anthracene Di-n-octylphthalate Benzo (b) fluoranthene Pyrene Butylbenzylphthalate Butylbenzylphthalate Butylbenzylphthalate Dibenz (a,h) anthracene Benzo (g,h,l) perylene Dibenz (a,h) anthracene Genzo (g,h,l) perylene Certification No.: /0/55 Unita: Lag /L	•	
Pentachlorophenoi Phenanthrene Anthracene DI-n-octylphthalate DI-n-octylphthalate Benzo (b) fluoranthene Benzo (k) fluoranthene Benzo (a) pyrene Butylbenzylphthalate Jindano (1,2,3-cd) pyrene Jibenz (a,h) anthracene Benzo (g,h,l) perylene Dibenz (a,h) perylene Certification No.: /0/55 Units: Mg / L	Hexachlorobenzene	Benzo (a) anthracene
Phenanthrene Anthracene Di-n-octylphthalate Di-n-octylphthalate Benzo (b) fluoranthene Fluoranthene Benzo (k) fluoranthene Benzo (a) pyrene Butylbenzylphthalate Dibenz (a,h) anthracene Benzo (g,h,l) perylene Dibenz (a,h) anthracene Benzo (g,h,l) perylene Comments: Methodology: EPA Target Compound List By 8270, 3W-846 November 1888, 3rd Edition Certification No.: /0/55 Units: Links: Lin	Pentachlorophenoi 4.51	· · · · · · · · · · · · · · · · · · ·
Benzo (b) fluoranthene Fluoranthene Benzo (k) fluoranthene Indiano (1,2,3-cd) pyrene Dibenz (a,h) anthracene Benzo (g,h.i) perviene Benzo (g,h.i) perviene Benzo (g,h.i) perviene Comments: Methodology: EPA Target Compound List By 6270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units: ug/L	The state of the s	Bis (2-ethylhexyl) phthalate
Fluoranthene Pyrene Benzo (a) pyrene Butylbenzylphthalate Indano (1,2,3-cd) pyrene Dibenz (a,h) anthracene Benzo (g,h,l) perylene Dibenz (compound List By 8270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units: Units:	Anthracene	DI-n-octylphthalate
Benzo (a) pyrene Butylbenzylphthalate Indano (1,2,3-cd) pyrene Dibenz (a,h) anthracene Benzo (g,h.i) perylene Benzo (g,h.i) perylene Comments: Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units:	# DI-n-butylphthalate	Benzo (b) fluoranthene
Butylbenzylphthalate Indeno (1,23-cd) pyrene Dibenz (a,h) anthracene Benzo (g,h,l) perylene Methodology: EPA Target Compound List By 8270, 3W-848 November 1988, 3rd Edition Certification No.: /0/55 Linits: May / L	Fluoranthene	Benzo (k) fluoranthene
Butylbenzylphthalate Indeno (1,2,3-cd) pyrene 3,3'-Dichlorobenzidine Dibenz (a,h) anthracene Benzo (g,h,l) perylene Benzo (g,h,l) perylene Comments: Methodology: EPA Target Compound List By 8270, SW-848 November 1888, 3rd Edition Certification No.: /0/55 Units: May / L	Pyrene	
Dibenz (a,h) anthracene Benzo (g,h,l) perviene Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units: Mg/L	Butylbenzylphthalate	indeno (1,2,3-cd) pyrene
Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units: Language Compound List By 8270, SW-848 November 1988, 3rd Edition	33'-Dichlorobenzidine	Dibenz (a,h) anthracene
Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition Certification No.: /0/55 Units: Language Compound List By 8270, SW-848 November 1988, 3rd Edition	The second of th	Benzo (g.h.i) perylene
November 1988, 3rd Edition Certification No.: 10155 Units: Units: And And Horn China Division No.: Certification No.: Certifi		white was a little files of reason on he was all many the files of the second second the second the second
Unites: prog /L	Comments:	Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition
		Certification No.: 10155
		Unite: pay / L
inverterences.	flevered detection limits due to m	

Authorized:



