PM ENVIRONMENTAL | Environmental & Engineering Services

PHASE I ENVIRONMENTAL SITE ASSESSMENT

101-111 Geraldine Street | Key West, Florida
PM Project Number 06-3668-0

Prepared for:

Keys Energy Services
PO Box 6100
Key West, Florida 33040

Prepared by:

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July 26, 2013

Ms. Lynne Tejeda
Keys Energy Services
PO Box 6100
Key West, Florida 33040

Re: Phase I Environmental Site Assessment of the Former Key West Gas and Electric Company Located at 101-111 Geraldine Street Key West, Florida PM Environmental, Inc. Project No. 06-3668-0

Dear Ms. Tejeda:

PM Environmental, Incorporated (PM) has completed the Phase I Environmental Site Assessment (ESA) of the above referenced property. This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

The Phase I ESA for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **KEYS ENERGY SERVICES** to rely on PM's Phase I ESA report.

If you have any questions related to this report please do not hesitate to contact our office at (813) 440-4721.

Sincerely,
PM ENVIRONMENTAL, INC.

Raymond H. Siegmann
Regional Due Diligence Group Manager

Gene Bailey, P.E.
Regional Manager/Senior Consultant

EXECUTIVE SUMMARY

PM Environmental, Inc., (PM) was retained to conduct a Phase I Environmental Site Assessment (ESA) of the Former Key West Gas and Electric Company located at 101-111 Geraldine Street, Key West, Monroe County, Florida (hereafter referred to as the "subject property"). This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF KEYS ENERGY SERVICES, WHO MAY RELY ON THE REPORT'S CONTENTS.

Item	Comments
Number of Parcels and Acreage	Eight parcels containing approximately 0.78 acres
Number of Building(s) and Square Footage	Three buildings, which consist of a 13,300 square foot main building, a 459-square foot blacksmith shop, and a 945 square foot machine shop
Current Property Use	Electrical substation

Reasonably ascertainable records for the subject property extended back to approximately 1884. Data failure occurred prior to that date, and between 1899 and 1912. In PM's professional opinion, this data failure does not represent a significant data gap. Standard and other historical sources were able to document that the first developed use of the subject property occurred in at 1884, at which time the property was developed as a manufactured gas plant that operated until 1889. The property began to operate as an electrical power plant in approximately 1890 and continued to operate as a power plant until the 1950s/1960s. Five residential dwellings were present on the northern and southern portions of the property from at least 1892 until 1899. The property has been unoccupied since the power plant was closed down, with the exception of the construction of an electrical substation on the southern portion of the property in the late 2000s.

Current Recognized Environmental Conditions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Former Key West Gas and Electric Company located at 101-111 Geraldine Street, Key West, Monroe County, Florida, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

- Assessment activities on behalf of the Florida Department of Environmental Protection (FDEP) in August 2012 to further assess the historical operations at the subject property identified concentrations of polynuclear aromatic hydrocarbons (PAHs), arsenic, and lead above FDEP Soil Cleanup Target Levels (SCTLs) in shallow soil samples to the southwest of the machine shop building. In addition, concentrations of isopropylbenzene

and PAHs were identified above FDEP Groundwater Cleanup Target Levels (GCTLs). This contamination appears to be associated with former operations on the subject property.

- The subject property operated as a manufactured gas plant (MGP) from approximately 1884 until 1889. Operations of MGPs typically involved the gasification of combustible materials such as coal, wood, or oil. A former retort room, which is a processing area, and a former gasometer, which was a storage container for gas, were identified on the eastern portion of the property. The by products of the gasification process typically included petroleum products and/or hazardous substances, including coal tars. The potential exists for a release to have occurred in association with the operation of the former MGP.

- Sanborn maps document the presence of six former 25,000-gallon crude oil above ground storage tanks (ASTs) along the southern property boundary between at least 1912 and 1926. In addition, two former crude oil ASTs were identified to the east of the main building. Limited sampling has been conducted in these areas that is not adequate to assess the potential for leaks, spills, and/or overfills to have occurred in association with these former ASTs; therefore, the potential exists for subsurface contamination to be present.

- The subject property as a power plant, which utilized petroleum products as a fuel source, from approximately 1890 until the 1950s/1960s. The potential exists for leaks and/or spills to have occurred in association with the operation of the turbine generators and/or other equipment within the main building and on various portions of the property. The integrity of the floor beneath the generators is unknown; therefore, the potential exists for subsurface impact to be present.

- Former machine shops were identified on the property within the southwestern portion of the main building and within the machine shop. Machine shop operations typically involve the use of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The historical waste management practices associated with the former machine shop operations are unknown and may be a source of subsurface contamination.

The following adjoining and/or nearby RECs have been identified:

- The north adjoining properties were formerly part of the Truman Annex, which was a part of Naval Air Station Key West, from at least 1892 until 1971. Sanborn maps document the property was occupied by U.S. governmental land dating back to at least 1892. The historic usage of these properties associated with the former military base is unknown from at least 1892 until 1958. Therefore, the potential exists for operations to have included the use of petroleum products and/or hazardous substances, and/or landfilling activities to have occurred.

- The south adjoining properties, identified as 110-118 Geraldine Street, was occupied by a Standard Oil bulk petroleum plant. The potential exists for leaks, spills, and/or overfills associated with the operation of a former bulk petroleum plant to have resulted in migration of contamination onto the subject property.

- The west adjoining property was occupied by U.S. governmental land from at least 1892 until 1926. Specifically, a governmental slip was identified directly west of the property in 1892. According to previous investigations on the subject property, this property was filled in the 1890s or early 1990s. The potential exists for the fill materials to have originated from a contaminated property. Therefore, the potential exists for migration of contamination onto the subject property.

Historical Recognized Environmental Conditions

A historical REC, as defined in the ASTM Standard, is an environmental condition that in the past would have been identified as a REC, but which may or may not be considered a REC currently. The following historical REC was identified:

- A release was identified in March 1991 based on the presence of free phase hydrocarbons within a concrete lined pit located east of the main building. Free product was also subsequently identified in MW-7, which was located to the northwest of the pit. As a result of the identification of free product, the former ASTs and the concrete lined pit were emptied, cleaned, and removed/abandoned in August 1992. A total of approximately 30,000-gallons of free product/impacted groundwater and 3,850 cubic yards of impacted soil was removed from the property during decommissioning activities and disposed off site. The extent and location of the excavation was not documented in previous reports. In addition, approximately 100-gallons of free product was removed from MW-7 between 1991 and 1992. Subsequent groundwater sampling between 1992 and 1995 did not identify free product within MW-7. The most recent sampling in 1994 and 1995 did not identify concentrations of polynuclear aromatic hydrocarbons (PAHs) or total recoverable petroleum hydrocarbons (TRPH) above the most restrictive FDEP Groundwater Cleanup Target Levels (GCTLs) in the area of the former ASTs or former concrete pit. Therefore, the FDEP issued a Site Rehabilitation Completion Order (SRCO) for the release on July 27, 1995.

De Minimis Conditions

De minimis conditions are conditions that generally do not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimis are not recognized environmental conditions. No de minimis conditions were identified during completion of this report.

Recommendations

These RECs have been brought to the attention of the client within the requirements of the ASTM Standard Designation E-1527-05.

PM has been contracted to complete additional investigation for the client.

The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (813) 440-4721 to discuss this report.

REPORT PREPARED BY:
PM Environmental, Inc.

Raymond H. Siegmann
Regional Due Diligence Group Manager

REPORT REVIEWED BY:
PM Environmental, Inc.

Gene Bailey, P.E.
Regional Manager/Senior Consultant

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APPENDICES

1.0 INTRODUCTION

This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF KEYS ENERGY SERVICES, WHO MAY RELY ON THE REPORT'S CONTENTS.

PM acknowledges that this party may rely on the contents and conclusions presented in this report. Unless stated otherwise in writing, PM makes no other warranty, representation, or extension of reliance upon the findings of this report to any other entity or third party.

1.1: Property Overview

Subject Property Location/Address	101-111 Geraldine Street, Key West, Monroe County, Florida
Number of Parcels and Acreage	Eight parcels containing approximately 0.78 acres
Number of Building(s) and Square Footage	Three buildings, which consist of a 13,300 square foot main building, a 459-square foot blacksmith shop, and a 945 square foot machine shop
Current Property Use	Electrical substation
Current Zoning	HMDR: Historic Medium Density Residential

The subject property location is depicted on Figure 1, Site Location Map. A diagram of the subject property and adjoining properties is included as Figure 2, Generalized Diagram of the Subject Property and Surrounding Area. Photographs taken during the site reconnaissance are included in Appendix A.

1.2: Purpose and Scope of Services

The purpose of this Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify *recognized environmental conditions* (RECs) and *historical recognized environmental conditions* (HRECs) in connection with the subject property. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs and HRECs in connection with the subject property.

Acronyms and terms used in this report are described in Appendix F. Additionally, PM's scope of services is included in Appendix F.

1.3: Significant Assumptions

Pursuant to ASTM Standard Practice E 1527-05, PM assumes that the information provided by all sources and parties, including the User, is accurate and complete, except where obvious inconsistencies or inaccuracies were identified.

1.4: Limitations, Deviations, and Special Terms and Conditions

There are no deviations from the ASTM Standard. Non-ASTM Scope considerations are included in Section 10.0. Any physical limitations identified during the completion of this report are referenced in Section 7.0.

Due to changing environmental regulatory conditions and potential on-site or adjacent activities occurring after this assessment, the client may not presume the continuing applicability to the subject property of the conclusions in this assessment for more than 180 days after the report's issuance date, per ASTM Standard Practice E 1527-05.

To the best of PM's knowledge, no special terms or conditions apply to the preparation of this Phase I ESA that would deviate the scope of work from the ASTM Standard Practice E 1527-05.

PM was not provided with a copy of the recorded land title records for subject property by the client and was not requested to complete a title search. Therefore, PM cannot comment on any potential relevant information that may have been obtained through review of these records.

2.0 USER PROVIDED INFORMATION

The ASTM Standard defines a User as "the party seeking to use Practice E 1527 to complete an environmental site assessment. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager." The User has specific obligations for completing a successful application of this practice as outlined in Section 6 of the ASTM Standard Practice E 1527-05.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments") (if desired), the User must provide certain information (if available) identified in the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

PM was retained to complete this Phase I ESA for property evaluation purposes. Therefore, innocent landowner defenses/protections under State and Federal law do not apply for the User.

2.1: Recorded Land Title Records

PM requested reasonably ascertainable recorded land title records for the subject property from the User. However, PM did not receive any title records from the User within the time constraints of this report. Additionally, PM was not requested to complete a title search by the User. PM did review available environmental lien and activity and use limitations for the subject property, which are further discussed in Section 4.10. Based upon the information reviewed as part of this Phase I ESA, PM has not identified the lack of provided land title records as a data failure that represents a significant data gap.

2.2: Reason for Performing this Phase I ESA

According to the User, this Phase I ESA was conducted to evaluate the current and historical conditions of the subject property in an effort to identify RECs and HRECs in connection with the subject property.

3.0 PHYSICAL SETTING

PHYSICAL SETTING INFORMATION FOR THE SUBJECT PROPERTY AND SURROUNDING AREA		SOURCE
Topography: Refer to Figure 1 for an excerpt of the Topographic Map		
Site Elevation	8 feet above mean sea level (msl)	United States Geological Survey Division (U.S.G.S.) 7.5-Minute Topographic Map of the Key West, Florida Quadrangle, 1971
Topographic Gradient	West	
Closest Surface Water	Gulf of Mexico, which is located approximately 1,000 feet west of the property	
General Soil Characteristics: Refer to Appendix B for a copy of the soil survey map and soil type descriptions		
Soil Type	Urban land	United States Department of Agriculture, Soil Survey of Monroe County, Florida (published October 1995)
Description	Consists of areas covered by asphalt, concrete, buildings, and other impervious surfaces. The natural soil is covered and cannot be readily observed.	
Area Specific Geology/Hydrogeology Characteristics:		
Geology	Geology was identified as weathered limestone to a depth of 8.0 feet bgs, underlain by hard limestone to a depth of 30.0 feet bgs, the maximum depth explored.	Previous site investigations for the subject property
Hydrogeology	Groundwater was encountered between 3.0 and 4.8 feet and documented to flow to the east.	
Oil and Gas Wells:		
Current Oil and Gas Wells on Subject Property	None	FDEP Mining and Minerals Regulation Oil and Gas Maps web site
Historical Oil and Gas Wells On Subject property	None	

4.0 RECORDS REVIEW

PM reviewed reasonably ascertainable records to identify obvious uses of the subject property from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. Reasonably ascertainable records reviewed as part of this Phase I ESA documented the use of the property back to 1884. Data failure occurred prior to that date, and between 1899 and 1912. In PM's professional opinion, this data failure does not represent a significant data gap.

4.1: Aerial Photographs and Sanborn Maps

PM reviewed reasonably ascertainable aerial photographs for the subject property area. The sources and years reviewed are identified in the table below. Relevant aerial photographs are included in Appendix B.

PM reviewed reasonably ascertainable Sanborn Fire Insurance Maps for the subject property area, which were obtained from EDR. The sources and years reviewed are identified in the table below. Relevant Sanborn Maps are included in Appendix B.

The following table summarizes the sources reviewed and the information obtained about the subject property from these sources. Information obtained about the adjoining properties from these sources is summarized in Section 8.0.

Aerial and Sanborn Summary for the Subject Property

Year and Source	Summary of Information
1889 Sanborn Map (EDR)	Due to the layout of this Sanborn map, the subject property is not visible.
1892 Sanborn Map (EDR)	The property is occupied by Key West Gas & Electric Light Company. A main building with engine and dynamo rooms is present on the southwestern portion of the property and is consistent with a portion of the current building. A cistern is identified to the northwest of this building. A total of five residential dwellings are present on the northern and southern portions of the property. A retort room and gas holder (likely a gasometer) are present on the eastern portion of the property.
1899 Sanborn Map (EDR)	Similar to the previous Sanborn map, with the exception that an addition has been constructed to the southeastern portion of the main building.
1912 Sanborn Map (EDR)	The former dwellings have been demolished. The former retort room is now identified as a machine shop. A tool shed is identified to the northeast of the machine shop. A blacksmith shop and an oil house are present to the southwest of the machine shop. The gas holder is now identified as a 75,000-gallon storage tank on the first floor and a stock room on the 2nd floor. A total of six 25,000-gallon crude oil ASTs are identified to the southwest of the gas holder along the southern property boundary. Two additional crude oil ASTs, a water tank, and a pump house are identified directly east of the main building.
1926 Sanborn Map (EDR)	The former blacksmith shop appears to have been demolished. The former gas holder/gasometer is now identified as a cistern. An addition has been constructed to the northern portion of the main building, which is now consistent with site reconnaissance observations.
1948 Sanborn Map (EDR)	Two oil ASTs are identified along the northern property boundary. The water tank and pump house to the east of the main building are no longer present. The former oil house building has been demolished, and a storage/blacksmith building, which is consistent with the current blacksmith shop has been constructed on the eastern portion of the property. The former ASTs along the southern property boundary appear to have been removed.
1959 Aerial (FDOT/USGS)	A third apparent AST is visible to the south of the two ASTs along the northern property boundary. The remainder of the property appears similar to the previous Sanborn map.
1962 Sanborn Map (EDR)	Similar to the previous aerial year.
1963 Aerial (FDOT)	Similar to the previous Sanborn year.
1970 Aerial (USGS)	The property generally appears similar to the previous aerial year. However, due to scale and resolution, more definitive details could not be determined.
1971 Aerial (FDOT)	A building consistent with the current control room building has been constructed on the southern portion of the property.
1979 Aerial (USGS)	The property generally appears similar to the previous aerial year. However, due to scale and resolution, more definitive details could not be determined.

Year and Source	Summary of Information
1994 Aerial (FDOT)	The former tanks on the northern portion of the property and to the east of the main building appear to have been removed.
2003 Aerial (FDOT)	Similar to the previous aerial year.
2010 Aerial (MapCard)	An electrical substation appears to have been constructed on the southeastern portion of the property. Layout is consistent with current layout.

4.2: Local Street Directories

Reasonably ascertainable local street directories for Key West, Florida were researched. Directories were available from 1962 to 2013. Directories were researched in at least five-year increments, when available. It should not be construed that the earliest date represented is the initial date of occupancy.

PM also reviewed listings for adjoining commercial properties. Information from the listings reviewed is included in Section 8.0.

Subject Property: 101-111 Geraldine Street

2013-1962 Not Listed

Historical Subject Property Addresses: 100-108 Geraldine Street

2013-1962 Not Listed

Historical Subject Property Addresses: 709 Fort Street

2013-1962 Not Listed

4.3: Assessing Department

Reasonably ascertainable assessment information provided by the Monroe County Assessing Department was obtained and reviewed. Assessing records document that the subject property consists of eight parcels containing 0.78 acres and developed with a 13,300 square foot main building constructed in 1923, a blacksmith shop that contains 459 square feet and was constructed in 1973, and a 945 square foot machine shop constructed in 1923. Copies of available assessment records for the subject property and the current legal description are included in Appendix B.

4.4: Building Department

Reasonably ascertainable assessment information provided by the City of Key West Building Department was obtained and reviewed. PM's review did not identify potential environmental concerns associated with the subject property. No relevant information was included within the records reviewed.

4.5: Fire Department

PM submitted a Freedom of Information Act (FOIA) request to the City of Key West Fire Marshal's Office to review Fire Department records for the subject property. PM received a written response indicating that no file information was available for the subject property.

4.6: Health Department

PM submitted a Freedom of Information Act (FOIA) request to the Monroe County Health Department to review records for the subject property. PM received a verbal response from a representative of the department indicating no files were available for the subject property.

4.7: Utilities

4.7.1: Municipal Water/Water Wells

The subject property is currently connected to municipal water. PM attempted to obtain an initial tap date from the Florida Keys Aqueduct Authority. However, a representative of the department indicated no tap records were available for the property. Sanborn maps document the presence of municipal water service in the area of the subject property dating back to at least 1912. In addition, two former cisterns were identified on the eastern and northwestern portions of the property in the late 1800s/early 1900s. No records of private water wells have been identified through review of reasonably ascertainable information.

4.7.2: Sanitary Sewer/Septic System

The subject property is currently connected to municipal sewer. PM attempted to obtain an initial tap date from the Florida Keys Aqueduct Authority. However, a representative of the department indicated no tap records were available for the property. Sanborn maps document the presence of municipal water service in the area of the subject property dating back to at least 1912. Therefore, PM believes the subject property has been connected to municipal sewer since at least that time. Based on the presence of several out buildings associated with the dwellings on the property during this time period, PM believes that out houses were potentially present on the property during this time period. No records of private septic systems have been identified through review of reasonably ascertainable information.

4.7.3: Heat Source

The subject property is currently heated with electric radiant heaters. Based on use of the property to generate electricity since at least 1890, PM believes the current and former buildings likely utilized electric heating. No alternative heat sources have been identified through review of reasonably ascertainable information.

4.8: Underground Storage Tank (UST) Systems

Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current presence of USTs on the subject property. Specifically, no records of current USTs were identified though review of reasonably ascertainable records and PM did not observe any evidence of USTs (i.e. fill ports, vent pipes,

etc.) during the site reconnaissance. Additionally, the current owner indicated he had no knowledge of current USTs associated with the subject property.

However, a Leaking Underground Storage Tank (LUST) release was identified in association with a former concrete vault located to the east of het main building. Refer to Section 4.9 for additional information. In addition, a 24,200-gallon diesel UST was formerly identified at the property. Based on review of previous assessment activities, PM believes this UST was actually a 25,000-gallon AST that was located on the northern portion of the property and was approximately 20 percent buried.

4.9: Previous Environmental Reports

PM reviewed the following previous environmental reports for the subject property. Relevant portions of the reports are included in Appendix C.

Name of Report	Date of Report	Company that Prepared Report
Contamination Assessment Report	9-1991	CH2M Hill
Contamination Assessment Report Addendum	7-1992	CH2M Hill
Remedial Action Plan	10-1992	CH2M Hill
Remedial Action Plan Modification	6-1993	PDG Environmental Services
1st Quarter Groundwater Monitoring	4-4-1994	CH2M Hill
Third Quarter "Monitoring Only Water Quality Results	4-17-1995	PDG Environmental Services
Site Rehabilitation Completion Order	7-27-1995	FDEP
Enhanced Pre-CERCLIS Screening Assessment Checklist/Decision Form	1-7-2011	FDEP
Abbreviated Preliminary Assessment Checklist	10-31-2011	FDEP
Site Inspection Report	8-16-2012	FDEP

4.9.1: Summary of Previous Environmental Reports

Open or Closed LUST Site:	Closed
Release Identification(s):	9101950 (Facility ID#)
Release Date(s)	March 7, 1991
Is soil contamination present above an applicable regulatory level?	Yes
Is soil contamination delineated in all directions?	Not
Is groundwater contamination present above an applicable regulatory level?	Yes
Is groundwater contamination delineated in all directions?	No
Significant deficiencies identified?	Yes. See below
Additional information:	See below

A release was identified in March 1991 based on the presence of free phase hydrocarbons within a concrete lined pit located east of the main building. Free product was also subsequently identified in MW-7, which was located to the northwest of the pit. As a result of the identification of free product, the former ASTs and the concrete lined pit were emptied, cleaned, and removed/abandoned in August 1992. A total of approximately 30,000-gallons of free product/impacted groundwater and 3,850 cubic yards of impacted soil was removed from the property during decommissioning activities and disposed off site. The extent and location of the excavation was not documented in previous reports. In addition, approximately 100-gallons of free product was removed from MW-7 between 1991 and 1992. Subsequent groundwater sampling between 1992 and 1995 did not identify free product within MW-7. The most recent sampling in 1994 and 1995 did not identify concentrations of polynuclear aromatic hydrocarbons (PAHs) or total recoverable petroleum hydrocarbons (TRPH) above the most restrictive FDEP Groundwater Cleanup Target Levels (GCTLs) in the area of the former ASTs or former concrete pit. Therefore, the FDEP issued a Site Rehabilitation Completion Order (SRCO) for the release on July 27, 1995. Therefore, PM has identified the closed LUST release at the property as a historical REC.

An additional assessment was completed on behalf of the FDEP in August 2012 to further assess the historical operations at the subject property to determine if the property qualified as a CERCLIS site. Soil and groundwater samples were submitted for laboratory analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), the RCRA eight metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), and cyanide. Analytical results identified concentrations of PAHs, arsenic, and lead above FDEP Soil Cleanup Target Levels in shallow soil samples to the southwest of the machine shop building. In addition, concentrations of isopropylbenzene and PAHs were identified above FDEP GCTLs in groundwater samples from the central portion of the property. **The presence of contaminants above FDEP SCTLs and GCTLs on the property is a REC.**

Sediment sampling from a storm water catch basin to the south of the subject property, across Fort Street, identified a concentration of lead above FDEP Sediment Quality Assessment Guidelines.

Based on the concentrations of contaminants identified at the subject property, no additional CERCLIS investigation was recommended. However, the identified contamination was referred to the FDEP for additional investigation.

The previous site assessment activities did not adequately assess several historical potential sources of contamination, such as the former operation of the property as a manufactured gas plant, the former crude oil ASTs identified on the southern portion of the property, the former operation of generators/as a power plant, and the former machine shop operations within the main and machine shop buildings. The additional RECs are identified throughout this report.

4.10: Environmental Liens, Activity and Use Limitations, and Government Institutional and Engineering Controls

PM has not identified any record of environmental liens, activity and use limitations, or institutional controls or engineering controls associated with the subject property through review of reasonable ascertainable records.

5.0 INTERVIEWS

The objective of completing interviews with knowledgeable site contacts is to obtain information about the uses and physical characteristics of the property. In general, interviewees supported the information reviewed from other historical sources (i.e. aerial photos, city records, etc.).

Represents	Interviewed	Name and Title	Length of Time Associated with Subject Property	Comments
Current Property Owner	Yes	Mr. Stanley Rzad, Compliance Administrator	Since 1991	The subject property has been unoccupied since the 1950s, and was formerly utilized to produce natural gas by coke and steam.
Former Property Owner	No	Not applicable	Not applicable	Contact information for the former owner was not reasonably ascertainable or provided by the User
Key Site Manager	Yes	Mr. Stanley Rzad, Compliance Administrator	Since 1991	See above
Current Occupant(s)	No	Not applicable	Not applicable	The subject property is not currently occupied; therefore, PM as unable to interview a current occupant during the site reconnaissance.
Former Occupant(s)	No	Not applicable	Not applicable	Contact information for the former occupants was not reasonably ascertainable or provided by the User
Other(s)	No	Not applicable	Not applicable	No other relevant interviews were conducted as part of this Phase I ESA.

6.0 SUMMARY OF HISTORICAL USE

Standard and other historical sources were able to document that the first developed use of the subject property occurred in at 1884, at which time the property was developed as a manufactured gas plant that operated until 1889. The property began to operate as an electrical power plant in approximately 1890 and continued to operate as a power plant until the 1950s/1960s. Five residential dwellings were present on the northern and southern portions of the property from at least 1892 until 1899. The property has been unoccupied since the power plant was closed down, with the exception of the construction of an electrical substation on the southern portion of the property in the late 2000s.

The subject property operated as a manufactured gas plant from approximately 1884 until 1889. Operations of manufactured gas plants typically involved the gasification of combustible materials such as coal, wood, or oil. A former retort room, which is typically a processing area, and a former gasometer, which was a storage container for gas were identified on the eastern portion of the property. The by products of the gasification process typically included petroleum products and/or hazardous substances, including coal tars. **The potential exists for a release**

to have occurred in association with the operation of the former manufactured gas plant, which is a REC.

The long term operation of the subject property as a power plant, which utilized petroleum products as a fuel source, presents the potential for leaks and/or spills to have occurred in association with the operation of the turbine generators and/or other equipment within the main building and on various portions of the property. **The integrity of the floor beneath the generators is unknown; therefore, the potential exists for subsurface impact to be present, which is a REC.**

Sanborn maps document the presence of six former 25,000 crude oil ASTs along the southern property boundary between at least 1912 and 1926. In addition, two former crude oil ASTs were identified to the east of the main building. **Limited sampling has been conducted in these areas that is not adequate to assess the potential for leaks, spills, and/or overfills to have occurred in association with these former ASTs. Therefore, PM has identified the former crude oil ASTs a REC.**

7.0 SUBJECT PROPERTY RECONNAISSANCE

Reconnaissance Information	
PM Field Personnel:	Ms. Candace Chin Fatt
Site Reconnaissance Date:	July 10, 2013
Weather Conditions:	90 degrees F, sunny
Escort:	Mr. Stanley Rzad, Compliance Administrator
Limitations:	None identified

7.1: Subject Property Observations

The main building contains a total of 13,300-square feet of floor space, which is divided into the former generator area, offices, a shower area, storage areas, and bathrooms. An area of damaged roofing was observed within the main building.

The 459 square foot blacksmith shop and 945 square foot machine shop buildings both consist of single rooms.

Interior finish materials in the main building consist of plaster and ceramic tile. All of the buildings are brick and mortar construction with poured concrete foundations.

The exterior portions of the property consist of gravel paved areas. An electrical substation and associated control room are located on the southern portion of the property. The remainder of the property consists of grass.

The following table summarizes the site observations. Affirmative responses are discussed in more detail following the table.

Category	Feature	Observed
Interior Equipment	Elevators	No
	Air Compressors	Yes
	Incinerators	No
	Waste Treatment Systems	No

Category	Feature	Observed
	Presses/Stamping Equipment	No
	Press Pits	No
	Hydraulic Lifts or In-ground hoists	No
	Paint Booth	No
	Plating Tanks	No
	Lathes, Screw Machines, etc.	Yes
Aboveground Chemical or Other Waste Storage or Waste Streams	Aboveground Storage Tanks (ASTs)	Yes
	Drums, Barrels and/or Containers > 5 gallons	Yes
	Chip Hoppers	No
	Hazardous or Petroleum Waste Streams	No
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground Storage Tanks	No
	Fuel Dispensers	No
	Sumps or Cisterns	No
	Dry Wells	No
	Oil/Water Separators	No
	Floor Drains, Trench Drains, etc.	No
	Pipeline Markers	No
Exterior Observations	Stressed Vegetation	No
	Stained Soil or Pavement	No
	Monitoring Wells	No
	Pad or Pole Mounted Transformers and/or Capacitors	Yes
	Soil Piles of Unknown Origin	No
	Exterior Dumpsters with Staining	No
	Leachate or Other Waste Seeps	No
	Trash, Debris, and/or Other Waste Materials	No
	Uncontrolled Dumping or Disposal Areas	No
	Surface Water Discoloration, Sheen or Free Product	No
	Strong, Pungent or Noxious Odors	No
	Storm water retention or detention ponds	No
	Pits, Ponds, Lagoons	No

Air Compressors: PM observed an apparent air compressor to the north of the machine shop building. The compressor had fallen over; however, PM did not observe evidence of significant staining in the vicinity of the compressor.

Lathes, Screw Machines, etc.: A total of four turbine generators were observed within various portions of the main building. Three of the generators were surrounded by concrete lined pits.

Drums, Barrels, and/or Containers > 5-gallons: PM observed three empty 55-gallon drums and a 5-gallon container of driveway sealer within the machine shop building. No staining was observed in the vicinity of the drums or container.

Pad or Pole Mounted Transformers and/or Capacitors: An electrical substation is present on the southern portion of the property that contains several transformers. A concrete lip is present around the substation. No evidence of drains was observed within the substation area. In addition, a pad mounted transformer was identified directly north of the control room for the substation. Based on the installation of the substation in the late 2000s, the lack of staining observed during the site reconnaissance, and the good condition of the transformers on the property, PM has not identified the substation or transformers as RECs.

7.1.1: Current Operations

The subject property is currently unoccupied and therefore there are no current business operations, with the exception of the operation of the electrical substation.

8.0 ADJOINING PROPERTIES

The following paragraphs provide information about the adjoining properties obtained during the site reconnaissance and through review of reasonably ascertainable information.

North Adjoining Properties, across

The north adjoining properties are currently occupied by residential dwellings or vacant. The dwellings have been present since at least 1994. The properties were formerly occupied by barracks and office buildings associated with former Truman Annex, which was a part of Naval Air Station Key West, from at least 1959 until 1971. Sanborn maps document the property was occupied by U.S. governmental land dating back to at least 1892. **The historic usage of these properties associated with the former military base is unknown from at least 1892 until 1958. Therefore, the potential exists for operations to have included the use of petroleum products and/or hazardous substances, and/or landfilling activities to have occurred, which is a REC.**

East Adjoining Properties

The east adjoining properties are currently and have historically been residential since at least 1892.

South Adjoining Properties, across Geraldine Street

The majority of the south adjoining properties are currently and have historically been residential since at least 1892.

The south adjoining properties, identified as 110-118 Geraldine Street, are currently occupied by residential dwellings. The residential dwellings have been present since at least 1926. From at least 1892 until 1912, this property was occupied by a Standard Oil bulk petroleum plant. **The potential exists for leaks, spills, and/or overfills associated with the operation of a former bulk petroleum plant to have resulted in migration of contamination onto the subject property, which is a REC.**

West Adjoining Property

The west adjoining property is currently occupied by a parking lot. Review of historical records documents this property has been occupied by vacant land or parking lots since at least 1959. Sanborn maps document the property was occupied by U.S. governmental land dating back to at least 1892. Specifically, a governmental slip was identified directly west of the property in 1892. According to previous investigations on the subject property, this property was filled in the 1890s or early 1990s. **The potential exists for the fill materials to have originated from a contaminated property. Therefore, the potential exists for migration of contamination onto the subject property, which is a REC.**

9.0 REGULATORY RECORDS REVIEW

PM retained EDR to provide current regulatory database information compiled by a variety of federal and state regulatory agencies. A copy of the complete database is included in Appendix D. The following information was obtained.

Type	Regulatory Agency Database	Approximate Minimum Search Distance (AMSD)	Number of Sites within AMSD
Federal	National Priority List (NPL) Sites	1 mile	0
Federal	Delisted National Priority List (DNPL) Sites	½ mile	0
Federal	Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites	½ mile	1
Federal	CERCLIS No Further Remediation Action Planned (NFRAP) Sites	subject property and adjoining properties	0
Federal	Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Sites	1 mile	0
Federal	RCRA non-CORRACTS Treatment, Storage or Disposal (TSD) Sites	½ mile	0
Federal	RCRA Large Quantity Generators (LQG) Sites	subject property and adjoining properties	0
Federal	RCRA Small Quantity Generators (SQG) Sites	subject property and adjoining properties	0
Federal	RCRA Conditionally Exempt Small Quantity Generators (CESQG) Sites	subject property and adjoining properties	0
Federal	RCRA Non-Generators (NON-GEN) Sites	subject property and adjoining properties	0
Federal	US Brownfield Sites	½ mile	0
Federal	Institutional Control / Engineering Control Registries	subject property	0
Federal	Environmental Response and Notification System (ERNS)	subject property	0
State & Tribal	Hazardous Waste Sites (HWS) (equivalents to NPL and CERCLIS)	1 mile	0
State & Tribal	Delisted Hazardous Waste Sites (HWS)	1 mile	0
State & Tribal	Solid Waste Facilities/Landfill Sites (SWLF)	½ mile	1
State & Tribal	Historical Landfill Sites (HIST LF)	½ mile	0
State & Tribal	Leaking Underground Storage Tank (LUST) Sites	½ mile	10
State & Tribal	Registered Underground Storage Tank (UST) Sites	subject property and adjoining properties	1
State & Tribal	Institutional Control / Engineering Control Registries	subject property	0
State & Tribal	Brownfield Sites	½ mile	0
Either	Unmappable Database Listings (a.k.a. Orphan Sites)	database-dependent	25

9.1: Subject Property and Occupant Listings

The regulatory database report identified the following listings for the subject property or its known occupants on the referenced databases:

Key West City-Diesel Plant – The subject property is identified as a CERCLIS site, a closed LUST site, an inactive UST site, and an inactive AST site. Refer to Section 4.9 for a summary of the previous site assessment activities and Section 4.8 for a summary of the former UST systems. Based on a Site Inspection Report in August 2012, the EPA has determined that no additional CERCLIS investigation is required at the subject property.

9.2: Adjoining and Nearby Sites

PM's review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified in the regulatory database report present an environmental risk to the subject property, PM considered the following criteria:

- The type of database on which the site is identified.
- The topographic position of the identified site relative to the subject property.
- The direction and distance of the identified site from the subject property.
- Local soil conditions in the subject property area.
- The known or inferred groundwater flow direction in the subject property area.
- The status of the respective regulatory agency-required investigation(s) of the identified site, if any.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified site and the subject property.

Only those sites that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated. Using the referenced criteria, and based upon a review of readily available information contained within the regulatory database report, PM did not identify adjoining (i.e., bordering) or nearby sites (e.g., properties within a ¼-mile radius) listed in the regulatory database report that were judged to present a potential environmental risk to the subject property.

10.0 NON-ASTM SCOPE CONSIDERATIONS

PM has included a discussion of Non-ASTM Scope Considerations based upon industry standards and lender requirements.

Non-ASTM Item	Observations or Information
Potential Asbestos Containing Building Materials (ACBM)	PM is completing an Asbestos Survey for the client under a separate cover.
Lead Based Paint	PM is completing a Lead Based Paint Survey for the client under a separate cover.
Visual Mold or Significant Moisture Damage	Significant water damage was observed within the main building. If the building is intended to be utilized in the figure, PM recommends the damaged portions of the building be repaired and impacted materials be removed.
Wetlands	None observed.

11.0 FINDINGS, OPINIONS AND CONCLUSIONS

11.1: Significant Data Gaps

PM did not identify or encounter any instances of significant data gaps during the course of this ESA.

11.2: Recognized Environmental Conditions (RECs)

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Former Key West Gas and Electric Company located at 101-111 Geraldine Street, Key West, Monroe County, Florida, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

- Assessment activities on behalf of the Florida Department of Environmental Protection (FDEP) in August 2012 to further assess the historical operations at the subject property identified concentrations of polynuclear aromatic hydrocarbons (PAHs), arsenic, and lead above FDEP Soil Cleanup Target Levels (SCTLs) in shallow soil samples to the southwest of the machine shop building. In addition, concentrations of isopropylbenzene and PAHs were identified above FDEP Groundwater Cleanup Target Levels (GCTLs). This contamination appears to be associated with former operations on the subject property.

- The subject property operated as a manufactured gas plant (MGP) from approximately 1884 until 1889. Operations of MGPs typically involved the gasification of combustible materials such as coal, wood, or oil. A former retort room, which is a processing area, and a former gasometer, which was a storage container for gas, were identified on the eastern portion of the property. The by products of the gasification process typically included petroleum products and/or hazardous substances, including coal tars. The potential exists for a release to have occurred in association with the operation of the former MGP.

- Sanborn maps document the presence of six former 25,000-gallon crude oil above ground storage tanks (ASTs) along the southern property boundary between at least 1912 and 1926. In addition, two former crude oil ASTs were identified to the east of the main building. Limited sampling has been conducted in these areas that is not adequate to assess the potential for leaks, spills, and/or overfills to have occurred in association with

these former ASTs; therefore, the potential exists for subsurface contamination to be present.

- The subject property as a power plant, which utilized petroleum products as a fuel source, from approximately 1890 until the 1950s/1960s. The potential exists for leaks and/or spills to have occurred in association with the operation of the turbine generators and/or other equipment within the main building and on various portions of the property. The integrity of the floor beneath the generators is unknown; therefore, the potential exists for subsurface impact to be present.

- Former machine shops were identified on the property within the southwestern portion of the main building and within the machine shop. Machine shop operations typically involve the use of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The historical waste management practices associated with the former machine shop operations are unknown and may be a source of subsurface contamination.

The following adjoining and/or nearby RECs have been identified:

- The north adjoining properties were formerly part of the Truman Annex, which was a part of Naval Air Station Key West, from at least 1892 until 1971. Sanborn maps document the property was occupied by U.S. governmental land dating back to at least 1892. The historic usage of these properties associated with the former military base is unknown from at least 1892 until 1958. Therefore, the potential exists for operations to have included the use of petroleum products and/or hazardous substances, and/or landfilling activities to have occurred.

- The south adjoining properties, identified as 110-118 Geraldine Street, was occupied by a Standard Oil bulk petroleum plant. The potential exists for leaks, spills, and/or overfills associated with the operation of a former bulk petroleum plant to have resulted in migration of contamination onto the subject property.

- The west adjoining property was occupied by U.S. governmental land from at least 1892 until 1926. Specifically, a governmental slip was identified directly west of the property in 1892. According to previous investigations on the subject property, this property was filled in the 1890s or early 1990s. The potential exists for the fill materials to have originated from a contaminated property. Therefore, the potential exists for migration of contamination onto the subject property.

11.3: Historical Recognized Environmental Conditions (HRECs)

A historical REC, as defined in the ASTM Standard, is an environmental condition that in the past would have been identified as a REC, but which may or may not be considered a REC currently. The following historical REC was identified:

- A release was identified in March 1991 based on the presence of free phase hydrocarbons within a concrete lined pit located east of the main building. Free product was also subsequently identified in MW-7, which was located to the northwest of the pit. As a result of the identification of free product, the former ASTs and the concrete lined pit

were emptied, cleaned, and removed/abandoned in August 1992. A total of approximately 30,000-gallons of free product/impacted groundwater and 3,850 cubic yards of impacted soil was removed from the property during decommissioning activities and disposed off site. The extent and location of the excavation was not documented in previous reports. In addition, approximately 100-gallons of free product was removed from MW-7 between 1991 and 1992. Subsequent groundwater sampling between 1992 and 1995 did not identify free product within MW-7. The most recent sampling in 1994 and 1995 did not identify concentrations of polynuclear aromatic hydrocarbons (PAHs) or total recoverable petroleum hydrocarbons (TRPH) above the most restrictive FDEP Groundwater Cleanup Target Levels (GCTLs) in the area of the former ASTs or former concrete pit. Therefore, the FDEP issued a Site Rehabilitation Completion Order (SRCO) for the release on July 27, 1995.

- The west adjoining property was formerly a governmental slip in at least 1892. According to previous investigations on the subject property, this property was filled in the 1890s or early 1990s. The potential exists for the fill materials to have originated from a contaminated property. Therefore, the potential exists for migration of contamination onto the subject property.

11.4: De Minimis Conditions

De minimis conditions are conditions that generally do not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimis are not recognized environmental conditions. No de minimis conditions were identified during completion of this report.

11.5: Recommendations

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Former Key West Gas and Electric Company located at 101-111 Geraldine Street, Key West, Monroe County, Florida, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except as listed in Section 11.2 of this report.

PM has been contracted to complete additional investigation for the client.

12.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Raymond H. Siegmann
Regional Due Diligence Group Manager

Gene Bailey, P.E.
Regional Manager/Senior Consultant

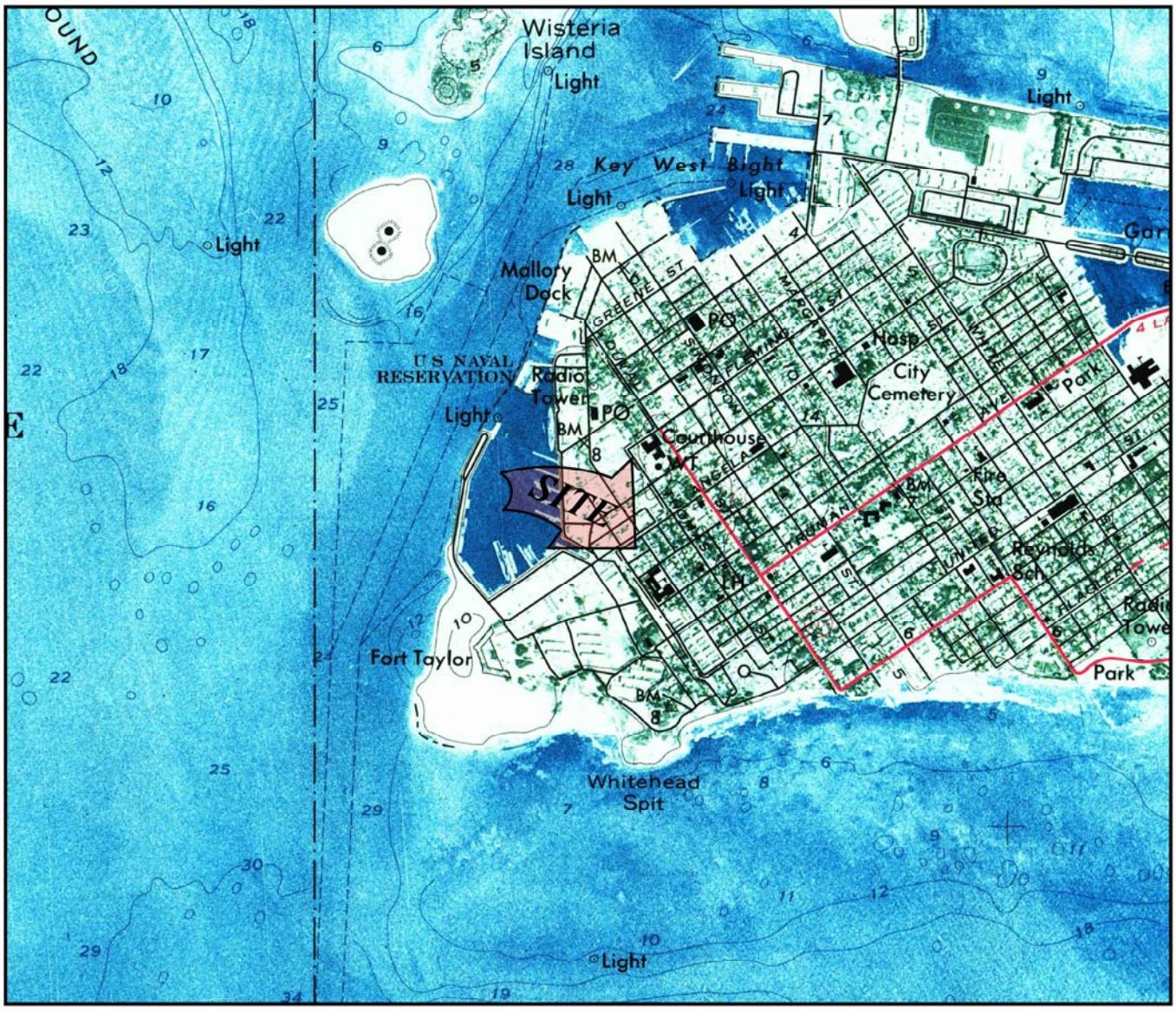
13.0 REFERENCES

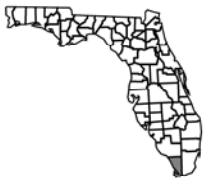
The following published sources were utilized during completion of this Phase I ESA:

- *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* ASTM, ASTM Designation E 1527-05, Published November 2005.
- Polk's Cross-Index City Directories, EDR in Milford, Connecticut. City: Key West. Years: 1962-2013.
- Contamination Assessment Report, September 1991, CH2M Hill.
- Contamination Assessment Report Addendum, July 1992, CH2M Hill.
- Remediation Action Plan, October 1992, CH2M Hill.
- Remediation Action Plan Modification, June 1993, PDG Environmental Services.
- 1st Quarter Groundwater Monitoring, April 4, 1994.
- Third Quarter "Monitoring Only" Water Quality Results, April 17, 1995, PDG Environmental Services.
- Enhanced Pre-CERCLIS Screening Assessment Checklist/Decision Form, January 7, 2011, FDEP.
- Abbreviated Preliminary Assessment Checklist, October 31, 2011, FDEP.
- Site Inspection Report, August 16, 2012, FDEP.
- United States Geological Survey Division (U.S.G.S.) 7.5 Minute Topographic Map Key West, Florida Quadrangle, 1971.
- *Soil Survey of Monroe County, Florida*, U.S. Department of Agriculture, October 1995.

Figures

PM ENVIRONMENTAL Environmental & Engineering Services





FLORIDA QUADRANGLE LOCATION

MONROE COUNTY

SCALE 1:24,000

1 MILE 1/2 MILE 0 1 MILE

FIGURE 1

PROPERTY VICINITY MAP

USGS, 7.5 MINUTE SERIES

KEY WEST, FL QUADRANGLE, 1971.