CLIENT O'BRIEN I GERE	ENGINEERS	JOB NO. 3435.	001.040
DESCRIPTION ATLANTIC EN	VERGY - GENERAL CA	ABLE GROUNDS	
WELL B6		MATRIX: LUA	TER
AMPLE NO	DATE COLLECTED 06/24/9	DATE RECEIVED	06/24/91
	DATE EXTRACTED 06/26/91		06/27/91
· •	garante de la compansión	T II et allement leinenstricken sin, gritte mit einer leinenstricken bleiben.	
Phenol	and the control of th	o-3-methylphanol	/3
Bis (2-chloroethyl) ether	2-Methy	yinaphthalene	و المستحد المستحد المستحد المستحد المستحد المستحد المستحدد المستحد المستحدد المستحدد المستحدد المستحدد المستحدد المستحدد المستحد
2-Chlorophanoi	Hexachi	forocyclopentadiene	
1,3-Dichlorobenzene	2,4,6•Tri	ichlorophenol	<u> </u>
1,4-Dichlorobenzene	2,4,5-Tri	ichlorophanol	_ <66
Benzyl alcohol	2-Chlon	onaphthalene	4/3: 1.75
1,2-Dichlorobenzana	2-Nitros	aniline	466
2-Methylphenol	Dimethy	/iphthalate	2/3 ※郷?
Bis (2-chloroisopropyi) ether	Acenapl	hthylene	
4-Methylphenol	2,8-Dini	trotoluene	
N-Nitroso-di-n-propylamine	3-Nitroa	unkine	466
Hexachloroethane	Acenapt	hthene	K/3 (1)
Nitrobenzene	2,4-Dini	trophenol	466
Isophorone	4-Nitrop	phenol	266 Santo
2-Nitrophenol	Dibenzo	oluran	3</th
2,4-Dimethylphenol	2,4-Dinit	trotoluana	155.15
Benzoic acid	Diethyip.		Trick A part of the second
Bis (2-chloroethoxy) methane	4-Chlore	ophenyl-phenylether	animonaj.
2,4-Dichlorophenol	Fluorene	B	
1,2,4-Trichlorobenzene	4-Nitros	niline	<66
Naphthaiene	· ·	tro-2-mathylphenol	7 66
4-Chioroaniline	N-Nitros	sodiphenylamine	4/3
Hexachiorobutadiene	4-8romo	ophenyl-phenylether	· · · · · · · · · · · · · · · · · · ·
•		والواليسيس ومراوي والمراوي والمراوي والمراوي والمراوي والمراوية وا	or the state of th

	Authorized:
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ise, NY 13221 / (315) 437-0200	Oate:



CLIENT D'ARIEN GERE ENGINE	ERS	ов но. <u>3435</u>	.001.070
DESCRIPTION ATLANTIC ENERGY	GENERAL CARLE	GROUNDS	
WELL BL		MATRIX: WA	TER
SAMPLE NO. M 6733 DATE CO	LLECTED 06/24/91	DATE RECEIVED	06/24/91
DATE EXT	TRACTED	DATE ANALYZED	06/27/91
Hexachlorobenzane	Benzo (a) anti		K/3
Pentachiorophenol <6	Chrysene	The second secon	
Phenanthrene	3 Bis (2-ethylher	xyi) phthalate	
Anthracene	Di-n-octylpith	alate	
DI-n-butylphthalate	Benzo (b) fluor		
Fluoranthene	Benzo (k) fluor		17. 17. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19
Pyrene A Company of the Company of t	Benzo (a) pyre	ле	
Butyibenzyiphtnalate	Indeno (1,2,3-c	cd) pyrene	
733'-Dichlorobenzidine	Olbenz (a,h) au	nthracene	The second secon
The second secon	Benzo (g,h,i) p	erylene	
Comments:	Mathodology: 8P/	A Target Compound List By (8270. SW-846
	Nov	rember 1958, 3rd Edition	
	Certification No.:	10155	
;	Units: pay /2		
Elevated detection limits due date size			
Values flagged with a "Bt' indi analyte was detected in the la brank. The blank exhibited of bis(1-ethylhexyl)phtha	borstory		

Page 2 of 2

Authorized:	