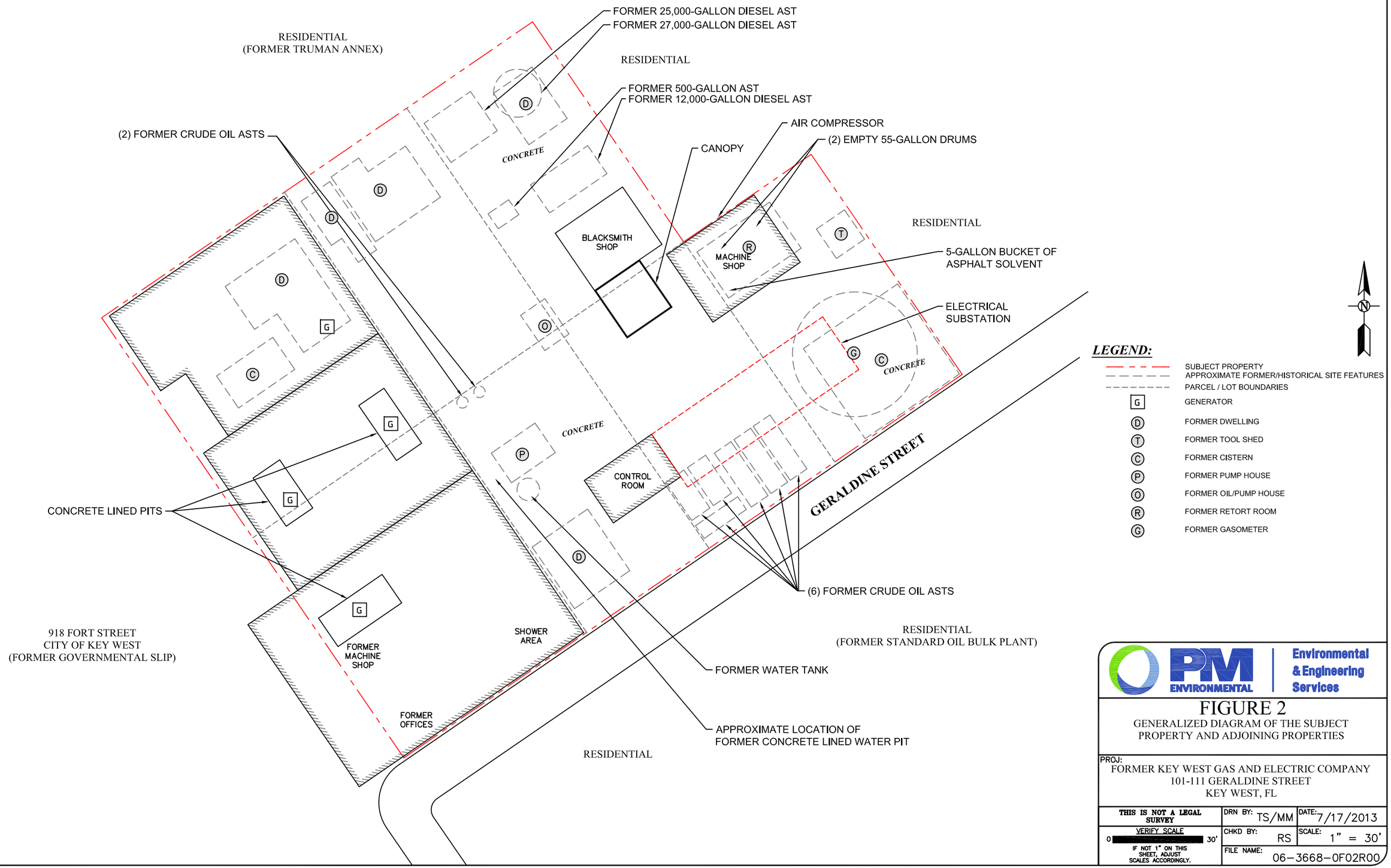
PM ENVIRONMENTAL | Environmental & Engineering Services

PROJ:
FORMER KEY WEST GAS AND ELECTRIC COMPANY
101-111 GERALDINE STREET
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY

VERIFY SCALE
0 2,000'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRN BY: TS
DATE: 7/16/2013
CHKD BY: RS
SCALE: 1" = 2,000'
FILE NAME: 06-3668-0F01R00



PM ENVIRONMENTAL | Environmental & Engineering Services

FIGURE 2

GENERALIZED DIAGRAM OF THE SUBJECT PROPERTY AND ADJOINING PROPERTIES

PROJ:
FORMER KEY WEST GAS AND ELECTRIC COMPANY
101-111 GERALDINE STREET
KEY WEST, FL

THIS IS NOT A LEGAL SURVEY	DRN BY: TS/MM	DATE: 7/17/2013
VERIFY SCALE 0 — 30' IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	CHKD BY: RS	SCALE: 1" = 30'
	FILE NAME: 06-3668-0F02R00	

Appendix A

PM ENVIRONMENTAL Environmental & Engineering Services

SITE PHOTOGRAPHS

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 1

View of the main subject building, facing southwest.

Photograph 2

View of the former blacksmith building, facing north.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 3

View of the former machine shop building, facing east.

Photograph 4

View of the electrical substation on the southern portion of the property.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 5

View of the control room building for the electrical substation.

Photograph 6

View of the apparent compressor to the north of the former machine shop building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 7

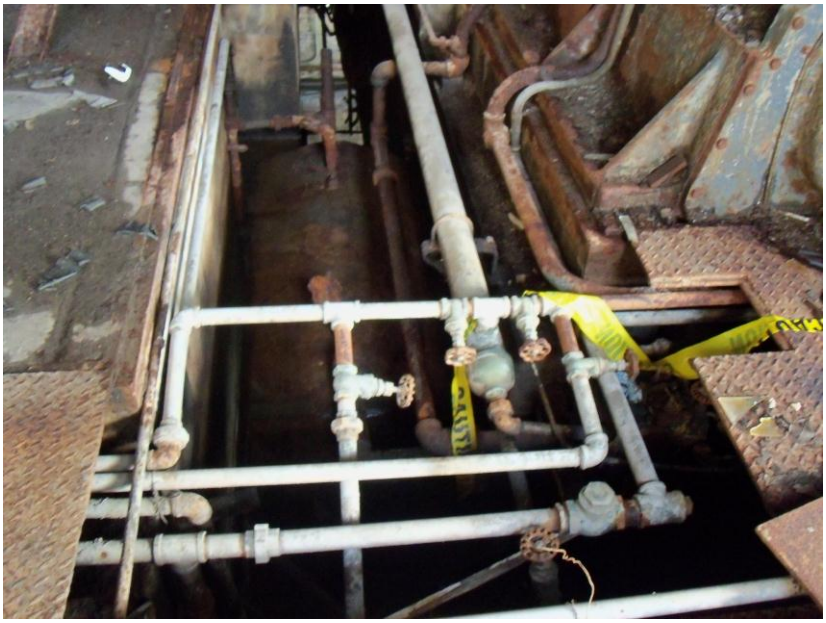
View of a typical gravel paved parking area on the property.

Photograph 8

View of a typical generator within the main building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 9



View of a typical pit surrounding a generator.

Photograph 10

View of an additional interior area within the main building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 11

View of an additional generator within the main building.

Photograph 12

View of the interior of the former blacksmith building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 13

View of the fire pit within the former blacksmith building.

Photograph 14

View of the interior of the former machine shop building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 15

View of empty 55-gallon drums within the former machine shop building.

Photograph 16

View of the interior of the control room building.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 17

View of the north and northwest adjoining properties, facing northeast.

Photograph 18

View of a typical east adjoining property, facing north.

Photographs From Site Reconnaissance
PM Project No. 06-3668-0
Location: 101-111 Geraldine Street, Key West, Florida

Photograph 19

View of typical south adjoining properties, facing southeast.

Photograph 20

View of the west adjoining property, facing southwest.

Appendix B

PM ENVIRONMENTAL Environmental & Engineering Services

SOIL SURVEY INFORMATION

United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experiment Stations, and Soil Science Department; and the Florida Department of Agriculture and Consumer Services

Soil Survey of Monroe County, Keys Area, Florida

Contents

Issued October 1995


370,000 FEET
150,000 FEET
LIMIT OF SOIL SURVEY
water
Big Pine Key
water
9
8
12
7
13
(Joins sheet 11)
375,000 FEET
(Joins sheet 8)


230,000 FEET
95,000 FEET
Channel
Bight
Garrison
Key
Fleming Key
Man of War Harbor
LIMIT OF SOIL SURVEY
water
Salt Pond Keys
Wisteria Island
Key West Bight
Garrison Bight
Malloey Dock
DUVAL STREET
KEY WEST
11
15
7
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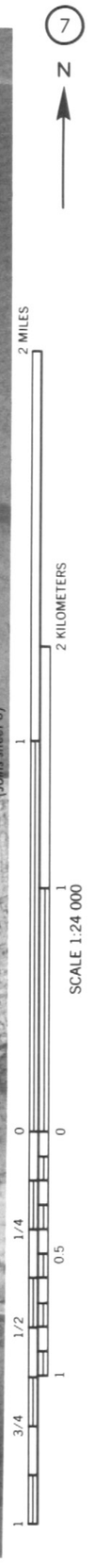
12
245,000 FEET
50,000 FEET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N
2 MILES
2 KILOMETERS
SCALE 1:24 000
1
3/4
1/2
1/4
0
0.5

Figure 7.—Lignumvitae marl, tidal, provides anhingas with habitat for nesting and an access area for feeding.

wet periods of most years. Permeability is moderate or moderately rapid.

Use and Vegetation

Most areas of this soil support native vegetation and are used as habitat for wetland wildlife (fig. 7). Some areas have been developed for residential, urban, or recreational use. Table 3 lists characteristic vegetation for the soils in the survey area. Because the species listed generally are more easily established and require less maintenance than other species, they should be selected for planting during beautification and landscaping.

Threatened or Endangered Plants and Animals

Threatened or endangered plants and animals in areas of this soil may include the following—

Birds: Bald eagle, white-crowned pigeon, wood stork
Reptiles: American crocodile, striped mud turtle

Interpretations

Depth to bedrock, the flooding, and the wetness are severe limitations affecting most uses of this soil, including most kinds of building site and recreational development and sanitary facilities. Tables 4, 6, and 7 provide more detailed information about these limitations.

11—Urban land

Geographic Setting

This map unit is on Key West and the adjacent, smaller keys. Individual areas are subject to rare flooding from hurricanes and other tropical storms. Elevations are dominantly 3 to 10 feet above sea level, according to National Geodetic Vertical Datum of 1929.

Map Unit Composition

This map unit is covered by asphalt, concrete, buildings, and other impervious surfaces. The natural soil is covered and cannot be readily observed. Urban land makes up about 80 percent of most areas of this map unit. The undeveloped areas of this map unit include Udorthents, which were developed by spreading crushed bedrock over the original soil material.

Geographically Associated Soils

The Urban land is associated with Udorthents and Beaches.

Drainage and Permeability

The drainage and permeability of the Urban land are variable.

Use and Vegetation

Most areas of Urban land are covered by impervious surfaces. Grasses and other plants selected for planting during landscaping are dominant in the areas that support vegetation.

Interpretations

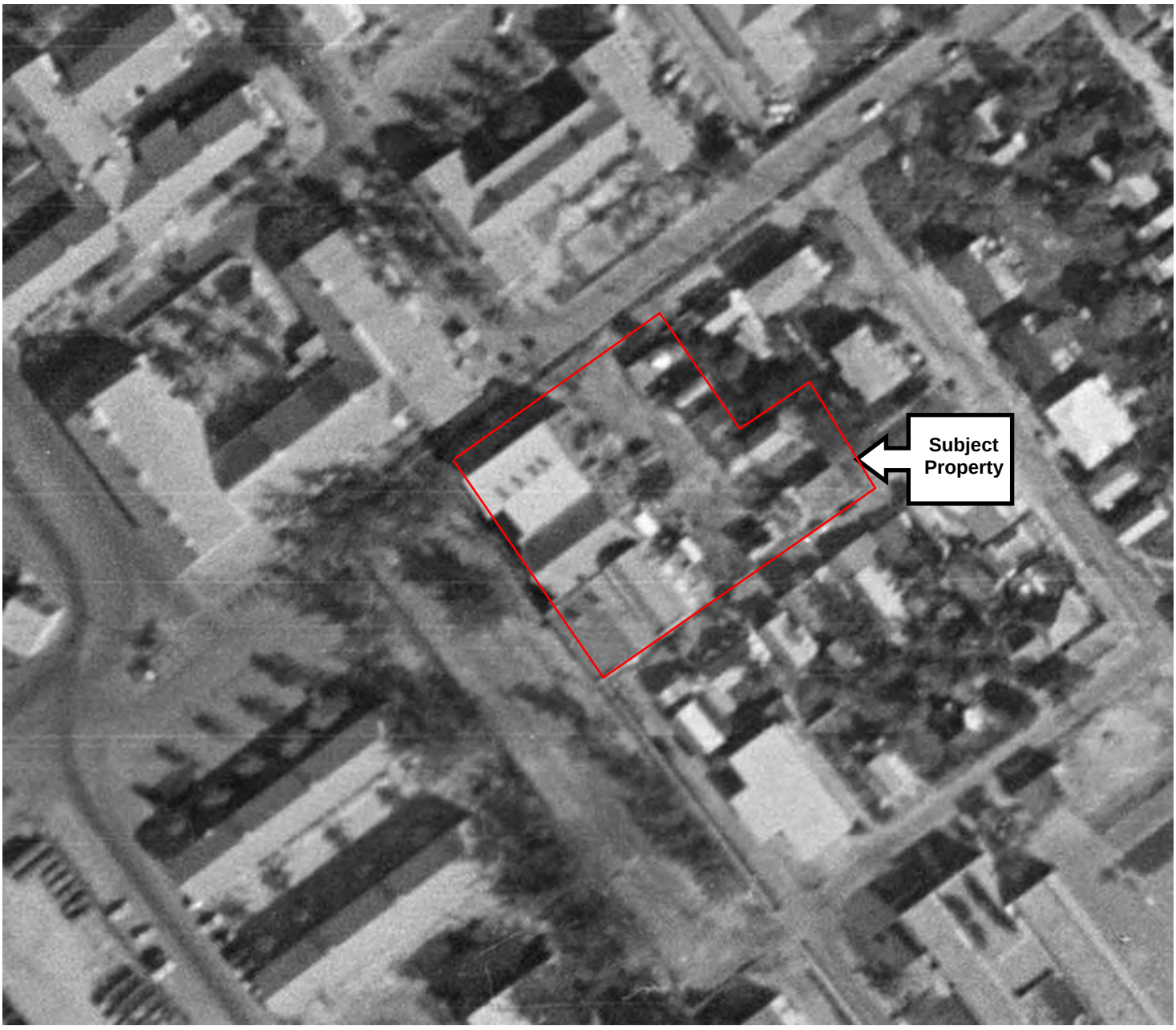
Soil properties in this map unit are variable; therefore, careful onsite investigation is needed to determine the limitations for any proposed use.

12—Rock outcrop-Cudjoe complex, frequently flooded

Geographic Setting

This map unit is on low tropical hammocks and in sawgrass marshes in the uplands throughout the keys.

AERIAL PHOTOGRAPHS



PM ENVIRONMENTAL	**Location: 101-111 Geraldine Street, Key West, Florida**
	PM Project No. 06-3668-0
	Aerial Year: 1959
	Source: Florida Department of Transportation

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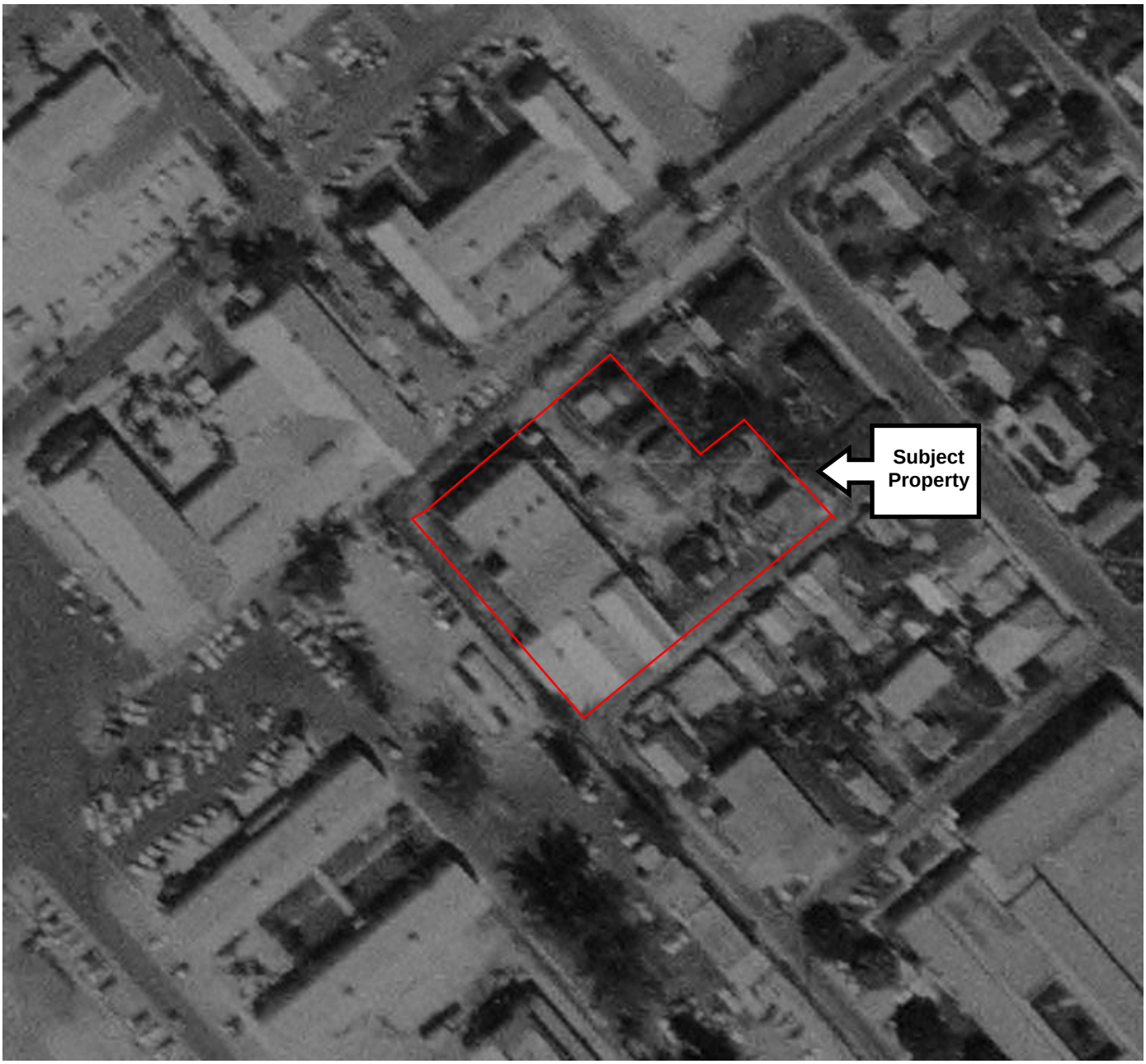

PM ENVIRONMENTAL	**Location: 101-111 Geraldine Street, Key West, Florida**
	PM Project No. 06-3668-0
	Aerial Year: 1971
	Source: Florida Department of Transportation

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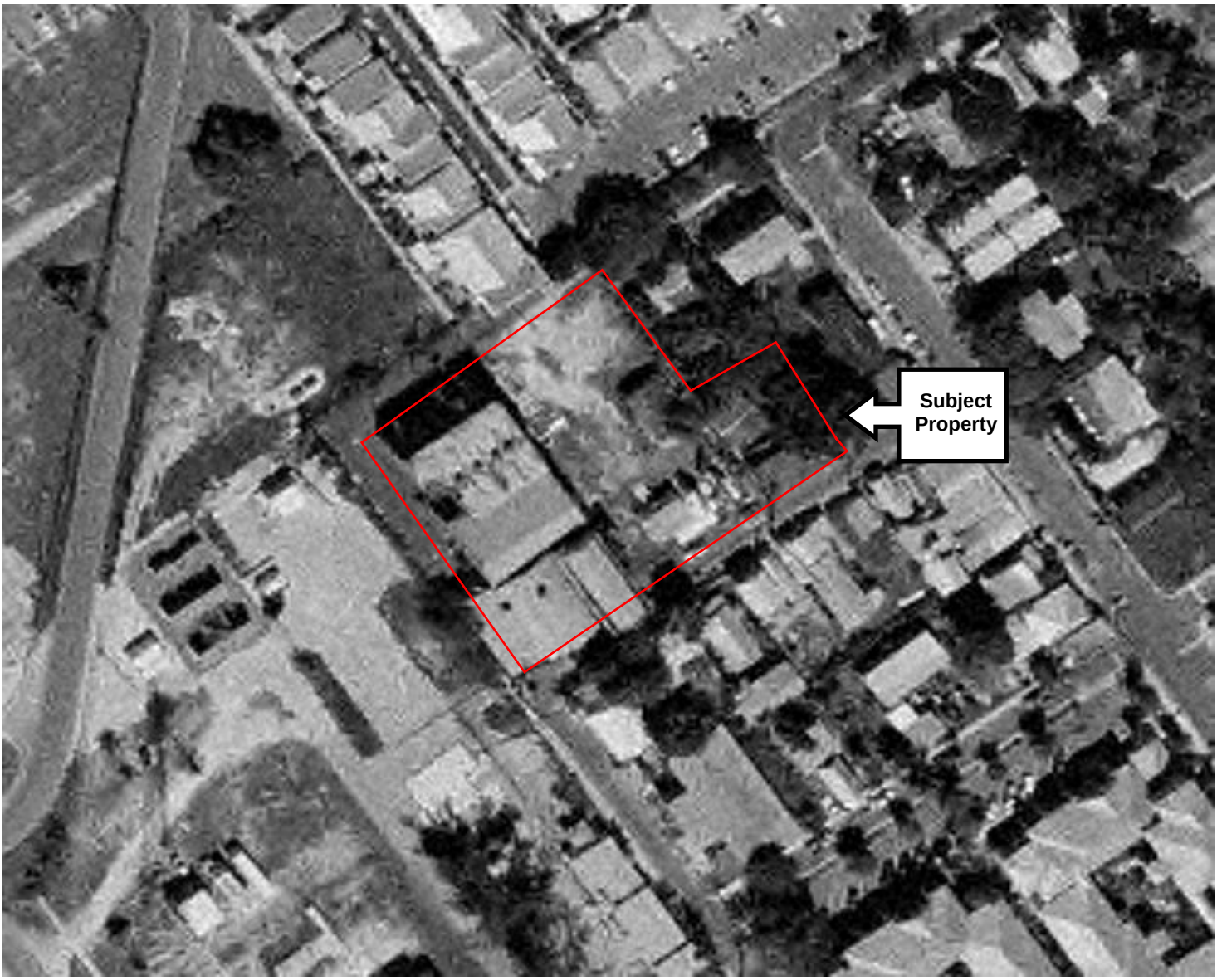

PM ENVIRONMENTAL	**Location: 101-111 Geraldine Street, Key West, Florida**
	PM Project No. 06-3668-0
	Aerial Year: 1994
	Source: Florida Department of Transportation

N
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PM ENVIRONMENTAL	**Location: 101-111 Geraldine Street, Key West, Florida**
	PM Project No. 06-3668-0
	Aerial Year: 2003
	Source: Florida Department of Transportation

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PM ENVIRONMENTAL	**Location: 101-111 Geraldine Street, Key West, Florida**
	PM Project No. 06-3668-0
	Aerial Year: 2010
	Source: Mapcard.com

N
W E
S

SANBORN FIRE INSURANCE MAPS

101-111 GERALDINE ST
101-111 GERALDINE ST
Key West, FL 33040

Inquiry Number: 3662252.3
July 11, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

7/11/13

Site Name:
101-111 GERALDINE ST
101-111 GERALDINE ST
Key West, FL 33040

EDR Inquiry # 3662252.3

Client Name:
PM Environmental, Inc.
3340 Ranger Road
Lansing, MI 48906

Contact: Matthew Brainard

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by PM Environmental, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, State, Zip: Key West, FL 33040
Cross Street:
P.O. # 06-3668-0
Project: 06-3668-0
Certification # C555-4336-9C2A

Maps Provided:

1962	1889
1948	
1926	
1912	
1899	
1892	

Sanborn® Library search results
Certification # C555-4336-9C2A

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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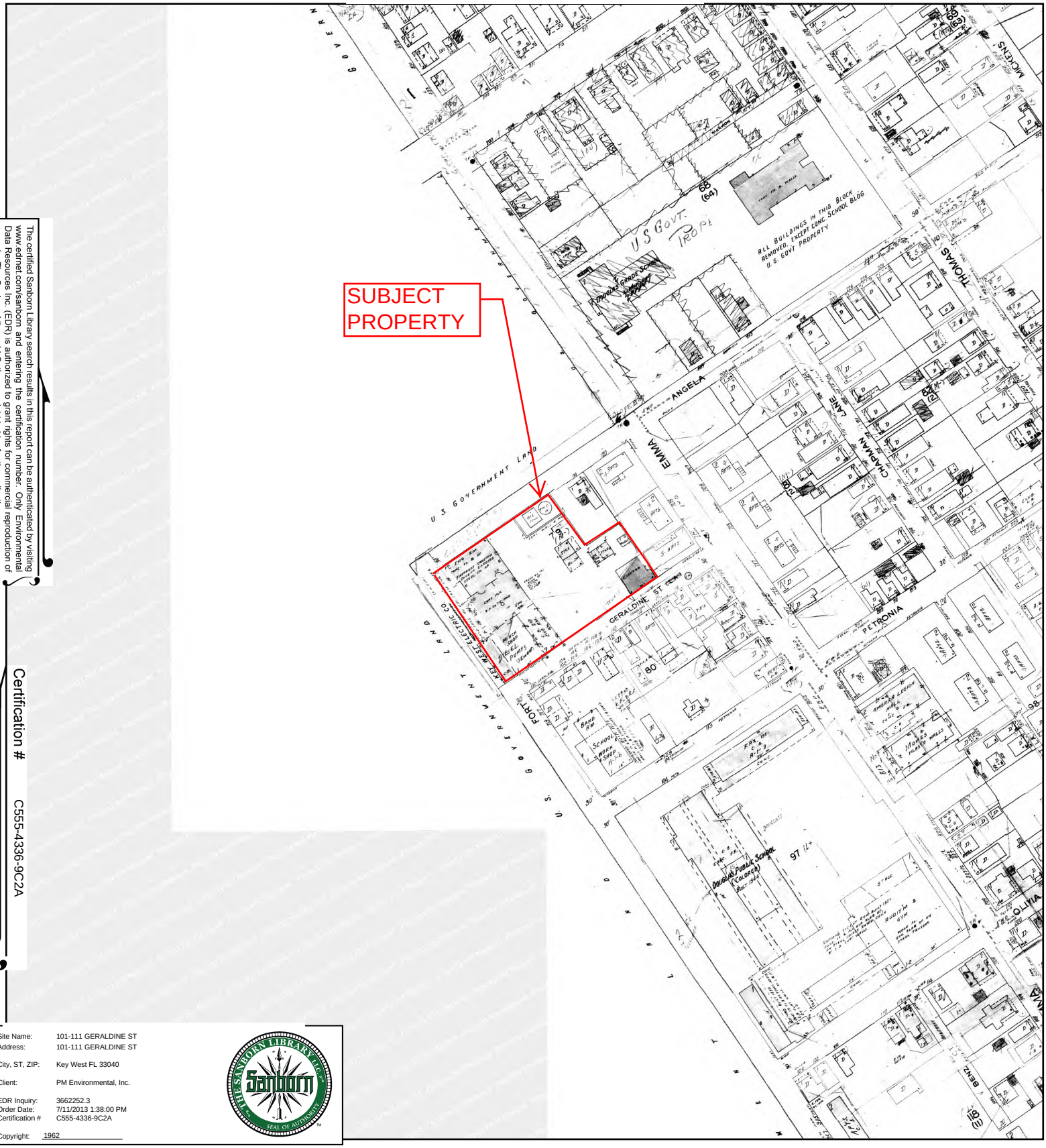
1962 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1962

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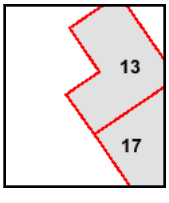
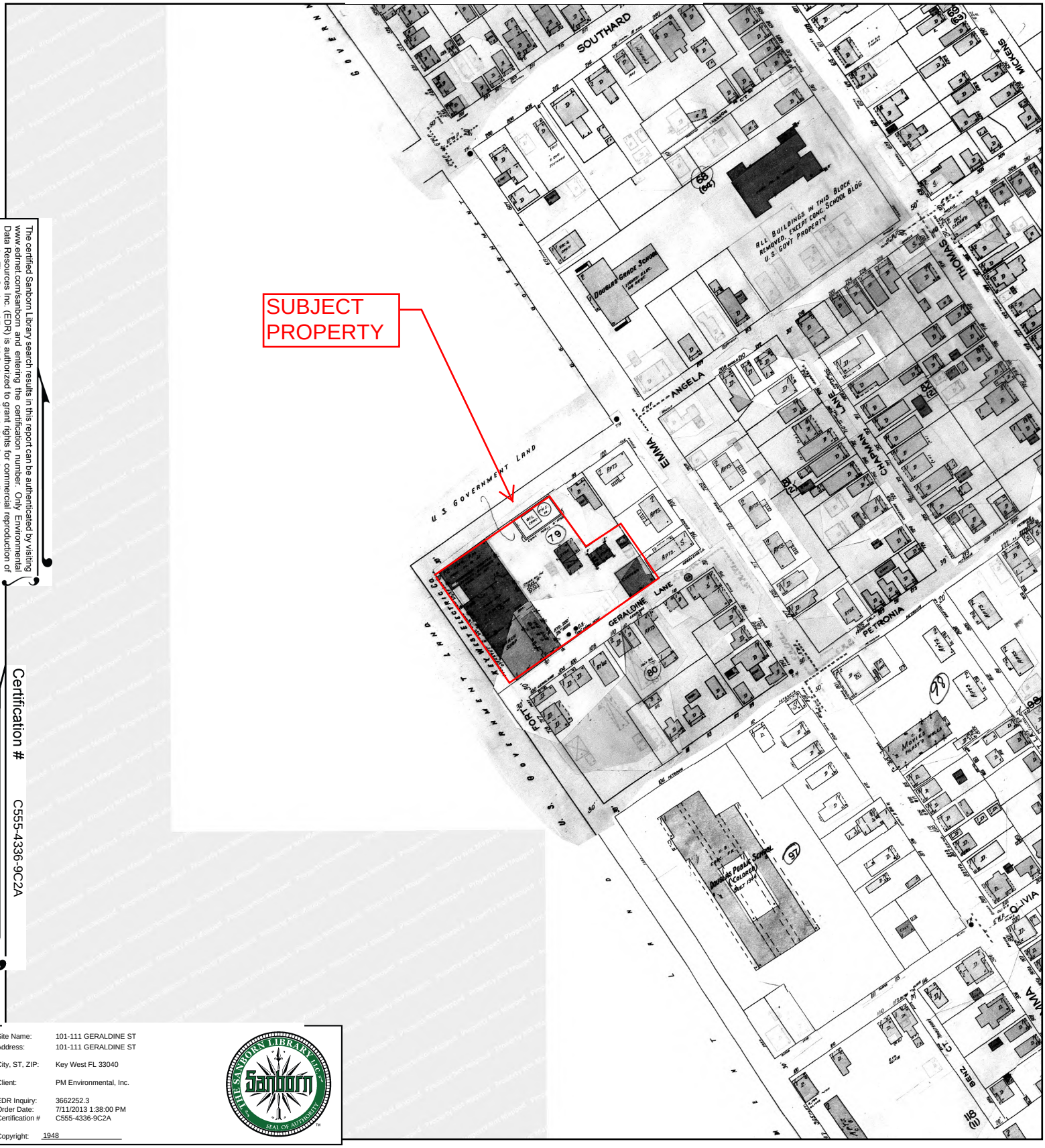


Volume 1, Sheet 13
Volume 1, Sheet 17

0 Feet 150 300 600

N

1948 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1948

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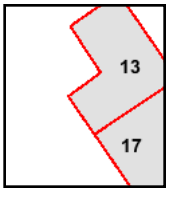
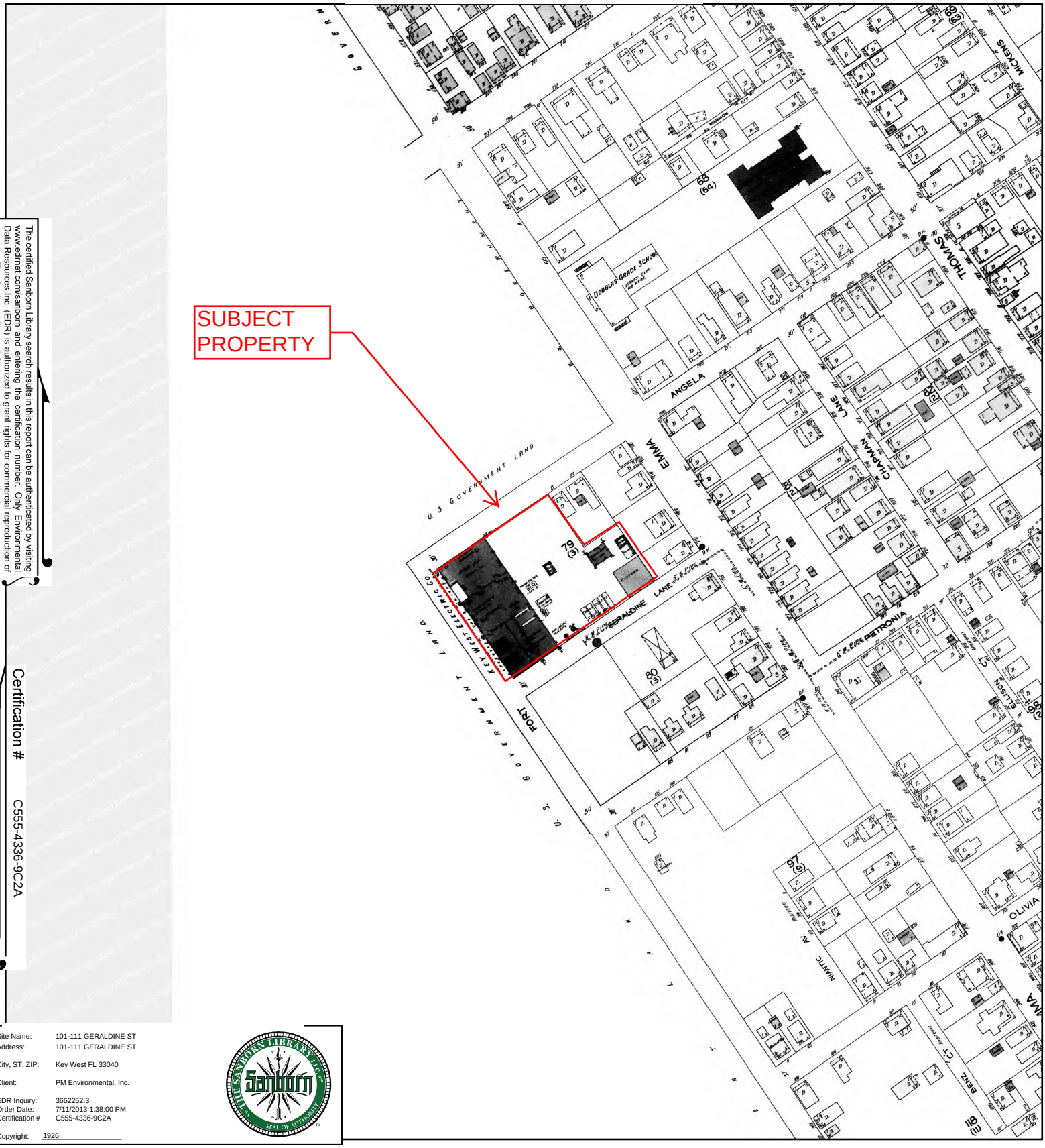


Volume 1, Sheet 13
Volume 1, Sheet 17

0 Feet 150 300 600

N

1926 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1926

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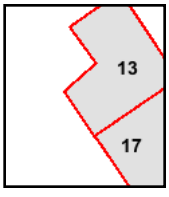
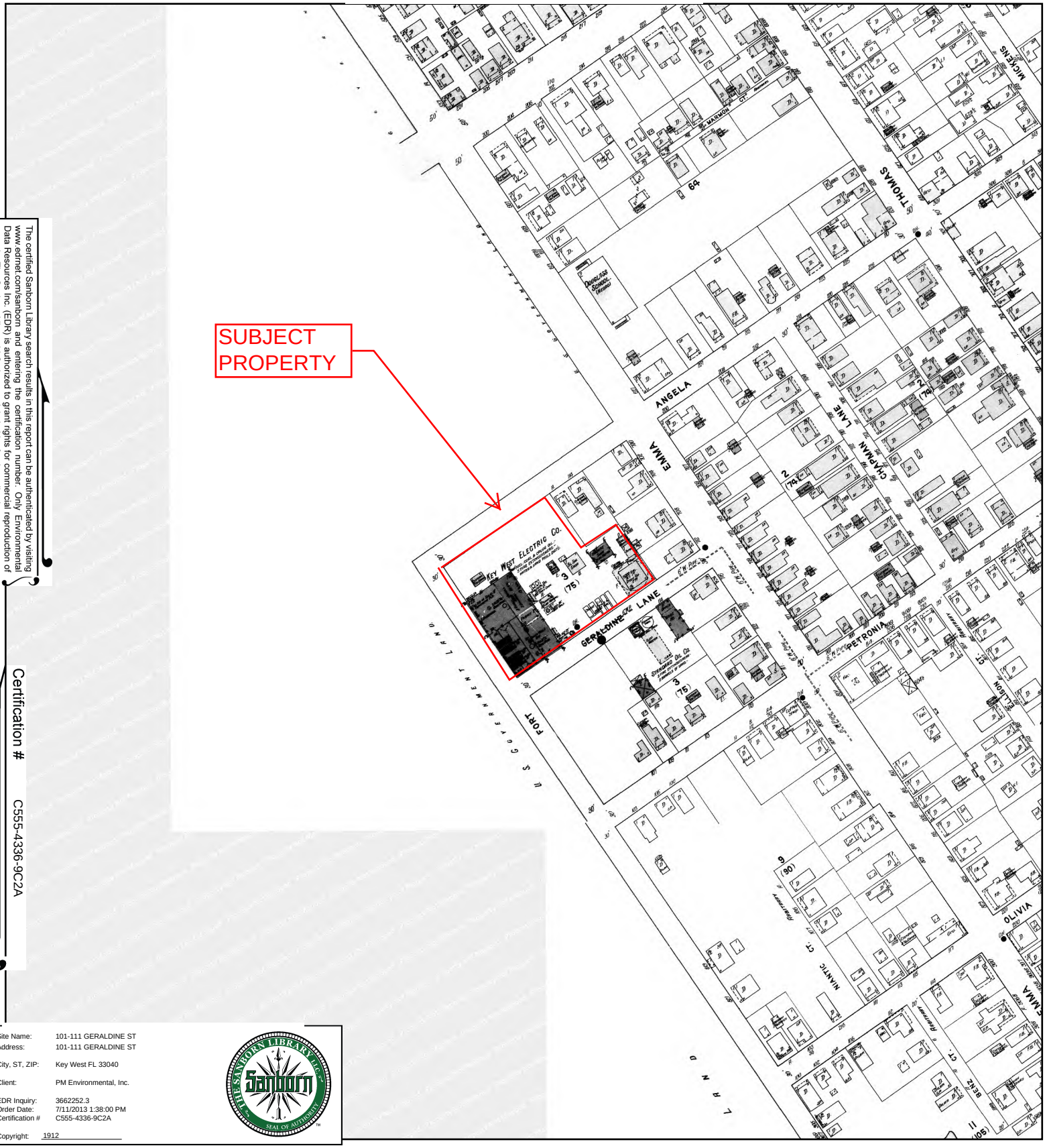


Volume 1, Sheet 13
Volume 1, Sheet 17

0 Feet 150 300 600

N

1912 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1912

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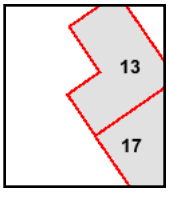
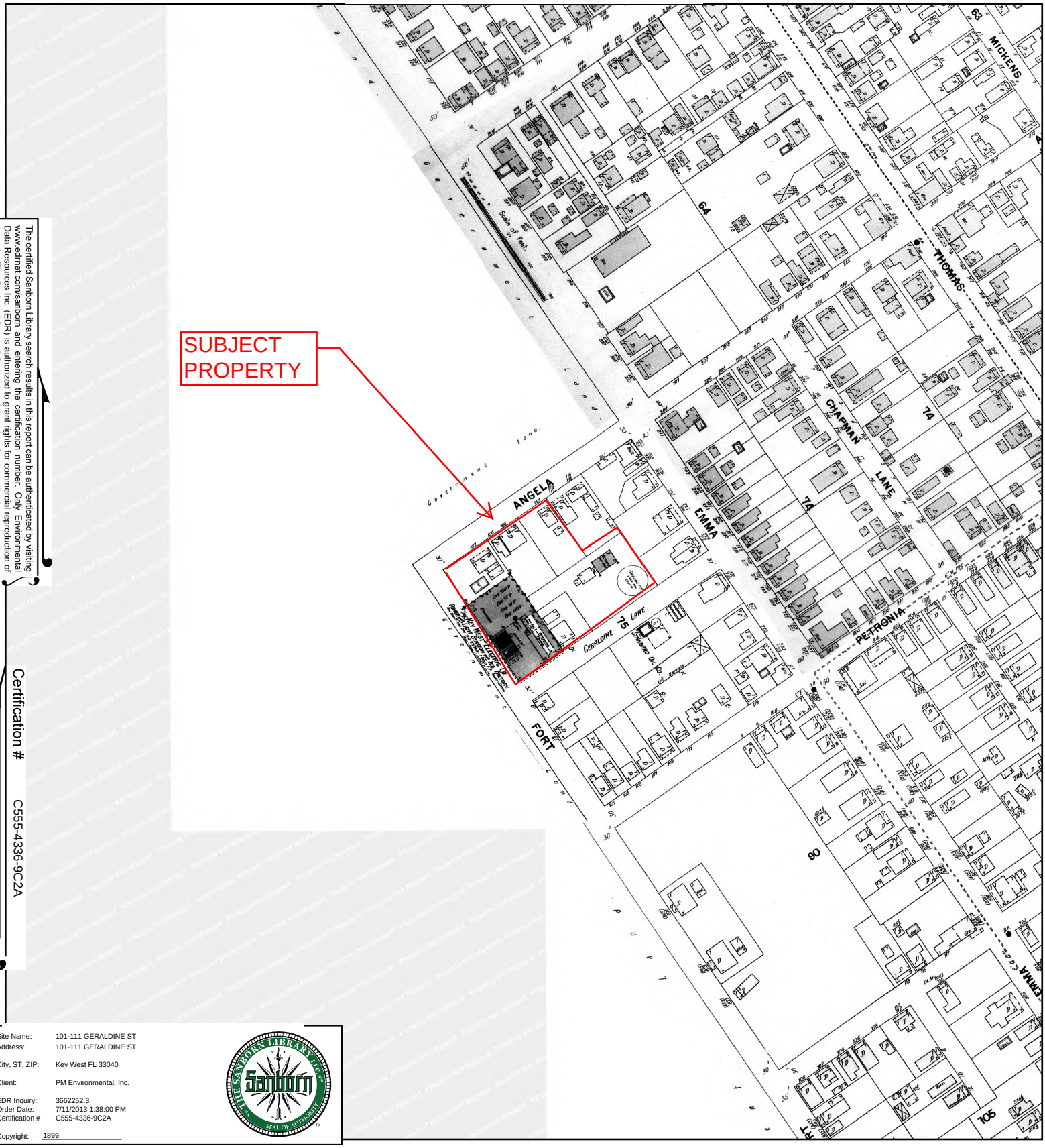


Volume 1, Sheet 13
Volume 1, Sheet 17

1899 Certified Sanborn Map



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Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1899

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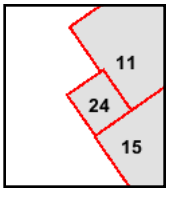
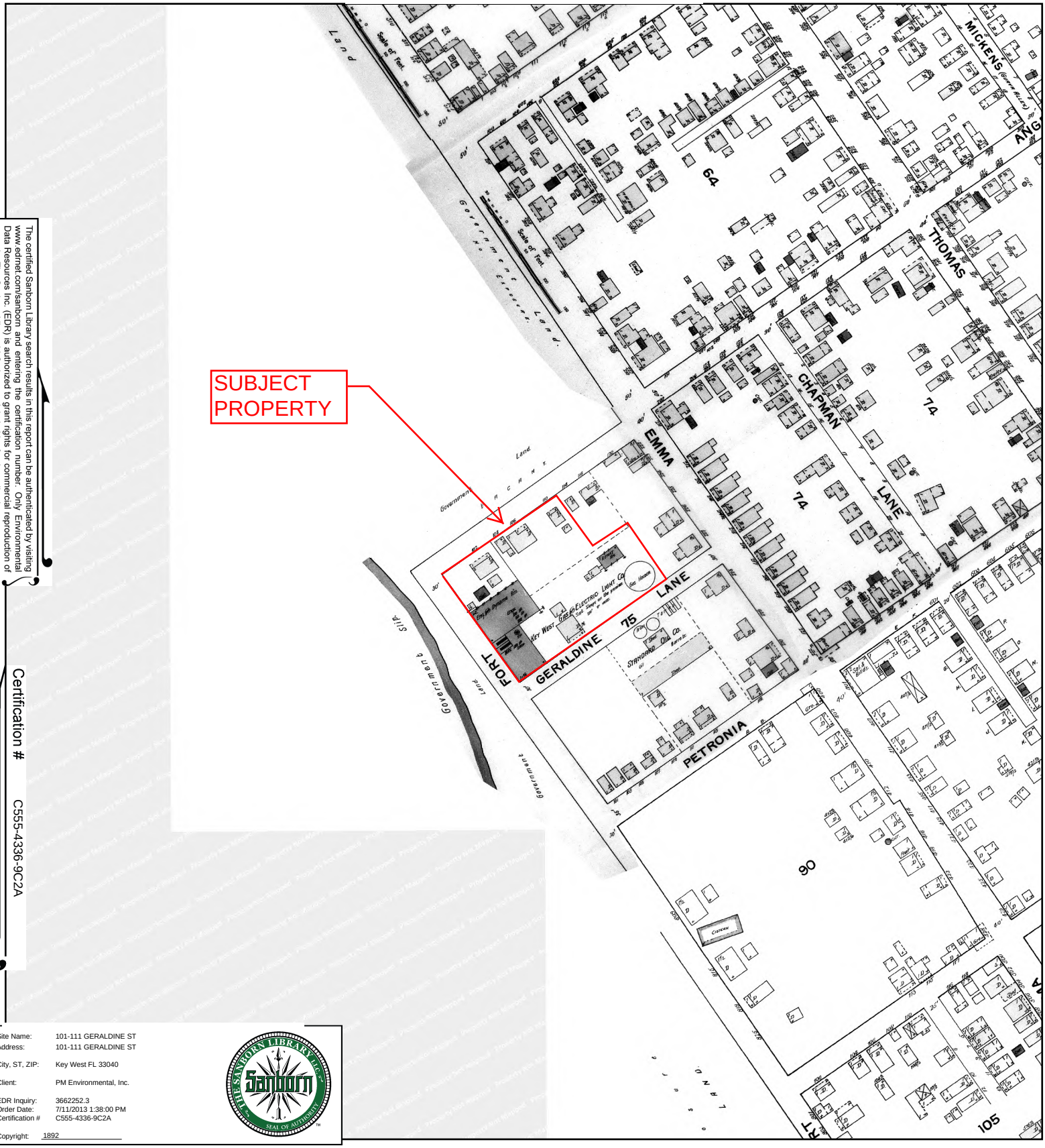


Volume 1, Sheet 11
Volume 1, Sheet 24
Volume 1, Sheet 15

0 Feet 150 300 600

N

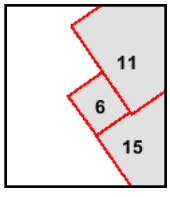
1892 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1892

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

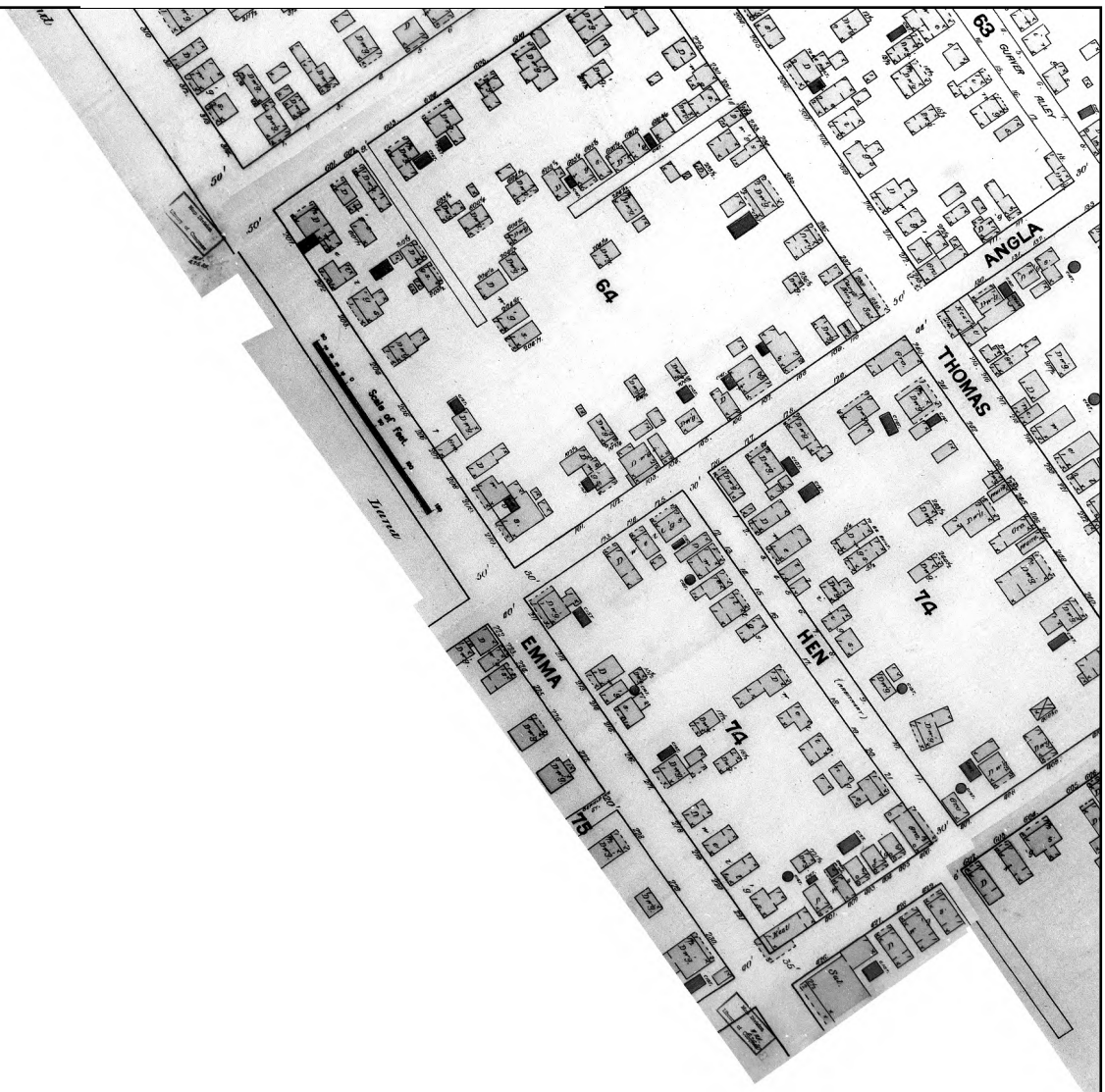


Volume 1, Sheet 6
Volume 1, Sheet 15
Volume 1, Sheet 11

0 Feet 150 300 600

N

1889 Certified Sanborn Map



Certification # C555-4336-9C2A

Site Name: 101-111 GERALDINE ST
Address: 101-111 GERALDINE ST
City, ST, ZIP: Key West FL 33040
Client: PM Environmental, Inc.
EDR Inquiry: 3662252.3
Order Date: 7/11/2013 1:38:00 PM
Certification # C555-4336-9C2A
Copyright: 1889

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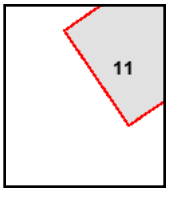
0 Feet 150 300 600



Volume 1, Sheet 11

N

ASSESSING DEPARTMENT RECORDS

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014214 **Parcel ID:** 00013830-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 109 GERALDINE ST KEY WEST
Legal Description: KW LOT 8 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	358,875.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	50	87	4,350.00 SF

Appraiser Notes

20027-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	0	0	358,875	358,875	358,875	358,875	0
2011	0	0	478,500	478,500	454,575	478,500	0
2010	0	0	413,250	413,250	413,250	413,250	0
2009	0	0	489,375	489,375	489,375	489,375	0
2008	0	0	500,250	500,250	500,250	500,250	0
2007	0	0	500,250	500,250	500,250	500,250	0
2006	0	0	282,750	282,750	282,750	282,750	0
2005	0	0	282,750	282,750	282,750	282,750	0
2004	0	0	278,400	278,400	278,400	278,400	0
2003	0	0	278,400	278,400	278,400	278,400	0
2002	0	0	76,125	76,125	76,125	76,125	0
2001	0	0	65,250	65,250	65,250	65,250	0
2000	0	0	54,375	54,375	54,375	54,375	0
1999	0	0	54,375	54,375	54,375	54,375	0
1998	0	0	54,375	54,375	54,375	54,375	0
1997	0	0	45,675	45,675	45,675	45,675	0
1996	0	0	45,675	45,675	45,675	45,675	0
1995	0	0	45,675	45,675	45,675	45,675	0
1994	0	0	45,675	45,675	45,675	45,675	0
1993	0	0	45,675	45,675	45,675	45,675	0
1992	0	0	45,675	45,675	45,675	45,675	0
1991	0	0	45,675	45,675	45,675	45,675	0
1990	0	0	34,800	34,800	34,800	34,800	0
1989	0	0	33,713	33,713	33,713	33,713	0
1988	0	0	28,275	28,275	28,275	28,275	0
1987	0	0	13,920	13,920	13,920	13,920	0
1986	0	0	13,050	13,050	13,050	13,050	0
1985	0	0	10,745	10,745	10,745	10,745	0
1984	0	0	10,745	10,745	10,745	10,745	0
1983	0	0	10,745	10,745	10,745	10,745	0
1982	0	0	10,484	10,484	10,484	10,484	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014249 **Parcel ID:** 00013860-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 112 ANGELA ST KEY WEST
Legal Description: KW LOT 11 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	391,386.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	50	87	4,350.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 432
Year Built: 1918

Building 1 Details

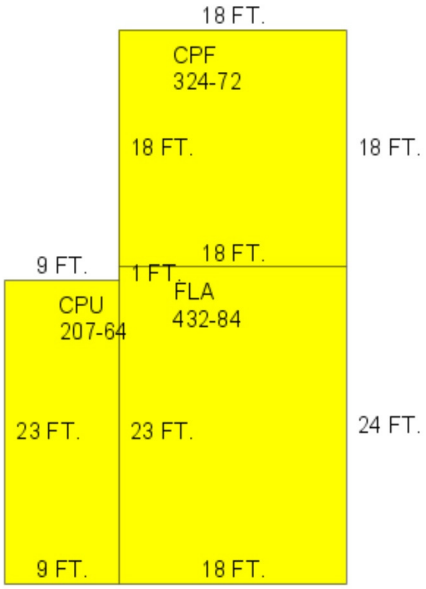
Building Type		**Condition**	P	**Quality Grade**	350
Effective Age	55	**Perimeter**	84	**Depreciation %**	60
Year Built	1918	**Special Arch**	0	**Grnd Floor Area**	432
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type		**Roof Cover**		**Foundation**	
Heat 1		**Heat 2**		**Bedrooms**	0
Heat Src 1		**Heat Src 2**			

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	0	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1988	432
2	CPF	1	1988	324
3	CPU	1	1988	207

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2597	WAREHOUSE/MARINA B	100	N	N
	2598	CPF	100	N	N
	2599	CPU	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
677	BRICK	100

Appraiser Notes

2002-7-24 OLD FOUNDRY BUILDING USED FOR STORAGE BY KEYS ENERGY SYSTEMS.

Building Permits

Bldg	Number	Date Issued	Date Completed	Amount	Description	Notes
1	9900188	01/15/1999	08/12/1999	7,500	Commercial	V-CRIMP ROOF
1	0200658	03/22/2002	08/12/2002	47,600	Commercial	REPAIRS

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	32,511	0	358,875	391,386	391,386	391,386	0
2011	32,511	0	478,500	511,011	490,337	511,011	0
2010	32,511	0	413,250	445,761	445,761	445,761	0
2009	32,511	0	489,375	521,886	521,886	521,886	0
2008	32,511	0	500,250	532,761	532,761	532,761	0
2007	22,344	0	500,250	522,594	522,594	522,594	0
2006	22,344	0	282,750	305,094	305,094	305,094	0
2005	22,344	0	282,750	305,094	305,094	305,094	0
2004	22,342	0	278,400	300,742	300,742	300,742	0
2003	22,342	0	278,400	300,742	300,742	300,742	0
2002	22,342	0	76,125	98,467	98,467	98,467	0
2001	22,342	0	65,250	87,592	87,592	87,592	0
2000	22,342	0	54,375	76,717	76,717	76,717	0

1999	22,342	0	54,375	76,717	76,717	76,717	0
1998	14,930	0	54,375	69,305	69,305	69,305	0
1997	14,930	0	45,675	60,605	60,605	60,605	0
1996	13,572	0	45,675	59,247	59,247	59,247	0
1995	13,572	0	45,675	59,247	59,247	59,247	0
1994	13,572	0	45,675	59,247	59,247	59,247	0
1993	13,572	0	45,675	59,247	59,247	59,247	0
1992	13,572	0	45,675	59,247	59,247	59,247	0
1991	13,572	0	45,675	59,247	59,247	59,247	0
1990	14,877	0	34,800	49,677	49,677	49,677	0
1989	14,877	0	33,713	48,590	48,590	48,590	0
1988	18,880	0	28,275	47,155	47,155	47,155	0
1987	18,215	0	13,920	32,135	32,135	32,135	0
1986	18,344	0	13,050	31,394	31,394	31,394	0
1985	17,581	0	13,442	31,023	31,023	31,023	0
1984	16,922	0	13,442	30,364	30,364	30,364	0
1983	16,922	0	13,442	30,364	30,364	30,364	0
1982	14,468	0	10,484	24,952	24,952	24,952	0

Parcel Sales History

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9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

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Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014257 **Parcel ID:** 00013870-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 111 GERALDINE ST KEY WEST
Legal Description: KW LOT 12 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	404,853.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	50	87	4,350.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 945
Year Built: 1923

Building 1 Details

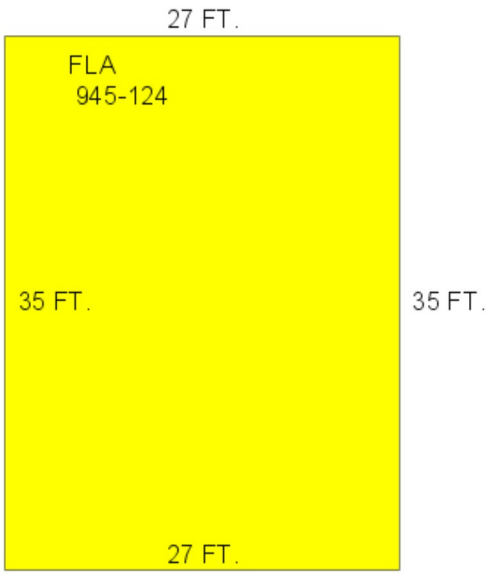
Building Type		**Condition**	A	**Quality Grade**	200
Effective Age	36	**Perimeter**	124	**Depreciation %**	45
Year Built	1923	**Special Arch**	0	**Grnd Floor Area**	945
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type		**Roof Cover**		**Foundation**	
Heat 1		**Heat 2**		**Bedrooms**	0
Heat Src 1		**Heat Src 2**			

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	1	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1922	945

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2600	VAC COMM D	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
678	BRICK	100

Appraiser Notes

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	45,978	0	358,875	404,853	404,853	404,853	0
2011	50,157	0	478,500	528,657	509,747	528,657	0
2010	50,157	0	413,250	463,407	463,407	463,407	0
2009	50,157	0	489,375	539,532	539,532	539,532	0
2008	50,157	0	500,250	550,407	550,407	550,407	0
2007	33,710	0	500,250	533,960	533,960	533,960	0
2006	33,710	0	282,750	316,460	316,460	316,460	0
2005	35,341	0	282,750	318,091	318,091	318,091	0
2004	35,340	0	278,400	313,740	313,740	313,740	0
2003	35,340	0	278,400	313,740	313,740	313,740	0
2002	35,340	0	76,125	111,465	111,465	111,465	0
2001	35,340	0	65,250	100,590	100,590	100,590	0
2000	35,340	0	54,375	89,715	89,715	89,715	0
1999	35,340	0	54,375	89,715	89,715	89,715	0
1998	22,884	0	54,375	77,259	77,259	77,259	0
1997	22,884	0	45,675	68,559	68,559	68,559	0
1996	20,804	0	45,675	66,479	66,479	66,479	0
1995	20,804	0	45,675	66,479	66,479	66,479	0
1994	20,804	0	45,675	66,479	66,479	66,479	0
1993	20,804	0	45,675	66,479	66,479	66,479	0
1992	20,804	0	45,675	66,479	66,479	66,479	0
1991	20,804	0	45,675	66,479	66,479	66,479	0
1990	20,804	0	34,800	55,604	55,604	55,604	0

1989	20,804	0	33,713	54,517	54,517	54,517	0
1988	20,804	0	28,275	49,079	49,079	49,079	0
1987	20,033	0	13,920	33,953	33,953	33,953	0
1986	20,185	0	13,050	33,235	33,235	33,235	0
1985	19,299	0	10,745	30,044	30,044	30,044	0
1984	18,589	0	10,745	29,334	29,334	29,334	0
1983	18,589	0	10,745	29,334	29,334	29,334	0
1982	15,945	0	10,484	26,429	26,429	26,429	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

This page has been visited 81,317 times.

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014281 **Parcel ID:** 00013900-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 110 ANGELA ST KEY WEST
Legal Description: KW LOT 15 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	358,875.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	50	87	4,350.00 SF

Appraiser Notes

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Building Permits

Bldg	Number	Date Issued	Date Completed	Amount	Description	Notes
	B921277	05/01/1992	12/01/1994	76,630		REMOVE 3 ABOVE GRND TANKS

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	0	0	358,875	358,875	358,875	358,875	0
2011	0	0	478,500	478,500	454,575	478,500	0
2010	0	0	413,250	413,250	413,250	413,250	0
2009	0	0	489,375	489,375	489,375	489,375	0
2008	0	0	500,250	500,250	500,250	500,250	0
2007	0	0	500,250	500,250	500,250	500,250	0
2006	0	0	282,750	282,750	282,750	282,750	0
2005	0	0	282,750	282,750	282,750	282,750	0
2004	0	0	278,400	278,400	278,400	278,400	0
2003	0	0	278,400	278,400	278,400	278,400	0
2002	0	0	76,125	76,125	76,125	76,125	0
2001	0	0	65,250	65,250	65,250	65,250	0
2000	0	0	54,375	54,375	54,375	54,375	0
1999	0	0	54,375	54,375	54,375	54,375	0
1998	0	0	54,375	54,375	54,375	54,375	0
1997	0	0	45,675	45,675	45,675	45,675	0
1996	0	0	45,675	45,675	45,675	45,675	0
1995	0	0	45,675	45,675	45,675	45,675	0
1994	0	0	45,675	45,675	45,675	45,675	0
1993	0	0	45,675	45,675	45,675	45,675	0
1992	0	0	45,675	45,675	45,675	45,675	0
1991	0	0	45,675	45,675	45,675	45,675	0
1990	0	0	34,800	34,800	34,800	34,800	0
1989	0	0	33,713	33,713	33,713	33,713	0
1988	0	0	28,275	28,275	28,275	28,275	0
1987	0	0	13,920	13,920	13,920	13,920	0

1986	0	0	13,050	13,050	13,050	13,050	0
1985	0	0	13,442	13,442	13,442	13,442	0
1984	0	0	13,442	13,442	13,442	13,442	0
1983	0	0	13,442	13,442	13,442	13,442	0
1982	0	0	10,484	10,484	10,484	10,484	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014290 **Parcel ID:** 00013910-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 105 GERALDINE ST KEY WEST
Legal Description: KW LOT 16 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	426,364.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	50	87	4,350.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 459
Year Built: 1973

Building 1 Details

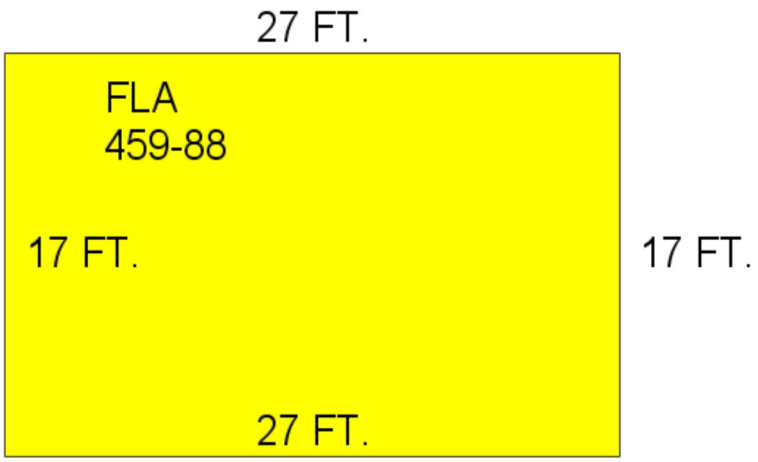
Building Type		**Condition**	A	**Quality Grade**	350
Effective Age	18	**Perimeter**	88	**Depreciation %**	23
Year Built	1973	**Special Arch**	0	**Grnd Floor Area**	459
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type		**Roof Cover**		**Foundation**	
Heat 1		**Heat 2**		**Bedrooms**	0
Heat Src 1		**Heat Src 2**			

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	1	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1972	459

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2601	COUNTY BLDGS D	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
679	C.B.S.	100

Appraiser Notes

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	67,489	0	358,875	426,364	426,364	426,364	0
2011	70,995	0	478,500	549,495	532,669	549,495	0
2010	70,995	0	413,250	484,245	484,245	484,245	0
2009	74,501	0	489,375	563,876	563,876	563,876	0
2008	74,501	0	500,250	574,751	574,751	574,751	0
2007	49,324	0	500,250	549,574	549,574	549,574	0
2006	50,485	0	282,750	333,235	333,235	333,235	0
2005	50,485	0	282,750	333,235	333,235	333,235	0
2004	51,063	0	278,400	329,463	329,463	329,463	0
2003	51,063	0	278,400	329,463	329,463	329,463	0
2002	51,063	0	76,125	127,188	127,188	127,188	0
2001	51,063	0	65,250	116,313	116,313	116,313	0
2000	51,063	0	54,375	105,438	105,438	105,438	0
1999	51,063	0	54,375	105,438	105,438	105,438	0
1998	34,122	0	54,375	88,497	88,497	88,497	0
1997	34,122	0	45,675	79,797	79,797	79,797	0
1996	31,020	0	45,675	76,695	76,695	76,695	0
1995	31,020	0	45,675	76,695	76,695	76,695	0
1994	31,020	0	45,675	76,695	76,695	76,695	0
1993	31,020	0	45,675	76,695	76,695	76,695	0
1992	31,020	0	45,675	76,695	76,695	76,695	0
1991	31,020	0	45,675	76,695	76,695	76,695	0
1990	29,935	0	34,800	64,735	64,735	64,735	0

1989	29,935	0	33,713	63,648	63,648	63,648	0
1988	26,408	0	28,275	54,683	54,683	54,683	0
1987	25,801	0	13,920	39,721	39,721	39,721	0
1986	25,881	0	13,050	38,931	38,931	38,931	0
1985	25,150	0	10,745	35,895	35,895	35,895	0
1984	17,099	0	10,745	27,844	27,844	27,844	0
1983	17,099	0	10,745	27,844	27,844	27,844	0
1982	16,219	0	10,484	26,703	26,703	26,703	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

This page has been visited 81,318 times.

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014338 **Parcel ID:** 00013950-000000

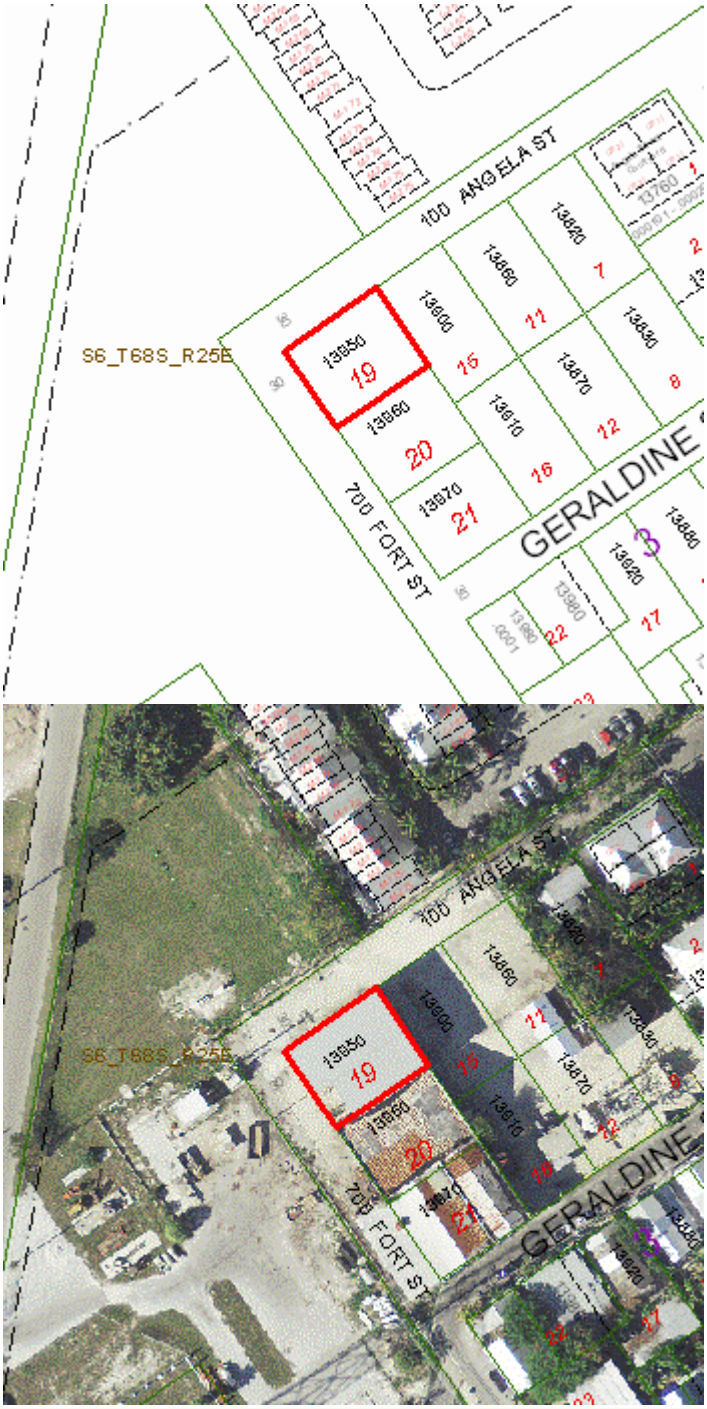
Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 100 ANGELA ST KEY WEST
Legal Description: KW LOT 19 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer



Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	546,567.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 3600
Year Built: 1923

Building 1 Details

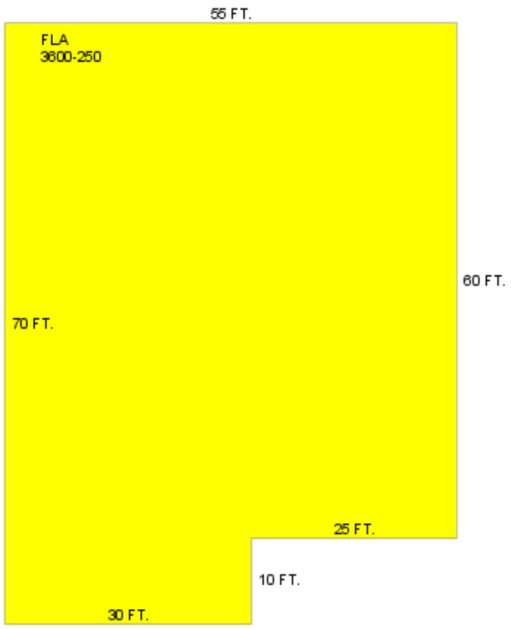
Building Type		**Condition**	P	**Quality Grade**	350
Effective Age	55	**Perimeter**	250	**Depreciation %**	60
Year Built	1923	**Special Arch**	0	**Grnd Floor Area**	3,600
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type		**Roof Cover**		**Foundation**	
Heat 1		**Heat 2**		**Bedrooms**	0
Heat Src 1		**Heat Src 2**			

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	1	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1922	3,600

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2602	ELEC/TELEPHONE ETC C	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
680	BRICK	100

Misc Improvement Details

Nbr	Type	# Units	Length	Width	Year Built	Roll Year	Grade	Life
1	PT3:PATIO	6 SF	3	2	1997	1998	2	50

Appraiser Notes

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Building Permits

Bldg	Number	Date Issued	Date Completed	Amount	Description	Notes
1	9801608	06/04/1998	01/01/1999	1,000	Commercial	POUR CONCRETE PADS

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	207,966	35	338,567	546,568	546,568	546,568	0
2011	207,966	36	451,423	659,425	653,072	659,425	0
2010	207,966	36	385,700	593,702	593,702	593,702	0
2009	207,966	37	456,750	664,753	664,753	664,753	0
2008	207,966	38	466,900	674,904	674,904	674,904	0
2007	134,954	39	466,900	601,893	601,893	601,893	0
2006	134,954	40	263,900	398,894	398,894	398,894	0
2005	134,954	41	263,900	398,895	398,895	398,895	0
2004	134,954	42	259,840	394,836	394,836	394,836	0
2003	134,954	43	259,840	394,837	394,837	394,837	0
2002	134,954	44	71,050	206,048	206,048	206,048	0
2001	134,954	45	60,900	195,899	195,899	195,899	0
2000	134,954	14	50,750	185,718	185,718	185,718	0

1999	134,954	15	50,750	185,719	185,719	185,719	0
1998	90,180	0	50,750	140,930	140,930	140,930	0
1997	90,180	0	42,630	132,810	132,810	132,810	0
1996	81,981	0	42,630	124,611	124,611	124,611	0
1995	81,981	0	42,630	124,611	124,611	124,611	0
1994	81,981	0	42,630	124,611	124,611	124,611	0
1993	81,981	0	42,630	124,611	124,611	124,611	0
1992	81,981	0	42,630	124,611	124,611	124,611	0
1991	81,981	0	42,630	124,611	124,611	124,611	0
1990	102,477	0	32,480	134,957	134,957	134,957	0
1989	102,477	0	31,465	133,942	133,942	133,942	0
1988	84,903	0	26,390	111,293	111,293	111,293	0
1987	83,018	0	12,992	96,010	96,010	96,010	0
1986	83,451	0	12,180	95,631	95,631	95,631	0
1985	81,291	0	12,545	93,836	93,836	93,836	0
1984	79,858	0	12,545	92,403	92,403	92,403	0
1983	79,858	0	12,545	92,403	92,403	92,403	0
1982	68,675	0	8,891	77,566	77,566	77,566	0

Parcel Sales History

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Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

This page has been visited 81,320 times.

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014346 **Parcel ID:** 00013960-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 709 FORT ST KEY WEST
Legal Description: KW LOT 20 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	546,996.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 3850
Year Built: 1923

Building 1 Details

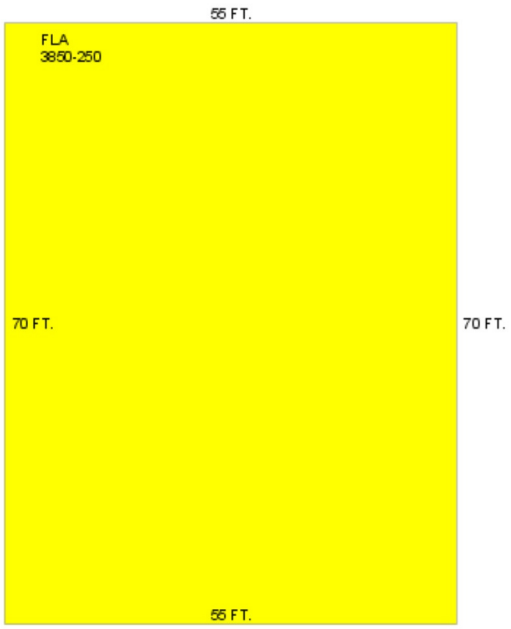
Building Type		**Condition**	P	**Quality Grade**	350
Effective Age	55	**Perimeter**	250	**Depreciation %**	60
Year Built	1923	**Special Arch**	0	**Grnd Floor Area**	3,850
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type		**Roof Cover**		**Foundation**	
Heat 1		**Heat 2**		**Bedrooms**	0
Heat Src 1		**Heat Src 2**			

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	0	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1922	3,850

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2603	ELEC/TELEPHONE ETC C	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
681	BRICK	100

Appraiser Notes

2002-7-24 THIS PROPERTY IS BEING USED BY KEYS ENERGY SYSTEMS.

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	208,429	0	338,567	546,996	546,996	546,996	0
2011	208,429	0	451,423	659,852	653,541	659,852	0
2010	208,429	0	385,700	594,129	594,129	594,129	0
2009	208,429	0	456,750	665,179	665,179	665,179	0
2008	208,429	0	466,900	675,329	675,329	675,329	0
2007	134,627	0	466,900	601,527	601,527	601,527	0
2006	134,627	0	263,900	398,527	398,527	398,527	0
2005	134,627	0	263,900	398,527	398,527	398,527	0
2004	134,627	0	259,840	394,467	394,467	394,467	0
2003	134,627	0	259,840	394,467	394,467	394,467	0
2002	134,627	0	71,050	205,677	205,677	205,677	0
2001	134,627	0	60,900	195,527	195,527	195,527	0
2000	134,627	0	50,750	185,377	185,377	185,377	0
1999	134,627	0	50,750	185,377	185,377	185,377	0
1998	89,961	0	50,750	140,711	140,711	140,711	0
1997	89,961	0	42,630	132,591	132,591	132,591	0
1996	81,783	0	42,630	124,413	124,413	124,413	0
1995	81,783	0	42,630	124,413	124,413	124,413	0
1994	81,783	0	42,630	124,413	124,413	124,413	0
1993	81,783	0	42,630	124,413	124,413	124,413	0
1992	81,783	0	42,630	124,413	124,413	124,413	0
1991	81,783	0	42,630	124,413	124,413	124,413	0
1990	102,229	0	32,480	134,709	134,709	134,709	0

1989	102,229	0	31,465	133,694	133,694	133,694	0
1988	83,435	0	26,390	109,825	109,825	109,825	0
1987	81,670	0	12,992	94,662	94,662	94,662	0
1986	82,110	0	12,180	94,290	94,290	94,290	0
1985	80,089	0	12,545	92,634	92,634	92,634	0
1984	78,860	0	12,545	91,405	91,405	91,405	0
1983	78,860	0	12,545	91,405	91,405	91,405	0
1982	67,706	0	8,891	76,597	76,597	76,597	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
9/26/2012	2592 / 2258	100	QC	11
4/25/2012	2571 / 2253	100	QC	11

This page has been visited 81,320 times.

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

Scott P. Russell, CFA
Property Appraiser
Monroe County, Florida

Key West (305) 292-3420
Marathon (305) 289-2550
Plantation Key (305) 852-7130

The offices of the Property Appraiser will be closed Thursday July 4th for Independence Day.

Website tested on IE8, IE9, & Firefox. Requires Adobe Flash 10.3 or higher

Property Record Card -
Maps are now launching the new map application version.

Alternate Key: 1014354 **Parcel ID:** 00013970-000000

Ownership Details

Mailing Address:
THE UTILITY BOARD OF THE CITY OF KEY WEST
1001 JAMES ST
KEY WEST, FL 33040-6935

Property Details

PC Code: 91 - UTILITIES,WATER TANKS
Millage Group: 11KW
Affordable Housing: No
Section-Township-Range: 06-68-25
Property Location: 101 GERALDINE ST KEY WEST
Legal Description: KW LOT 21 SQR 3 TR 3 G12-473/74 OR1428-1157/75F/J OR2571-2253/75 OR2592-2258/80C

Click Map Image to open interactive viewer

Exemptions

Exemption	Amount
15 - MUNICIPAL LANDS	652,567.00

Land Details

Land Use Code	Frontage	Depth	Land Area

100E - COMMERCIAL EXEMPT	58	70	4,060.00 SF

Building Summary

Number of Buildings: 1
Number of Commercial Buildings: 1
Total Living Area: 5850
Year Built: 1923

Building 1 Details

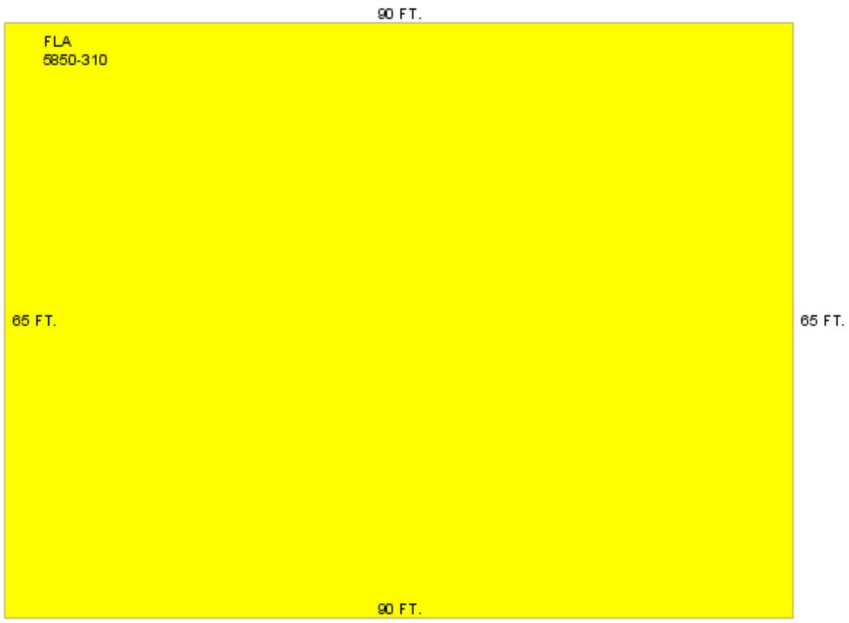
Building Type		**Condition**	P	**Quality Grade**	350
Effective Age	55	**Perimeter**	310	**Depreciation %**	60
Year Built	1923	**Special Arch**	0	**Grnd Floor Area**	5,850
Functional Obs	0	**Economic Obs**	0		

Inclusions:

Roof Type	**Roof Cover**	**Foundation**
Heat 1	**Heat 2**	**Bedrooms** 0
Heat Src 1	**Heat Src 2**	

Extra Features:

2 Fix Bath	0	**Vacuum**	0
3 Fix Bath	1	**Garbage Disposal**	0
4 Fix Bath	0	**Compactor**	0
5 Fix Bath	0	**Security**	0
6 Fix Bath	0	**Intercom**	0
7 Fix Bath	0	**Fireplaces**	0
Extra Fix	0	**Dishwasher**	0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area

1	FLA	1	1922	5,850

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	2604	ELEC/TELEPHONE ETC C	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
682	BRICK	100

Appraiser Notes

2002-7-24 PROPERTY BEING USED BY KEYS ENERGY SYSTEMS

Parcel Value History

Certified Roll Values.

View Taxes for this Parcel.

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2012	314,000	0	338,567	652,567	652,567	652,567	0
2011	314,000	0	451,423	765,423	765,423	765,423	0
2010	314,000	0	385,700	699,700	699,700	699,700	0
2009	314,000	0	456,750	770,750	770,750	770,750	0
2008	314,000	0	466,900	780,900	780,900	780,900	0
2007	203,118	0	466,900	670,018	670,018	670,018	0
2006	203,118	0	263,900	467,018	467,018	467,018	0
2005	203,118	0	263,900	467,018	467,018	467,018	0
2004	203,117	0	259,840	462,957	462,957	462,957	0
2003	203,117	0	259,840	462,957	462,957	462,957	0
2002	203,117	0	71,050	274,167	274,167	274,167	0
2001	203,117	0	60,900	264,017	264,017	264,017	0
2000	203,117	0	50,750	253,867	253,867	253,867	0
1999	203,117	0	50,750	253,867	253,867	253,867	0
1998	135,728	0	50,750	186,478	186,478	186,478	0
1997	135,728	0	42,630	178,358	178,358	178,358	0
1996	123,389	0	42,630	166,019	166,019	166,019	0
1995	123,389	0	42,630	166,019	166,019	166,019	0
1994	123,389	0	42,630	166,019	166,019	166,019	0
1993	123,389	0	42,630	166,019	166,019	166,019	0
1992	123,389	0	42,630	166,019	166,019	166,019	0
1991	123,389	0	42,630	166,019	166,019	166,019	0
1990	154,236	0	32,480	186,716	186,716	186,716	0

1989	154,236	0	31,465	185,701	185,701	185,701	0
1988	125,680	0	26,390	152,070	152,070	152,070	0
1987	123,072	0	12,992	136,064	136,064	136,064	0
1986	123,696	0	12,180	135,876	135,876	135,876	0
1985	120,711	0	12,545	133,256	133,256	133,256	0
1984	118,934	0	12,545	131,479	131,479	131,479	0
1983	118,934	0	12,545	131,479	131,479	131,479	0
1982	102,095	0	8,891	110,986	110,986	110,986	0

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

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This page has been visited 81,320 times.

Monroe County Monroe County Property Appraiser
Scott P. Russell, CFA
P.O. Box 1176 Key West, FL 33041-1176

BUILDING DEPARTMENT RECORDS

Call for inspections:
293-6462
24-hour inspection line

THE CITY OF KEY WEST
BUILDING DEPARTMENT
P.O. BOX 1409
KEY WEST, FL 33041-1409
(305) 292-8151

Application Number	02-00000658	Date	3/22/02
Property Address	112 ANGELA ST		
RE #/PARCEL #/TAX ID etc	0001-3860-000000- -		
Application description	RENOVATION, ADDITION, CONVERSION: COMMER		
Property Zoning			
Application valuation	20600		

Owner	Contractor
CITY OF K. W./C.E.S.STATION	FLORIDA CONCRETE RESTORATION
P O BOX 1409	748 25TH ST
KEY WEST FL 33041	MARATHON FL 33050
(294) 3721	(305) 731-7267

Structure Information

Construction Type	ALL CONCRETE		
Occupancy Type	FACTORY INDUSTRIAL		
Flood Zone	UNKNOWN AT SUBMITTAL		
Other struct info	NUMBER OF UNITS		1.00
	BASE FLOOR ELEVATION	1	
	Distance from back line		1.00
	Distance from left line		1.00
	Distance from right line		1.00
	Distance from street line		1.00
	HARC #	NA	
	NUMBER OF BEDROOMS		1.00
	SQUARE FOOTAGE-ACTUAL		1.00

Permit	BUILDING PERMIT		
Additional desc			
Permit Fee	.00		
Issue Date	3/22/02	Valuation	20600
Expiration Date	3/13/04		

Special Notes and Comments
DRILL & INSTALL 270 EACH #5 ROD & EPOX4
PERIMETER OF BUILDING #1 , EPOXY GROUT
PERIMETER CRACKS ON EALLS OF INTERIOR &
EXTERIOR OF BUILDING #1 FOR THE K.W.
DIESEL SITE PLANT MC

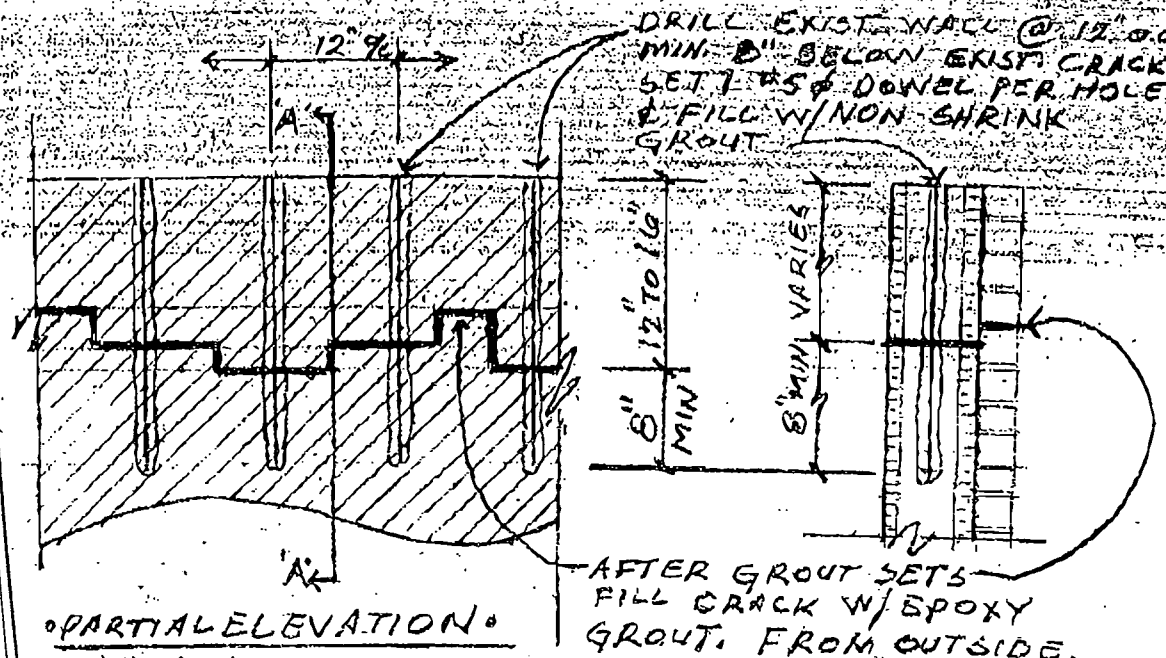
Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	.00	.00	.00	.00
Grand Total	.00	.00	.00	.00

Steve Mueller

THE PROPOSED CONSTRUCTION IS PERMITTED ON CONDITION OF COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL PLANS, SPECIFICATIONS AND ESTIMATES SUBMITTED WITH THE SUBJECT APPLICATION. PERMIT VOID UNLESS CONSTRUCTION SUBSTANTIALLY COMMENCED WITHIN 90 DAYS OF ISSUE

3-22-02
DATE ISSUED

BY



"PARTIAL ELEVATION"
3/4" = 1'-0"

TYPICAL SECTION 'A-A'
3/4" = 1'-0"

RECEIVED
MAR 15 2002
By

ADDENDUM NO. 1

DATE: 2-18-02
DRAWN BY: LPK
SHEET 1 of 1

ROOF REPAIR for:
CITY ELECTRIC

FLORIDA TECHNICAL, INC.
114 W Davis Blvd.,
Tampa, Florida 33606
(CA# 4455) (813) 251-5948
Thomas E. Cheever P.E. / Lic.# 36054

SEAL

Florida Technical, Inc.

Consulting Engineers **Tampa - Key West**

March 15, 2002

Key West Building Department
C/O Mr. Steve Mullins
Florida Concrete Restoration
P.O. Box 522392
Marathon Shores, Florida 33052-2392

RE: CONCRETE SPALLING DAMAGE @

CITY ELECTRIC DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA 33040

Dear sir:

The contractor, Mr. Steve Mullins, asked that I inspect the above referenced residence. As with so many structures throughout Monroe County and Key West a number of the structural elements have deteriorated due to "spalling".

I inspected the above referenced project. Many structural elements display some evidence of spalling. However, the damage to be repaired includes the following elements:

1. **Exterior wall cracks/separation near top of existing wall. (See attached detail.)**

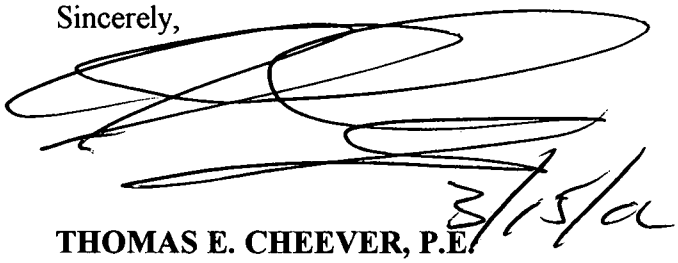
In this particular case, the spalling is not severe enough to require replacing the structural elements. The structural members can be repaired with a composite masonry product. I have discussed this with the contractor. Utilizing the "Tamms" product line or an approved equal will be sufficient to properly repair the residence. All products should be installed in accordance with the manufacturers' recommendations.

The "Tamms" product line can be expensive. Since each structural element will require multiple repairs I discussed the option of replacing the element in total. This is an

option the contractor will consider after getting into the project.

If you have any questions concerning the above, or if I can ever be of assistance, please don't hesitate to call. I look forward to hearing from you soon.

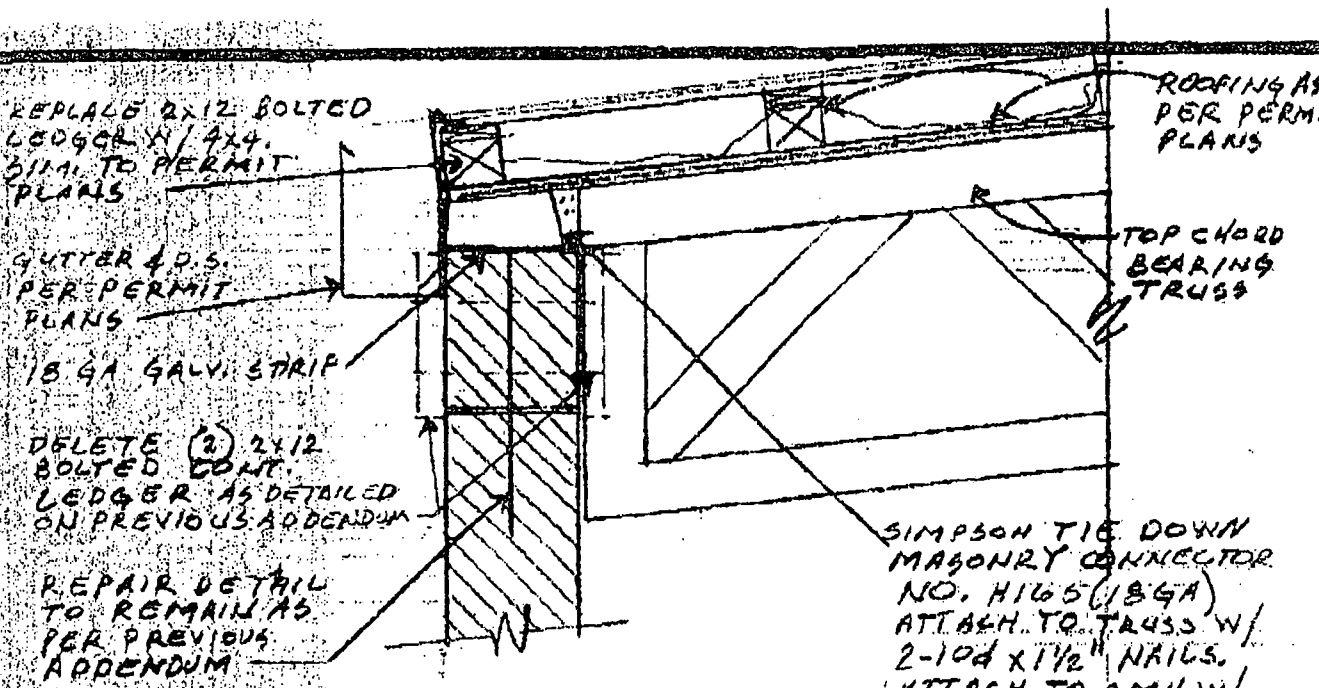
Sincerely,



THOMAS E. CHEEVER, P.E.
President

attachment

Xc: Steve Mullins



ROOF DETAIL 3/4" = 1'-0"

NOTES:

1. THIS ADDENDUM SHALL TAKE PRESIDENCE OVER PREVIOUS ADDENDUM DATED 7-20-01 (ATTACHED)
2. EXTERIOR CMU REPAIR ADDENDUM WILL NOT CHANGE.
3. SIMPSON TIE DOWN (OR EQUAL) SHALL BE 18GA. HOT-DIPPED GALVANIZED
4. THIS DETAIL HAS BEEN ENGINEERED TO THE "FLORIDA BUILDING CODE" & CONFORMS TO ASCE-7-97
5. CONTRACTOR TO FIELD VERIFY EXIST. CONDITIONS & REPORT ANY DESCREPENCIES TO ENGINEER PRIOR TO ORDERING ANY MATERIAL.
6. ALL COMMUNICATION SHALL BE IN WRITING & ALLOW 3-BUSINESS DAYS FOR WRITTEN RESPONCE.