CLIENT O'BRIEN I GERE EN	GINEERS	лов но. <u>34/35</u>	. 001. 040
DESCRIPTION ATLANTIC ENERS	GY - GENERA	L CABLE GROUNDS	
WELL BIL	·	MATRIX: LUA	TER
	DATE COLLECTED 06	/24 /9/ DATE RECEIVED	06/24/91
····	DATE EXTRACTED 06		06/27/91
	-		
Phenol	<n.< td=""><td>4-Chloro-3-methylphenol</td><td>411</td></n.<>	4-Chloro-3-methylphenol	411
Bis (2-chloroethyl) ether		2-Methylnaphthalene	100
2-Chlorophenol		Hexachiorocyclopentadiene	
1,3-Dichlorobenzene		2,4,6-Trichlorophenol	
1,4-Dichiorobanzane		2,4,5-Trichlorophenol	< 55
Benzyl alcohol	A PARTITION	2-Chloronaphthalene	Z //
1,2-Dichlorobenzene		2-Nitroaniline	455
2-Mathylphenol	Man	Dimethylphthalate	之 (/)
Bis (2-chloroisopropyl) ether		Acanaphthylene	
4-Methylphenol	a minimizer ann de principal de la composition della composition d	2.6-Dinitrotoluene	
N-Nitroso-di-n-propylamine	स्तित्व शास्त्र वाक्षर स्वतं प्र	3-Nitroaniline	< 55
Hexachloroethane	Color indistrumental adminis	Acenaphthene	- 人//公司報
Nitrobanzana	en e	2,4-Dinitrophenol	≺55
Isophorone		4-Nitrophenol	455 miles
2-Nitrophenol		Dibenzoluran	<u> </u>
2,4-Dimethylphenol		2,4-Dinitrotoluene	
Benzoic acid	455	Diethylphthalate	
Bis (2-chloroethoxy) methane	<11	4-Chlorophenyi-phenylether	***************************************
2,4-Dichlorophenol		Fluorene	
1,2,4-Trichlorobenzene		4-Nitroaniline	<55
Naphthalene		4.8-Dinitro-2-mathylphanol	<u> </u>
4-Chloroaniline		N-Nitrosodiphenylamine	· · 1</td
Hexachlorobutadiene		4-Bromophanyl-phanylether	<11

utharized:	

• • • • • • • • • • • • • • • • • • •		
		•



Semivolatile Orga Method (

SAMPLE NO. M6734		RAL CARLE	MATRIX: WATER
10/01	DATE COLLECTED_	06/24/91	
	DATE EXTRACTED	96/26/51	DATE RECEIVED 06/34/9 DATE ANALYZED 06/37/9
Hexachiorobenzene		The state of the s	. *
Pentachlorophenol	三五公子/1万/467	Benzo (a) anthrac	ene
Phananthena	<u> </u>	Chrysena	The state of the s
Anthracene	4/	Bis (2-ethylhexyl)	Ohthalata
Di-g-bundahir 1918 State Cart Store	of the statement of the	Di-n-octylphthalate	
Fluoranthene		Benzo (b) fluoranti	e dari da
Tyrene , we	* * 21 ·= 1.	Benzo (k) fluoranth	The state of the s
lutyibenzyiphthalate		Benzo (a) ovrene	The second secon
3'-Olchlorobenzidine	100 mg / 100	Indeno (1,2,3-cd) py	Tena
Managements.	_ <a>2,000	Dibenz (a,h) anthrac	
	Ĺ	Benzo (g,h,i) peryler	
ग e nts:	.•	delicated delicated and a second delicated to	
•			i Compound List By 8270, SW-848 1986, 3rd Edition
	Ca	rtification No.: /0/	55
Λ	Un	ite: jug /L	-
Mentared Aertechish Limit	to furto dathin	/ / -	
Values flagged with a "a	indicate the		



CLIENT O'BRIEN ' GERE ENGINES	3.5	JOB NO. <u>3435.</u>	001.040
DESCRIPTION ATLANTIC ENERGY -	GENERAL CABLE	GROUNDS	
FIELD DUP BII		MATRIX: LUA	TER
SAMPLE NO. M6735 DATE COL	LECTED 06/24/91	DATE RECEIVED _	06/24/91
	RACTED 06/26/91	DATÉ ANALYZED .	06/27/91
	-		
			•
Phenol	4-Chloro-3-meth	yiphenol	/</td
Bis (2-chloroethyl) ether	2-Methylnaphtha	lene	
2-Chiorophenol	Hexachlorocyclor	pentadiene	
1,3-Dichlorobenzane	2,4,6-Trichloroph	enol	\downarrow
1,4-Dichlorobenzene	2,4,5-Trichlorophi	enol	₹ 56
Benzyl aicohol	2-Chloronaphtha	lene .	Z11 233
1,2-Dichiorobenzane	2-Nitroaniline		< <i>5</i> 6
2-Methylphenol	Dimethylphthalati	Marking of the Market State of the Control of the	×// / / / / / / / / / / / / / / / / / /
Bis (2-chloroisopropyl) ether	Acenaphthylene	sanis a saddinini.	Villander (12)
4-Methylphenol	2,6-Dinitrotoluane		
N-Nitroso-di-n-propylamine	3-Nitroaniline	ىمىنىدىك ئىنىكىدىد دېچىكىلىكىدىدىدى يېزىنى بولىدىدى دېيىدىد	<54
Hexachloroethane	Acanaphthana		- イバタを建設
Nitrobenzene	2,4-Dinitrophenoi	ing grand weetsware com-	456
Isophorone	4-Nitrophenol		<56 € Sec
2-Nitrophenol	Dibenzoturan	ringelijas (k. 1917). Pa liidos gundina sardini	411
2,4-Dimethylphenol	2,4-Dinitrotoluene	k a s	No. 100
Benzoic acid	Diethylphthalate	k k a region kombinist in ee ee	and the second s
Bis (2-chloroethoxy) methans	4-Chlorophenyi-p	henylether	(2) (2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
2,4-Dichlorophenal	Fluorene	ta programa de de la companya de la	
1,2,4-Trichloropenzene	4-Nitroaniline	•	₹56
Naphthalene	4,6-Dinitro-2-mati	hylphenol	456
4-Chloroaniline	N-Nitrosodiphany	iaminė yras sas	4//
Hexachlorobutadiene	4-Bromophenyi-p	henylether	411
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DBG Laboratories, Inc., an O'Brien & Gera Limited Company		Authorized:
5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY	13221 / (315) 437-0200	Date:



CLIENT D'ARIEN ! GERE ENGINEERS	JOB NO. 3435. 001. 040
DESCRIPTION ATLANTIC ENERGY - GENER	AL CAME GROUNDS
FIELD OUP BILL	MATRIX: WATER
SAMPLE NO. M6735 DATE COLLECTED	06/24/91 DATE RECEIVED 06/24/91
DATE EXTRACTED	06/26/91 DATE ANALYZED 06/27/91
Hexachlorobenzene	Benzo (a) anthracene
Pentachlorophenol 456	Chrysene
Phenanthrene	Bis (2-ethylhexyl) phthalate
Anthracene	Di-n-octylphthalate
DI-n-butylphthalate	Benzo (b) fluoranthene
Fluoranthene	Benzo (k) fluoranthene
Pyrene	Benzo (a) pyrene
Butylbenzylphthalate	Indeno (1,2,3-cd) pyrene
733'-Dichiorobenzidine	Olbenz (a,h) anthracene
	Benzo (g,h,i) perylene
Comments:	Methodology: EPA Target Compound List By 8270, SW-848 November 1988, 3rd Edition
	Certification No.: /0/55
	Unita: pag/a
Rievated dependion limits due to maer	ix
Values flagged with a "B1" indicate the analyte was detected in the laborator brank The blank exhibited in the laborator brank.	y .

Page 2 of 2

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CLIENT O'BRIEN ' GERE ENGINEERS	JOB NO. 3435	001.040
DESCRIPTION ATLANTIC ENFRGY - GENER	RAL CABLE GADUNOS	
FIELD BLANK BU	MATRIX: LUA	TER.
SAMPLE NO. ME736 DATE COLLECTED C	36/24/9/ DATE RECEIVED_	06/24/91
DATE EXTRACTED		06/27/91
Phenol 4/7	4-Chloro-3-methylphenol	<17
Bis (2-chloroethyl) ether	2-Methylnaphthalens	
2-Chlorophenol	Hexachlorocyclopentadlene	
1,3-Dichlorobenzene	2,4,6-Trichlorophenol	
1,4-Dichlorobenzene	2.4,5-Trichlorophenol	486
Benzyl alcohol	2-Chloronaphthaiene	417
1,2-Dichiorobenzene	2-Nitroaniline	<86
2-Methylphenol	Dimethylphthalate	4/7
Bis (2-chloroisopropyi) ether	Acenaphthylene	
4-Methylphenol	2,8-Dinitrotoluene	
N-Nitroso-di-n-propylamine	3-Nitroaniline	7 EC
Hexachloroethane	Acenaphthene	1.4/7.
Nitrobenzene	2.4-Dinitrophenol	~ 86
Isophorone	4-Nitrophenol	~ 86
2-Nitrophenol	Dibenzoturan	<17
2,4-Dimethylphenol	2,4-Dinitrotoluene	1
Benzolo aold	Diethylphthalate	
Bis (2-chloroethoxy) methane	4- Chlorophenyl-phenylether	e n anna apriq
2,4-Dichlorophenol	Fluorene	J
1,2,4-Trichlorobenzene	4-Nitroaniline	~86 ·
Naphthalene	: 4,6-Dinitro-2-methylphenol	< 86
4-Chloroaniline	N-Nitrosodiphenylamine	<u>≺/7</u> ~
Hexachlorobutadiene	4-Bromophenyi-phenyiether	Κ 17
· · · · · · · · · · · · · · · · · · ·		

mited Company		Authorized:
142 / Syracuse, NY	3221 / (315) 437-0200	Oate;