FLORIDA TECHNICAL, INC.
114 W Davis Blvd.,
Tampa, Florida 33606
(CA# 4455) (813) 253-5948
Thomas E. Chesver P.E. / Lic.# 36054

ROOF REPLACEMENT TO BUILDING #1
OLD KEY WEST DIESEL PLANT
LOCATED AT THE FOOT OF ANGELLA STREET
KEY WEST, FLORIDA

DATE: 3-12-02
DRAWN BY: MSK
SHEET NO. 1 of 1

SEAL

3/15/02

Florida Technical, Inc.

Consulting Engineers Tampa - Key West

March 15, 2002

Key West Building Department
C/O Mr. Steve Mullins
Florida Concrete Restoration
P.O. Box 522392
Marathon Shores, Florida 33052-2392

RE: CONCRETE SPALLING DAMAGE @

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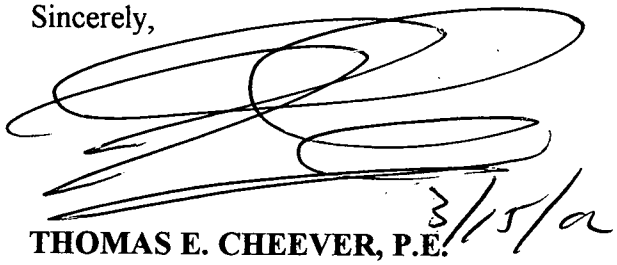
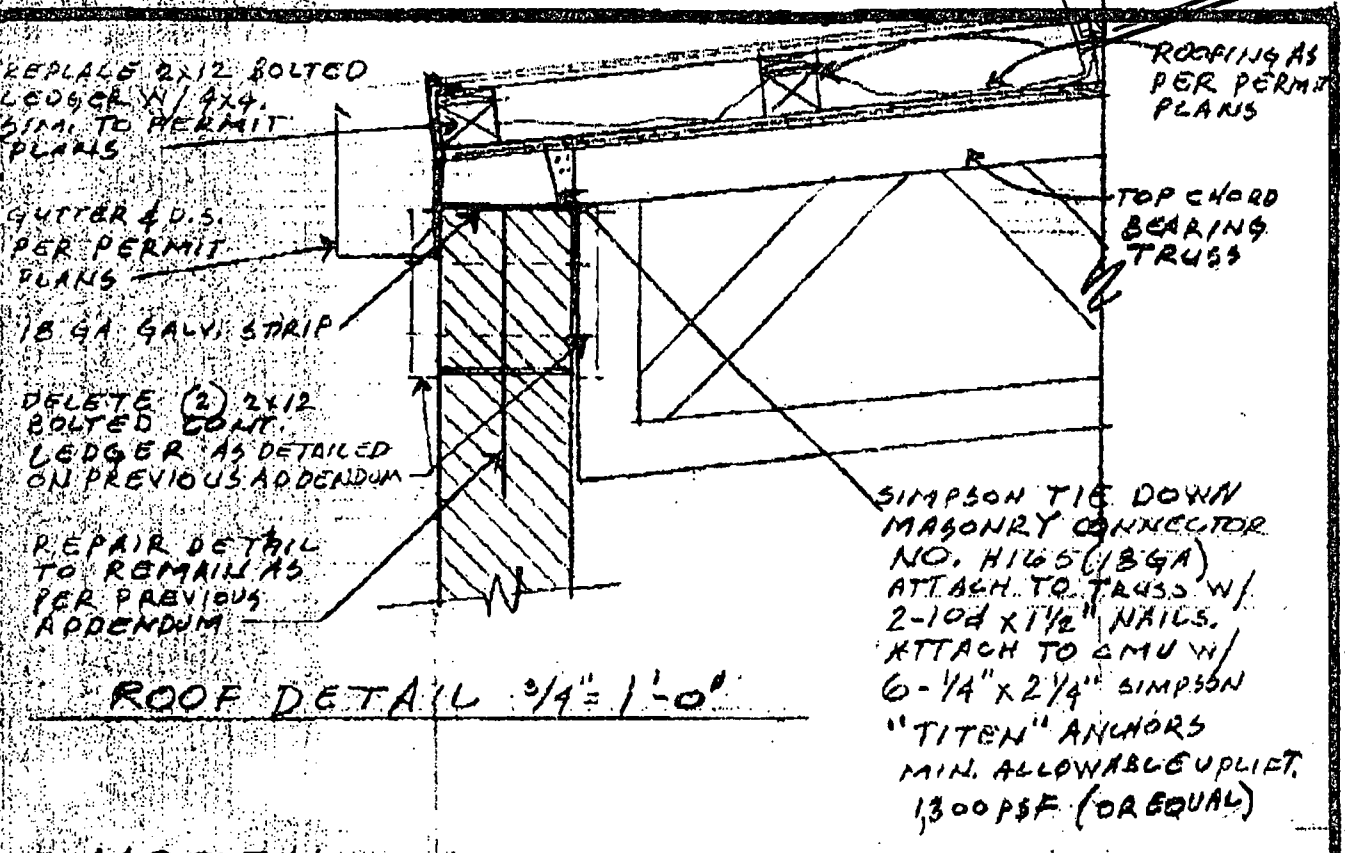


3/15/02

THOMAS E. CHEEVER, P.E.
President

attachment

Xc: Steve Mullins



ROOF DETAIL 3/4" = 1'-0"

NOTES:

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ROOF REPLACEMENT TO BUILDING #1
OLD KEY WEST DIESEL PLANT
LOCATED AT THE FOOT OF ANGELLA STREET
KEY WEST, FLORIDA

DATE: 3-12-02
DRAWN BY: MSK
SHEET NO. 1 of 1

SEAL:

3/18/02

CITY OF KEY WEST
BUILDING DEPARTMENT

02-658

RECEIVED
MAR 1 5 2002
By

PERMIT # [illegible]

$25.00 APPLICATION FEE WILL APPLY TO PERMIT FEE

COMMERCIAL BUILDING PERMIT APPLICATION

OWNER NAME: THE CITY ~~ELECTRIC SYSTEM~~ city of K. W. — DATE: 3-15-02

OWNERS ADDRESS: P.O. Box 6100 Keywest Fl 33041-6100 — PHONE #: 305 296-1181

CONTRACTOR'S NAME: Florida Concrete Restoration Inc — PHONE #: 305 731-7267
CONTRACTOR LICENSE #: 3095 masonry contractor

GENERAL CONTRACTOR'S NAME: N.A. — PHONE #: N.A.

ADDRESS OF CONSTRUCTION: ~~201 Grinnell St #~~ 112 ANGELA ST KEY WEST ~~FL 33040 Marathon FL 33050~~ — # OF UNITS: 1

THERE WILL BE A FINAL INSPECTION REQUIRED UNDER THIS PERMIT

DETAILED DESCRIPTION OF WORK:
① Drill & Install 270 Each #5 Rod and Epoxy Perimeter of Bild. #1
② Epoxy Grout Perimeter cracks on walls of Interior and Exterior of Bild. #1
Key West Diesel Site 112 ANGELA ST

TYPE OF WORK:

NEW	
ADDITION	
RENOVATION	YES ✓

ESTIMATED COST OF WORK: $ 20,600.00

Chapter 837.06 F.S.- False Official Statements- Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor of the second degree punishable as provided for in s. 775.082 or s. 775.083

****

DEBRIS REMOVAL TO BE HANDLED BY: Florida Concrete Restoration

FEE SCHEDULE

DESCRIPTION	QTY	UNIT PRICE	EXTENDED PRICE
Less than $500.00 estimated cost		NO COST	✓
Each $1000.00 of estimated cost or fraction thereof		$18.00	
Each $1000.00 of estimated cost or fraction thereof RENO & REHAB		$24.00	
TOTAL		$	

REQUIRED SUBMITTALS

	HARC APPROVAL
	4 SETS SEALED PLANS
	PROPERTY DEED
	SITE PLAN
	PROPERTY SURVEY
	FKAA APPROVAL
	C.E.S. APPROVAL
	COASTAL CONST.COMPLIANCE
	4 SETS ENERGY CALCULATIONS
	TREE PERMIT
	FLOOD ELEVATION CERT.
	STORMWATER CALCULATIONS

SIGNATURE OF CONTRACTOR/ AGENT: Steve Mullin

CHAPTER 31.171-CITY CODE- The fee for work commenced without a permit shall be a minimum $250.00 if the value of the work (labor and materials) is found by The Building Official to exceed $1,500.00.

SIGNATURE OF BUILDING OFFICIAL OR PLAN REVIEWER: 3/15/02

LICENSE STATUS: _____

ACCOUNT STATUS: _____

RECEIVED BY: _____ DATE: _____

GENERAL REQUIREMENTS

Chapter 713 -F.S.

NOTICE OF COMMENCEMENT

WARNING TO OWNER: Your failure to record a NOTICE OF COMMENCEMENT may result in your paying twice for improvements to your property. If you intend to obtain financing, consult with your lender or an attorney before recording your NOTICE OF COMMENCEMENT.
If a direct contract is greater than $2,500.00, the applicant shall file with the issuing authority prior to the first inspection either a certified copy of the recorded NOTICE OF COMMENCEMENT or a notorized statement that the NOTICE OF COMMENCEMENT has been filed for recording, along with a copy thereof.

APPLICANT'S INITIALS

****

Chapter 553.79 -F.S.

ADDITIONAL PERMITTING REVIEWS

NOTICE TO APPLICANT: In addition to this permit, there may be additional restrictions applicable to this property that may be found in public records of this county and there may be additional permits from other governmental entities such as water mangement districts, state agencies or federal agencies.

APPLICANT'S INITIALS

****

Chapter 104.6- SBC

CONDITIONS OF THE PERMIT

A permit issued shall be construed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the techinical codes. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 3 months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 6 months after the time the work is commenced.

APPLICANT'S INITIALS

****

Chapter 104.4.4-FBC

ASBESTOS DISCLOSURE STATEMENT

State law requires ASBESTOS ABATEMENT to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as owner of your property, to act as your own ASBESTOS ABATEMENT contractor even though you do not have a license.
You must supervise the construction yourself. You may move, remove or dispose of asbestos-containing materials on a residential building where you occupy the building and the building is not for sale or lease, or the building is an outbuilding on your property. If you sell or lease such building within one (1) year after the asbestos abatement is complete, the law will presume that you intended to sell or lease the property at the time the work was done, which is a violation of this exemption. You may not hire an unlicensed person as your contractor. Your work must be done according to all local, state and federal laws which apply to ASBESTOS ABATEMENT projects. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances.

APPLICANT'S INITIALS:(if applicable)

****

Chapter 489.013-F.S.

HOMEOWNER DISCLOSURE STATEMENT

State law requires construction be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed $25,000.00. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building or substanially improve it within one (1) year after construction is complete, the law will presume that you built or improved the building for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide worker's compensation for that employee, all as prescribed by laws, ordinances, building codes and zoning regulations.

APPLICANT'S INITIALS:(if applicable)

Call for inspections:
293-6462
24-hour inspection line

THE CITY OF KEY WEST
BUILDING DEPARTMENT

P.O. BOX 1409
KEY WEST, FL 33041-1409
(305) 292-8151

Application Number	02-00000658	Date 4/29/02
Property Address	112 ANGELA ST	
RE #/PARCEL #/TAX ID etc	0001-3860-000000- -	
Application description	RENOVATION, ADDITION, CONVERSION: COMMER	
Property Zoning		
Application valuation	47600	

Owner

CITY OF K. W./C.E.S.STATION
P O BOX 1409
KEY WEST FL 33041
(294) 3721

Contractor

FLORIDA CONCRETE RESTORATION
748 25TH ST
MARATHON FL 33050
(305) 731-7267

Structure Information

Construction Type	ALL CONCRETE	
Occupancy Type	FACTORY INDUSTRIAL	
Flood Zone	UNKNOWN AT SUBMITTAL	
Other struct info	NUMBER OF UNITS	1.00
	BASE FLOOR ELEVATION 1	
	Distance from back line	1.00
	Distance from left line	1.00
	Distance from right line	1.00
	Distance from street line	1.00
	HARC # NA	
	NUMBER OF BEDROOMS	1.00
	SQUARE FOOTAGE-ACTUAL	1.00

Permit	~~ROOFING PERMIT~~		
Additional desc			
Sub Contractor	~~D & J INDUSTRIES, INC.~~ (ROOF)		
Permit Fee	.00		
Issue Date	4/29/02	Valuation	27000
Expiration Date	4/20/04		

Special Notes and Comments
(1) INSTALL MODIFIED ROOFING ON PLYWOOD DECK. (2) INSTALL BATTONS ON MODIFIED ROOFING. (3) INSTALL METAL ROOFING ON BATTONS. **NOTE: (PER DIANE S.) COPPER ROOF VENTS MUST BE RELOCATED ON ROOF AS THEY WERE HISTORICALLY.
HARC #02-04-29-564 JD
** NEEDS TO FILE N.O.C. $27,000. **

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	.00	.00	.00	.00
Grand Total	.00	.00	.00	.00

THE PROPOSED CONSTRUCTION IS PERMITTED ON CONDITION OF COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL PLANS, SPECIFICATIONS AND ESTIMATES SUBMITTED WITH THE SUBJECT APPLICATION. PERMIT VOID UNLESS CONSTRUCTION SUBSTANTIALLY COMMENCED WITHIN 90 DAYS OF ISSUE

Stephen Howard

DATE ISSUED

4/30/02 JD

BY

12-4-01

CITY OF KEY WEST
BUILDING DEPARTMENT

GC# 01-3409

RECEIVED
APR 24 2002
gd

PERMIT # 02 - 0658

$25.00 APPLICATION FEE WILL APPLY TO PERMIT FEE

ROOFING PERMIT APPLICATION

OWNER NAME: City Electric — DATE: 4-24-02

APPLICANT NAME: — PHONE #: 295-1181

CONTRACTOR'S NAME: D & J Industries Inc. — PHONE #: 872-0607
CONTRACTOR LICENSE #: 60400

GENERAL CONTRACTOR'S NAME: D & J Industries Inc — PHONE #: 872-0607

ADDRESS OF CONSTRUCTION: 112 Angela
Foot of Angela St. Old City Steam plant

THERE WILL BE A FINAL INSPECTION REQUIRED UNDER THIS PERMIT

DETAILED DESCRIPTION OF WORK:
(1) install modified roofing on plywood deck
HARC # 02-04-29-564
(2) install battens on modified roofing
(3) install metal roofing on battens

TYPE OF WORK:

NEW	✓
ADDITION	
RE-ROOF	

ESTIMATED COST OF WORK:
$ 27,000

Chapter 837.06 F.S.- False Official Statements- Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor of the second degree punishable as provided for in s. 775.082 or s. 775.083

****

DEBRIS REMOVAL TO BE HANDLED BY:
← Copper roof vents must be relocated on roof as they were historically.
4/29/02 DS

REQUIRED SUBMITTALS

✓	HARC APPROVAL
	Marc #

FEE SCHEDULE

DESCRIPTION	QTY	UNIT PRICE	EXTENDED PRICE
For each 100 square feet or fraction thereof	30	$6.00	
MINIMUM FEE $30.00			

TOTAL $ - 0 -

SIGNATURE OF CONTRACTOR/ AGENT:
Stephen Howard

CHAPTER 31.171-CITY CODE- The fee for work commenced without a permit shall be a minimum $250.00 if the value of the work (labor and materials) is found by The Building Official to exceed $1,500.00.

SIGNATURE OF BUILDING OFFICIAL OR PLAN REVIEWER:
James C. Elwood

DATE 4/29/02

LICENSE STATUS: OK
ACCOUNT STATUS: No Account
RECEIVED BY: gd

No Application Fee

GENERAL REQUIREMENTS

Chapter 713 -F.S.

NOTICE OF COMMENCEMENT

WARNING TO OWNER: Your failure to record a NOTICE OF COMMENCEMENT may result in your paying twice for improvements to your property. If you intend to obtain financing, consult with your lender or an attorney before recording your NOTICE OF COMMENCEMENT.
If a direct contract is greater than $2,500.00, the applicant shall file with the issuing authority prior to the first inspection either a certified copy of the recorded NOTICE OF COMMENCEMENT or a notorized statement that the NOTICE OF COMMENCEMENT has been filed for recording, along with a copy thereof.

APPLICANT'S INITIALS: _____

****

Chapter 553.79 -F.S.

ADDITIONAL PERMITTING REVIEWS

NOTICE TO APPLICANT: In addition to this permit, there may be additional restrictions applicable to this property that may be found in public records of this county and there may be additional permits from other governmental entities such as water mangement districts, state agencies or federal agencies.

APPLICANT'S INITIALS: _____

****

Chapter 104.6- SBC

CONDITIONS OF THE PERMIT

A permit issued shall be construed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the techinical codes. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 3 months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 6 months after the time the work is commenced.

APPLICANT'S INITIALS: _____

****

Chapter 104.4.4-FBC

ASBESTOS DISCLOSURE STATEMENT

State law requires ASBESTOS ABATEMENT to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as owner of your property, to act as your own ASBESTOS ABATEMENT contractor even though you do not have a license.
You must supervise the construction yourself. You may move, remove or dispose of asbestos-containing materials on a residential building where you occupy the building and the building is not for sale or lease, or the building is an outbuilding on your property. If you sell or lease such building within one (1) year after the asbestos abatement is complete, the law will presume that you intended to sell or lease the property at the time the work was done, which is a violation of this exemption. You may not hire an unlicensed person as your contractor. Your work must be done according to all local, state and federal laws which apply to ASBESTOS ABATEMENT projects. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances.

APPLICANT'S INITIALS:(if applicable) _____

****

Chapter 489.013-F.S.

HOMEOWNER DISCLOSURE STATEMENT

State law requires construction be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed $25,000.00. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building or substanially improve it within one (1) year after construction is complete, the law will presume that you built or improved the building for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide worker's compensation for that employee, all as prescribed by laws, ordinances, building codes and zoning regulations.

APPLICANT'S INITIALS:(if applicable) _____

THE CITY OF KEY WEST
BUILDING DEPARTMENT
P.O. BOX 1409
KEY WEST, FL 33041-1409
(305) 292-8154

Application Number	99-00000188	Date 1/15/99
Property Address	112 ANGELA ST	
RE #/PARCEL #/TAX ID etc	0001-3860-000000- -	
Application description	ROOFING	
Property Zoning	HIGH DENSITY RES/COMM	
Application valuation	7500	

Owner	Contractor
CITY OF K. W./C.E.S.STATION	DAN-ACE ROOFING & TEX COTE CO.
P O BOX 1409	1219 FLAGLER AVENUE
KEY WEST FL 33041	KEY WEST FL 33040
(294) 3721	(305) 294-2380

Structure Information

Roof Type	V-CRIMP
Other struct info	SQUARE FOOTAGE-ACTUAL 2500.00

Permit	ROOFING PERMIT		
Additional desc			
Permit Fee	.00		
Issue Date	1/15/99	Valuation	0
Expiration Date	1/06/01		

Qty	Unit Charge	Per	Extension
25.00	.0000	ROOFING NEW AND REPAIR	.00

Special Notes and Comments
REPLACE 25 SQS V-CRIMP ROOFING

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	.00	.00	.00	.00
Grand Total	.00	.00	.00	.00

Daniel Acevedo

THE PROPOSED CONSTRUCTION IS PERMITTED ON CONDITION OF COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL PLANS, SPECIFICATIONS AND ESTIMATES SUBMITTED WITH THE SUBJECT APPLICATION. PERMIT VOID UNLESS CONSTRUCTION SUBSTANTIALLY COMMENCED WITHIN 90 DAYS OF ISSUE

1/19/99
DATE ISSUED

BY

APPLICATION FOR ROOFING PERMIT
BUILDING AND ZONING DEPARTMENT
CITY OF KEY WEST, FLORIDA

99-188

DATE: Jan 12-98 PERMIT FEE $ _____

1. OWNER: City Elect System TELEPHONE: _____
2. LOCATION OF CONSTRUCTION: Angela St. Sub Station
3. BUILDER: Lan-Dee ADDRESS: 571 Park Dr
4. LOT SIZE: NA RESIDENCE: _____ COMMERCIAL _____
5. ZONE CLASSIFICATION: NA
6. ARCHITECT: NA ADDRESS: _____
7. TYPE OF ROOFING:
   A. BUILT-UP: _____ SQUARES: _____
   B. ASPHALT SHINGLES: _____ SQUARES: _____
   C. METAL (SHINGLES OR "V" CRIMP): _____ SQUARES: 2550
   D. TILE: _____ SQUARES: _____
   E. OTHER: _____ SQUARES: _____
8. SHEATHING REPAIRS: _____ SQUARES: _____
9. COPY OF WARRANTY DEED
   ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE ABOVE STATEMENTS AND CITY OF KEY WEST FLORIDA CODE SECTION 31.181 SUPPLEMENTARY DISTRICT RESOLUTIONS.
   FAILURE TO COMPLY WITH THE MECHANICS' LIEN LAW CAN RESULT IN THE PROPERTY OWNER PAYING TWICE FOR BUILDING IMPROVEMENTS.

ESTIMATED COST OF WORK $ 7,500

FEET

FEET

Daniel Reveal
OWNER OR BUILDER

STATE REGISTRATION NO.

BUILDING OFFICIAL

STREET NAME

Call for inspections:
293-6462
24-hour inspection line

THE CITY OF KEY WEST
BUILDING DEPARTMENT
P.O. BOX 1409
KEY WEST, FL 33041-1409
(305) 292-8151

Application Number	99-00001111	Date 4/06/99
Property Address	112 ANGELA ST	
RE #/PARCEL #/TAX ID etc	0001-3860-000000- -	
Application description	RENOVATION, ADDITION, CONVERSION: COMMER	
Property Zoning	HIGH DENSITY RES/COMM	
Application valuation	1156	

Owner	Contractor
CITY OF K. W./C.E.S.STATION	OWNER
P O BOX 1409	
KEY WEST FL 33041	
(294) 3721	

Structure Information

Occupancy Type	MIXED USE
Flood Zone	FLOOD ZONE X
Other struct info	SQUARE FOOTAGE-ACTUAL .00

Permit	FENCE PERMIT		
Additional desc			
Permit Fee	.00		
Issue Date	4/01/99	Valuation	1156
Expiration Date	3/23/01		

Qty	Unit Charge	Per		Extension
			BASE FEE	.00

Special Notes and Comments
INSTALL A PRIVACY DECORATIVE FENCE
AROUND 4160V SUBSTATION PAINT - TAN
SLATES TO BE INSTALLED BY WEAVING WITHIN
CHAIN LINK FENCE HARC #03-99-1111 TM
231 LN FT

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	.00	.00	.00	.00
Grand Total	.00	.00	.00	.00

Randall S. Roberts, Sr.

THE PROPOSED CONSTRUCTION IS PERMITTED ON CONDITION OF COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL PLANS, SPECIFICATIONS AND ESTIMATES SUBMITTED WITH THE SUBJECT APPLICATION. PERMIT VOID UNLESS CONSTRUCTION SUBSTANTIALLY COMMENCED WITHIN 90 DAYS OF ISSUE

4/6/99
DATE ISSUED

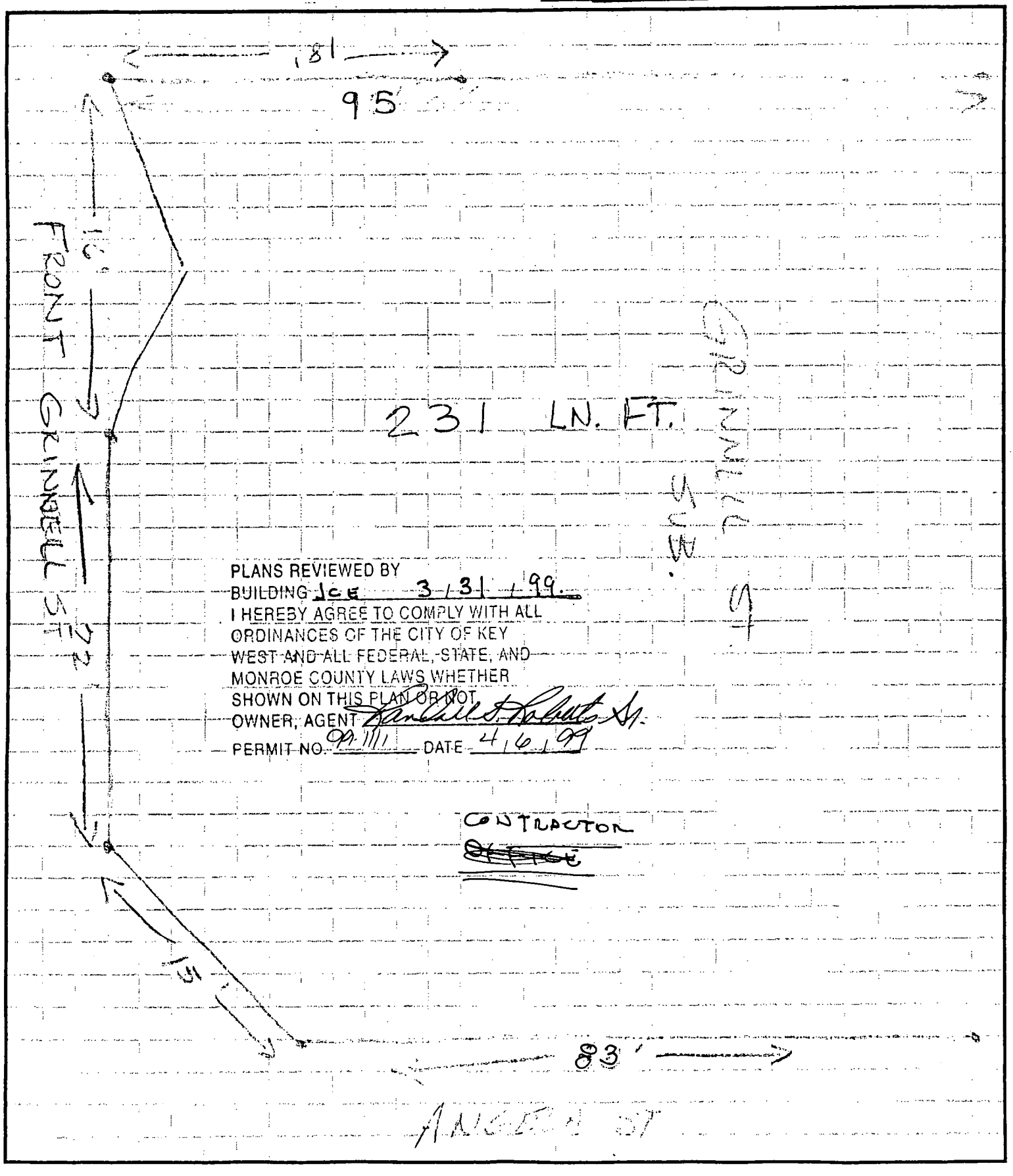
CC
BY

"THE CITY ELECTRIC SYSTEM"
ENGINEERING DEPARTMENT

Post Office Box 6100 • Key West, Florida 33041-6100 • (305) 295-1042
FAX 295-1044

PROJECT
SHEET NO. OF
DESIGNED BY DATE
CHECKED BY DATE
SCALE

RECEIVED
MAR 26 1999
By



PLANS REVIEWED BY
BUILDING JCE 3/31/99.
I HEREBY AGREE TO COMPLY WITH ALL ORDINANCES OF THE CITY OF KEY WEST AND ALL FEDERAL, STATE, AND MONROE COUNTY LAWS WHETHER SHOWN ON THIS PLAN OR NOT.
OWNER, AGENT Randall S. Roberts Sr.
PERMIT NO. 99-1111 DATE 4/6/99

CONTRACTOR
~~OWNER~~

KEY WEST BUILDING DEPARTMENT
APPLICATION FOR BUILDING PERMIT

RECEIVED
MAR 26 1999
BY

4160V SUBSTATION

ADDRESS OF CONSTRUCTION: BRINNEL & ANGELA STREETS

OWNER: UTILITY BOARD OF THE CITY OF K.W. TELEPHONE: 295-1181

ADDRESS: 1001 JAMES ST., KEY WEST, FL. 33040

CONTRACTOR: CITY ELECTRIC SYSTEM TELEPHONE: 295-1181

CONTRACTOR ADDRESS: 6900 FRONT ST.-EXTENDED, S.I.

ARCHITECT/ENGINEER: N/A TELEPHONE: N/A

ARCHITECT/ENGINEER ADDRESS: N/A

PROPERTY IS: RESIDENTIAL _____ COMMERCIAL ✓

EXISTING # UNITS: N/A # UNITS AFTER CONSTRUCTION: N/A

EXISTING # BEDROOMS: N/A # BEDROOMS AFTER CONSTRUCTION N/A

SQUARE FOOTAGE OF EXISTING ~~BUILDING~~ FENCE(S): 231 LN. FT.

DIMENSIONS OF NEW BUILDING(S) OR ADDITION: _____

TYPE OF WORK: NEW ✓ REMODEL _____ REPAIR _____ ADDITION _____

DESCRIPTION OF WORK: INSTALL PRIVACY DECORATIVE FENCE SKATING AROUND 4160V SUBSTATION. COLOR - "TAN". Slates to be installed by weaving within chain link fence 6' High

ESTIMATED COST OF COMPLETED WORK (LABOR & MATERIAL): $ ~~940.00~~ Material 216.00 Labor

SEC. 35.13(6) OF THE KEY WEST CODE OF ORDINANCES: If the work described in any building permit has not begun within ninety (90) days from the date of issuance thereof, said permit shall expire; it shall be canceled by the Chief Building Official, and written notice shall be given to the persons affected.

If the work described in any building permit has not been substantially completed within two (2) years of the date of issuance thereof, said permit shall expire and be canceled by the Chief Building Official and written notice thereof shall be given to the persons affected, together with notice that further work described in the canceled permit shall not proceed unless and until a new building permit has been obtained.

"FAILURE TO COMPLY WITH THE MECHANIC'S LIEN LAW CAN RESULT IN THE PROPERTY OWNER PAYING TWICE FOR BUILDING IMPROVEMENTS"

Randall D. Roberts Sr.
Owner or Contractor

_____
State Certification/Registration

CES Fleets Facilities Supv.

James C. Elwood 3/21/99
Plan Reviewer Date

_____
Building Official Date

Permit Fee $ 54

Zoning HHDR Flood Zone X Re# _____ Assessed Value$ _____

UTILITY BOARD OF THE CITY OF KEY WEST

1001 JAMES STREET KEY WEST, FL 33040

RANDALL S. ROBERTS, SR.

Fleets/Facilities Supervisor

City Electric System
P.O. Box 6100
Key West, FL 33041-6100

Phone (305) 295-1181
Fax (305) 295-1145

CITY OF KEY WEST
BUILDING DEPARTMENT

GC # 01-3409

CERTIFICATE of APPROPRIATENESS

APPLICATION #H02-04-29-564

HISTORIC ARCHITECTURAL REVIEW APPLICATION

OWNER NAME: City Electric

DATE: 4-24-02

OWNERS ADDRESS: 1001 Jones St

PHONE #: 295-1181

APPLICANT'S NAME: D & J Industries

PHONE #: 872-0607

APPLICANT'S ADDRESS: Big Pine Key, Fl

ADDRESS OF CONSTRUCTION: foot of Anglia Street 112 Angela

OF UNITS: — 0 —

THERE WILL BE A FINAL INSPECTION REQUIRED UNDER THIS PERMIT

DETAILED DESCRIPTION OF WORK:

install mondefind & roofing on deck as per plans & specs.

install metal roofing on wood battens

* Replace copper roof vents as orginally located DR 4/29/02

Chapter 837.06 F.S.- False Official Statements- Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor of the second degree punishable as provided for in s. 775.082 or s. 775.083

****

This application for Certificate of Appropriateness must precede applications for building permits, variances and development review approvals. Applications must meet or exceed the requirements outlined by the Secretary of the Interior's Standards for Rehabilitation and Key West's Historic Architectural Guidelines.

Once completed, the application shall be reviewed by staff for completeness and either approved or scheduled for presentation to the Historic Architectural Review Commission at the next available meeting. The applicant must be present at this meeting. The filing of this application does not ensure approval as submitted.

Applications that do not possess the required submittals will be considered incomplete and will not be reviewed for approval.

Date: 4-24-02

Applicant Signature: Stephen Howard

REQUIRED SUBMITTALS

	TWO SETS OF SCALED DRAWINGS OF FLOOR PLAN, SITE PLAN AND EXTERIOR ELEVATIONS (for new buildings and additions)
	TREE REMOVAL PERMIT (if applicable)
	PHOTOGRAPHS OF EXISTING BUILDING (repairs, rehabs, or expansions)
	PHOTOGRAPHS OF ADJACENT BUILDINGS (new buildings or additions)
	ILLUSTRATIONS OF MANUFACTURED PRODUCTS TO BE USED SUCH AS SHUTTERS, DOORS, WINDOWS, PAINT COLOR CHIPS, AND AWNING FABRIC SAMPLES

Staff Use Only

Date: 4/29/02

Staff Approval: DR

Fee Due: $

HISTORIC ARCHITECTURAL REVIEW COMMISSION USE ONLY

****

Approved _____ Denied _____ Deferred _____

Reason for Deferral or Denial:

_____

_____

_____

_____

_____

HARC Comments:

_____

_____

_____

_____

_____

Limits of Work Approved, Conditions of Approval and/or Suggested Changes:

_____

_____

_____

_____

_____

Date: _____ Signature: _____

Historic Architectural
Review Commission

HARC

Historic Architectural Review Commission
1998 HARC Application

99-188

A HARC application must precede applications for building permits, variances, and development review approvals. HARC applications must meet the requirements as outlined by the *Secretary of the Interior's Standards for Rehabilitation* and *Design Guidelines in Key West's Historic District.* The filing of an application does not ensure approval.

This application should be completed to the best of your ability and returned to the Building Department, 604 Simonton Street, Key West, Florida. All applications will be forwarded to the HARC board for a decision. The applicant should be present at the scheduled HARC meeting.

- Unless scope of work follows staff approval criteria, application review period is typically 14 days.
- Consult the tree commission for questions regarding tree removal.
- Please refer to the *Secretary of the Interior's Standards for Rehabilitation* and *Design Guidelines in Key West's Historic District* (available at the City Planning Office) for additional information.

Required attachments:

- ☐ **Photographs of existing building (for repairs, rehabilitations, or expansions)**
- ☐ **Photographs of adjoining buildings (for new buildings or major additions)**
- ☐ **Two (2) sets of to scale drawings of floor plans, site plans, exterior elevations (for new buildings or major additions)**
- ☐ **Illustrations of manufactured products to be used such as shutters, doors, and windows; paint color chips; and awning fabric samples**
- ☐ **Brief written description of scope of work intended under this application**

Applications that do not have the required attachments will be considered incomplete and will not be brought to the HARC board.

S/A DR 1/04/99

Building Permit Number (assigned by Building Department) _____

Name of Property Owner: City Electric System Phone : _____

Permanent Home Address: _____

Applicant(owner or legally designated agent): _____ Phone : _____

Applicant's Mailing Address: _____

Address of Construction: _____

HARC

Historic Architectural Review Commission

Applicant's Summary of Scope of Work (Please type or print): Remove Vinyl Replace With Same

I attest that I will not exceed the scope of work as summarized above without coming back before the HARC for additional review.

Date: _____ **Signature:** [signature]

For HARC Use Only

Approved _____ Denied _____ Deferred _____

Reason for deferral/denial: _____

_____ New Hearing Date: _____

HARC staff comments: _____

Limits of work approved, conditions of approval, and/or suggested changes, etc.: _____

Date: _____ By: _____

Historic Architectural Review Commission

99 111

HARC

Historic Architectural Review Commission
1998 HARC Application

A HARC application must precede applications for building permits, variances, and development review approvals. HARC applications must meet the requirements as outlined by the *Secretary of the Interior's Standards for Rehabilitation* and *Design Guidelines in Key West's Historic District.* The filing of an application does not ensure approval.

This application should be completed to the best of your ability and returned to the Building Department, 604 Simonton Street, Key West, Florida. All applications will be forwarded to the HARC board for a decision. The applicant should be present at the scheduled HARC meeting.

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Required attachments:

- ☐ **Photographs of existing building (for repairs, rehabilitations, or expansions)**
- ☐ **Photographs of adjoining buildings (for new buildings or major additions)**
- ☐ **Two (2) sets of to scale drawings of floor plans, site plans, exterior elevations (for new buildings or major additions)**
- ☐ **Illustrations of manufactured products to be used such as shutters, doors, and windows; paint color chips; and awning fabric samples**
- ☐ **Brief written description of scope of work intended under this application**

Applications that do not have the required attachments will be considered incomplete and will not be brought to the HARC board.

SA DD 3/30/99

Building Permit Number (assigned by Building Department) _____

Name of Property Owner: _____ Phone: _____

Permanent Home Address: _____

Applicant(owner or legally designated agent): Utility Board of the City of Key West Phone: 295-1181

Applicant's Mailing Address: _____

Address of Construction: 4160V Substation, Grinnell & Angela Streets

HARC

Historic Architectural Review Commission

Applicant's **Summary** of Scope of Work (Please type or print): _____

Install privacy decorative fence slating within chain link

I attest that I will not exceed the scope of work as summarized above without coming back before the HARC for additional review.

Date: _____ **Signature:** _____

For HARC Use Only

Approved _____ Denied _____ Deferred _____

Reason for deferral/denial: _____

_____ New Hearing Date: _____

HARC staff comments: _____

Limits of work approved, conditions of approval, and/or suggested changes, etc.: _____

Date: _____ **By:** _____

Historic Architectural Review Commission

Appendix C

PM ENVIRONMENTAL Environmental & Engineering Services

PREVIOUS SITE INVESTIGATION

CONTAMINATION ASSESSMENT REPORT (CAR)

Abandoned Diesel Plant
Angela Street
Key West, Florida

Prepared for

City Electric System Utility Board of the City of Key West

Prepared by

CH2M HILL

October 1991
SEF31821.A0

CONTAMINATION ASSESSMENT REPORT

CITY ELECTRIC SYSTEM
OLD DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FDER Facility No. 44/9101950

Prepared for

CITY ELECTRIC SYSTEM
UTILITY BOARD OF THE CITY OF KEY WEST
Key West, Florida

Prepared by

CH2M HILL SOUTHEAST, INC.
800 Fairway Drive, Suite 350
Deerfield Beach, Florida 33441

September 1991
SEF31821.A0

10-8-91

CONTENTS

TABLES

TABLES

FIGURES

ACRONYMS AND ABBREVIATIONS

Ag	Silver
As	Arsenic
Ba	Barium
bls	Below land surface
CAR	Contamination Assessment Report
Cd	Cadmium
CES	City Electric System
Cr	Chromium
DDT	Dichlorodiphenyltrichloroethane
EDB	Ethylene Dibromide (1,2-Dibromo ethane)
EPA	Environmental Protection Agency
FAC	Florida Administrative Code
FDER	Florida Department of Environmental Regulation
FID	Flame ionization detector
ft/ft	Feet per foot
gal	gallon
GC/MS	Gas chromatography/mass spectroscopy
gpd/ft	Gallons per day per foot
Hg	Mercury
HRS	Florida Department of Health and Rehabilitative Services
LPHC	Liquid phase hydrocarbon
MCL	Maximum contaminant level
mg/kg	Milligrams per kilogram
mg/l	Milligrams per liter
MO	Monitoring only
MW	Monitor well
NA	Not analyzed
NS	Not sampled
µg/kg	Micrograms per kilogram
µg/l	Micrograms per liter
OVA	Organic vapor analyzer
PAH	Polynuclear aromatic hydrocarbon
Pb	Lead
PCB	Polychlorinated biphenyl
ppb	Part(s) per billion
ppm	Part(s) per million
PVC	Polyvinyl chloride
QAP	Quality assurance plan
SB	Soil boring
Se	Selenium

SVE	Soil vapor extraction
TCLP	Toxicity characteristics leaching procedure
TIC	Tentatively identified compound
TPH	Total petroleum hydrocarbons
yd3	Cubic yard
Zn	Zinc

Section 1
INTRODUCTION

This Contamination Assessment Report (CAR) presents CH2M HILL's investigation of City Electric System's abandoned diesel plant located on Angela Street in Key West, Florida. This report was prepared using the guidelines contained in Chapter 17-770 Florida Administrative Code (F.A.C.) and describes methodology used in the evaluation procedures as well as the results of the site investigation.

The Florida Department of Environmental Regulation (FDER) requested the completion of a contamination assessment in response to a Discharge Notification Form, submitted by City Electric System (CES) on March 13, 1991. The document was filed after preliminary site investigation activities identified liquid phase hydrocarbons (LPHC) in a cement-lined groundwater pit located on the site. According to the letter sent to CES on April 4, 1991, a CAR was to be submitted to the FDER by October 9, 1991.

The preliminary investigation was initiated in an effort to close the storage facility in accordance with FDER guidelines outlined in *Pollutant Storage Tank Closure Requirements* (May 1990). Five shallow groundwater monitoring wells (MW-1 through MW-5) and 12 soil borings (SB-1 through SB-12) were installed and sampled. Although the preliminary investigation suggested that the LPHC was confined to the groundwater pit, the results of the soil organic vapor analyses indicated organic compound concentrations in excess of the 50 part per million (ppm) action limit for the kerosene/diesel and mixed product groups stated in Chapter 17-770 F.A.C. In addition, the analyses of groundwater samples collected on March 21, 1991, revealed the presence of certain petroleum compounds in excess of the maximum contaminant levels (MCL).

The results of the preliminary site assessment indicated that additional contamination assessment activities would be required to estimate the nature and extent of contamination. On July 15, 1991, three additional shallow wells (MW-6 through MW-8), two deep wells (MW-9D and MW-10D), and five soil borings (SB-13 through SB-17) were installed at the site. The results of these contamination assessment efforts are described in the following sections.

Section 2
SITE DESCRIPTION

2.1 SITE LOCATION AND HISTORY

The abandoned diesel plant is located at the corner of Fort Street and Angela Street in Key West, Florida (Figure 2-1). The site is bordered by the Truman Annex Naval Base to the west and surrounded by residential property to the east, north, and south. The Atlantic Ocean is less than 2,000 feet from the site in several directions.

The facility (Figure 2-2) was originally constructed in 1920-1930 and was operated by CES as the primary source for electric power in Key West until the 1960s. During this time period, the main building housed a number of large diesel-powered generators. The diesel was supplied by four fuel storage tanks located on the northeast corner of the facility. Tank 1 (27,000 gal) and Tank 3 (12,000 gal) are steel above-ground tanks, and Tank 2 (25,000 gal) is a square, cement storage tank with approximately 20 percent of its storage capacity below grade. There is a containment wall around Tanks 1 and 2. Tank 4 (500 gal) was an above-ground steel tank which was removed prior to the initiation of preliminary assessment activities.

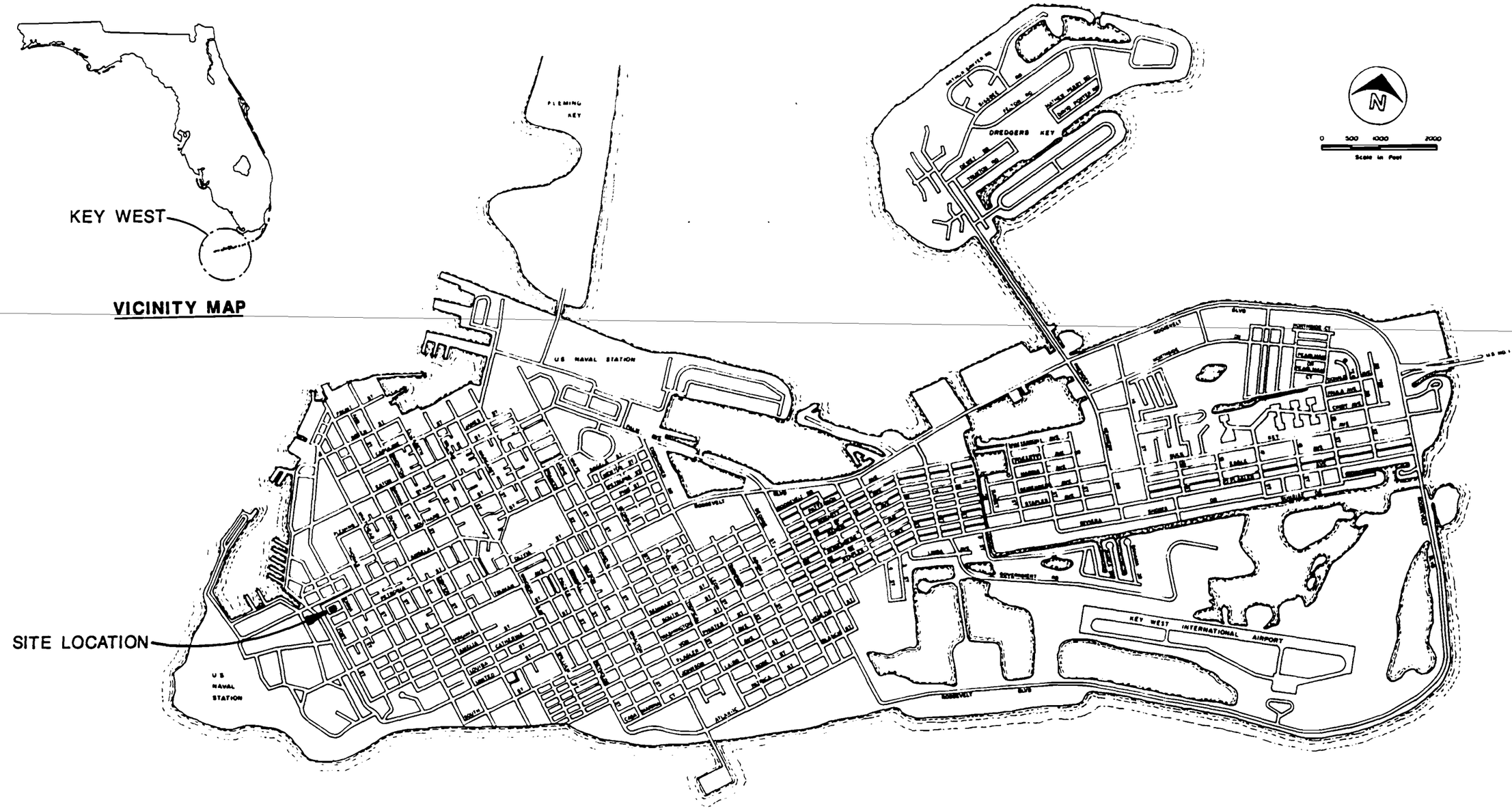
The diesel fuel was distributed to several day tanks and other storage vessels inside the main building through underground piping. Due to the age of the facility, no engineering drawings for the original distribution system were available.

The rest of the original facility consisted of a storage shed in the center of the site and a machine shop to the south. There is a closed water cistern (Tank 5) located in the southeast corner of the property. Next to the main building there is a cement structure which was used as both a storage vessel for recycled process water, and as part of the air treatment system. Adjacent to this structure there is an approximately 20-foot-deep cement groundwater pit with cement walls which was used for cooling water intake (Figure 2-2).

Although the majority of operations had ceased by the late 1960s, there was a high speed diesel generator located on a cement pad across from the fuel tanks that remained in operation until the 1970s. The last shipment of petroleum was supplied to the site in the late 1970s, and the distribution piping was subsequently capped. The storage facility has remained out of service since that time.

Currently, the only activity at the facility is an operating transformer located in the south central area of the site and the storage of office supplies in the southwest corner of the main building.

VICINITY MAP



CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 2-1
SITE LOCATION MAP

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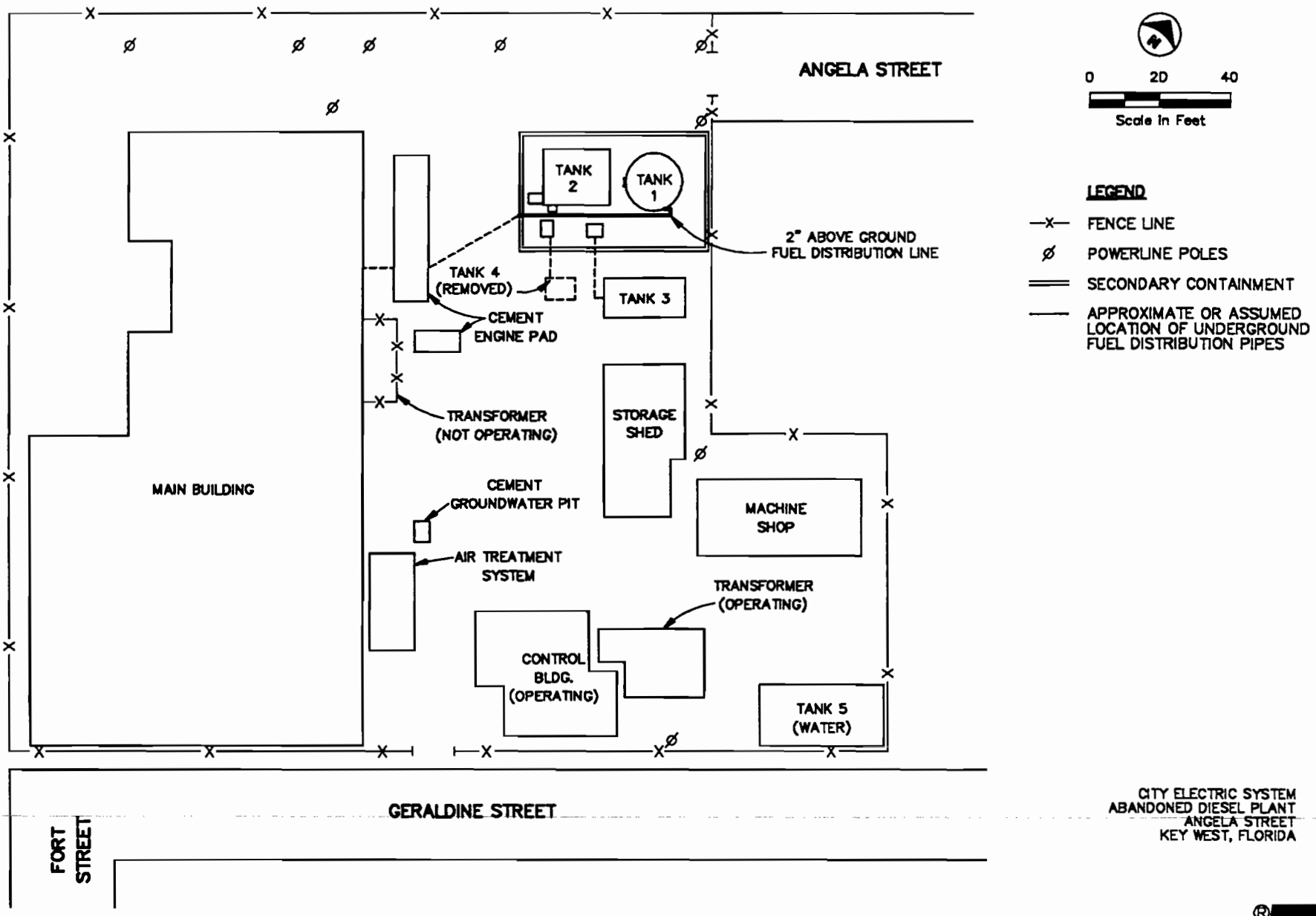

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 2-2
SITE PLAN

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2.2 PREVIOUS INVESTIGATIONS

In June 1990, CES collected samples of the diesel fuel from Tanks 1, 2, and 4, and analyzed them for polychlorinated biphenyl (PCB)/pesticide compounds using EPA Method 608. Tank 3 was empty at that time. The analyses confirmed earlier laboratory results that indicated the presence of 100 ppm of Dichlorodiphenyltrichloroethane (DDT) in Tank 4. These analytical results were submitted to FDER which determined that the contents of Tanks 1 and 2 could be burned at the CES Stock Island facility. However, FDER requested that the contents of Tank 4 be transported off site and burned at a permitted disposal facility for energy recovery purposes. This fuel was removed from the site and burned in a kiln operated by Rinker Materials. Tank 4 was subsequently removed from the site by CES.

During the initial field activities on March 5, 1991, approximately 3 inches of LPHC was discovered floating on the groundwater table in the cement-walled groundwater pit at the entrance to the main engine house. This pit, which was approximately 20 feet deep and constructed with cement sides and top but a permeable bottom, was reportedly used as a source of process water for the diesel plant during its operation. From a visual survey of the main building, it appeared that this groundwater pit was in contact with a network of subsurface pipe galleries and excavated engine foundations. To determine whether the LPHC identified in the groundwater pit had migrated via these subsurface pipe galleries, CES conducted an inventory of the liquid storage containers within the main building. The types of containers included in this inventory were small tanks, floor grates, engine foundations, and engine blocks. The results of this inventory are presented in Appendix A.

Under 17-770 F.A.C., the identification of LPHC in contact with the water table at the site constituted a reportable discharge. In compliance with 17-770 F.A.C., CES filed the required Discharge Notification Form on March 13, 1991. This regulation also requires that contamination assessment activities begin within 30 days of filing the discharge notification. On April 4, 1991, a letter was received from FDER instructing CES to conduct a contamination assessment and submit the results in a CAR by October 9, 1991.

On March 18, 1991, the second phase of field activities began at the site including observation of the removal of approximately 3,000 gallons of diesel fuel from Tanks 1 and 2. In accordance with the correspondence between CES and FDER, this fuel was transported to the Stock Island Power Plant to be used for energy recovery purposes. At this time, the LPHC floating on the groundwater in the cement pit was also collected and transported to the Stock Island Plant along with the other diesel fuel. Approximately 2,000 gallons of diesel sludge currently remains in the bottom of Tank 1 and Tank 2.

Because of the age of the facility, the petroleum storage tanks were not previously registered with FDER. There are no inventory records for the facility when it was in operation, and there were previously no groundwater wells at the site. Subsequent to the initiation of closure activities, CES filed a Storage Tank Registration Form for Tanks 1, 2, and 3 through the Florida Department of Health and Rehabilitative Services (HRS) in Monroe County.

In accordance with FDER closure requirements, four shallow groundwater monitor wells were installed near the fuel storage and distribution system on March 19, 1991. The wells were constructed to a depth of approximately 12 feet using standard 2-inch PVC material and screened from approximately 2 to 12 feet below land surface (bls). The drillers' well completion logs are included in Appendix B.

In accordance with the guidelines referenced in the Pollutant Storage Tank Closure Requirements (May 1990), groundwater samples from these four wells were collected and analyzed for purgeable hydrocarbons (EPA Method 602), and polynuclear aromatic hydrocarbons (EPA Method 610. The samples were also analyzed for PCB/pesticide compounds (EPA Method 608). No polynuclear aromatic compounds or PCB/pesticide compounds were detected; however, benzene (1.3 micrograms per liter [µg/l]) was detected in MW-2 (Table 2-1). The analytical results are included in Appendix C.

To start contamination assessment activities within the required 30 days of filing the Discharge Notification Form, additional field activities were conducted near the groundwater pit during the week of March 18, 1991. As part of the preliminary effort, one monitor well (MW-5) was installed adjacent to the groundwater pit. The locations of these five wells installed during the preliminary assessment (MW-1, MW-2, MW-3, MW-4, and MW-5) are shown in Figure 2-3.

Samples from MW-5 were analyzed for the parameters required under Chapter 17-770 F.A.C for the assessment of sites with potential contamination from both diesel product and used oil. The required analyses for samples from MW-5 were more extensive than the closure assessment requirements because both diesel fuel and used oil potentially existed at the groundwater pit. The list of analyses required under Chapter 17-770 F.A.C. for sites where both diesel fuel and used oil potentially exist is listed in Table 2-2. Although this table lists both groundwater and soil analyses, no soil samples were analyzed for these parameters during the preliminary assessment.

In addition, a groundwater sample was collected from the cement groundwater pit. Although there was initially an oily sheen visible on the surface of the groundwater in the pit, it was removed prior to the sample collection. The sample was analyzed for total petroleum hydrocarbons (TPH), priority/non-priority pollutant volatile organics,

TABLE 2-1

City Electric System - Abandoned Diesel Plant

Summary of Groundwater Analysis - Closure Assessment

for MW-1, MW-2, MW-3, and MW-4

March 21, 1991

Parameter	Concentration (ug/l)			
	MW-1	MW-2	MW-3	MW-4
Select Volatile Organic Compounds (EPA Method 602)				
Methyl Tert-Butyl Ether (MTBE)	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	< 1.0	1.3	< 1.0	< 1.0
Toluene	< 1.0	< 1.0	< 1.0	< 1.0
Ethylenzene	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	< 1.0	< 1.0	< 1.0	< 1.0
Total BTEX	< 1.0	1.3	< 1.0	< 1.0

ug/l = micrograms per liter

BTEX = total for benzene, toluene, ethylbenzene, and total xylenes

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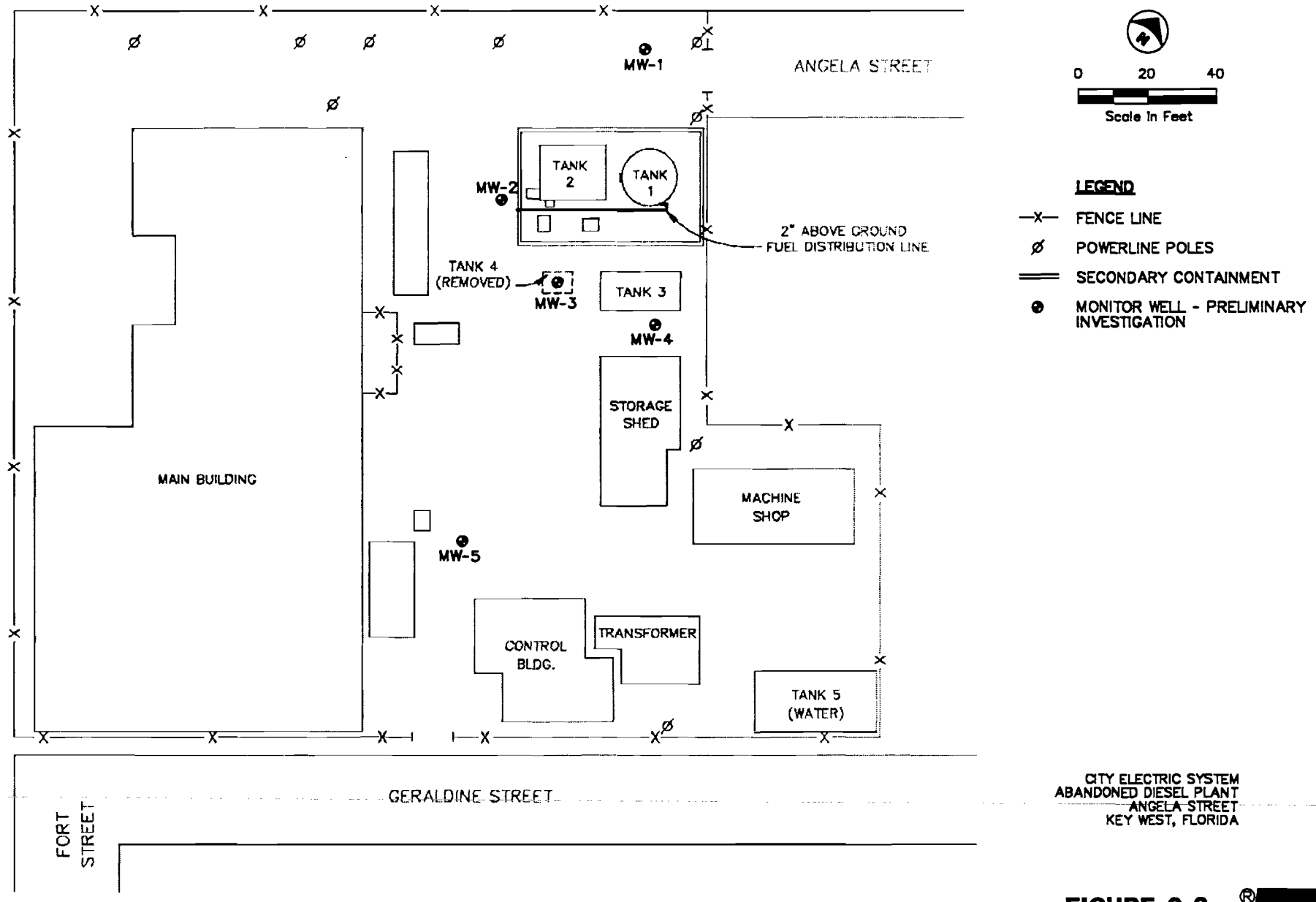

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 2-3

LOCATION OF MONITOR WELLS FROM PRELIMINARY INVESTIGATIONS

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Table 2-2 Contamination Assessment Analyses Chapter 17-770 F.A.C.	
Groundwater	
Parameter	**Analytical Method**
Benzene	EPA Method 602
Toluene	EPA Method 602
Ethylbenzene	EPA Method 602
Total Xylenes	EPA Method 602
Methyl Tert-Butyl Ether	EPA Method 602
1,2-Dibromoethane (EDB)	EPA Method 504
1,2-Dichloromethane	EPA Method 601
Polynuclear Aromatic Hydrocarbons (PAH)	EPA Method 610
Total Volatile Organic Aromatics	EPA Method 602
Total Volatile Organic Halocarbons	EPA Method 601
Total Recoverable Petroleum Hydrocarbons	EPA Method 418.5
Metals (As, Cd, Cr, Pb)	EPA Method 7000 Series
Priority/Non-priority Pollutant Volatile Organics	EPA Method 624 (with GC/MS peaks greater than 10 ppb)
Priority/Non-priority Pollutant Extractable Organics	EPA Method 625 (with GC/MS peaks greater than 10 ppb)
Soil	
Total and Filtered Metals (As, Cd, Cr, Pb)	EPA Method 7000 Series
Priority/Non-priority Pollutant Volatile Organics	EPA Method 8240 (with GC/MS peaks greater than 10 ppb)
Priority/Non-priority Pollutant Semivolatile Organics	EPA Method 8250 (with GC/MS peaks greater than 10 ppb)
TCLP Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)	EPA Method 1310 and analyzed using EPA Method 7000 Series

priority/non-priority pollutant extractable organics, and selected metals (arsenic, cadmium, chromium, lead). The results of the analyses from MW-5 and the groundwater pit are summarized in Table 2-3. The laboratory reports from these groundwater analysis are included in Appendix C.

As indicated in Table 2-3, volatile aromatic compounds (EPA Method 602) including toluene (1.7 micrograms per liter, [µg/l]), ethylbenzene (39 µg/l), and total xylenes (42 µg/l) were detected in the sample from MW-5. Total Napthalenes (48 µg/l) and other semivolatile organic compounds were detected using EPA Method 610. The gas chromatography/mass spectroscopy (GC/MS) scan (EPA Method 625) generally supported the results from EPA Method 610, and indicated the presence of semivolatile compounds as tentatively identified compounds (TIC) at levels up to 90 µg/l in this monitor well. TPH was detected in MW-5 at a concentration of 29.5 milligrams per liter (mg/l) as well as chromium (0.011 mg/l), lead (0.015 mg/l), and zinc (0.01 mg/l). No 1,2-dibromoethane (EDB) was detected.

The data from the groundwater pit indicated the presence of TPH at 192 mg/l. Although no polynuclear aromatic hydrocarbons were detected in the groundwater pit by EPA Method 625, the GC/MS scan indicated the presence of unidentified semivolatile organic compounds at concentrations up to 3,400 µg/l. Zinc (0.06 mg/l) was also detected in the groundwater pit. No LPHC was encountered in the five monitor wells.

A total of 12 soil borings (SB-1 through SB-12) were drilled at the site as part of the preliminary investigation (Figure 2-4). Split-spoon samples from each of these borings were collected at 2-foot intervals to a depth of approximately 6 feet bls. Soil samples were also collected from drill cuttings at monitor well locations MW-1 through MW-5.

Soil samples were placed in half-filled, 16-ounce glass mason jars and were analyzed with an organic vapor analyzer (OVA) equipped with a Flame Ionization Detector (FID), in accordance with Chapter 17-770, F.A.C. At the completion of each soil boring, split-spoon sampling equipment was decontaminated by a steam/pressure wash followed by an isopropanol wash, and a second steam/pressure wash. As required, contaminated boring holes were abandoned by grouting to the surface.

The OVA soil screening indicated the existence of organic vapor concentrations in excess of the 50 ppm action limit established by FDER for diesel contaminated sites. Results of these analyses will be discussed in Section 4, along with the OVA soil screening results collected during the site investigation. The purpose of discussing these results together is to provide a cohesive assessment of soil contamination at the site.

TABLE 2-3
City Electric System - Abandoned Diesel Plant
Summary of Analysis for
MW-5 and the Groundwater Pit
March 21, 1991

Parameter	Concentration (ug/l)	
	MW-5	Groundwater Pit
Select Volatile Organic Compounds (EPA Method 602)		
Benzene	< 1.0	NA
Toluene	1.7	NA
Ethylbenzene	39	NA
Xylenes (Total)	42	NA
Total BTEX	82.7	NA
Methyl Tert-Butyl Ether (MTBE)	< 1.0	NA
Select Volatile Organic Compounds (EPA Method 624)		
Benzene	<25	<5.0
Toluene	<25	<5.0
Ethylbenzene	54	<5.0
Xylenes (Total)	82	<5.0
TIC	86	10
Select Semivolatile Organic Compounds (EPA Method 610)		
Naphthalene	10	NA
2-Methylnaphthalene	16	NA
1-Methylnaphthalene	22	NA
Total Naphthalenes	48	NA
Acenaphthylene	7	NA
Acenaphthene	4	NA
Fluorene	6	NA
Phenanthrene	18	NA
Anthracene	< 2.0	NA
Fluoranthene	3	NA
Pyrene	7	NA
Benzo (a) anthracene	< 2.0	NA
Chrysene	< 2.0	NA
Benzo (a) pyrene	< 2.0	NA
Total PAH (excluding Naphthalenes)	< 2.0	NA
Select Semivolatile Organic Compounds (EPA Method 625)		
Naphthalene	<10	< 250
Acenaphthylene	23	< 250
Acenaphthene	24	< 250
Fluorene	19	< 250
Phenanthrene	70	< 250
Anthracene	16	< 250
Fluoranthene	18	< 250
Pyrene	40	< 250
Benzo (a) anthracene	11	< 250
Chrysene	11	< 250
Benzo (a) pyrene	11	< 250
TIC	90	3400
Select Metals	Concentration (mg/l)	
Arsenic	< 0.005	< 0.005
Cadmium	< 0.0002	< 0.0002
Chromium	0.011	< 0.002
Lead	0.015	< 0.002
Zinc	0.1	0.06
Total Petroleum Hydrocarbons (EPA Method 418.1)	29.5	192

ug/l = micrograms per liter
TIC = Tentatively Identified Compounds. Maximum estimated value reported.
NA = Not Analyzed
mg/l = milligrams per liter
PAH = Polynuclear Aromatic Hydrocarbons

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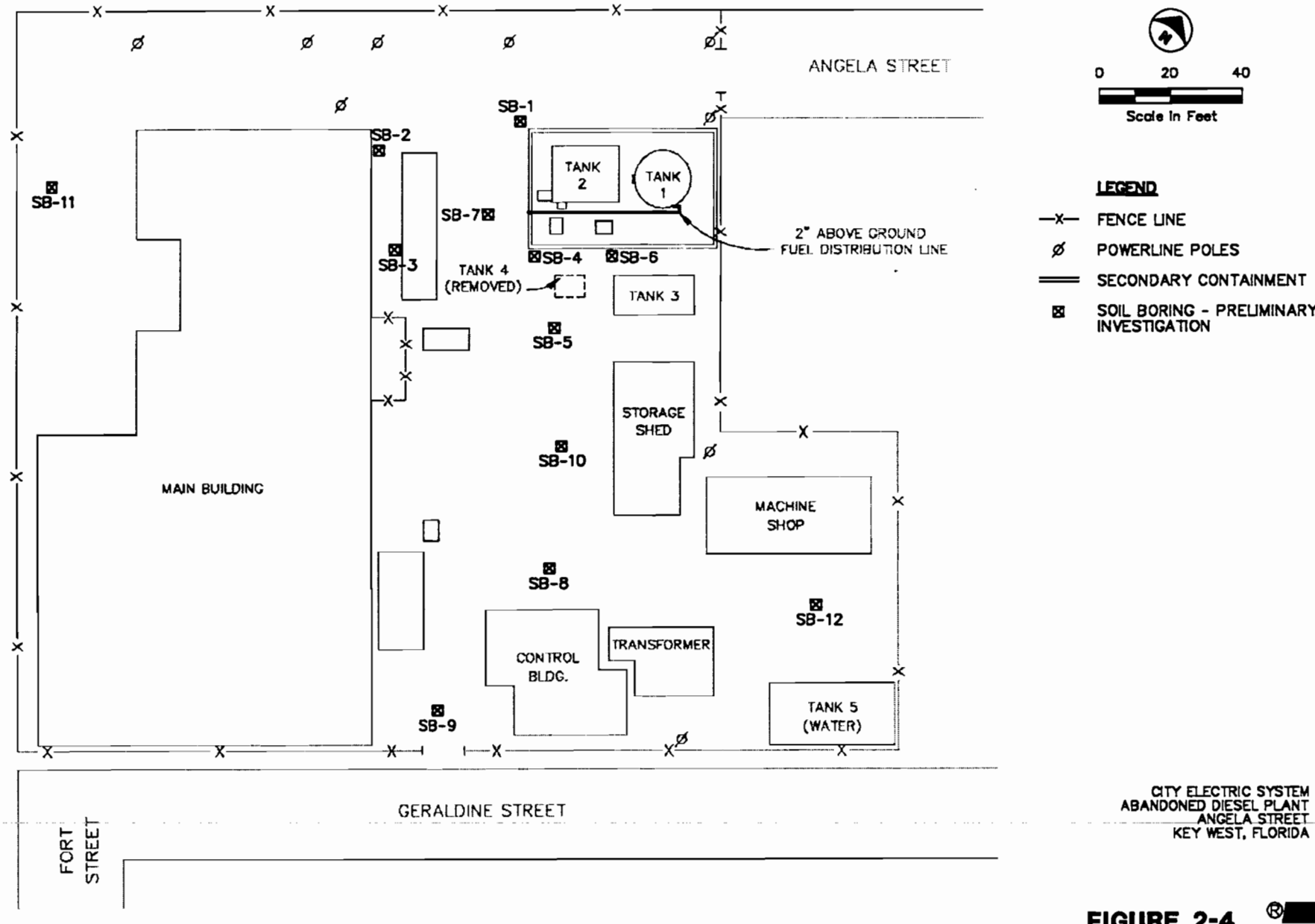

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 2-4

LOCATION OF SOIL BORINGS FROM PRELIMINARY INVESTIGATIONS

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2.3 LOCAL HYDROGEOLOGY

Key West is underlain by oolitic limestone (Miami Oolite) that extends to a depth of about 200 feet. The oolitic limestone has a high permeability and is honeycombed with solution holes that allow rainwater to escape rapidly to the sea and seawater to easily infiltrate. Underlying the oolitic limestone is a white fossiliferous limestone with loosely cemented coquina to a depth of approximately 2,000 feet.

The fresh water floats in a lens-shaped configuration on the salt water as a result of density differences. While there is a substantial amount of fresh water in the western half of the island, the eastern half has large amounts of fill material and lacks sufficient aquifer material for a measurable freshwater lens. The freshwater lens (chloride concentration of 250 mg/l or less) is thickest, averaging about 5 feet, in the center of the Old Town area. Underlying the freshwater is the transition zone--a mixture of fresh water and salt water that increases in salinity vertically until the saltwater interface is reached at a depth of about 40 feet (McKenzie, 1990).

As a result of tidal effects, the water table fluctuates constantly. Water levels range from 0.8 to 2.4 feet above sea level near the coast. Tidal effects cause continual change, both vertically and horizontally, in the configuration of the freshwater lens and salinity of the transition zone. The amount of fresh water varies with rainfall, seepage to the ocean, evaportranspiration, and withdrawal. However, the effect of evaportranspiration and withdrawals on water levels is largely masked by tidal influence.

Section 3
SITE INVESTIGATION PROCEDURES

3.1 QUALITY ASSURANCE PLAN

In accordance with Section 17-160.700 F.A.C., the site investigation quality assurance objectives were satisfied by CH2M HILL's Laboratory Comprehensive and Field Comprehensive Quality Assurance Plans (QAP) on file with FDER. Laboratory Comprehensive QAPs have been approved by FDER for CH2M HILL laboratories in Gainesville, Florida (#87534G), Montgomery, Alabama (#87212G), and Redding, California (#880969T). The Field Comprehensive QAP, which was submitted to FDER in February 1991, is currently being reviewed, but CH2M HILL was informed by FDER (Marathon) that these referenced Laboratory and Field Comprehensive QAPs would satisfy the site-specific quality assurance objectives for this project.

3.2 SITE GEOLOGY

During shallow monitor well installation (MW-6 through MW-8), soil cutting samples were collected at 5-foot intervals to approximately 12 to 13 feet bls and were visually evaluated. During installation of the deep monitor wells (MW-9D and MW-10D), continuous split-spoon samples were collected to a depth of 30 feet bls. Continuous split-spoon soil sampling was also conducted to the water table interface at five other locations.

The geology underlying the site is quite uniform, consisting primarily of a white to pale orange oolitic limestone. The top 8 feet is composed of a yellowish gray to white, very soft, weathered, fossiliferous oolitic limestone, while very hard, white coral rock and oolitic fossiliferous limestone are found between 8 feet and 30 feet bls.

3.3 SOIL VAPOR MONITORING

On July 15 through 17, 1991, CH2M HILL installed five soil borings (SB-13 through SB-17) to supplement the soil quality data obtained during the preliminary site investigation and to describe the horizontal extent of contamination (See Figure 3-1). Because of the numerous overhead power lines, soil borings SB-13 through SB-16 were post-holed, and samples were collected at 4 to 6 feet bls. After the completion of each boring, post-hole equipment was decontaminated using the procedure described in Section 2.2. Originally, the location of SB-17 had been intended for the installation of a perimeter monitor well. However, due to the existence of detectable VOA concentrations, the installation site for the monitor well was relocated. Because

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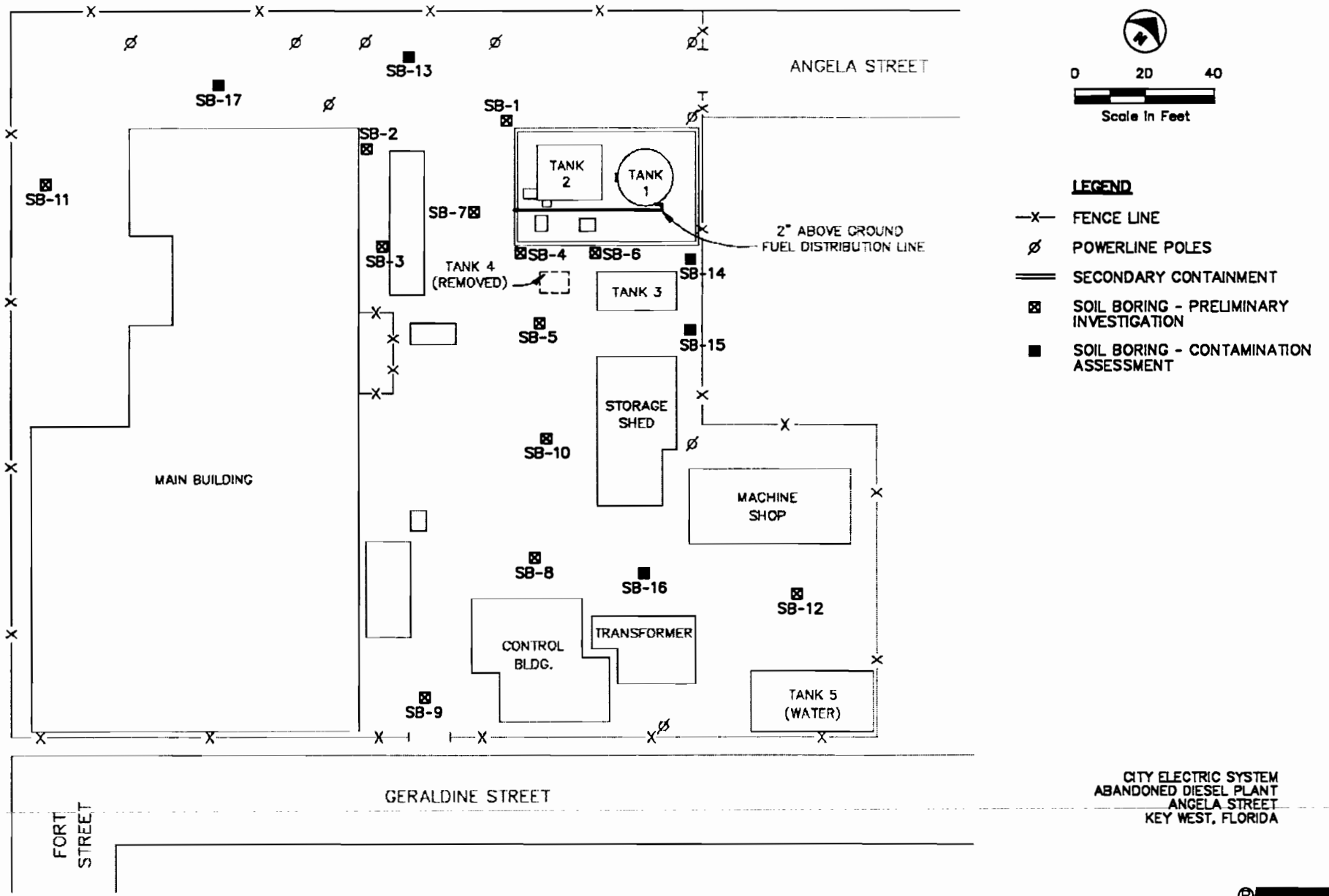

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 3-1
LOCATIONS OF SOIL BORINGS

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soil boring SB-17 was originally intended as the location for a shallow monitor well, the soil sample from this boring was collected from drill cuttings corresponding to 4 to 6 feet bls.

Additional soil boring samples were collected from the drill cuttings of three new shallow groundwater monitoring wells (MW-6 through MW-8) which were installed at the site as part of the contamination assessment (Figure 3-2). The samples from these borings corresponded to zero to 5 feet bls and 5 to 10 feet bls, respectively, and were intended to describe further the horizontal extent of soil contamination.

To describe the vertical extent of soil contamination, split-spoon soil boring samples were collected from two locations at 2-feet intervals to a depth of approximately 30 feet bls. The locations of these borings corresponded to the locations of the two deep monitor wells (MW-9D and MW-10D).

Each of the soil samples collected during the contamination assessment was analyzed using an OVA as described previously in Section 2.2. The results of the soil vapor analyses for both the contamination assessment and the preliminary investigation will be described in Section 4.

3.4 MONITOR WELL INSTALLATIONS

The three new shallow groundwater monitor wells (MW-6 through MW-8) shown in Figure 3-2 were installed on July 16, 1991. These wells were positioned around the perimeter of the site in an attempt to describe the horizontal extent of groundwater contamination and provide water level data.

The three 2-inch-diameter monitor wells were installed to depths of approximately 12 feet bls using 8-inch-diameter hollow-stem augers. Ten feet of No. 10 slot poly-vinyl chloride (PVC) well screen and 2 feet of Schedule 40 PVC riser pipe were used to construct the wells. The screened interval was approximately 2.0 to 12.0 feet bls. A clean, graded 20/30 silica sand pack was installed so that the tips of the screens were at least 2 feet above the water table at high tide. A 6-inch-thick bentonite seal was added on top of the sand pack, followed by cement grout to the surface. Below-grade meter boxes with 6-inch-diameter, traffic bearing covers were cemented in place. The covers were set approximately 1/2 to 1 inch above grade to prevent runoff from entering the meter box. A locking, gasket-sealed cover was placed on the top of the riser pipe. Locks were included on the wells. This method was also used for the installation of MW-1 through MW-5. A construction diagram for the shallow monitor wells is shown in Figure 3-3.

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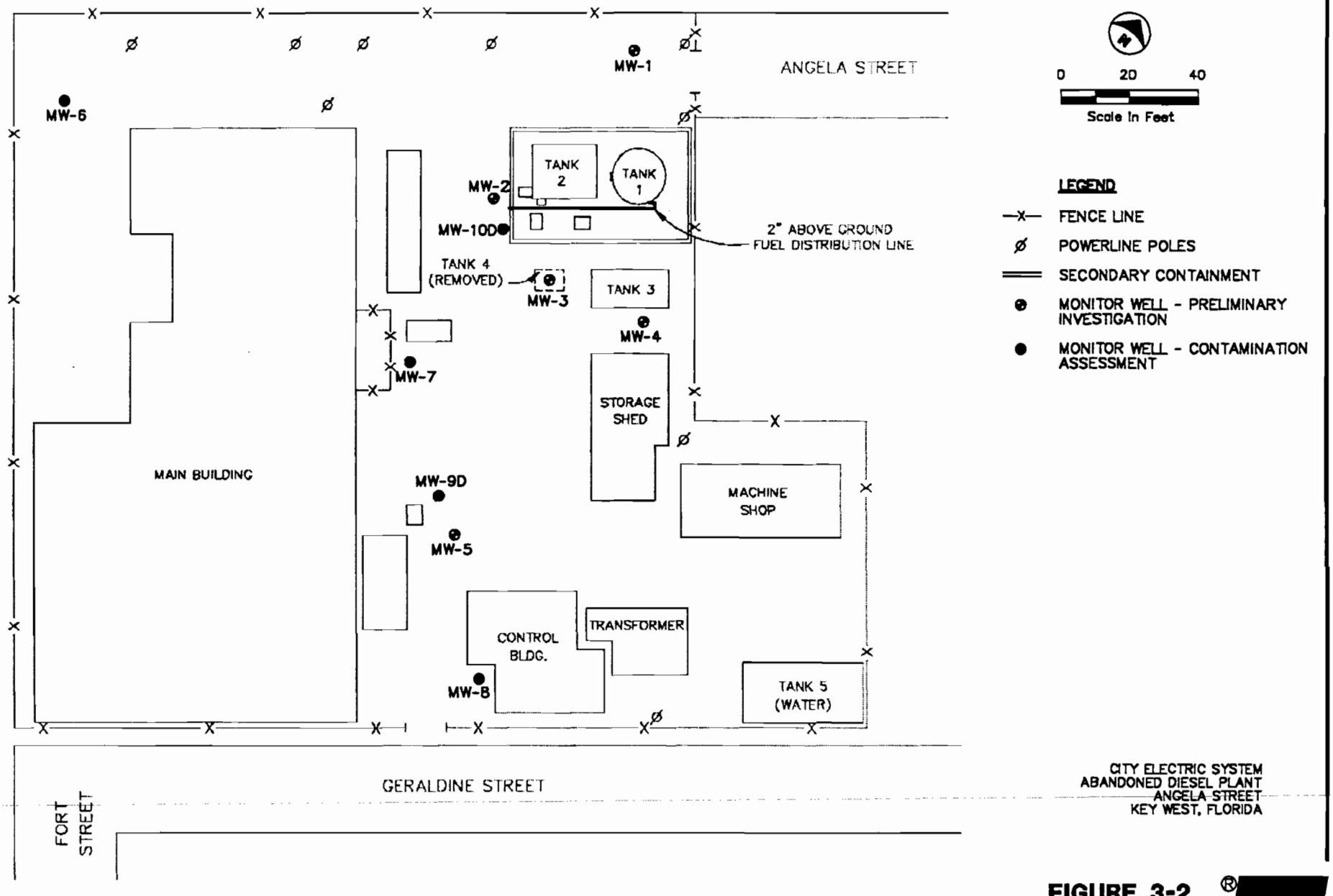

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 3-2
LOCATION OF GROUNDWATER MONITOR WELLS

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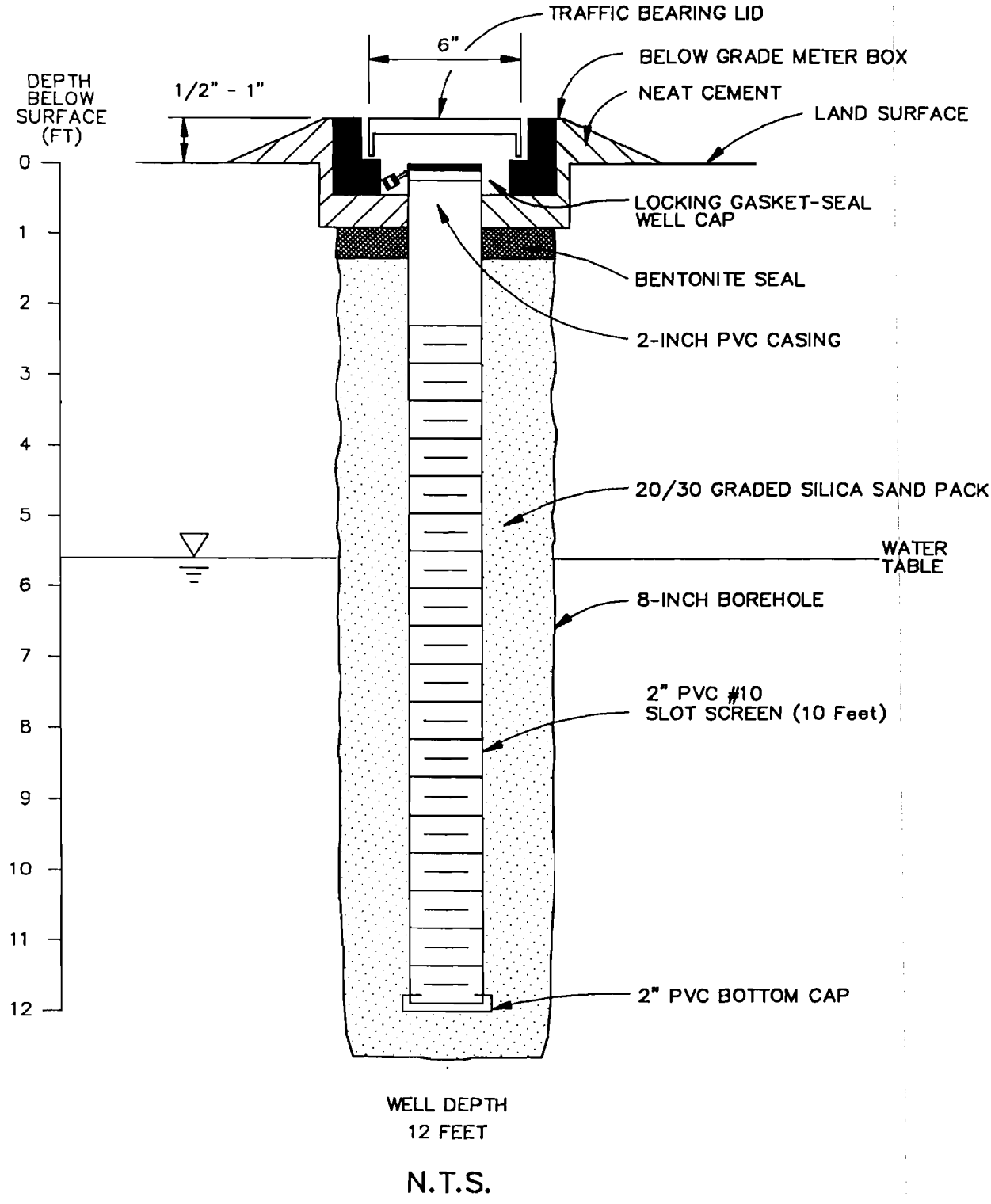

FIGURE 3-3
SHALLOW MONITOR WELL CONSTRUCTION DIAGRAM

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To describe the vertical extent of migration, two 2-inch-diameter deep monitor wells (MW-9D and MW-10D) were installed. During the construction of these deep wells, approximately 18 feet of 6-inch-diameter PVC surface casing was installed to prevent hydrocarbons from migrating downward during subsequent drilling activities. Drill cuttings and fluids were analyzed with an OVA and hydrocarbon contaminated drill cutting returns were disposed of on an impervious barrier in a remote area of the site to allow the organic vapors to evaporate. The surface casing was then pressure-grouted in place and allowed to stand undisturbed for approximately 24 hours after which 2-inch-diameter PVC casing with 5 feet of No. 10 slot well screen was installed inside the surface casing to a depth of 28 feet bls. The screened interval was from 23 to 28 feet bls with the remainder of the well constructed similarly to the shallow wells. Figure 3-4 shows a construction diagram for the deep monitor wells. The drillers' well completion logs for each monitor well are shown in Appendix B.

After installation, each monitor well was developed by over-pumping to remove any sediments and to establish hydraulic continuity between the well and the aquifer. Development water was discharged to the ground surface, which allowed potentially existing hydrocarbons to volatilize. Each well was permitted to stabilize for an approximate 24-hour period prior to sampling to allow the water in the wells to equilibrate. The presence or absence of LPHC was determined in each well by lowering a decontaminated Teflon bailer to the product/water table interface and measuring the height of the product column collected in the bailer.

3.5 AQUIFER EVALUATION

Aquifer testing was conducted to estimate the hydraulic characteristics of the site. Slug tests were performed on monitor wells MW-4, MW-6, MW-8, MW-9D, and MW-10D to obtain an average horizontal hydraulic conductivity of the upper 30 feet of the aquifer.

Slug tests were conducted by withdrawing a 1-inch PVC solid slug from the wells and measuring water level response with a pressure transducer and data logger. A detailed discussion of slug test methodology is contained in Appendix D. The data were analyzed by the Bower and Rice (1976) method in conjunction with the updated version (Bouwer, 1989) to calculate hydraulic conductivity. Results of the analyses are described in Section 4.

3.6 GROUNDWATER AND SOIL SAMPLING

On July 18, 1991, groundwater samples were collected from 9 of the 10 monitor wells at the site. Shallow well MW-3 was excluded from this sampling effort because pre-

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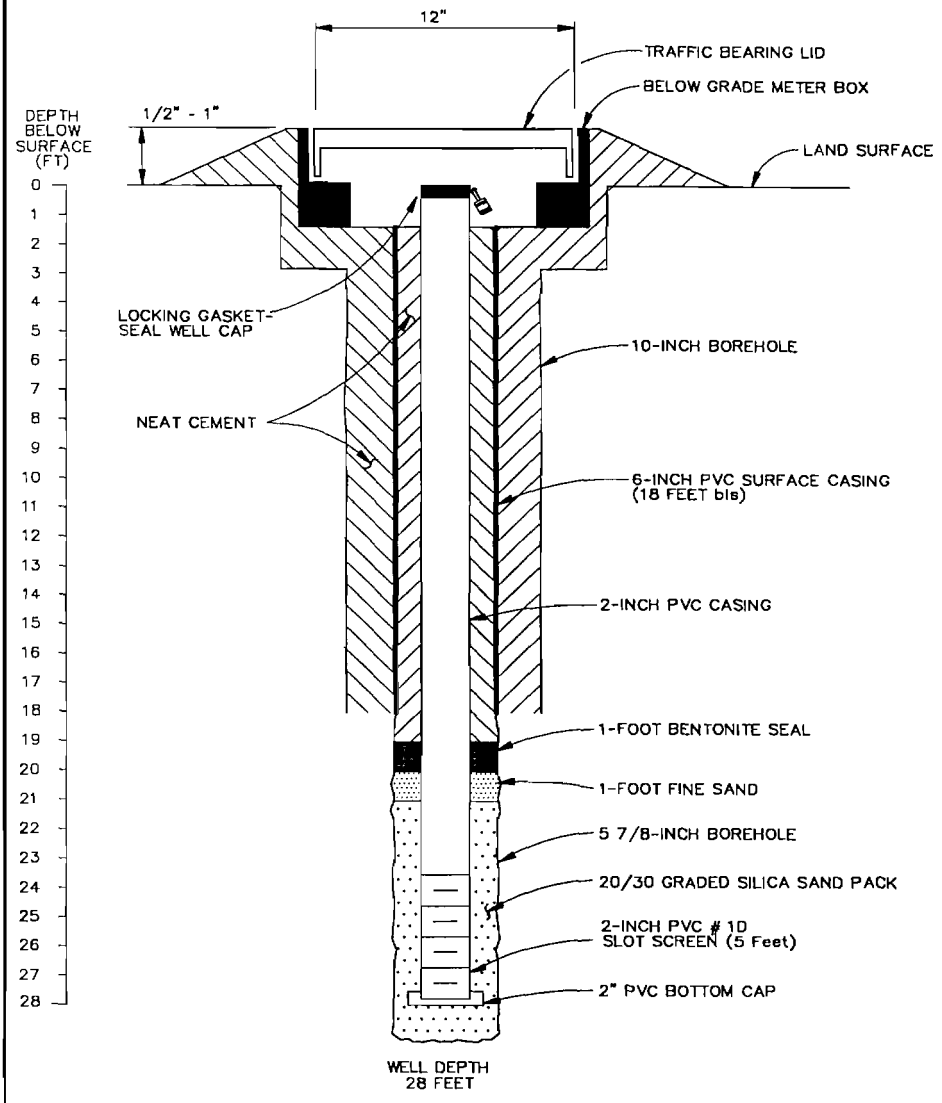

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FIGURE 3-4
DEEP MONITOR WELL CONSTRUCTION DIAGRAM

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vious samples did not exhibit petroleum contaminants, and its location was not crucial in describing the horizontal extent of contaminant migration. Groundwater and soil sampling and analysis were conducted in accordance with the referenced Laboratory and Field Comprehensive QAPs.