Semivolatile Oi Metho

CLIENT D'ARIEN ;	ERE ENGINEERS	
DESCRIPTION ATLANTIC		JOB NO. 3435. 501. 0
FIELD BL		RAL CAME GROUNDS
SAMPLE NO. M6736		MATRIX: WATER
	DATE COLLECTED	OG/24/91 DATE RECEIVED ON /24
	DATE EXTRACTED	06/26/51 DATE ANALYZED 06/2-
Hexachlorobenzane		
Pentachlorophenol	2.6.47	Benzo (a) anthracene
Phenanthrene	<u> </u>	Chrysene
Anthracene	and the second of the second production of the	Bis (2-ethylhexyl) phthalate
OI-n-butylphthalate		Di-n-octylphthalate
Fluoranthene		Benzo (b) fluoranthene
Pyrene-	Barrier and State William reason	Benzo (k) fluoranthene
Butylbenzylphthalate		Benzo (a) pyrene
3 Dichlorobenzidine		Indeno (1,23-cd) pyrene
	24. 24. A. 34. A	Dibenz (a,h) anthracene
•	.,	Berzn (g.h.i) perylene: Gib
nments:	·	
	1	Mathematica

Methodology: EPA Target Compound List 8y 8270, SW-846 November 1988, 3rd Edition

Cartification No.: 10155

Elevated detection limits due to marriage SAMPLE GROUPTESTIBILITY 512E (580 MLS.)



100 TOMPKINS ST. · CORTLAND, N.Y. 13045 607-753-3403



TOXICITY CHARACTERISTICS LEACHING PROCEDURE LEAD

Client: EMPIRE SOILS

INVESTIGATIONS

Report Date:

8/27/91

Sampling Date: Sampled By:

7/25/91 K. Seitz

Site:

Rome Cogeneration

Date Received:

8/23/91

Project No: GTA-91-40B

Extraction: Percent Solids: TCLP 1311 80.4%

Sample: Soil - B-16/S-2

Lab Log Number:

9108187

Cas No.	Compound	latory (mg/L)	Result (mg/L)
7439-92-1	Lead	5.0	ND (<.10)

ND - None detected greater than detection limits noted.

Fluid Extraction Method: Fluid #1

All units above are mg/L based on a digestion of 100 g sample and a final solution volume of 2,000 ml.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

> John H. Buck, P.E. Laboratory Director NYS ELAP ID 10795

HUNTINGDON ANALYTICAL SERVICES ENVIRONMENTAL

METHOD 8020 PURGEABLE AROMATICS

SAMPLE IDENTIFICATION:	METHOD BLANK	B-12	B-13	B-14	B-15	8-16
HAS SAMPLE #91-1170-		001	002	003	004	005
DATE ANALYZED:	7-29-91	7-29-91	7-29-91	7-29-91	7-29-91	7-29-91
COMPOUND	RESULT . ug/kg	RESULT ug/kg	RESULT ug∕kg	RESULT ug/kg	RESULT ug/kg	RESULT ug/kg
BENZENE TOLUENE ETHYL BENZENE TOTAL XYLENES CHLOROBENZENE 1,4-DICHLOROBENZENE	<50 <50 <100 <50	<50 <50 <50 <100 <50 <50	<50 <50 <50 <100 <50 <50	<50 <50 <50 <100 <50 <50	<50 <50 <50 <100 <50 <50	<50 <50 <50 <100 <50 <50
1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE		<50 <100	`∢50 ∢100	<50 <100	<50 <100	<50 <100

NIINGDON BHALTICAL			
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mplers (Signasuper):	HAS Ref. 890. T IN IL		
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B-13 1-25-41350			0008 0108
8-14 7-255 1330			
8-15 7-36-810800	Q-15 1004 A>D		
3-16/224.9/0500	1 1-16 OUS A 3 De 1		
8-12 7-25/1015			
73 7254 AD (B-14)	12-14		TCLP METALS
-16 7369,0900	8.16 018 1		
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