Before sampling, at least three casing volumes of water were purged from each well so that native formation water was sampled. Purge water from the sampling was discharged to the ground surface, which would allow the hydrocarbons, if any, to volatilize. Once conductivity and pH of the water stabilized, a decontaminated Teflon bailer was lowered into each well to collect the groundwater sample. The pump, intake hose, and bailer were washed with deionized water and rinsed with nanograde isopropanol between sampling to avoid cross-contamination. Quality assurance samples (equipment blanks, trip blanks, field blanks, and duplicate samples) were also analyzed for selected parameters.

During the installation of monitor well MW-9D, one set of soil samples was collected at the interval between 2 to 8 feet bls. The position for this sample was chosen to characterize the nature of the soil contamination. The soil and groundwater samples were analyzed for the parameters listed in Table 2-2 in accordance with the requirements of 17-770 F.A.C.

3.7 UTILITY SURVEY

Field observations revealed a cement drainage ditch behind the main building on the west side of the site. Another cement ditch was reportedly located along the northern perimeter of the site but has apparently been filled. Because of the age of the facility, no engineering drawings indicating the location of underground utilities were available. Prior to subsurface investigations, a metal detector was used to search for shallow subsurface structures or piping. Due to the operation of a transformer on the south central portion of the plant, there are numerous overhead power lines located at the site.

3.8 POTABLE WELL REVIEW

Private residences and businesses on the island of Key West receive potable water from the Florida Keys Aqueduct Authority pipeline which originates in Florida City, Florida. According to FDER, the local groundwater is classified as G-III which indicates non-potable water quality. There are reportedly a limited number of privately-owned shallow groundwater wells on the island. However, according to FDER, these wells are not permitted for potable water use. Additionally, a review of

the South Florida Water Management District files did not reveal any permitted wells in Key West.

Section 4
RESULTS OF SITE INVESTIGATION

4.1 AQUIFER CHARACTERISTICS

Slug tests conducted on monitor wells MW-4, MW-6, MW-8, MW-9D, and MW-10D were evaluated using the Bouwer and Rice (1976) method, in conjunction with the updated version (Bouwer, 1989). Slug tests, instead of pumping tests, were selected because it was anticipated that they would provide similar results for the subsurface conditions encountered at the site. In addition, slug tests eliminate the need for contaminated water disposal. Field data from the data logger, semi-log graphs, and calculations performed in analyzing the data are included in Appendix D.

Results from the analyses were averaged to obtain a hydraulic conductivity value (K) that characterizes the site. Results of the slug tests for the monitor wells are summarized in Table 4-1 and indicate a range of hydraulic conductivity between 6 feet/day (ft/day) to 29 ft/day, with an average of 17 ft/day. These values are consistent with the conductivity values for other limestone units encountered in South Florida. The shallow monitor well slug tests were performed on the upper 12 to 13 feet of the aquifer, while the deep monitor well slug tests were conducted on the upper 28 feet of the limestone aquifer. The results derived from the slug tests indicate similar hydraulic characteristics at the two intervals tested. The hydraulic conductivity values obtained are approximate and are intended to be used to estimate groundwater flow rates beneath the site.

Based on the spatial distribution of hydraulic conductivities across the site, it appears that the hydraulic properties of the aquifer vary. The highest values (29 ft/day) were measured around the tanks in the northeast corner of the site, while the lowest (6 ft/day) values were exhibited to the south and northwest. The variability may be due to the heterogeneity of the aquifer, or the potential presence of fine grained fill material existing under portions of the site.

The aquifer transmissivity was obtained by multiplying the hydraulic conductivity (determined by the slug tests) by the affected aquifer thickness. An estimated average transmissivity of 837 gallons per day per foot (gpd/ft) was estimated from monitor wells MW-4, MW-6, MW-8, MW-9D, and MW-10D. The storage coefficient for the area was estimated at 0.25 (Driscoll, 1986) .

TABLE 4-1
City Electric System - Abandoned Diesel Plant
Summary of Hydraulic Conductivity Values
Obtained from Slug Tests
July 15-17, 1991

Monitor Well Indentification	Hydraulic Conductivity		Affected Aquifer Thickness (ft.)
	gpd/ft	ft/day	
Shallow Monitor Wells			
MW-4	221	29	8.2
MW-6	45	6	8.0
MW-8	134	17	7.2
Deep Monitor Wells			
MW-9D	61	8	5.0
MW-10D	149	26	5.0
Average	166	17	

gpd/ft = gallons per day per foot

ft/day = feet per day

4.2 GROUNDWATER FLOW

Groundwater level elevations, as measured at each monitor well on July 17, 1991, and August 2, 1991, are shown in Table 4-2. Table 4-3 provides a summary of construction details for each monitor well. Groundwater contour maps (Figures 4-1 through 4-4) were prepared from water level measurements taken from each well and referenced to the 1929 National Geodetic Vertical Datum (NGVD).

Because of its proximity to the Atlantic Ocean and the major influence of tidal effects on groundwater at this site, depth-to-water measurements were collected during the approximate periods of high and low tides on each of the 2 days of sampling (July 17, 1991, and August 2, 1991). The contour maps indicate a very flat average hydraulic gradient of approximately 0.0009 feet/foot (ft/ft), the groundwater flow appearing to move towards the northeast during both high and low tides (Figure 4-1 through 4-4).

Based upon Darcy's Law, groundwater velocity is defined as:

$$V = \frac{Ki}{n}$$

An effective porosity of 30 percent was assumed for the calculation of flow velocity based on the lithology of the borehole samples and literature data (Todd, 1980). Using this estimated porosity value, the average hydraulic conductivity of 17 ft/day and an average hydraulic gradient of 0.0009 ft/ft, the average groundwater velocity was calculated to be:

$$V = \frac{(17)(0.00087)}{0.30} = 0.049 \ ft/day$$

where:

V = Average groundwater velocity (feet/day)
K = Hydraulic conductivity (feet/day)
i = Hydraulic gradient (feet/foot)
n = Effective porosity (dimensionless)

TABLE 4-2
City Electric System - Abandoned Diesel Plant
Groundwater Elevation Data
July 17, 1991 and August 2, 1991

	July 17, 1991				August 2, 1991			
	Low Tide	Low Tide	High Tide	High Tide	Low Tide	Low Tide	High Tide	High Tide
Monitor Well Identification	Depth to Water (feet)	Water Level Elevation (feet NGVD) (a)	Depth to Water (feet)	Water Level Elevation (feet NGVD) (a)	Depth to Water (feet)	Water Level Elevation (feet NGVD) (a)	Depth to Water (feet)	Water Level Elevation (feet NGVD) (a)
MW-1	4.80	0.30	4.18	0.92	4.77	0.33	4.30	0.8
MW-2	4.85	0.29	4.00	1.14	4.85	0.29	4.24	0.9
MW-3	4.67	0.30	3.84	1.13	4.70	0.27	4.06	0.91
MW-4	4.80	0.27	4.07	1.00	4.80	0.27	4.23	0.84
MW-5	4.52	0.30	3.70	1.12	4.52	0.30	3.89	0.93
MW-6	3.98	0.38	3.23	1.13	3.98	0.38	3.38	0.98
MW-7	5.00	0.30	4.20	1.10	5.95	0.65	5.32	0.02
MW-8	4.79	0.33	4.06	1.06	4.79	0.33	4.21	0.91
MW-9D	5.16	0.00	4.18	0.98	4.97	0.19	4.44	0.72
MW-10D	5.04	0.23	4.41	0.86	5.21	0.06	4.56	0.71

(a) Top-of-Casing elevation measured in reference to the National Geodetic Vertical Datum (NGVD). See Table 4-3.

TABLE 4-3
City Electric System - Abandoned Diesel Plant
Monitor Well Construction Details

Monitor Well Identification	Installed By	Diameter (inches)	Total Depth (feet)	Screened Interval (feet)	TOC Elevation (feet NGVD) (a)
MW-1	CH2M HILL	2	13.0	3 - 13	5.10
MW-2	CH2M HILL	2	13.0	3 - 13	5.14
MW-3	CH2M HILL	2	13.0	3 - 13	4.97
MW-4	CH2M HILL	2	13.0	3 - 13	5.07
MW-5	CH2M HILL	2	13.0	3 - 13	4.82
MW-6	CH2M HILL	2	12.0	2 - 12	4.36
MW-7	CH2M HILL	2	12.0	2 - 12	5.30
MW-8	CH2M HILL	2	12.0	2 - 12	5.12
MW-9D	CH2M HILL	2	28.0	23 - 28	5.16
MW-10D	CH2M HILL	2	28.0	23 - 28	5.27

(a) Top-of-Casing measured in feet above National Geodetic Vertical Datum (NGVD)

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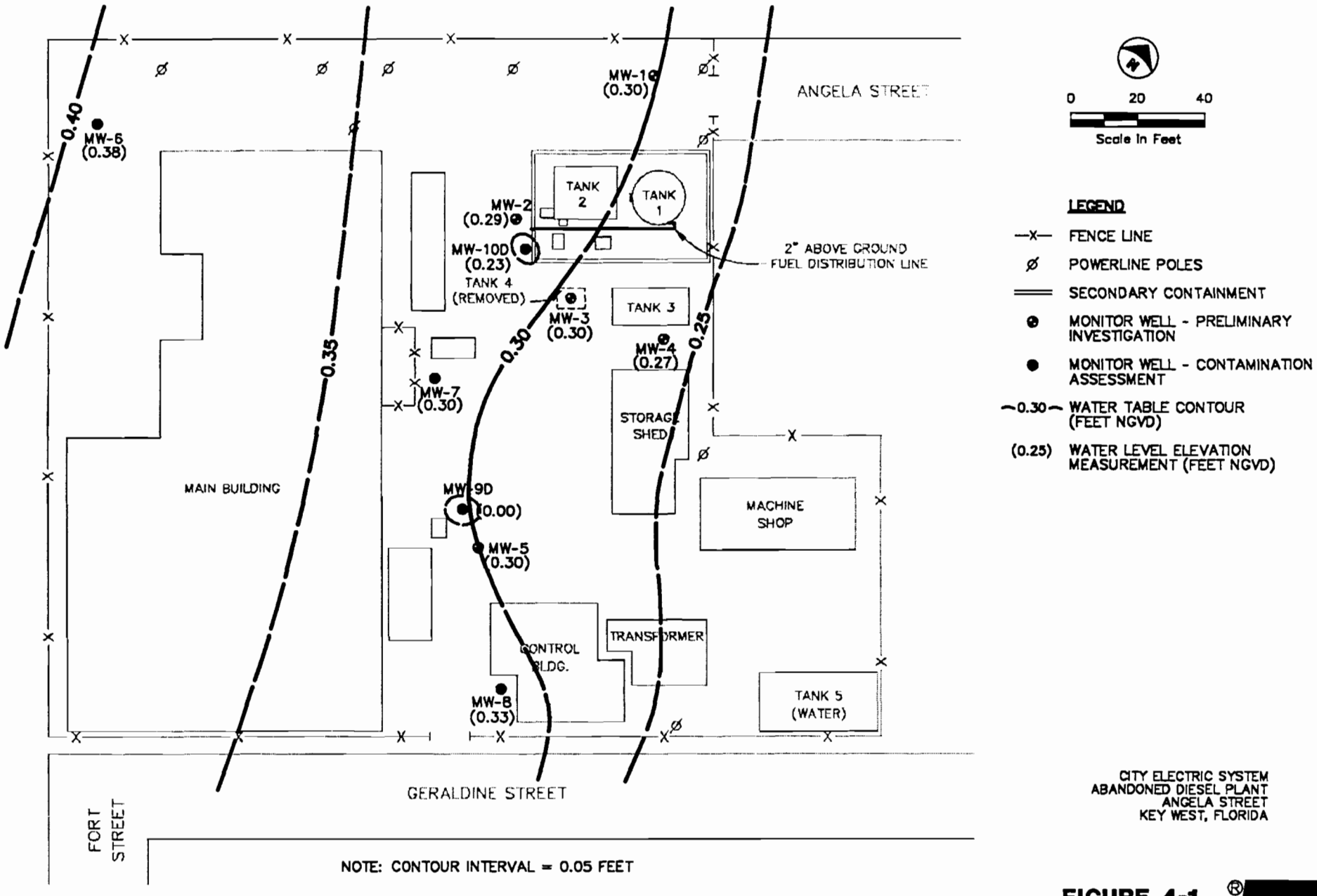

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-1

WATER TABLE ELEVATION CONTOURS
JULY 17, 1991 (LOW TIDE)

CH2M HILL

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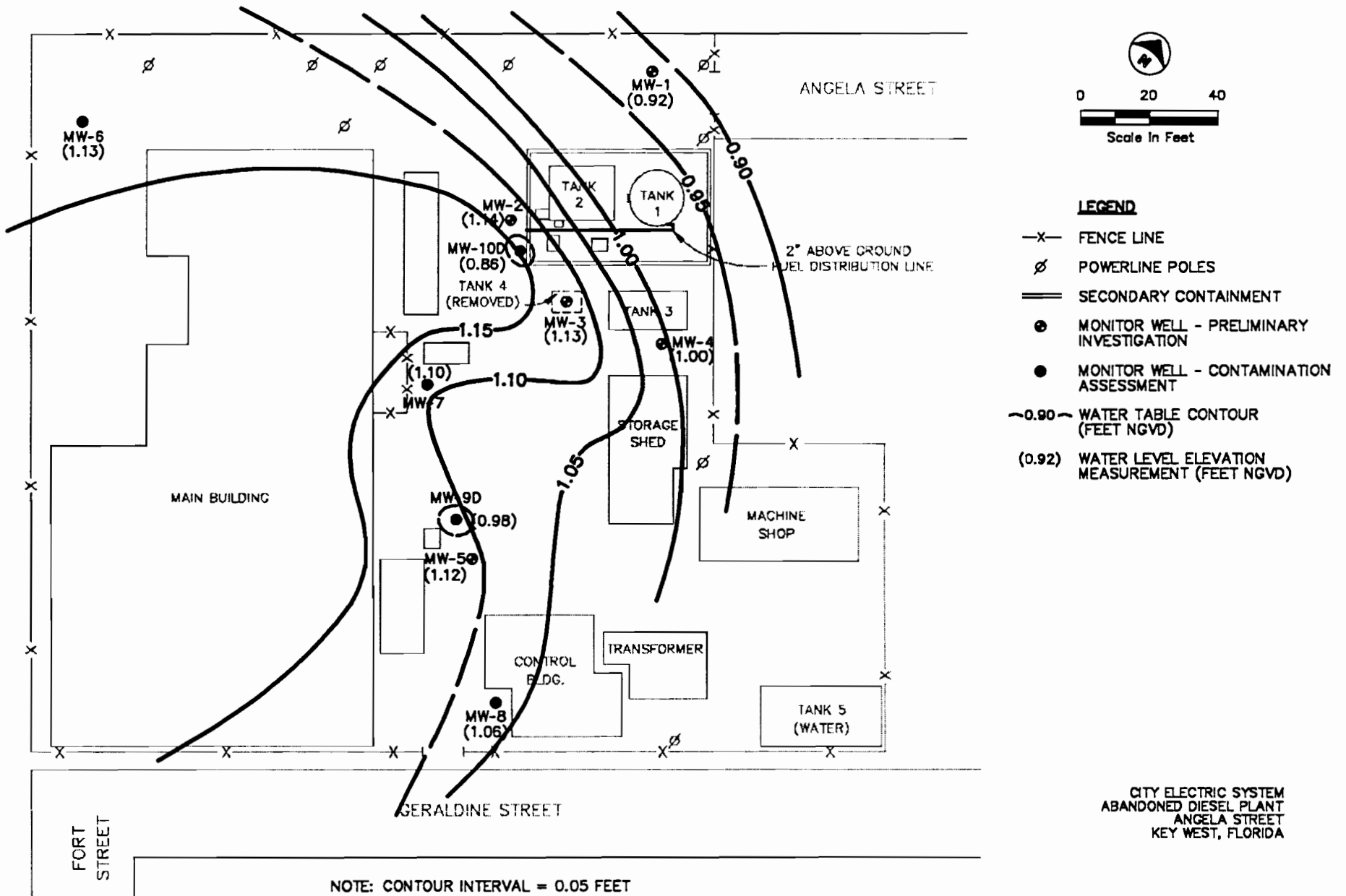

NOTE: CONTOUR INTERVAL = 0.05 FEET

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-2

WATER TABLE ELEVATION CONTOURS
JULY 17, 1991 (HIGH TIDE)

CH2MHILL

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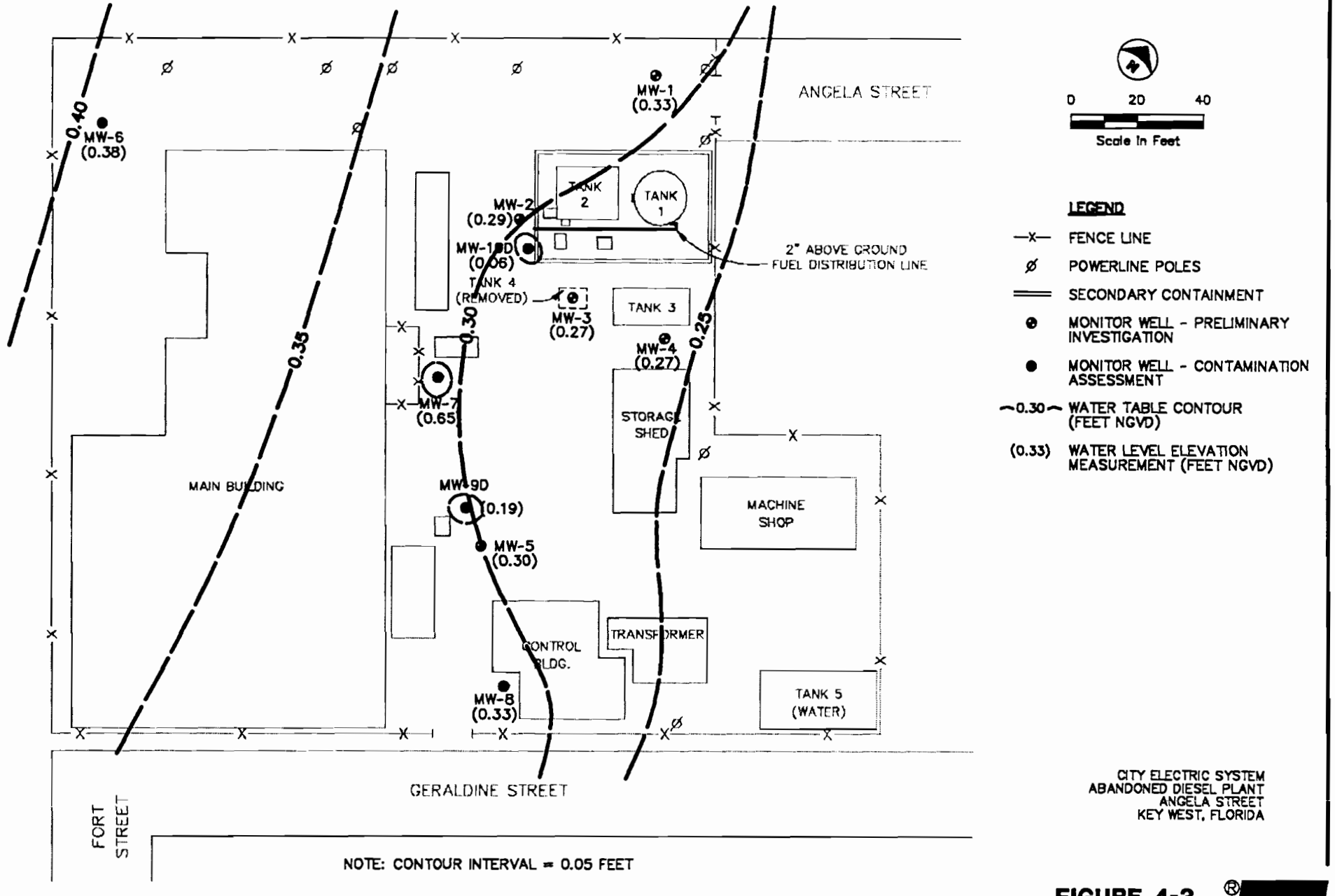

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-3

WATER TABLE ELEVATION CONTOURS
AUGUST 2, 1991 (LOW TIDE)

CH2MHILL

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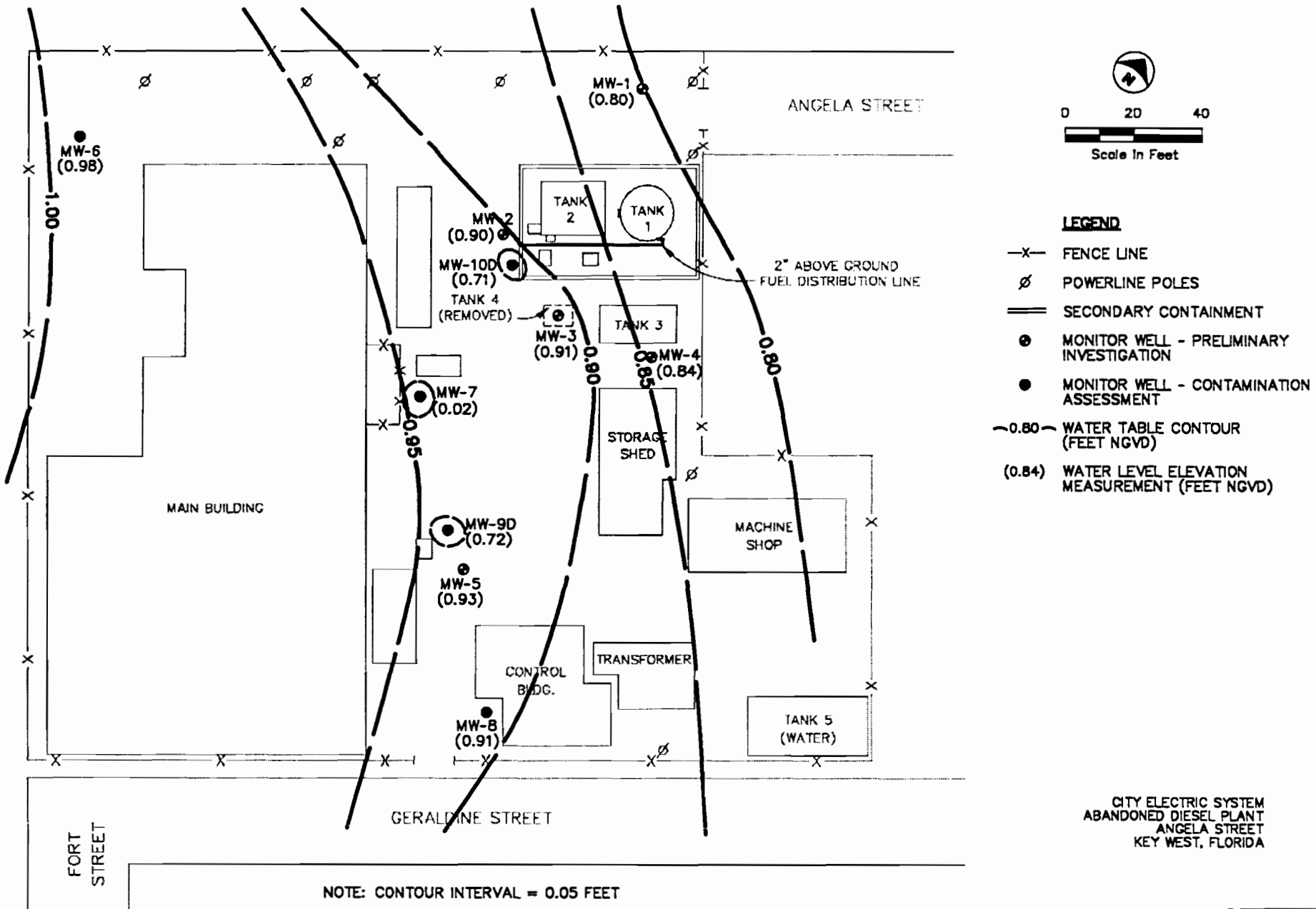

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-4

WATER TABLE ELEVATION CONTOURS
AUGUST 2, 1991 (HIGH TIDE)

CH2MHILL

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4.3 SOIL ASSESSMENT

The OVA results obtained from samples collected at the five soil borings (SB-13 through SB-17) and the three shallow monitor wells (MW-6, MW-7, and MW-8) installed as part of the contamination assessment were combined with the OVA results from preliminary investigations to estimate the horizontal extent of soil contamination (Table 4-4). The data indicate organic vapor concentrations in excess of the 50 ppm action limit defined by F.A.C. 17-770 for diesel petroleum sites. In general, the OVA readings indicated higher levels of contamination from 4 to 6 feet (regions near the water table interface) than in the shallow soils from 2 to 4 feet. Figure 4-5 depicts the maximum OVA reading obtained for each sampling location and shows an inferred horizontal extent of contamination as defined by the 50 ppm action level.

OVA readings obtained during the installation of the deeper monitor wells (MW-9D and MW-10D) were used to estimate the vertical extent of soil hydrocarbon contamination. The results (Table 4-5) indicate organic vapor concentrations in excess of the 50 ppm action level from the shallow surface soils down to approximately 12 feet bls. Based upon the OVA analyses, soils below this depth appeared to be uncontaminated. However, it should be noted that highest OVA concentrations where generally higher in the interval between 4 to 6 feet below land surface. This depth corresponds to the soil-water interface. Data below this level may reflect the existence of organic compounds in the groundwater.

The analytical results from the soil sample collected at MW-9D (Table 4-6) indicated the presence of both volatile and semivolatile compounds and a TPH concentration of 6,600 milligrams per kilogram (mg/kg). Trichlorofluoromethane (9 µg/kg), ethylbenzene (77 µg/kg), and total xylenes (150 µg/kg) were also detected. In addition, the GC/MS scan (EPA Method 624) revealed volatile compounds as TIC at concentrations or up to 860 µg/kg. EPA Method 610 indicated the presence of naphthalene (17,000 µg/kg), 2-methylnaphthalene (25,000 µg/kg), and 1-methylnaphthalene (9,300 µg/kg). The results for EPA Method 625 generally confirmed the results of EPA Method 610 and identified phenanthrene (9,300 µg/kg) in the sample. Additional semivolatile compounds were identified as TIC at concentrations of 180,000 µg/kg.

The total metals analyses, using the Toxic Characteristic Leaching Procedure (TCLP) indicated the presence of lead (5.2 mg/kg) and zinc (9.3 mg/kg), and barium (0.263 mg/kg). A copy of the laboratory report for the soil analysis is included in Appendix E.

TABLE 4-4
City Electric System - Abandoned Diesel Plant
Summary of Soil Vapor Analyses
Horizontal Extent

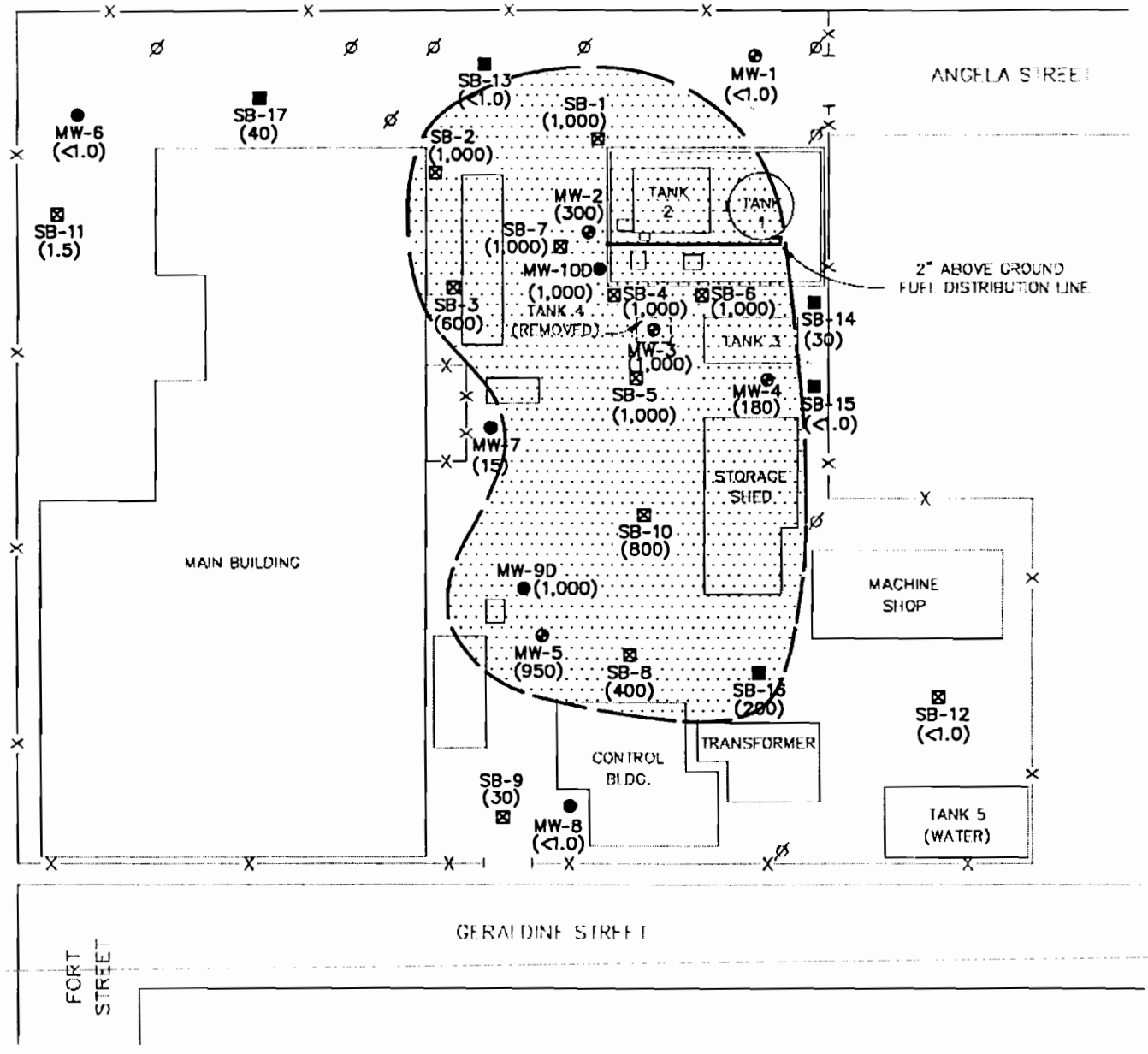
Boring Identification	Concentration (ppm)	
	2-4 feet	4-6 feet
Preliminary Investigation (March 21, 1991)		
MW-1	BDL	BDL
MW-2	300	250
MW-3	100	> 1000
MW-4	180	100
MW-5	20	950
SB-1	200	>1000
SB-2	>1000	>1000
SB-3	500	600
SB-4	500	>1000
SB-5	10	>1000
SB-6	500	>1000
SB-7	300	>1000
SB-8	300	400
SB-9	30	2
SB-10	200	800
SB-11	BDL	1.5
SB-12	BDL	BDL
Contamination Assessment (July 15-17, 1991)		
SB-13	NS	BDL
SB-14	NS	30
SB-15	NS	BDL
SB-16	NS	200
SB-17	NS	40
	0-5 feet	5-10 feet
MW-6	BDL	BDL
MW-7	10	15
MW-8	BDL	BDL

ppm = parts per million.

BDL = below detection limit (1ppm)

NS means not sampled

10-04-91



0 20 40

Scale in Feet

LEGEND

- FENCE LINE
- POWERLINE POLES
- SECONDARY CONTAINMENT
- MONITOR WELL - PRELIMINARY INVESTIGATION
- SOIL BORING - PRELIMINARY INVESTIGATION
- MONITOR WELL - CONTAMINATION ASSESSMENT
- SOIL BORING - CONTAMINATION ASSESSMENT
- (40) MAXIMUM FID ORGANIC VAPOR CONCENTRATION (ppm)
- ESTIMATED EXTENT OF EXCESSIVELY CONTAMINATED SOIL (AS DEFINED BY FID VAPOR CONCENTRATIONS >50 ppm)

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-5
RESULTS OF SOIL VAPOR ANALYSES

CH2M HILL

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TABLE 4-5
City Electric System - Abandoned Diesel Plant
Summary of Soil Vapor Analyses
Vertical Extent
July 15-17, 1991

	Concentration (ppm)	
	Boring Identification	
Depth (bls)	MW-9D	MW-10D
4-6 feet	200	>1000
6-8 feet	400	>1000
8-10 feet	>1000	NS
10-12 feet	100	150
12-14 feet	BDL	BDL
14-16 feet	5	BDL
16-18 feet	BDL	BDL
18-20 feet	NS	NS
20-22 feet	BDL	1
22-24 feet	NS	BDL
24-26 feet	BDL	BDL
26-28 feet	NS	NS
28-30 feet	BDL	BDL

ppm = parts per million

BDL = below detection limit (1ppm)

bls = below land surface

NS = not sampled

TABLE 4-6
City Electric System - Abandoned Diesel Plant
Summary of Laboratory Analyses for
Soil Samples Collected from MW-9D
July 15, 1991

Parameter	Concentration (BDLg/kg)	
	Detection Limit	Soil
Select Volatile Organic Compounds (EPA Method 624)		
Benzene	6	BDL
Toluene	6	BDL
Trichlorofluoromethane	6	9
Ethylbenzene	6	77
Xylenes (Total)	6	150
TIC	NA	860
Select Semivolatile Organic Compounds (EPA Method 610)		
Naphthalene	1,200	17,000
2-Methylnaphthalene	1,200	25,000
1-Methylnaphthalene	1,200	9,300
Phenantrene	1,200	BDL
Select Semivolatile Organic Compounds (EPA Method 625)		
Naphthalene	7,900	24,000
2-Methylnaphthalene	7,900	21,000
1-Methylnaphthalene	NA	NA
Phenanthrene	7,900	9,300
TIC	NA	180,000
	Concentration (mg/kg)	
Select TCLP Metals		
Silver	0.01	BDL
Arsenic	0.01	BDL
Barium	0.225	0.263
Cadmium	0.005	BDL
Chromium	0.01	BDL
Mercury	0.0002	BDL
Lead	0.1	BDL
Selenium	0.025	BDL
Select Total Metals		
Arsenic	2.5	BDL
Cadmium	1.2	BDL
Chromium	2.5	BDL
Lead	0.7	5.2
Zinc	4.9	9.3
Total Petroleum Hydrocarbons (EPA Method 418.5)	103	6600

ug/kg = micrograms per kilogram

TIC = Tentatively Identified Compounds. Maximum estimated value reported.

BDL = below detection limit

mg/kg = milligrams per kilogram

TCLP = Toxicity Characteristic Leaching Procedure

NA = Not Applicable

4.4 GROUNDWATER ASSESSMENT

The results of the groundwater analyses are presented in Table 4-7, and a copy of the analytical report is included in Appendix F. The data indicate that volatile organic compounds were detected in only two of the nine wells sampled. Benzene (1.5 µg/l) and ethylbenzene (15 µg/l) were detected in MW-2 and xylenes (3.7 µg/l) were detected in MW-5 using EPA Method 602. Also, in MW-2, carbon disulfide (5 µg/l) was identified using EPA Method 624. The reported concentrations for volatile TICs were generally low for all the monitor wells. No toluene or other volatile organic compounds, including EDB, were detected in the groundwater samples.

The results of analyses indicated the presence of semivolatile compounds in MW-2, MW-4, and MW-5. Naphthalene (250 µg/l), 2-methylnaphthalene (320 µg/l), 1-metylnaphthalene (200 µg/l), and phenanthrene (72 µg/l) were detected in MW-2 using EPA Method 610. EPA Method 625 generally supported these results. In MW-5, naphthalene (130 µg/l), 2-methylnaphthalene (81 µg/l), 1-methylnaphthalene (92 µg/l), acenaphthylene (35 µg/l), phenanthrene (74 µg/l), fluoranthene (27 µg/l), pyrene (53 µg/l), benzo (a) anthracene (13 µg/l), and chrysene (13 µg/l) were detected using EPA Method 610. As with MW-2, the results of Method 625 analyses generally supported these results. The results of analyses for samples from MW-4 indicate the presence of 2-methylnaphthalene (23 µg/l), 1-methylnaphthalene (20 µg/l), and phenanthrene (17 µg/l). Figure 4-6 shows the results of groundwater analyses for total naphthalene concentrations at all of the monitor wells. This figure indicates that the highest concentrations of semivolatile compounds appear in the central portion of the site while monitor wells around the perimeter of the site appear to be within the FDER target concentrations reference in the *No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites* (October, 1990).

The results for the TPH analyses appear to correspond to the results for the semivolatile compounds. The highest TPH concentrations were detected in MW-2 (31.2 mg/l), MW-4 (23.3 mg/l), MW-5 (61.9 mg/l) and MW-7 (31.2 mg/l). Additionally, TPH concentrations were detected above the FDER target value of 5 mg/l in MW-7 (31.2 mg/l) and MW-8 (6.37 mg/l). The TPH concentrations for all the monitor wells are shown on Figure 4-7. As with the distribution of contamination shown for total naphthalenes, the concentration of TPH appears to be higher in the central portion of the site.

The groundwater samples were also analyzed for total and dissolved metals. The results of these analyses, presented in Table 4-8, indicates the presence of chromium, lead, and zinc as total metals in the monitor wells, except MW-9D and MW-10D where lead was not detected. The results of the filtered samples which represent the dissolved fraction indicate the presence of cadmium (MW-10D), chromium (MW-9D and MW-10D), and zinc (MW-4 and MW-5) as dissolved metals. None of the filtered

TABLE 4-7
City Electric System - Abandoned Diesel Plant
Summary of Laboratory Analysis for
Groundwater Samples (Organic Compounds)
July 17, 1991

Parameter	Concentration (ug/l)								
	MW-1	MW-2	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9D	MW-10D
Select Volatile Organic Compounds (EPA Method 602)									
Benzene	< 1.0	1.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	< 1.0	15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes (Total)	< 1.0	< 1.0	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total BTEX	< 1.0	16.5	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether (MTBE)	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Select Volatile Organic Compounds (EPA Method 624)									
Benzene	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Toluene	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	< 5	12	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Xylenes (Total)	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
TIC	6.3	53	10	11	20	12	10	16	8.8
Select Semivolatile Compounds (EPA Method 610)									
Naphthalene	< 2	250	< 2	130	< 2	< 2	< 2	< 2	< 2
2-Methylnaphthalene	< 2	320	23	81	< 2	< 2	< 2	< 2	< 2
1-Methylnaphthalene	< 2	200	20	92	< 2	< 2	< 2	< 2	< 2
Total Naphthalenes	< 2	770	43	303	< 2	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 20	< 2	35	< 2	< 2	< 2	< 2	< 2
Acenaphene	< 2	< 20	< 2	< 10	< 2	< 2	< 2	< 2	< 2
Fluorene	< 2	< 20	< 2	< 10	< 2	< 2	< 2	< 2	< 2
Phenanthrene	< 2	72	17	74	< 2	< 2	< 2	< 2	< 2
Anthracene	< 2	< 20	< 2	< 10	< 2	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 20	< 2	27	< 2	< 2	< 2	< 2	< 2
Pyrene	< 2	< 20	< 2	53	< 2	< 2	< 2	< 2	< 2
Benzo (a) anthracene	< 2	< 20	< 2	13	< 2	< 2	< 2	< 2	< 2
Chrysene	< 2	< 20	< 2	13	< 2	< 2	< 2	< 2	< 2
Benzo (a) pyrene	< 2	< 20	< 2	< 10	< 2	< 2	< 2	< 2	< 2
Total PAH (excluding Naphthalenes)	< 2	72	17	180	< 2	< 2	< 2	< 2	< 2

ug/l = micrograms per liter
TIC = Tentatively Identified Compounds. Maximum estimated value reported.
mg/l = milligrams per liter
PAH = Polynuclear Aromatic Hydrocarbons
NA = not analyzed
NI = none identified

TABLE 4-7
City Electric System – Abandoned Diesel Plant
Summary of Laboratory Analysis for
Groundwater Samples (Organic Compounds)
July 17, 1991

Parameter	Concentration (ug/l)								
	MW-1	MW-2	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9D	MW-10D
Select Semivolatile Organic Compounds (EPA Method 625)									
Naphthalene	< 10	210	< 10	140	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	< 10	310	24	51	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10	< 10
Acenaphthene	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10	< 10
Fluorene	< 10	20	< 10	11	< 10	< 10	< 10	< 10	< 10
Phenanthrene	< 10	34	< 10	46	< 10	< 10	< 10	< 10	< 10
Anthracene	< 10	< 10	< 10	10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	< 10	< 10	< 10	22	< 10	< 10	< 10	< 10	< 10
Pyrene	< 10	< 10	< 10	42	< 10	< 10	< 10	< 10	< 10
Benzo (a) anthracene	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10	< 10
Chrysene	< 10	< 10	< 10	12	< 10	< 10	< 10	< 10	< 10
Benzo (a) pyrene	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
TIC	470	310	130	79	NI	42	24	330	18
	Concentration (mg/l)								
Total Petroleum Hydrocarbons (EPA Method 418.1)	0.07	31.2	23.3	61.9	0.23	31.2	6.37	<0.05	<0.06

ug/l = micrograms per liter

TIC = Tentatively Identified Compounds. Maximum estimated value reported.

mg/l = milligrams per liter

PAH = Polynuclear Aromatic Hydrocarbons

NA = not analyzed

NI = none identified

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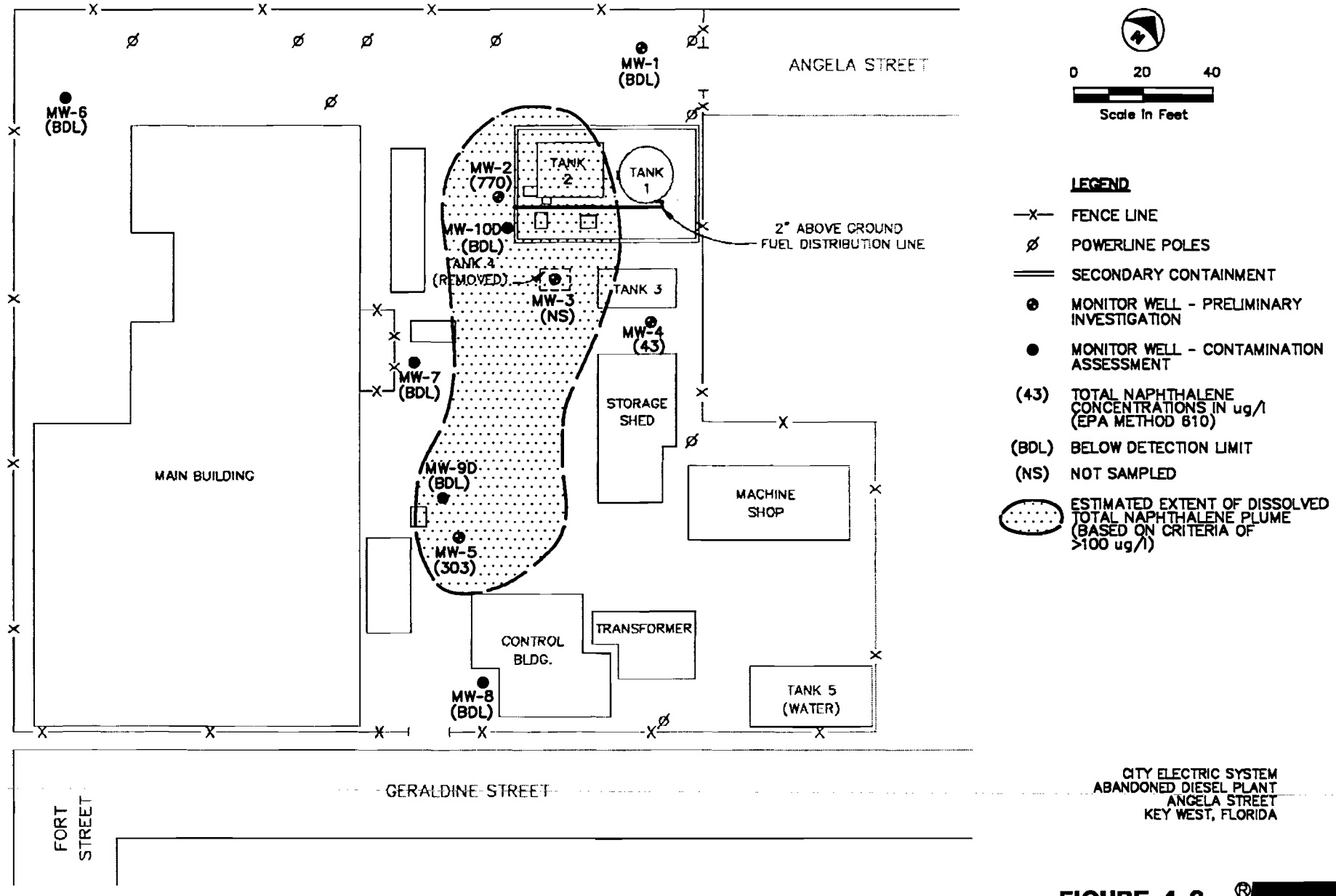

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-6

RESULTS OF GROUNDWATER ANALYSES FOR TOTAL NAPHTHALENES

CH2M HILL

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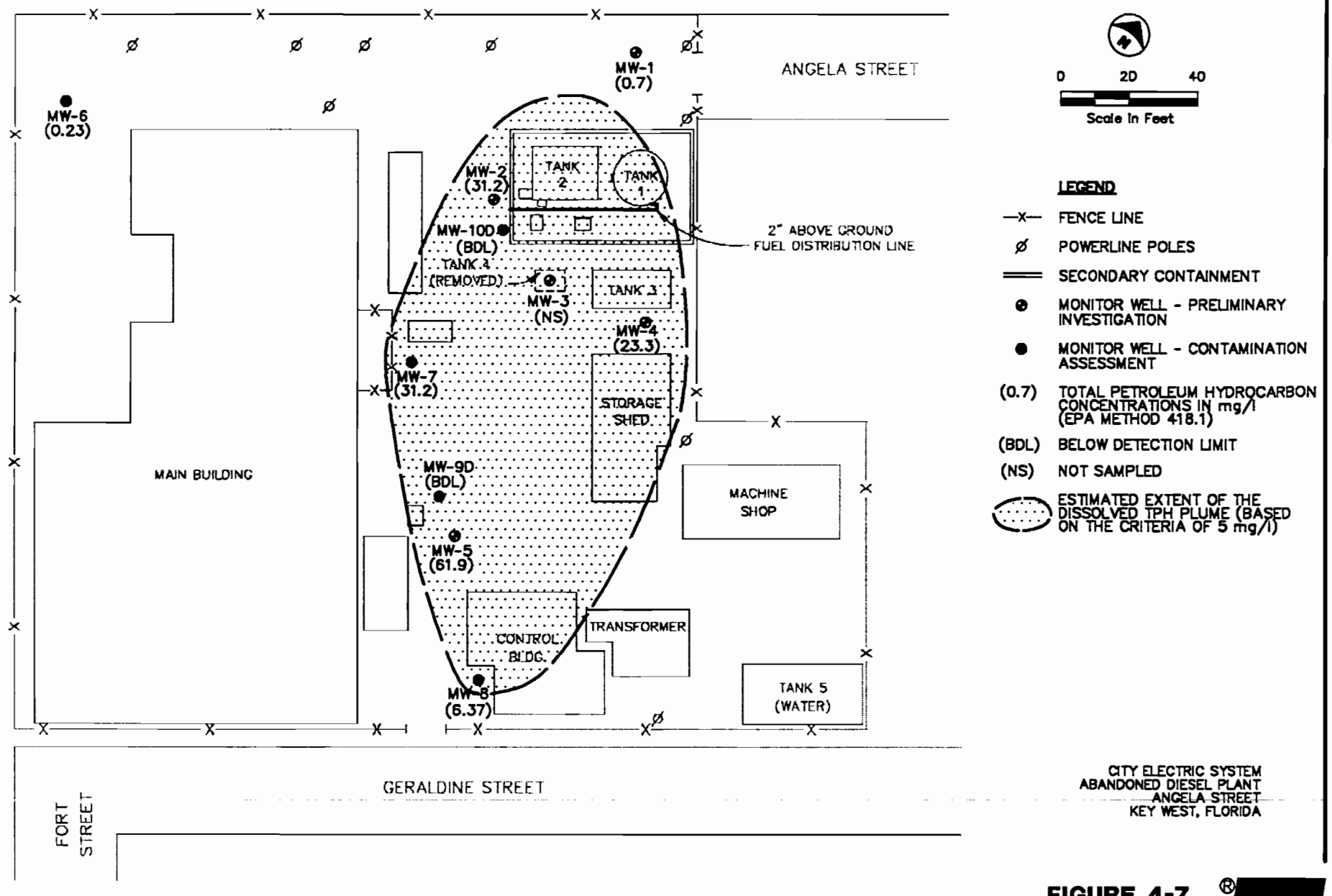

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-7

RESULTS OF GROUNDWATER ANALYSES FOR TOTAL PETROLEUM HYDROCARBONS

CH2MHILL

D:\SEF31821.A0\1821F17.DWG

TABLE 4-8
City Electric System - Abandoned Diesel Plant
SBDLmmary of Laboratory Analysis for
GroBDLndwater Samples (Metals)
JBDLly 17, 1991

Parameter	Concentration (mg/l)									
	Detection Limit	MW-1	MW-2	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9D	MW-10D
Select Metals (Dissolved) - Filtered										
Arsenic	0.005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	0.001	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.004
Chromium	0.002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.003	0.003
Lead	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc	0.01	BDL	BDL	0.01	0.01	BDL	BDL	BDL	BDL	BDL
Select Total Metals - Unfiltered										
Arsenic	0.005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	0.001	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium	0.002	0.026	0.024	0.019	0.009	0.014	0.01	0.02	0.003	0.005
Lead	0.01	0.013	0.037	0.123	0.017	0.06	0.012	0.019	BDL	BDL
Zinc	0.01	0.02	0.03	0.15	0.06	0.07	0.02	0.01	0.03	0.01

mg/l = milligrams per liter
BDL = below detection limit

or unfiltered metals concentrations appeared to be above the referenced FDER target levels.

No LPHC was detected during the soil boring or monitor installations, or the groundwater sampling field efforts. However, during subsequent field activities on August 2, 1991, LPHC was identified in MW-7. No LPHC has been encountered in any of the other monitor wells at the site. The magnitude and source of this isolated occurrence is currently being investigated. Because of the location of MW-7, the LPHC may have migrated to the well from an identified source within the main building. Initial remedial actions have been initiated to remove the LPHC from this monitor well, and the limited volume of product which has been collected to date is being stored temporarily on the site. Disposal of this material will be addressed during the scheduled tank cleaning and removal activities. Currently, the existence of LPHC is not considered a major concern at this site.

Section 5
CONCLUSIONS AND RECOMMENDATIONS

The results of the contamination assessment activities at the CES abandoned diesel plant indicate that hydrocarbons are present in both the soils and the groundwater. Laboratory analyses indicate that the contaminants are primarily semivolatile organic compounds.

5.1 FINDINGS

In the soil, OVA concentrations were in excess of 1,000 ppm at nine of the sampling locations. Generally, the higher concentrations were detected in the central region of the site, and on the basis of a potential action limit of 50 ppm, the horizontal extent of soil contamination was delineated. The VOA concentrations in the soil appeared to be higher near the water table interface (4 - 6 feet) than in the shallow soils (2 to 4 feet). Soil contamination appears to extend to approximately 12 feet below grade in the most contaminated areas of the site. Laboratory analyses indicate the presence of semivolatile and volatile organic compounds. Metals (barium, lead, and zinc) were also detected in the soil.

Laboratory analyses of groundwater samples indicate the presence of volatile organic compounds at relatively low concentrations in the monitor wells near the diesel storage tanks (MW-2) and in the vicinity of the groundwater pit (MW-5). No volatile organic compounds were found in the other monitor wells at the site. Semivolatile compounds were detected in these same areas. Total naphthalenes were detected at concentrations up to 770 µg/l in MW-2. It is anticipated that the semivolatile organic compounds account for a significant fraction of the TPH concentrations, which were detected at levels up to 61.9 mg/l in monitor well MW-5. Semivolatile compounds were detected in monitor well MW-4, but the concentrations appear to be much lower than in the central regions of the site.

Although LPHC was initially detected in the cement groundwater pit, no additional LPHC was detected at the site or in any of the monitor wells during preliminary investigations and the initial contamination assessment field activities. However, during subsequent fieldwork, an isolated occurrence of LPHC was detected in MW-7. To date, approximately 25 gallons of product have been removed from this well and being stored temporarily in Tank 1 pending final disposal. The source of this product is under investigation, and may not be directly associated with the diesel fuel storage or distribution system. Removal of this product is anticipated to continue on a periodic basis until the LPHC is no longer present.

According to FDER, the groundwater at the site is classified as a G-III, non-potable water source. Results of the aquifer evaluation indicate that the aquifer is characterized by an average hydraulic conductivity of 17 ft/day and is strongly affected by tidal influences. Groundwater level elevations collected on two separate dates indicate a very flat hydraulic gradient (0.0009 ft/ft) that tends generally eastward.

From these results, it appears that the extent of soil and groundwater contamination has been delineated. Although the data indicate the existence of contaminated soils, it does not appear that the quality of the local G-III groundwater has been severely degraded. The following supports the proposals for a "No Further Action" recommendation for the contaminated soils, and a "Monitoring Only" recommendation for the groundwater.

5.2 NO FURTHER ACTION PROPOSAL FOR SOIL

According to the *No Further Action and Monitoring Only Guidelines for Petroleum Sites*, published by FDER in October 1990, sites with soil contamination do not usually satisfy the requirements for "No Further Action". However, the environment of the site provides several unique factors which should be considered.

The data indicate that although there are excessively contaminated soils located below the water table throughout the central portion of the site, this contamination is not severely affecting the local water quality. Because of the age of the facility and the type of contaminants present, it is possible that semivolatile compounds remaining in the soils are only slightly soluble and adhere to the soil matrix. In addition, the local groundwater is characterized as a G-III, non-potable water source, and the residents of Key West receive centralized potable water supplied from the Florida Keys Aqueduct Authority. Therefore, the low level release of hydrocarbon compounds from the contaminated soils should have minimal effect.

Additionally, the predominance of semivolatile compounds and the geology of the site could potentially make certain remediation alternatives extremely difficult. There are several methods of remediating soil contaminated with hydrocarbons including the following:

- Excavation and thermal treatment
- Excavation and landfilling
- Excavation and landfarming
- Soil vapor extraction (SVE)
- In situ bioremediation

The first three alternatives require removal and replacement of the soil, followed by different treatment alternatives. Thermal treatment and landfilling are the two most widely used methods for soil disposal. The volume of soil that would require removal from the abandoned diesel plant would be from approximately 2,300 yds^3 to over 3,400 yds^3 based on the approximate area of contaminated soils and an excavation depth to the water table (approximately 4 to 6 feet). Based upon an estimate of $\$90/yd^3$ which was provided by Laidlaw Environmental for soil removal and disposal at similar site in South Florida, it could cost approximately $207,000 - $306,000 to remove, dispose of, and replace/restore the large volume of hydrocarbon-contaminated soil. This estimate assumes that the selected FDER-permitted treatment facility would accept the contaminated soils. It should be noted that this estimate is intended to be used to demonstrate the potential costs of soils excavation and treatment and that actual costs for this alternative may differ depending upon the actual site conditions encountered.

The volume estimate for excavation assumes that contaminated soils below approximately 6 feet would not be removed because of difficulties in excavating the very hard oolitic limestone which occurs below the water table. If the amount of soil removed exceeded the volumes discussed, the associated costs would increase proportionally. Therefore, excavation and thermal treatment or landfilling may not be considered cost-effective options.

Excavation and landfarming of the contaminated soils would require the removal of these soils from the site and transportation to an area with sufficient land available for landfarming operations. FDER permits landfarming of soils only if the total recoverable hydrocarbon concentrations are less than 500 mg/kg when analyzed by EPA Method 418.1. If the soils meet this criterion, they may be spread on an impermeable base, 1- to 6-inches thick. Based on preliminary soil estimates, landfarming of soil from the site would require an area ranging from 3 to 25-plus acres of land. Additional land would be required for equipment operation and storage, surface water runoff controls, and groundwater monitoring.

Landfarming of soil not only requires a significant amount, it is also a labor-intensive remediation alternative. Additionally, the time required to achieve remediation of soils is unknown because of the predominance of semivolatile compounds. As a result of these factors and land area limitations, landfarming is not considered a viable soil remediation alternative.

Soil vapor extraction (SVE) is an in situ method of removing VOAs from contaminated soil in the vadose zone above the water table. This option would require the installation of a network of vertical vacuum extraction wells (or horizontal collection trenches) which would be screened in the contaminated zone and joined by a header pipe(s) to a vapor-water separator. The separator, which would remove the liquid

phase collected during the extraction process, would be connected to a positive displacement blower that would provide a negative pressure gradient in the subsurface.

Although this is a proven technology for removing volatile organics, SVE may be difficult to implement at this site since there is an apparent affinity exhibited by the semivolatile compounds for the soil particles. This is the same feature which immobilizes the contaminants and prevents their leaching into the groundwater. To address this problem, additional extraction wells and a higher pressure gradient may be required. These design considerations will result in increased costs for remediation. Additionally, the limestone formation in the subsurface soils may generate preferential flow patterns in the vapor extraction process which may prevent a uniform treatment of the contaminated soils. A pilot test may be required to determine if soils could be effectively remediated using SVE.

In situ bioremediation of contaminated soils is a variation of the biological methods used for decades to treat municipal wastewater. Subsurface soils can be treated in place by stimulating the biodegradation activity of native microorganisms through delivery of the required treatment reagents, typically oxygen and inorganic nutrients, directly to the contaminated zone.

The addition of oxygen and nutrients to the soils enhance the natural biological activity. However, in situ bioremediation may not be effective for the abandoned diesel plant because the contaminants have potentially existed in the soils for several decades without significant biological degradation. It is possible that the subsurface conditions and water quality are not conducive to sustaining the required microorganisms. Pilot testing may be required to determine the potential effectiveness of this alternative.

In conclusion, the contaminants in the soils do not appear to be significantly affecting the water quality in the regional G-III aquifer. Also, contaminants of concern and the subsurface conditions make alternative treatment options either technically or economically difficult. Therefore, a "No Further Action" option should be considered as a solution for the hydrocarbon-contaminated soils at the abandoned diesel plant.

5.3 MONITORING ONLY PROPOSAL FOR GROUNDWATER

In accordance with Chapter 17-770 F.A.C., a "Monitoring Only" (MO) proposal for groundwater is justified based upon the results of the contamination assessment because it generally satisfies the conditions set forth in Chapter 17-770.630(4) as follows:

- The potential sources of petroleum contamination have been identified, and are scheduled to be abated. CES is currently proceeding with plans to clean and remove/demolish the three abandoned diesel storage tanks and associated distribution piping which remain at the site. In addition, CES has conducted an inventory of potential sources of petroleum within the main building. If required, these sources will be collected and removed from the site.

- LPHC was not detected in any of the monitor wells during the preliminary investigations or the initial contamination assessment field efforts. Although isolated quantities of LPHC were detected in the cement lined groundwater pit and MW-7 during various stages of the fieldwork, the product is currently being removed and has not been identified in other monitor wells at the site.

- Excessive soil contamination, although present, does not appear to be significantly affecting the quality of the local G-III aquifer.

- The groundwater contamination is generally confined to the central portion of the site and apparently has not migrated downward.

According to the data, the general action levels for MO status for groundwater under FDER guidelines referenced in the *No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites* (October, 1990) for a G-III aquifer are not exceeded for this site. The volatile organic parameters do not appear to be a primary concern at the site, and the analysis for dissolved metals do not exceed the action level in either the source areas (MW-2 and MW-5) or the perimeter wells (MW-1, MW-4, MW-6, MW-8, MW-9D, and MW-10D). The results for total petroleum hydrocarbon are also generally below the specified FDER action levels for both the source and perimeter wells. However, the results for MW-8 (6.37 mg/l) and MW-4 (23.3 mg/l) are slightly above these levels.

The proposed monitoring will be performed quarterly on monitor wells MW-1, MW-2, MW-4, MW-5, MW-8, MW-9D, and MW-10D. Samples from these wells will be analyzed for semivolatile organic compounds using EPA Method 610 and TPH using EPA Method 418.5. After four consecutive quarters of monitoring, the results will be summarized in an annual report to be sent to FDER. Depending upon the results of the four quarterly sampling and analysis, additional quarterly monitoring or a "No Further Action" proposal will be considered.

Section 6
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Appendix A

City Electric System Storage Inventory			
Item Number	**Storage Location**	**Liquid Volume (Gallons)**	**Liquid Type**
1	Floor Grate	3,150	H20/Oil
2	Engine Block		
3	Floor Grate	Dry	Dry
4	Floor Grate	124	Water
5	Floor Grate	149	Water
6	Floor Grate	174	Water
7	Tank	160	Oil
8	Tank	17	Oil
9	Tank	7	Oil
10	Floor Grate	838	Water
11	Filter Tank	2	Oil
12	Engine Block	1,078	Oil
13	Floor Grate	606	Hz0/Oil
14	Floor Grate	518	Water
15	Floor Grate	Dry	Dry
16	Floor Grate	Dry	Dry
17	Floor Grate	318	Water
18	Tank	155	Oil
19	Tank	460	Oil
20	Tank	Dry	Dry
21	Tank	Dry	Dry
22	Filter Tank	1	Oil
23	Filter Tank	43	Oil
24	Floor Grate	4,067	Water
25	Engine Block	Dry	Dry
26	Filter Tank	8	Oil
27	Tank	Dry	Dry
28	Tank	17.5	Oil
29	Tank	98	Oil
30	Engine Block	3,500	Oil
31	Engine Flywheel	1,048	Water
32	Engine Flywheel	88	Water
33	Floor Grate	2,924	Water
34	Engine Flywheel	448	Water
35	Engine Flywheel	748	Water
Total Oil 5,129 gallons	Total Water 10,229 gallons	Total Water and Oil 1,705 gallons	Total Liquid 17,063 gallons

REMEDIAL ACTION PLAN

Abandoned Diesel Plant
Angela Street
Key West, Florida

Prepared for

City Electric System
Utility Board of the City of Key West

Prepared by

CH2M HILL

October 1992
SEF31821.A1

#4328

Bureau of Waste Cleanup

Neims-s

NOV 5 1992

Engineering Support Section

Remedial Action Plan

City Electric System
Abandoned Diesel Plant
Angela Street
Key West, Florida

FDER Facility No. 449101950

Prepared for

City Electric System
Utility Board of the City of Key West

Prepared by

CH2M HILL Southeast, Inc.
800 Fairway Drive, Suite 350
Deerfield Beach, Florida 33441

Richard D. Olson 10-30-92

October 1992
SEF31821.A1

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Executive Summary

Based on the assessment of the Abandoned Diesel Plant facility, the following remedial actions are proposed:

- Groundwater Monitoring - implement a monitoring plan which incorporates site visits, groundwater contouring, groundwater analyses, and quarterly reporting. Samples will be collected and analyzed quarterly from MW-1, MW-4, MW-6, MW-8, MW-9D, and MW-10. Anticipated annual cost of program - $15,000.

- Impermeable Cap/Cover - install an impermeable asphalt pavement over the entire Old Diesel Plant facility. The cap will reduce surface water percolation through the excessively contaminated soil and prevent potential leaching of hydrocarbons into the groundwater. A surface water drainage plan will be required if this option is approved. Estimated cost - $23,000.

- Free Product Recovery - install a free product recovery system that consists of four recovery wells, pneumatic product skimmer pumps, and a temporary collection tank. It is estimated that a free product recovery system will cost $33,100, require 12-weeks to install, and will operate for 2 years.

- Additional Measures - waste oils and wastewater from within the facility buildings will be sampled and analyzed for hazardous characteristics by toxicity characteristic leaching procedure (TCLP) analyses. Based on the results of the analyses, the wastes will be properly disposed. Estimated disposal costs range from $20,000 to $200,000.

Section 1
Introduction

1.1 Purpose and Scope

This Remedial Action Plan (RAP) addresses the treatment of groundwater containing free-phase and dissolved hydrocarbons and petroleum affected soil at the City Electric System Abandoned Diesel Plant (FDER Facility #44910195) located on Angela Street in Key West, Florida. This report was developed from information provided in the Contamination Assessment Report (CAR) (CH2M HILL, October 1991) and the Contamination Assessment Report Addendum (CARA) (CH2M HILL, July 1992). The assessment of the Abandoned Diesel Plant was approved by the Florida Department of Environmental Regulation (FDER) on July 30, 1992.

Information contained in this RAP includes a summary of the previous investigations; a description of the proposed remedial system design for groundwater, including maintenance and monitoring; a proposed remedial response strategy for affected soil; information on additional proposed remedial response actions; estimated costs; and an implementation and completion schedule for the selected systems.

This RAP will be implemented after approval is received from FDER. When the initial results of remediation and monitoring are available, they will be provided to FDER in a letter report.

1.2 Site Location and History

The abandoned diesel plant is located at the corner of Fort Street and Angela Street in Key West, Florida (Figure 1-1). The site is bordered by the Truman Annex Naval Base to the west and surrounded by residential property to the east, north, and south. The Atlantic Ocean is less than 2,000 feet from the site in several directions.

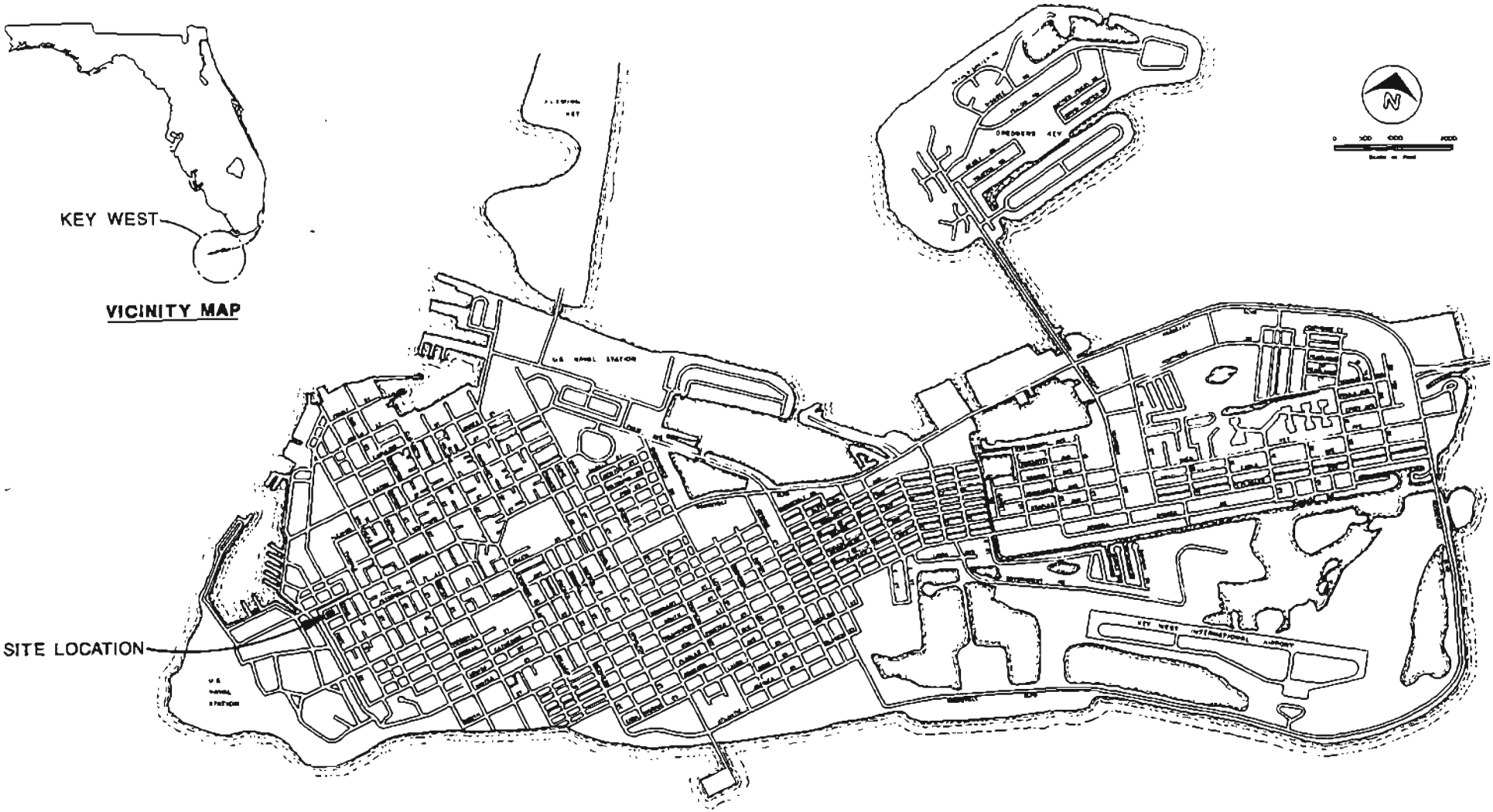

FIGURE 1-1
SITE LOCATION MAP

The facility (Figure 1-2) was originally constructed in the early 1900's and was operated by CES as the primary source for electric power in Key West until the 1960s. During this time period, the main building housed a number of large diesel-powered generators. The diesel was supplied by fuel storage tanks located on the northeast corner of the facility. These tanks were closed in June 1992 and details regarding the closure were included in the CARA.

The diesel fuel was distributed to several day tanks and other storage vessels inside the main building through underground and aboveground piping. Due to the age of the facility, no engineering drawings for the original distribution system were available. Petroleum products remaining within the main building will be removed and properly disposed as discussed in Section 6.

The rest of the original facility consisted of a storage shed in the center of the site and a machine shop to the south. There is a closed water cistern (Tank 5) located in the southeast corner of the property. Next to the main building there is a cement structure which was used as both a storage vessel for recycled process water, and as part of the air treatment system. Adjacent to this structure, there was an approximately 20-foot-deep cement groundwater pit with cement walls which was used for cooling water intake. This pit was abandoned during the tank removal activities as discussed in the CARA.

Although the majority of operations had ceased by the late 1960s, there was a high speed diesel generator located on a cement pad across from the fuel tanks that remained in operation until the 1970s. The last shipment of petroleum was supplied to the site in the late 1970s, and the distribution piping was subsequently capped. The storage facility has remained out of service since that time. Currently, the only activity at the facility is an operating transformer located in the south central area of the site and the storage of office supplies in the southwest corner of the main building.

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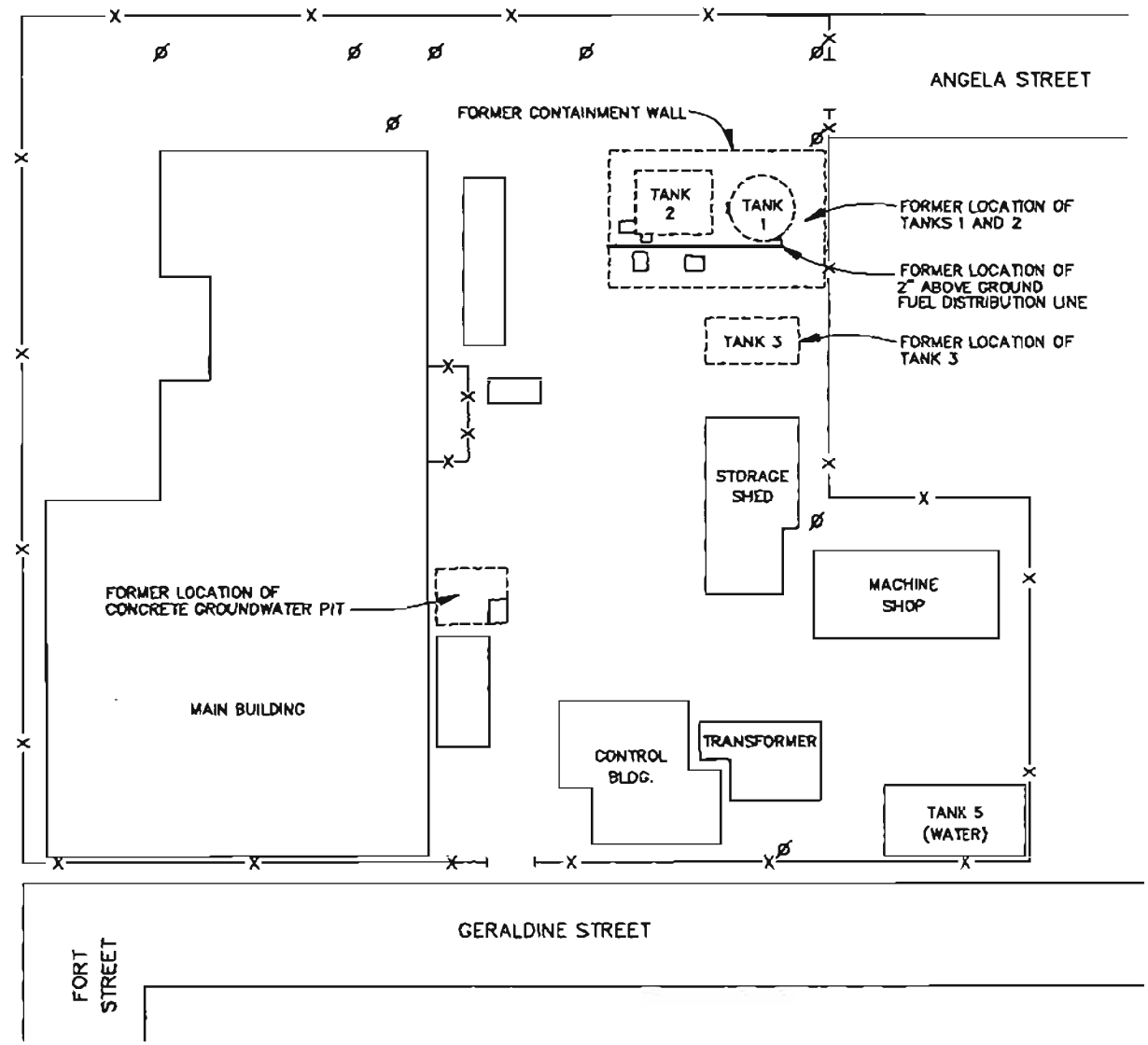

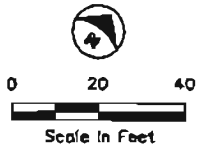

LEGEND

—X— FENCE LINE

Ø POWERLINE POLES

NOTE:

TANKS 1, 2, AND 3, SECONDARY CONTAINMENT WALL, AND GROUNDWATER PIT WERE REMOVED IN JUNE 1992.

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 1-2
SITE PLAN

CH2M HILL

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Assessment and remediation activities at this site may be reimbursable under the Abandoned Tank Reimbursement Program (ATRP). An application for eligibility into this program was submitted by CES prior to the application deadline in June 1992. According to CES, FDER has not returned a response regarding the sites acceptance into this program.

1.3 Summary of Contamination Assessment

Assessment of the Abandoned Diesel Plant began in March 1991 after petroleum product was identified on the groundwater table during petroleum storage tank closure assessment field activities. A total of five shallow groundwater monitor wells and twelve soil borings were installed as part of the preliminary investigation. In July 1991, additional contamination assessment activities were conducted and the results were reported in the CAR (CH2M HILL, October 1991).

FDER reviewed the CAR and responded with comments in December 1991. FDER requested additional soil and groundwater data be collected as part of a CARA and requested that the existing storage tanks be properly closed. FDER was cooperative in granting extensions of time to enable CH2M HILL to complete the requested fieldwork in conjunction with the planned tank closure activities. Two additional shallow monitor wells and five additional soil borings were installed as part of the CARA activities. In August 1992, FDER approved the CAR/CARA and requested that additional groundwater samples be collected and analyzed for purgeable aromatic compounds (EPA Method 602). These samples were collected in August 1992, and the analytical results are presented in Section 3. The following is a summary of current site conditions.

1.3.1 Soil Assessment

Soil samples were collected from a total of 22 shallow soil borings (Figure 1-3). Samples were collected at approximately 2-foot intervals to a depth of approximately 6 feet below land surface (bls). Samples were also collected from auger cuttings associated with monitor well installations. Vapor head-space samples from these soils were screened using an Organic Vapor Analyzer (OVA) in accordance with procedures specified by FDER. The results of the OVA screening of soil vapor samples are presented in Table 1-1. These results indicate the presence of excessively contaminated soil as defined by the FDER criteria (OVA > 50 ppm) for sites contaminated with diesel product. The horizontal extent of soil contamination is isolated within the property boundaries as shown in Figure 1-4.

A composite soil sample was collected from MW-9D to supplement the OVA screening data. This sample was analyzed for volatile (EPA Method 624) and semivolatile organic compounds (EPA Method 610 and 625) and select metals. The analytical results reported in the CAR (CH2M HILL, October 1991) indicate a limited presence of volatile compounds (BTEX = 0.236 milligrams per kilogram, mg/kg). However, semivolatile compounds were detected at a more significant level (51.3 mg/kg) and the Total Petroleum Hydrocarbon (TPH) concentration was relatively high (6,600 mg/kg). Metals are not a particular concern at this site.

These analytical results support the conclusion that the soils are mainly affected by less volatile, less mobile, higher-molecular weight petroleum compounds. This conclusion is consistent with both the type of petroleum product which was used at this facility and the approximate age of the spill.

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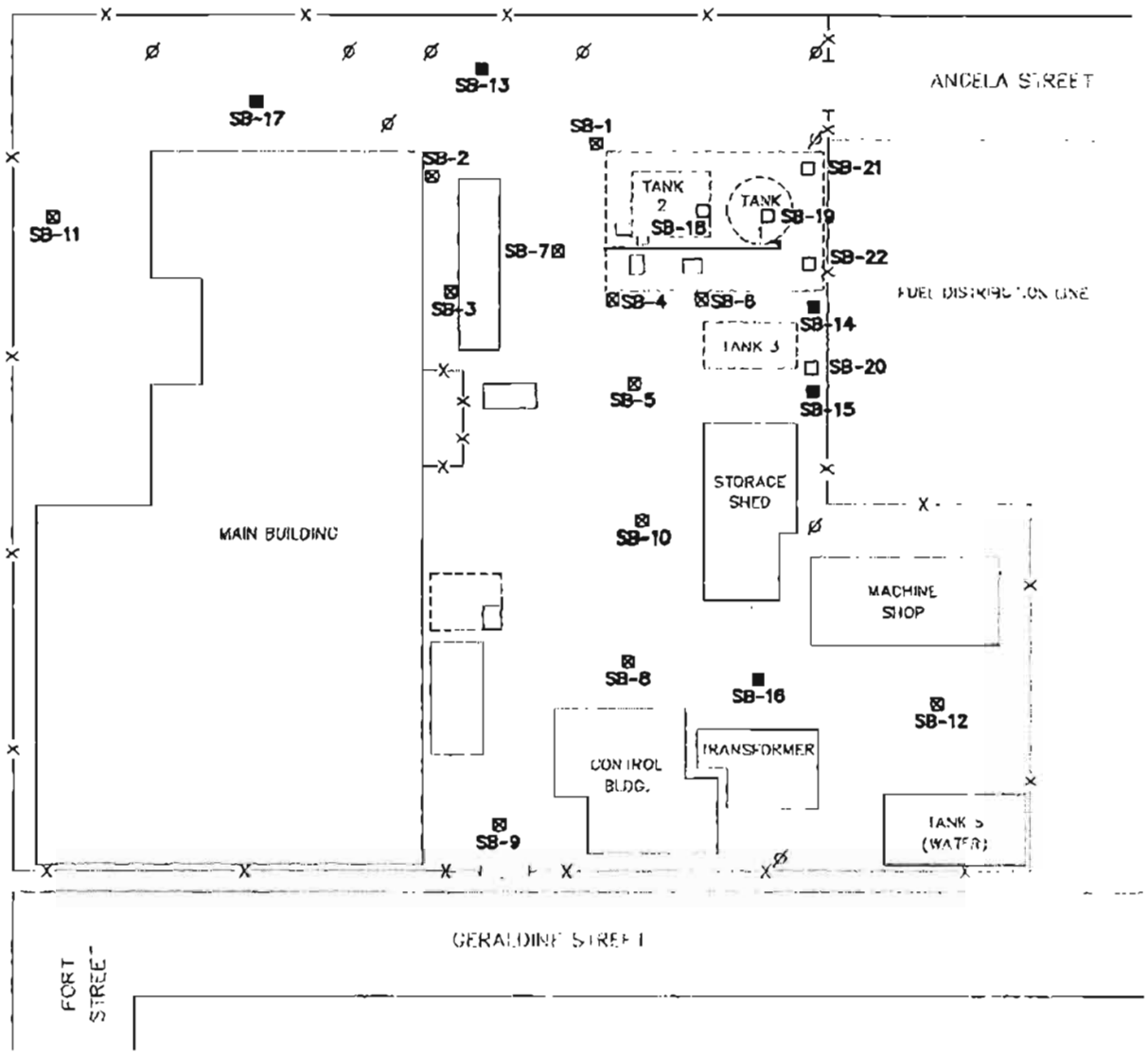

0 20 40

Scale In Feet

LEGEND

- FENCE LINE
- POWERLINE POLE
- SOIL BORING - PRELIMINARY INVESTIGATION
- SOIL BORING - CONTAMINATION ASSESSMENT
- SOIL SAMPLE - CONTAMINATION ASSESSMENT ADDENDUM

NOTE:

TANKS 1, 2, AND 3, SECONDARY CONTAINMENT WALL, AND GROUNDWATER PIT WERE REMOVED IN JUNE 1992.

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 1-3

LOCATIONS OF SOIL SAMPLES

CH2M HILL

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Table 1-1
City Electric System—Abandoned Diesel Plant
Summary of Soil Vapor Analyses

Boring Identification	Concentration (ppm)					
	2-4 feet			4-6 feet		
	Probe	Filter	Reported OVA[a] Reading	Probe	Filter	Reported OVA[a] Reading
Preliminary Investigation (March 21, 1991)						
MW-1	BDL	BDL	BDL	BDL	BDL	BDL
MW-2	400	100	300	350	150	50
MW-3	120	20	100	> 1000	200	> 1000
MW-4	330	150	180	150	50	100
MW-5	40	20	20	1000	50	950
SB-1	300	100	200	> 1000	> 1000	> 1000
SB-2	> 1000	> 1000	> 1000	> 1000	> 1000	> 1000
SB-3	900	400	500	900	300	600
SB-4	800	300	500	> 1000	> 1000	> 1000
SB-5	20	10	10	> 1000	> 1000	> 1000
SB-6	1000	500	500	> 1000	> 1000	> 1000
SB-7	600	300	300	> 1000	> 1000	> 1000
SB-8	600	300	300	700	300	400
SB-9	60	30	30	4	2	2
SB-10	300	100	200	1000	200	800
SB-11	BDL	BDL	BDL	3	1.5	1.5
SB-12	BDL	BDL	BDL	BDL	BDL	BDL
Contamination Assessment (July 15-17, 1991)						
SB-13	NS	NS	NS	BDL	BDL	BDL
SB-14	NS	NS	NS	330	300	30
SB-15	NS	NS	NS	BDL	BDL	BDL
SB-16	NS	NS	NS	300	100	200
SB-17	NS	NS	NS	50	10	40
MW-6	20	20	BDL	50	10	40
MW-7	40	30	10	45	30	15
MW-8	BDL	BDL	BDL	BDL	BDL	BDL
MW-9D	NA	NA	NA	250	50	200
MW-10D	NA	NA	NA	> 1000	> 1000	> 1000
Contamination Assessment Addendum (March 1992 and June 1992)						
MW-11	BDL	BDL	BDL	BDL	BDL	BDL
MW-12	BDL	BDL	BDL	1	BDL	1
SB-18	NA	NA	NA	620	NA	620
SB-19	220	8	212	NA	NA	NA
SB-20	2	BDL	2	NA	NA	NA
SB-21[b]	BDL	BDL	BDL	NA	NA	NA
SB-22[c]	BDL	BDL	BDL	NA	NA	NA

[a]OVA Organic Vapor Analyzer using a flame ionization detector.
[b]Sample collected at approximately 0.5 foot below land surface due to limestone.
[c]Sample collected at approximately 1 foot below land surface due to limestone.

ppm = parts per million
BDL = below detection limit (1 ppm)
NA = not analyzed

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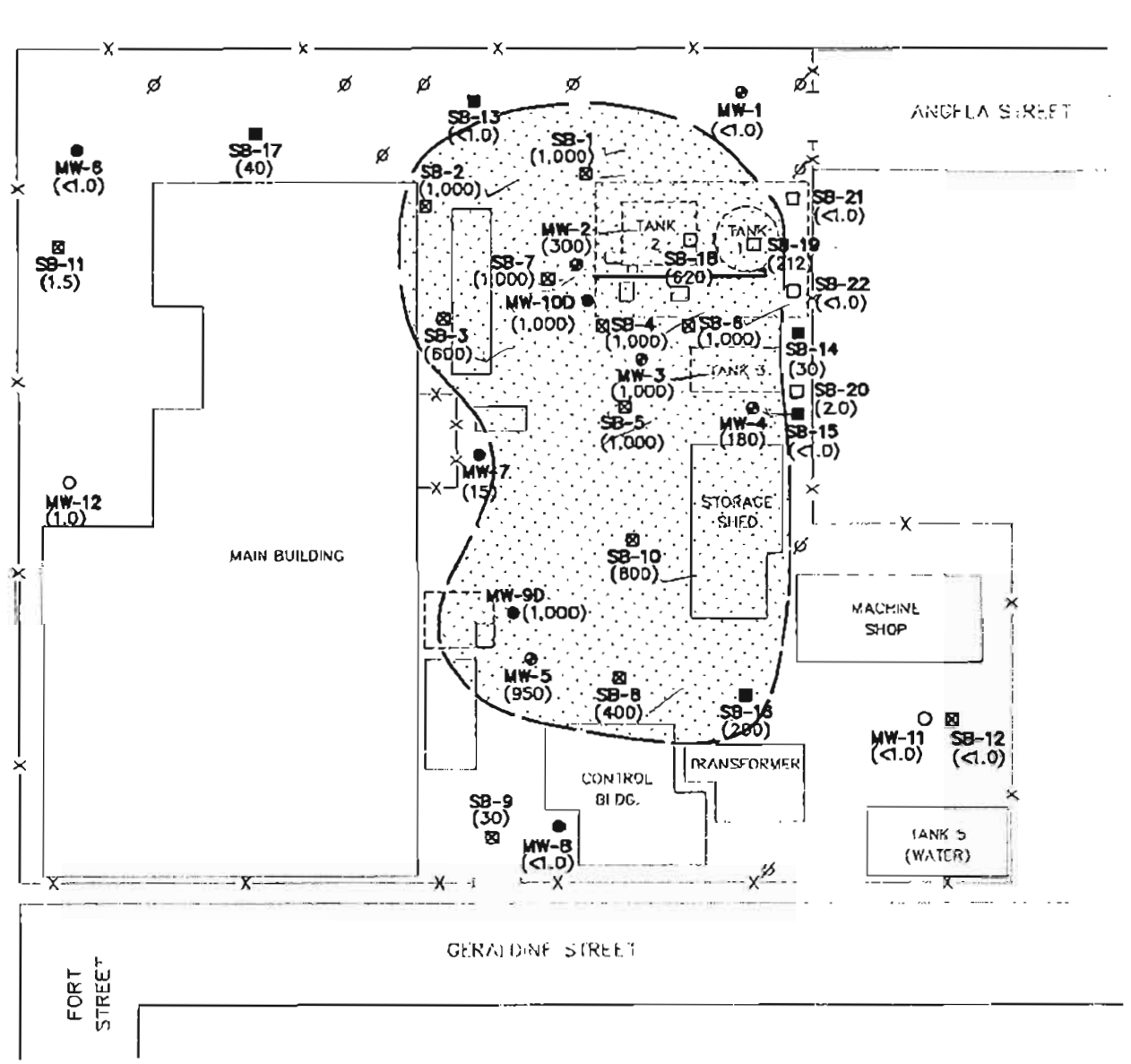

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—x—	FENCE LINE
ø	POWERLINE POLES
⊘	MONITOR WELL - PRELIMINARY INVESTIGATION
⊠	SOIL BORING - PRELIMINARY INVESTIGATION
●	MONITOR WELL - CONTAMINATION ASSESSMENT
○	MONITOR WELL - CONTAMINATION ASSESSMENT ADDENDUM
■	SOIL BORING - CONTAMINATION ASSESSMENT
□	SOIL SAMPLE - CONTAMINATION ASSESSMENT ADDENDUM
(40)	MAXIMUM FID ORGANIC VAPOR CONCENTRATION (ppm)
	ESTIMATED EXTENT OF EXCESSIVELY CONTAMINATED SOIL (AS DEFINED BY FID VAPOR CONCENTRATIONS >50 ppm)

NOTES:

1. TANKS 1, 2, AND 3, SECONDARY CONTAINMENT WALL, AND GROUNDWATER PIT WERE REMOVED IN JUNE 1992.
2. MW-3 WAS DESTROYED DURING TANK ABANDONMENT ACTIVITIES.

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 1-4

AREA OF EXCESSIVE SOIL CONTAMINATION

CH2M HILL

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1.3.2 Groundwater Assessment

Although the Discharge Notification Form (DNF) for this site was submitted in response to the identification of free-phase liquid hydrocarbon product in a groundwater pit near the main building, free product was detected in only one monitor well (MW-7) during the site investigations. CES installed a temporary product recovery system to collect this product. Details regarding this effort will be discussed in Section 2.

Twelve monitor wells were installed at the site (Figure 1-5) to assess the extent of dissolved hydrocarbons in the groundwater. Samples were collected from these wells and analyzed in accordance with FAC Chapter 17-770 guidelines for sites contaminated with diesel product. The analytical results for groundwater samples reported in the CAR/CARA indicate relatively low concentrations of volatile and semivolatile compounds in the groundwater. TPH concentrations in the groundwater appear to be more significant. However, since the local groundwater is rated G-III, the concentrations of dissolved petroleum compounds are not significantly diminishing local groundwater quality. Since most of Monroe County receives potable water from the Florida Keys Aqueduct Authority (FKAA), there are no permitted production wells within over 100 miles of the site. Analytical results for the most recent sampling events are included Section 3.

The local depth to water fluctuates between approximately 3 - 5 feet bls and the shallow water table experiences a strong tidal influence. Groundwater contours consistently indicate that the groundwater flows in a northeasterly direction (Figure 1-6) during both high and low tides. Slug tests indicate a moderate hydraulic conductivity of approximately 17 feet/day which is reasonable for the uniform limestone geologic conditions encountered at the site.

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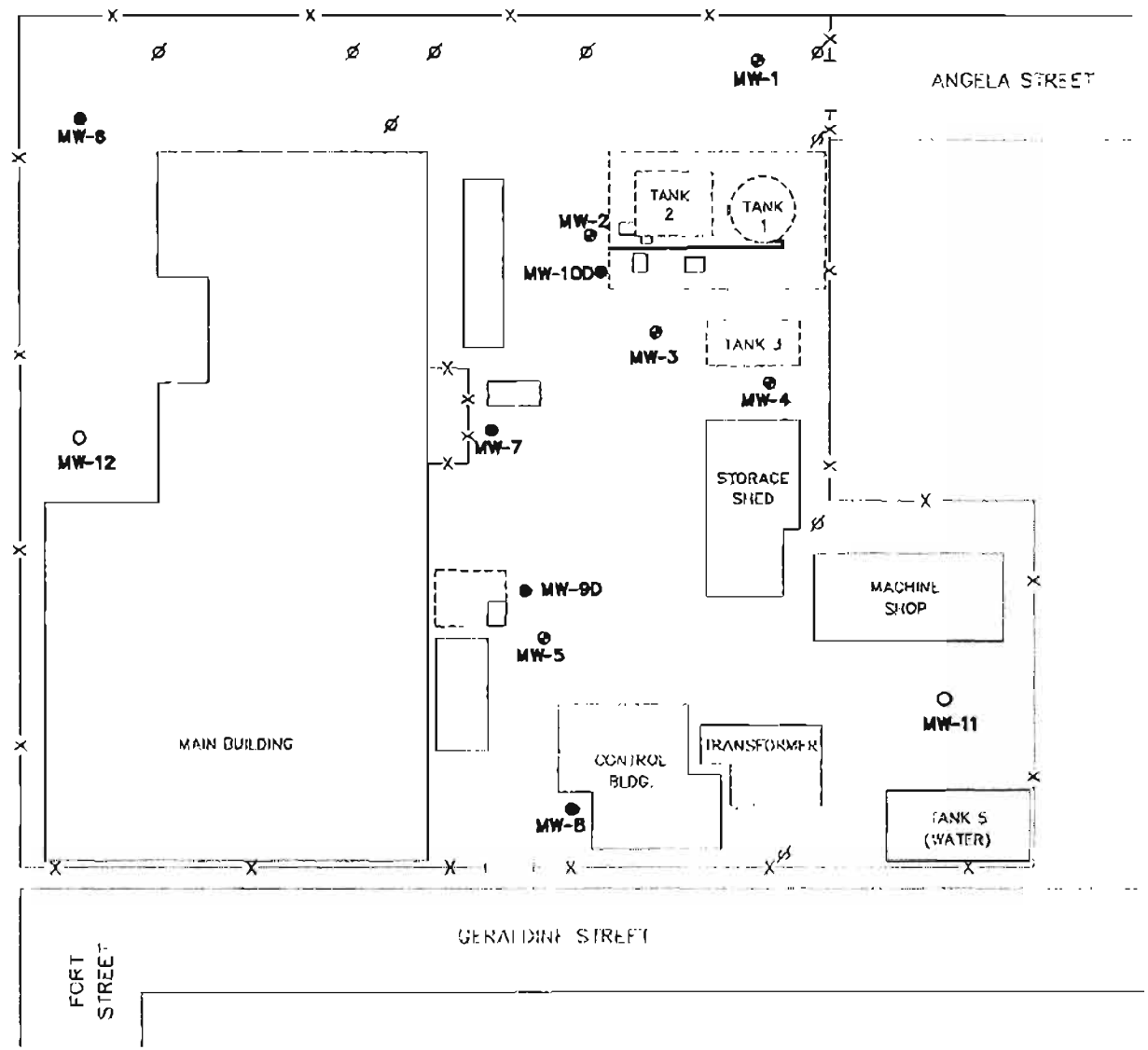

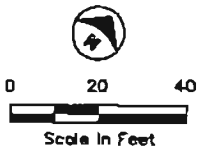

LEGEND

- —X— FENCE LINE
- ⌀ POWERLINE POLES
- ⊕ MONITOR WELL - PRELIMINARY INVESTIGATION
- ● MONITOR WELL - CONTAMINATION ASSESSMENT
- ○ MONITOR WELL - CONTAMINATION ASSESSMENT ADDENDUM

NOTES:

1. TANKS 1, 2, AND 3, SECONDARY CONTAINMENT WALL, AND GROUNDWATER PIT WERE REMOVED IN JUNE 1992.
2. MW-3 WAS DESTROYED DURING TANK ABANDONMENT ACTIVITIES.

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 1-5
LOCATION OF GROUNDWATER MONITOR WELLS

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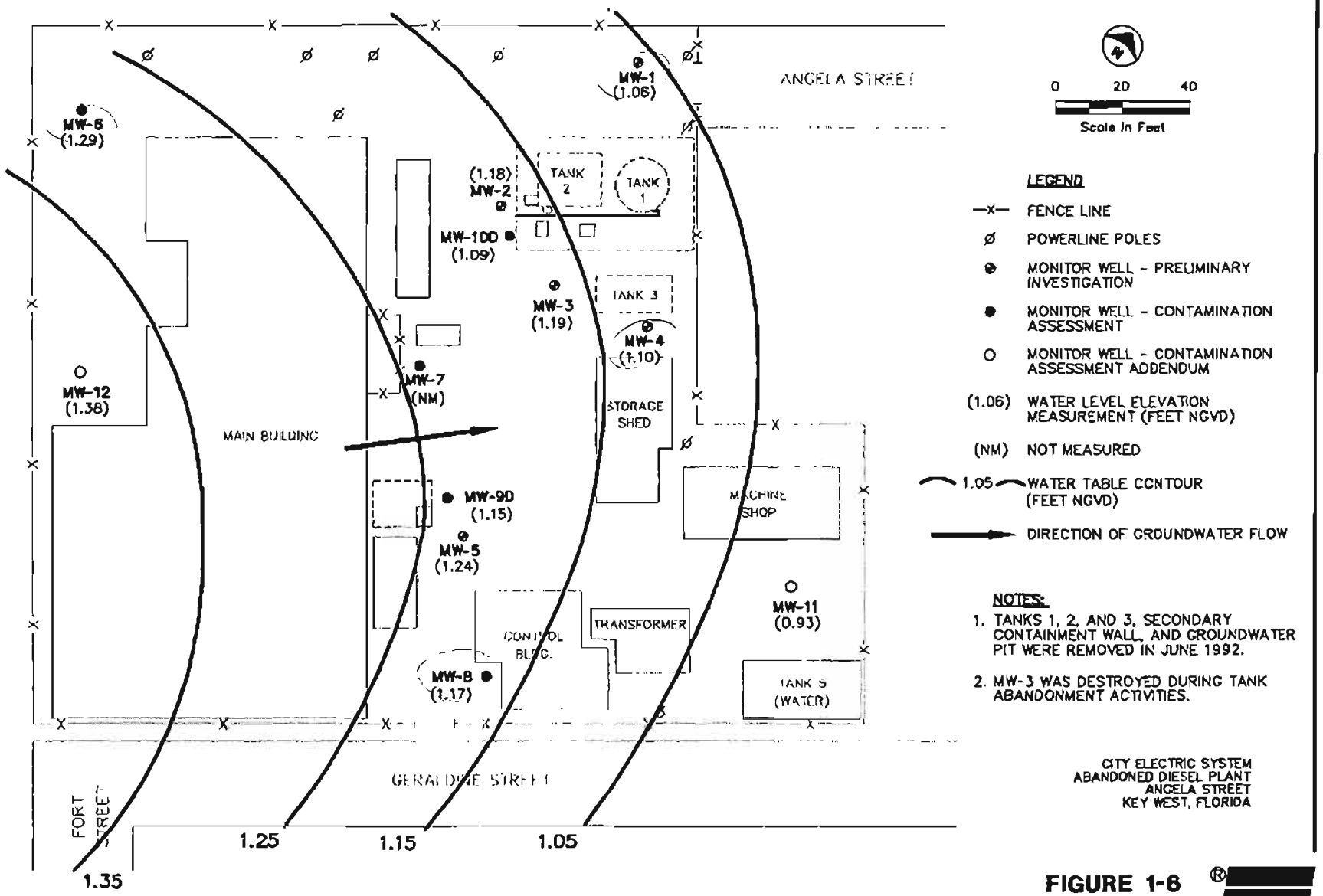

FIGURE 1-6

GROUNDWATER CONTOURS
MARCH 10, 1992

CH2MHILL

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1.4 Proposed Remedial Actions

Based on the results from the contamination assessment, the following remedial (or monitoring) actions are proposed.

- Recover free-phase liquid hydrocarbons from the groundwater surface near the main building
- Contain petroleum contamination in the unsaturated zone
- Monitor concentrations of dissolved petroleum concentrations in the groundwater

The following sections address initial remedial actions conducted onsite; a proposed groundwater monitoring plan; evaluations of alternatives for free product recovery and soil remediation; and conceptual designs, costs, and implementation schedules for proposed remedial actions:

Section 2
Initial Remedial Actions

Following the completion of the Contamination Assessment Report (CAR), two initial remedial actions were conducted by CES at the Abandoned Diesel Plant. Remedial activities include abandoning storage facilities and recovering free product.

2.1 Facility Abandonment

Between June 14, 1992, and July 26, 1992, four facilities were decommissioned at the Abandoned Diesel Plant including Tanks No. 1, 2, 3, and a groundwater supply pit. The locations of these former facilities are illustrated in Figure 1-2. Tanks No. 1 and 3 were above-ground steel tanks with capacities of 27,000 and 12,000 gallons respectively. Tank No. 2 was a 25,000 gallon reinforced concrete vessel that was constructed partially below grade. The final structure consisted of 20-foot deep concrete-lined vault which was used as a large well to supply cooling water to the diesel generators. Each of the four facilities was emptied, cleaned, and dismantled/abandoned following appropriate procedures. These activities were documented in a Closure Assessment Report that was submitted to the Department of Health and Rehabilitative Services in August 1992. Portions of the Closure Report were also submitted to the Florida Department of Environmental Regulation (FDER) in the CARA.

By abandoning these facilities, the majority of the remaining diesel source has been removed from the site. Additionally, the abandonment of the groundwater supply pit has sealed an avenue for contaminant migration from the ground surface into the groundwater.

2.2 Free Product Recovery

During the assessment of the Abandoned Diesel Plant, free product was detected in two locations. These included the groundwater supply pit and in monitoring well MW-7. The locations of this facility and well are illustrated in Figure 1-2.

The floating product in the groundwater supply pit had apparently accumulated as the result of back-flow through buried piping from the main generator building. The product was removed during the facility decommissioning and manifested to a waste oil recycling facility. The detection of free product within the groundwater supply pit probably represented a closed release as the product could not migrate from within the perimeter of the pit. All piping leading from the pit into the buildings was abandoned, capped, or removed during the facility decommissioning.

Free product was also detected in one of monitoring wells within the Abandoned Diesel Plant facility. Shortly after MW-7 was installed, free product began to accumulate in the well. The product appeared to be weathered diesel and was probably the result of historical discharges from within the main building.

In August 1991, CES installed an electric submersible skimmer pump to recover the floating product from within MW-7. The pump recovers and discharges product to a 55-gallon drum; the drum is periodically emptied and the product disposed of by a waste oil recycling facility. Free product recovery is still ongoing. To date, approximately 100 gallons of product have been recovered.

Section 3
Proposed Groundwater Monitoring Plan

During the assessment of the Abandoned Diesel Plant, 12 groundwater monitoring wells were installed to describe groundwater quality. To characterize groundwater for regulatory purposes, the wells can be subdivided into three classifications including source wells, perimeter wells, and intermediate depth wells. Within the source area monitor wells MW-2, MW-3, MW-5, and MW-7 characterize the plume; wells MW-1, MW-4, MW-6, MW-8, MW-11, and MW-12 are perimeter wells that exist on the perimeter of the Abandoned Diesel Plant Property; and wells MW-9D and MW-10D characterize the intermediate zones (23 - 28 feet below land surface) of the aquifer within the plume area. Figure 1-5 illustrates the locations of the monitor wells at the facility.

The groundwater below the Abandoned Diesel Plant has been characterized as a G-III aquifer. This designation characterizes the aquifer as being non-potable. As a result, less stringent standards exist regarding the concentrations of dissolved hydrocarbons permitted in the groundwater.

In March 1992, the wells at the site were sampled for PAH compounds by EPA Method 610 and for Total Recoverable Petroleum Hydrocarbons (TPRH) by EPA Method 418.1. The wells were then resampled in August 1992 for volatile organic compounds (VOCs) by EPA Method 602. A summary of the results are presented in Table 3-1 while the complete laboratory data packages are included in Appendix B. During the CAR some concentrations of volatile organic aromatic compounds (VOAs), polynuclear aromatic hydrocarbon compounds (PAH), and total recoverable petroleum hydrocarbons (TRPH) were detected in several of the wells across the site. These results were reconfirmed with the latest analytical results.

The analytical results indicated that VOAs are all below regulated standards for sites within a G-III aquifer. Therefore, VOAs are no longer a concern for this facility. PAH compounds were detected in several of the wells (MW-4, MW-5, and MW-11), however, concentrations of these compounds are not regulated within a G-III aquifer.

Table 3-1
City Electric System—Abandoned Diesel Plant
Summary of Laboratory Analysis for Groundwater Samples

Parameter	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9D	MW-10D	MW-11	MW-12
Select Semivolatile Compounds (EPA Method 610) (µg/l) - 3/10/92												
Naphthalene	<2	<20	<2	<2	48	<2	NA	<2	<2	<2	15	<2
2-Methylnaphthalene	<2	100	<2	<2	<5	<2	NA	<2	<2	<2	<4	<2
1-Methylnaphthalene	<2	120	<2	7	18	<2	NA	<2	<2	<2	9	<2
Total Naphthalenes	<2	220	<2	7	66	<2	NA	<2	<2	<2	24	<2
Acenaphthylene	<2	<20	<2	<2	<2	<2	NA	<2	<2	<2	12	<2
Acenaphthene	<2	<20	<2	<3	13	<2	NA	<2	<2	<2	21	<2
Fluorene	<2	<20	<2	<5	<3	<2	NA	<2	<2	<2	<5	<2
Phenanthrene	<2	<20	<2	4	19	<2	NA	<2	<2	<2	24	<2
Anthracene	<2	<20	<2	<2	7	<2	NA	<2	<2	<2	<4	<2
Fluoranthene	<2	<20	<2	<2	11	<2	NA	<2	<2	<2	<4	<2
Pyrene	<2	<20	<2	<2	24	<2	NA	<2	<2	<2	<4	<2
Benzo anthracene	<2	<20	<2	<2	6	<2	NA	<2	<2	<2	<4	<2
Chrysene	<2	<20	<2	<2	8	<2	NA	<2	<2	<2	<4	<2
Benzo pyrene	<2	<20	<2	<2	5	<2	NA	<2	<2	<2	<4	<2
Total PAH (excluding Naphthalenes)	<2	<20	<2	4	93	<2	NA	<2	<2	<2	57	<2
Total Petroleum Hydrocarbons (EPA Method 418.1) (mg/l) - 3/10/92	0.16	7.79	4.47	6.35	4.74	<0.06	NA	<0.07	0.23	<0.06	0.32	16.4

Table 3-1
City Electric System—Abandoned Diesel Plant
Summary of Laboratory Analysis for Groundwater Samples

Parameter	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9D	MW-10D	MW-11	MW-12
Select Volatile Organic Compounds by EPA Method 602 (µg/l) - 8/22/92												
Benzene	<1	<1	NA	<1	<1	<1	NA	<1	<1	<1	18 <10	<1
Toluene	<1	<1	NA	<1	<1	<1	NA	<1	<1	<1	14 <10	<1
Ethyl Benzene	<1	<1	NA	<1	6.6	<1	NA	<1	<1	<1	150 ~~120~~	<1
Total Xylenes	<1	<1	NA	<1	8.6	<1	NA	<1	12	<1	55 ~~91~~	<1
Total BTEX	<1	<1	NA	<1	<17.2	<1	NA	<1	<15	<1	<231	<1

µg/l = micrograms per liter
mg/l = milligrams per liter
PAH = Polynuclear Aromatic Hydrocarbons
NA = not analyzed
BTEX = Summation of benzene, toluene, ethyl benzene, and total xylene concentrations

TRPH was detected in eight of the twelve wells at concentrations ranging from 0.16 mg/l to 16.4 mg/l. Concentrations of TRPH are regulated in a G-III aquifer based on the location of the monitoring well in which it is detected. In wells within "source" areas, TRPH is permitted at concentrations of up to 100 mg/l while in peripheral or perimeter locations, a maximum allowable concentration of 5 mg/l has been established. The results of the TRPH analyses indicate that all of the source wells (MW-2, MW-3, MW-5, MW-9D, and MW-10D) contain concentrations of TRPH below the 100 mg/l limit. Additionally, each of the perimeter wells contains TRPH below the maximum allowable level (5 mg/l) with the exception of MW-4 and MW-12. These wells are located on the Abandoned Diesel Plant property and demonstrate concentrations of TRPH slightly above the maximum allowable levels (6.35 and 16.4 mg/l for MW-4 and MW-12 respectively) established for a G-III aquifer.

In addition to VOAs, PAH compounds, and TRPH, several other compounds are also regulated within a G-III aquifer. Previous analyses for ethylene dibromide (EDB), lead, arsenic, cadmium, and chromium indicated that these compounds were present at the site below regulated levels.

The results of the previous activities and groundwater analyses indicate that three of the four criteria for "monitoring only" have been met including the following:

- The contaminant source has been or will be removed from the storage facility
- The dissolved groundwater plume is contained within the site boundaries
- Neither vertical nor horizontal migration of the plume is apparent

The sole criteria which remains unmet, is that traces of free product have been detected in one well. Free product recovery will be addressed in Chapter 4; however, based on the concentrations of contaminants observed in the groundwater, the regulations are inter-

preted to indicate active groundwater treatment will not be required. This interpretation is justified by the following conditions:

- The site is located above a G-III aquifer which is not used for potable consumption
- Concentrations of dissolved hydrocarbons do not exceed regulated values
- Vertical migration is not occurring
- The contaminant plume is contained on the Abandoned Diesel Plant site and does not appear to be migrating laterally

A Monitoring Only Plan (MOP) is proposed that meets the regulatory requirement. The proposed monitoring program will include the following activities:

- Monthly site visits to check the monitor well network for visible traces of hydrocarbon contamination and measure free product thickness if present
- Collect monthly groundwater elevations
- Collect quarterly groundwater samples from wells MW-1, MW-4, MW-6, MW-8, MW-9D, and MW-10D. Groundwater samples will be analyzed for EPA Method 610 and 418.1 parameters
- Prepare an annual summary report presenting the data and future recommendations

The costs and schedule associated with implementing the proposed monitoring program will be detailed in Chapter 7 and Appendix G.

Section 4

Proposed Free Product Recovery

Free product was detected in monitor well MW-7 in August 1991. This occurrence was unexpected as the soil cuttings produced during the well installation were relatively free from organic vapors. Since its detection, the thickness of free product has ranged from a sheen to 3 inches.

As described in Chapter 2, free product recovery was initiated in August 1991. To date, approximately 100 gallons of product have been recovered. In its current configuration, an electric, in-well skimmer pump is recovering small quantities of product. This situation is limited by the location of the recovery well, the physical properties of the product, and the natural gradient of the groundwater surface.

Several options exist which could more efficiently recover product at this site. These include direct excavation, a dual-phase recovery system, free product recovery using absorbent pads, recovery wells using product skimmer pumps, or soil vapor extraction.

4.1 Preliminary Evaluation of Alternatives

The following sections describe the merits and limitations of each of the identified alternatives.

4.1.1 Excavation

Excavation of soil and product could be performed in the vicinity of MW-7. Product was not detected in a soil boring 35 feet east of MW-7, therefore, it could be assumed that product extends no more than 20 feet in each direction. Given this assumption, a volume of approximately 250 cubic yards of soil and product would be removed. During this

procedure, the excavation would remain open and absorbent pads would be placed on the groundwater to collect floating product. The excavation would remain open until product was no longer observed in the excavation.

There are two limitations with excavation. Excavation does not guarantee the recovery of product. Additionally, a significant portion of the product may lie beneath the main building. Excavation of these soils could not occur without causing damage to the building.

4.1.2 Dual Phase Recovery

A dual phase recovery system could be installed to capture the free product plume. This type of system would consist of a groundwater recovery pump to depress the groundwater surface and a petroleum recovery pump that would recover floating product. This type of system may work well to recover product from under the buildings and could be designed with the flexibility to accommodate variable groundwater flow patterns and fluctuations.

Although this method is technically feasible, dual phase recovery may not be the best alternative based on financial considerations. To depress the groundwater surface facilitating free product recovery, a significant pumping rate would be required. The groundwater would then require separation, treatment, and disposal systems. As long as groundwater remains in place, it does not require treatment. Therefore, this type of system would add significant cost to the recovery of free product.

Treating groundwater at this site would pose a difficult challenge requiring the removal of long-chain hydrocarbons; remnants of weathered diesel. These compounds are very stable and are difficult or impossible to remove by air stripping. Groundwater treatment options would probably be limited to granular activated carbon filtration. This process is operation and maintenance intensive and expensive.

4.1.3 Recovery Sump With Absorbent Pads

A small excavation could be conducted near MW-7 and a large diameter, perforated sump could be installed to recovery free product. The perimeter of the sump would be backfilled with crushed gravel to facilitate product movement. Soil removed during the installation (up to five cubic yards) might be excessively contaminated or partially saturated with product. The soil could possibly be land farmed on site to passively remediate the hydrocarbon components or taken off-site to an appropriate treatment facility. It should be noted however, that land farming may not be appropriate for the contaminants in the soil.

Following the installation of the sump, absorbent pads could be installed to recover floating product that migrates into the sump. Absorbent pads demonstrate a high affinity to hydrocarbons and would absorb even trace quantities of product. Absorbent pads are relatively inexpensive and could be replaced on a routine basis. Pads which become saturated with product would be placed into drums and disposed on a periodic basis.

Absorbent pads are a passive method of product recovery. Although they will absorb product which migrates into the sump, they do not increase the potential for product to flow in the sump's direction. Additionally, this method of product recovery may require significant labor to monitor, remove, and replace spent pads.

4.1.4 Recovery Wells With Skimmer Pumps

This method would include installing a series of 4-inch diameter monitoring wells in the area of suspected free product. Pneumatic skimmer pumps would be installed in the wells that would be operated by one central controller. Skimmer pumps would sense the presence of floating product and remove it to a thickness of 0.02 inches (0.5 mm). Recovered product would be stored in an above-ground tank in a secondary containment structure. The system would have a fail safe high product sensor in the recovery tank

which would suspend product recovery if the temporary holding tank was full. The contents of the recovery tank would be periodically emptied by a waste oil recycling facility or used as fuel for power generation.

By using a series of wells, some movement of the plume could be initiated which would facilitate cleanup. Additionally, small diameter wells are relatively cheap and could be installed periodically as the result of any product migration and cleanup.

4.1.5 Soil Vapor Extraction

Soil vapor extraction (SVE) is a method of applying a negative pressure (vacuum) to the vadose zone to initiate volatization of hydrocarbon contamination. Because of the lack of volatile compounds present at this site, it has been determined that SVE would not be appropriate.

4.2 Conceptual Design

Based on its cost, flexibility, and ease of operation, recovery wells with free product skimmers appear to be the best alternative. This method of free product recovery will not interfere with potential operations at the site, will not require the removal, treatment, or disposal of groundwater, and may be re-configured to address free product removal and/or migration. It is estimated that the free product recovery system will operate for 1 to 2 years. A brief description of the components included in the free product recovery system are described in the following sections. More detailed literature provided by the proposed equipment vendor is supplied in Appendix B.

4.2.1 Recovery Wells

Three additional monitoring wells will be installed around MW-7. The wells will be constructed of 4-inch diameter PVC to a depth of approximately 12 feet below land surface. The wells will contain No. 20 continuous slot screen, exposing the well to the groundwater from approximately 2 to 12 feet below land surface. Figure 4-1 illustrates a typical well construction detail. The wells will be constructed around monitor well MW-7 as shown in Figure 4-2. However, final well location will be based on the detection of free product during well installation.

4.2.2 Skimmer Pumps

Each well will be provided with a 3.8-inch diameter selective oil skimmer sensor as manufactured by Clean Environmental Engineers, Inc., (CEE). Each sensor will be mounted on a guide tube which will serve to center the device in the well and to carry oil from the skimmer to the temporary storage tank. A 54-inch long guide tube is specified to accommodate large tidal fluctuations in the wells. The skimmer sensors will be driven by a pneumatic pump located near the recovery tank. One pump will power two skimmer sensors. Each skimmer will operate continuously and can pump product at a rate of 1.5 gallons per minute. The skimmers are designed to operate dry without internal damage if product is no longer present. The skimmer pumps will not require routine maintenance; however, the pneumatic control pumps may require periodic maintenance to replace diaphragms and seals.

Flexible effluent lines will be used to connect each skimmer sensor to the recovery tank. Individual piping will be provided from each well to the recovery tank so that individual well performance can be evaluated. One of the four skimmers will be provided with a high water sensor. The sensor will be triggered should the skimmer rise to the maximum height of the guide tube. The high water sensor will suspend product recovery until

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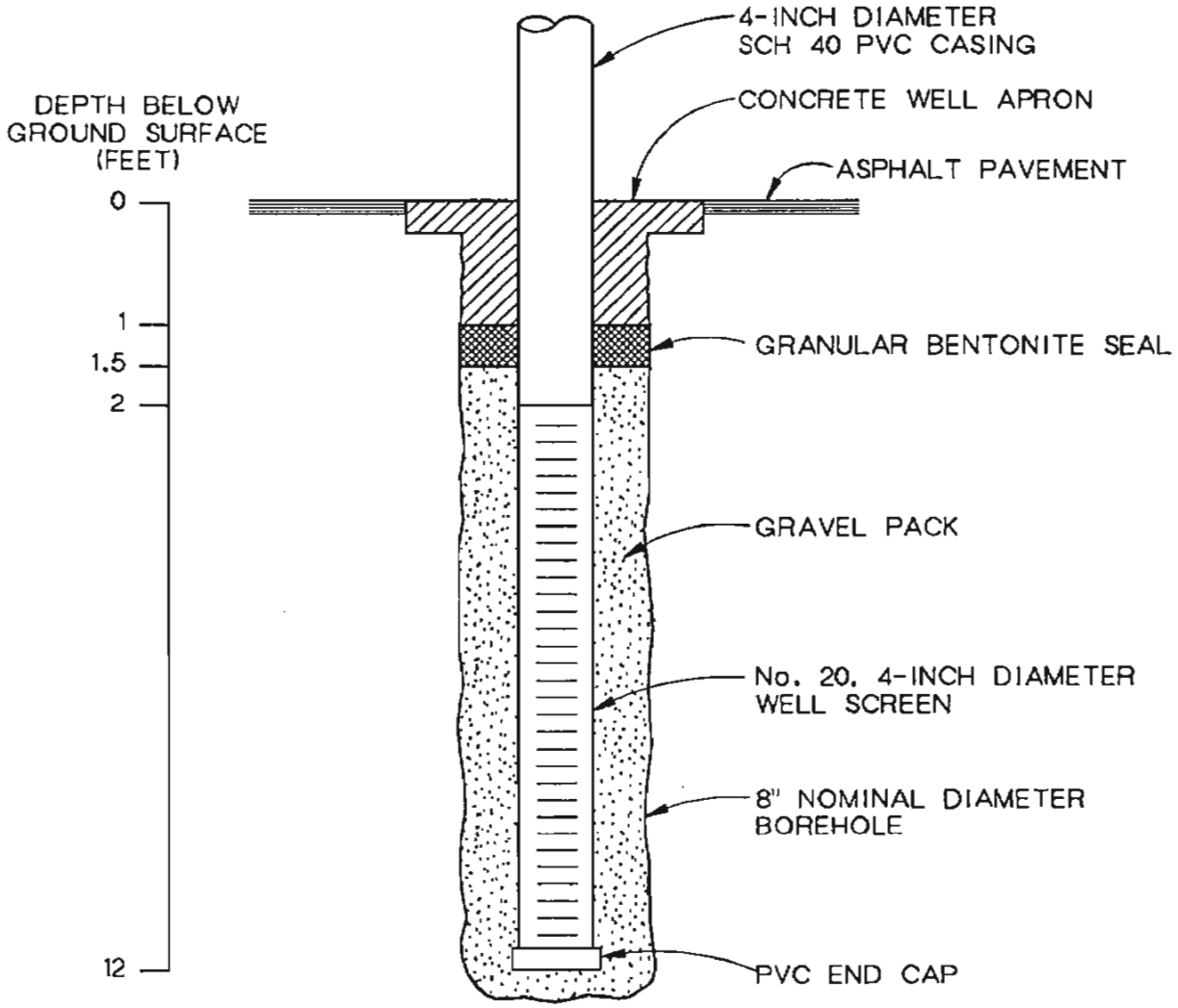

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FIGURE 4-1

RECOVERY WELL CONSTRUCTION DIAGRAM

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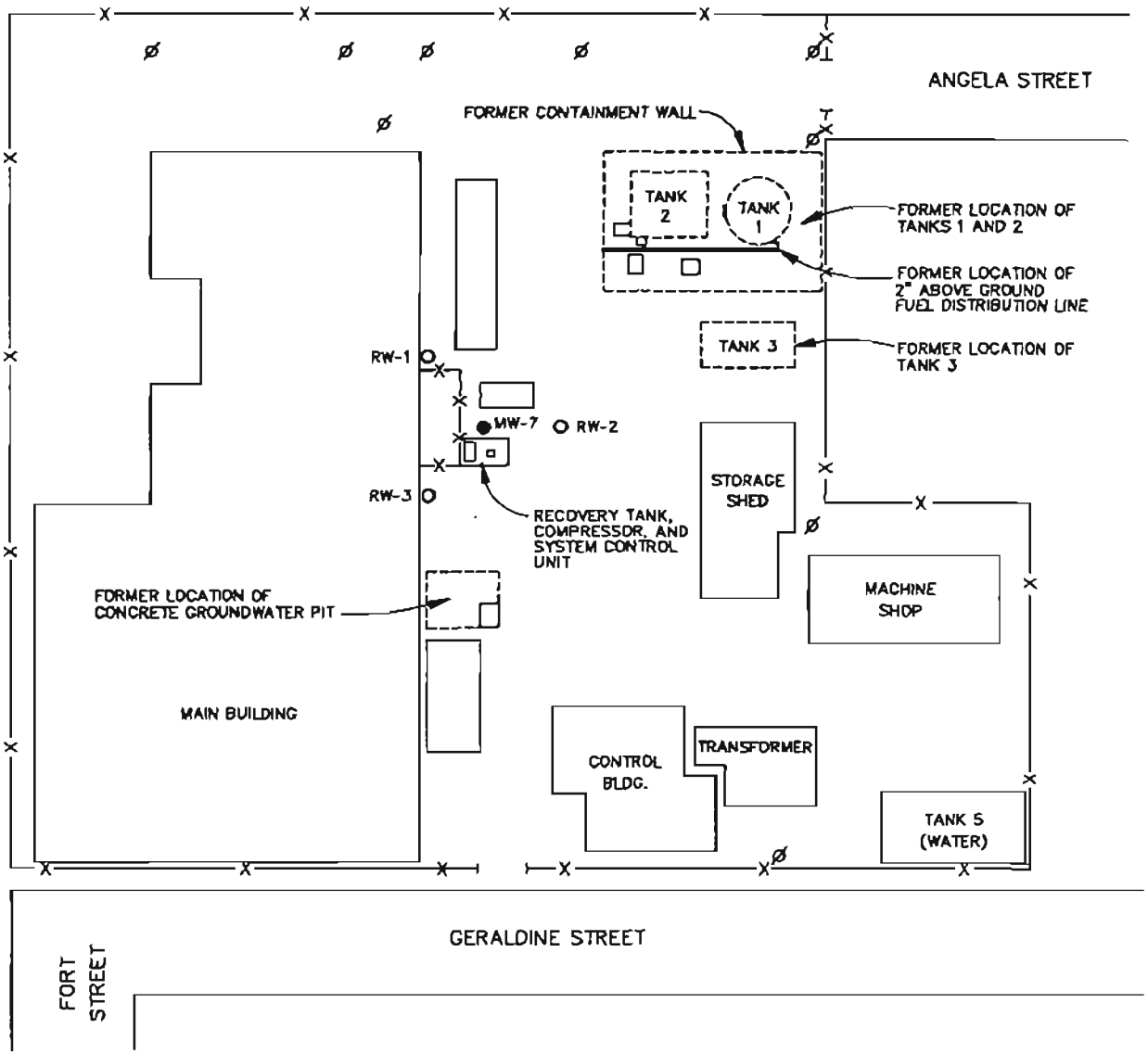

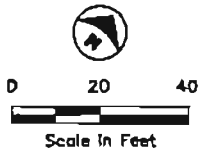

LEGEND

—X— FENCE LINE

ø POWERLINE POLES

O RECOVERY WELL

● EXISTING MONITORING WELL

NOTE:
TANKS 1, 2, AND 3, SECONDARY CONTAINMENT WALL, AND GROUNDWATER PIT WERE REMOVED IN JUNE 1992.

CITY ELECTRIC SYSTEM
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

FIGURE 4-2

FREE PRODUCT RECOVERY SYSTEM CONFIGURATION

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manual resetting can occur.

4.2.3 Temporary Recovery Tank

A 100 gallon product tank will be provided to temporarily store recovered product. The tank will be mounted on a stand and supplied with a valve so that gravity drainage can be performed. The tank will be mounted on a five foot square concrete pad with a side wall free board of approximately 4-inches to accommodate tank leakage. The tank will be fitted with a high level sensor to suspend product recovery when the tank becomes full. The high level sensor will suspend product recovery until a manual reset has been performed. Weekly system inspections will be conducted initially by CES personnel to observe the progress of product recovery. The recovery tank will be periodically emptied by a licensed waste oil recycling facility or recycled as fuel oil for power generation.

4.2.4 System Controller

The recovery system will be managed by an intrinsically safe, pneumatically driven control unit. The control unit will be mounted on a stand near the product recovery tank, and will manage the air supply to the skimmers, monitor water levels in the wells, and monitor product level in the recovery tank. The entire unit will be operated by one compressor and two pneumatic pumps. Figure 4-2 illustrates the locations of the proposed system controls and product recovery tank.

4.2.5 Compressor

A 5-horsepower air compressor will be specified to power the pumps, skimmers, and control unit. The compressor will be a horizontal mounted system similar to the Ingersol Rand Model 5D-1 and capable of providing 16 standard cubic feet per minute (SCFM) at 60 psi. The system will operate on 220-volt, single phase power. The system will be equipped with a 60 gallon reservoir tank and a oil filter so as to supply oil-free air to the

system control unit. The system is oversized by a factor of approximately 1.4 to allow non-peak usage and minimize maintenance. The compressor is the only equipment that may require maintenance. Some maintenance activities could include the replacement of seals and gaskets, lubrication, and belts. The compressor may require semi-annual maintenance and should be inspected monthly.

Section 5
Soil Remediation

5.1 Preliminary Evaluation of Alternatives

As shown in Figure 1-4, affected soil covers approximately 11,400 square feet (ft^2) of the site. Approximately 1,500 cubic yards (yd^3) (2,025 tons) of soil (see Appendix C for calculations) has been identified as having been affected by petroleum compounds (OVA > 50 ppm).

As described in Section 1, the soil is primarily affected by less volatile, less mobile petroleum compounds. The results of previous site investigations indicate that the soil poses a minimal risk to the local groundwater quality as discussed in Section 3. In evaluating treatment feasibility, the ability of the technology to remediate the soil, the actual environmental risks posed by the petroleum compound concentrations in the soil, and the costs of remediation should be key considerations.

The following five alternatives were evaluated:

- Excavation and offsite thermal treatment
- In situ bioremediation
- Soil vapor extraction (SVE)
- Containment using a cap/cover
- No Action/Deferral

This section provides a brief analyses of each remedial alternative. The alternative determined to be most reasonable is addressed in greater detail later in this section.

5.1.1 Excavation and Offsite Thermal Treatment

This option would consist of removing affected soil from the site and treating it in an approved thermal disposal facility. Although this option has been used at many sites throughout Florida, there are a number of site specific technical/economical considerations which make this option less feasible for the Abandoned Diesel Plant site. These considerations are as follows:

- The entire quantity of affected soil would have to be transported over approximately 150 miles to the mainland for disposal. Transport of this material from Key West to the Miami area would require approximately 10 - 12 hours of mobilization time (round trip) which would significantly increase costs associated with this option. Additionally, excavation of the hard, uniform limestone subsurface conditions encountered at the site would require the use of specialized construction equipment not locally available. Based on the volume/weight calculations presented in Appendix C, a contractor (TransSoil Inc.), estimated cost for excavation, transport, and disposal of this volume of soil would be approximately $172,200 ($82 per ton) (see Appendix D). This price includes providing clean backfill for the excavation. Should buildings be damaged or destroyed in the process, this cost could increase significantly. Additional costs for this approach would be incurred for engineering services during the excavation and replacement of destroyed monitor wells.

- Soil contamination may extend below buildings; therefore, not all of the affected soil could be excavated without demolishing or jeopardizing the structural integrity of the buildings. Demolition of the buildings at this site is not be recommended due to the historic significance of this site and the buildings.

Although this option would effectively remediate the excessively contaminated soil which was excavated, costs would be relatively high compared to the other approaches discussed below. These high costs may not be justified since the soil does not appear to be significantly impacting the local G-III groundwater quality. In addition, not all of the affected soil could be excavated without causing damage to the buildings at the site. Therefore, excavation and thermal treatment was not chosen as the recommended approach for this site.

5.1.2 In situ Bioremediation

Bench-scale biotreatability tests were conducted by Aurora International, Inc. located in Deerfield Beach, Florida. Initial tests were conducted using combinations of nutrients and specialized bacteria. The results of these initial tests failed to yield evidence of any significant reductions in petroleum compound concentrations in the treated samples. Aurora concluded that biodegradation may be limited due to the calcium carbonate soils at the site (Appendix E). However, Aurora claims to have identified a "catalyst" which could enhance biological degradation of petroleum compounds in the calcium carbonate environment. Aurora has also promoted the use of specialized bacteria to improve the rate of degradation. Using this bacteria and catalyst, Aurora predicts that bioremediation could be implemented in situ provided that the soil matrix is sufficiently transmissive. The estimated costs for in situ bioremediation would not exceed $90,000. However, Aurora has not been specific in the scope of services included in their estimate and has stressed that this is not a final estimate.

The drawback to in situ bioremediation is that Aurora has been unable to demonstrate that the proposed "catalyst" enhanced biodegradation can reduce site specific hydrocarbon concentrations in the soil to acceptable levels. In general, if the clean-up criteria cannot be met in a controlled laboratory setting, it is unlikely that the criteria will be achieved in the field. Additional bench-scale and pilot-test treatability studies would be needed to assess the feasibility of the "catalyst" enhanced bioremediation. Even if bioremediation

could be shown to be effective for remediating the soil, it is likely that the cost of field activities, laboratory analyses, and regulatory reporting associated with these tests would increase the costs of in situ bioremediation to a level comparable with excavation and thermal treatment. Therefore, in situ bioremediation was not chosen as the recommended approach for this site.

5.1.3 Soil Vapor Extraction

SVE is often considered as a feasible approach to remediating petroleum contamination in situ. Although SVE is more applicable for gasoline spills, it is also applicable to sites contaminated with diesel product. The primary function of SVE is to remove volatile petroleum compounds from the soil. Fresh diesel product is composed of approximately 30 percent volatile compounds. Therefore, about one third of the contamination could theoretically be removed by volatilization. After the volatile compounds have been remediated, SVE tends to function as a means to supply oxygen to the unsaturated zone. The addition of oxygen is intended to stimulate the natural populations of bacteria and promote biodegradation of the petroleum compounds.

Since the majority of the volatile compounds have already volatilized or migrated from the site, SVE would serve only to stimulate natural biodegradation. As presented above in the discussion on in situ bioremediation, this approach may not be technically or economically feasible for the Abandoned Diesel Plant site. Therefore, SVE was not chosen as the recommended approach for this site.

5.1.4 Impermeable Cap/Cover

The function of an impermeable cap/cover is to isolate contaminants in the vadose zone by reducing percolation of surface water through the affected matrix. An impermeable cap/cover is often used at sites where the risk associated with a particular contaminant

due not justify the high costs associated with active treatment of the soil. For this site, an asphalt, concrete, or asphaltic concrete material could be used to construct the impermeable cap/cover. For the purposes of this evaluation, an asphalt cap will be chosen as the representative cap/cover material.

The asphalt cap/cover material would be placed over the entire affected area and site grading would be used to create an appropriate drainage of rainwater to unaffected areas of the site. Special attention would be taken to tie the impermeable cap/cover into the concrete, flush-mounted casings for the existing monitor wells. Costs for this option would be relatively low compared to other remedial options.

Although this option would not actively treat petroleum compounds in the soil, it will effectively reduce infiltration and thus leaching of contaminants into the groundwater. Given the relatively low risk associated with the soil, this level of remedial action appears to be appropriate and will be included in the remedial approach for the site.

5.1.5 No Action/Deferral

This option does not include any remedial action to contain or treat the petroleum compounds in the soil matrix. The feasibility of this option is based on the fact that the minimal level of risk reduction that would be achieved by remediating the soil does not justify the high costs associated with the remediation. Although this argument is valid, the costs required to contain the petroleum compounds in the unsaturated soils using a cap/cover are relatively low and appear to be a reasonable match with the environmental risks at the site. Therefore, No Action/Deferral was not chosen as the recommended remedial approach for this site.

5.2 Conceptual Design and Estimated Costs

As discussed above, containment using an impermeable cap/cover appears to be the most technically and economically feasible option for this site. This cap would be constructed of standard pavement asphalt over a compacted base course. Prior to installing the cap/cover, the site would be properly graded to drain surface water toward the unpaved, unaffected areas of the site. The proposed area of coverage for the asphalt cap is shown in Figure 5-1.

The estimated capital cost for this option would be $23,000 based on a estimate of $14/yd^2 over the area of coverage (1,267 yd^2). The impermeable cap/cover would be installed so as not to destroy existing monitor wells at the site. Maintenance activities for the impermeable cap/cover would be limited to the application of protective sealer on a periodic basis to maintain the integrity of the asphalt. Cost associated with this maintenance activity would be negligible. Appendix D provides a more detailed cost estimate.

10-28-92

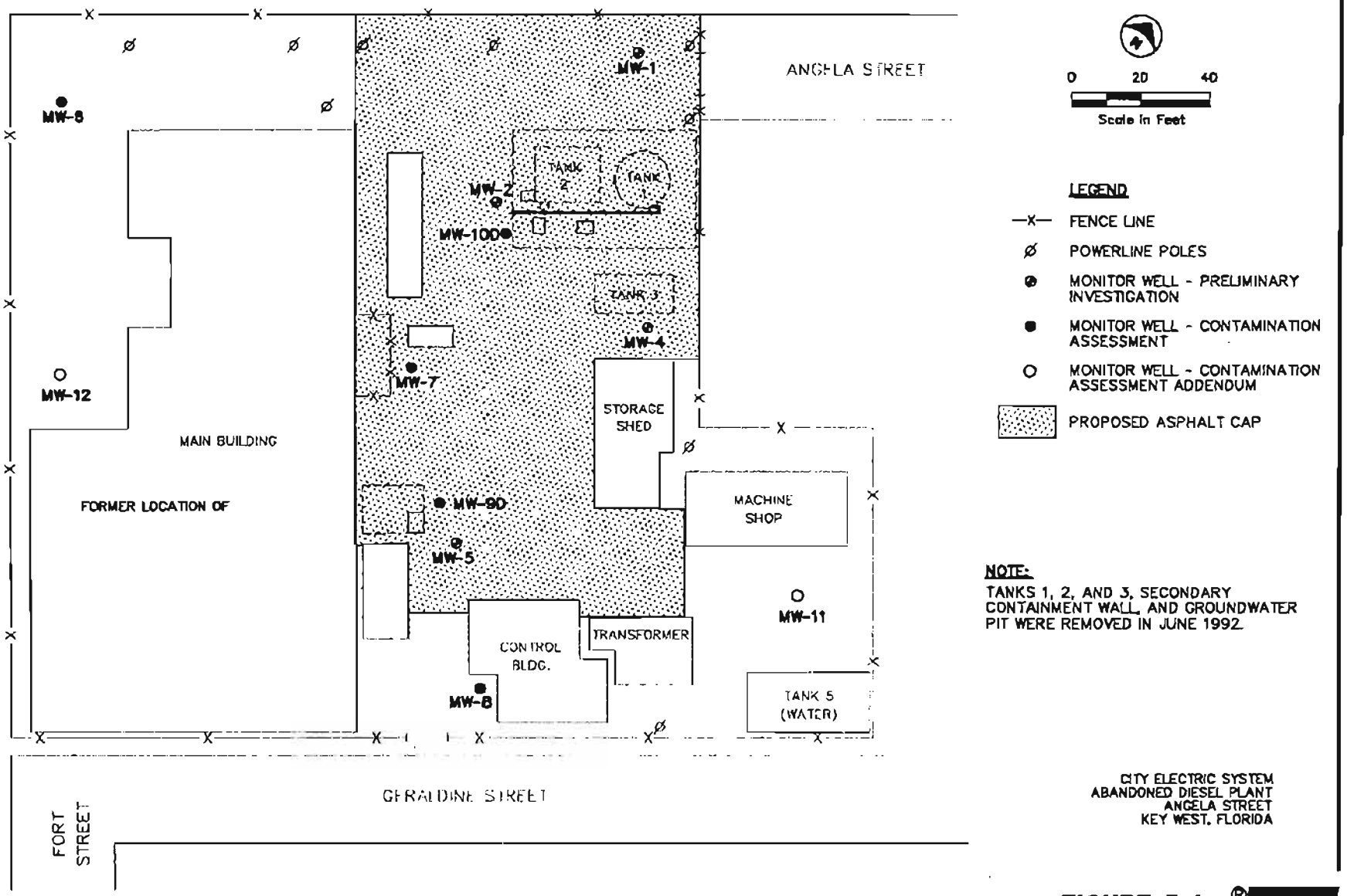

FIGURE 5-1

EXTENT OF PROPOSED SITE CAP/COVER

CH2MHILL

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Section 6
Additional Proposed Remedial Actions

As discussed in Section 1, there is petroleum product remaining in engines, filters, day tanks, and other storage vessels within the main building. An inventory of the quantity and type of the remaining waste is included in Appendix F. According to the data reported by CES there is approximately 5,130 gallons of petroleum product and 1,700 gallons of petroleum/water mixture. Based on general knowledge of the facility, it is anticipated that the majority of this petroleum waste is either used oil or diesel fuel associated with the operation of the diesel powered generators.

As part of the remediation effort at this site, CES proposes to remove the remaining petroleum product. The product will be separated from the water, collected, and analyzed to evaluate the available disposal alternatives. The wastes will be properly manifested and disposed of at an appropriately licensed facility. The costs associated with the testing and disposal of the waste oil and waste water range from $20,000 to $200,000. A breakdown of associated costs is provided in Appendix G. Copies of the analyses and waste disposal manifests will be submitted to FDER when available.

Section 7

Cost and Implementation Schedule for Remedial Measures

7.1 Cost

Based on the assessment of the Abandoned Diesel Plant site, the following remedial actions are proposed:

- Groundwater Monitoring - implement a monitoring plan which incorporates site visits, groundwater contouring, groundwater analyses, and quarterly reporting.

- Impermeable Cap/Cover - install an impermeable asphalt pavement over the entire Abandoned Diesel Plant facility. The cap would reduce surface water percolation through the excessively contaminated soil and prevent potential leaching of hydrocarbons into the groundwater.

- Free Product Recovery - install a free product recovery system that consists of four recovery wells, pneumatic product skimmer pumps, and a temporary collection tank.

- Additional Measures - recovery and composite remaining waste oils and wastewater from within the facility buildings. The composite liquids would be sampled and analyzed for hazardous characteristics by toxicity characteristic leaching procedure analyses. Based on the results of the analyses, the wastes will be properly disposed.

The following sections present the major components and assumptions identified in preparing the remedial option cost estimates. Appendixes B, D, F, and G contain additional information used to prepare these estimates. A cost summary is provided in Table 7-1.

7.1.1 Groundwater Monitoring Plan

Groundwater monitoring will consist of monthly site visits to monitor the status of the Abandoned Diesel Plant facility. During the visits, depth to groundwater measurements will be collected, each of the monitoring wells will be checked for visible traces of hydrocarbons, and significant changes in the site will be documented.

Six wells have been selected to represent groundwater quality at the facility. The wells consist of MW-1, MW-4, MW-6, MW-8, MW-9D, and MW-10D. Each quarter, groundwater samples will be collected from the six wells to identify changes in groundwater quality. Groundwater samples will be analyzed for polynuclear aromatic hydrocarbon compounds by EPA Method 610 and total recoverable petroleum hydrocarbons by EPA Method 418.1.

Results of the monthly site inspections and quarterly analytical results will be submitted to FDER in a quarterly summary report. A annual summary report will be submitted following the completion of the first four quarters of monitoring. At the end of the monitoring year, the status of the facility will be discussed with FDER and the monitoring frequency revisited.

The annual cost to implement a monitoring only program (MOP) is expected to be $15,000. Detailed costs associated with the MOP are outlined in Appendix G.

Table 7-1
Remedial Measures - Cost Summary
CES-Old Diesel Plant

	Labor	Expenses	Total Annual Cost
Groundwater Monitoring	$6,600	$8,400	$15,000
Free Product Recovery			
Installation	$2,130	$29,400	31,530
One Year Maintenance	------	1,200	1,200
Operation & Maintenance	200	200	400
Impermeable Cap/Cover			
Installation	$5,000	$18,000	$23,000
Maintenance	0	0	0
	$13,930	$57,000	$71,730

7.1.2 Free Product Recovery

A free product recovery system is proposed consisting of four small diameter recovery wells, pneumatic floating product skimmer pumps, and a 100-gallon temporary holding tank. Other components of this system will include two pneumatic pumps, a five-horse power air compressor, miscellaneous sensors, and installation costs. Costs associated with the installation of this system are provided in Appendix G and have been estimated to be approximately $31,530.

7.1.3 Impermeable Cap/Cover

It has been proposed that excessively contaminated soils be left in place because of the stability of the contaminants, lack of receptors, and cost to remediate. An asphalt cap is proposed for the entire Abandoned Diesel Plant Site. The cap will consist of a two-inch thick asphalt pavement that will be installed to prevent surface water percolation. If this alternative is approved, a surface water drainage plan will be prepared to design drainage pathways and retention facilities. A detailed cost break-down for this option is included in Appendix D and has been estimated at $23,000.

7.1.4 Other Measures

In addition to the remediation of the soil and groundwater, it is proposed that the remaining waste oils be removed from the Abandoned Diesel Plant facility. The wastes will be separated using oil-water separation techniques with waste water and waste oil being composited. One composite sample of the waste oil and waste water will be collected and analyzed by TCLP methods. These analyses will determine if the substances are hazardous and will limit proper disposal methods.

Should the waste oil be determined to be non-hazardous, it may be suitable for recycling or possible use as fuel. Since the cost of disposal for these wastes can not be

determined until samples are collected and analyzed, the cost for this work will not be provided in the RAP. Appendix G, however, contains a range of costs for various disposal options.

7.2 Implementation Schedule

It is anticipated that from the approval of the RAP, the proposed remedial approach could be implemented within 12 weeks. Table 7-2 provides an implementation schedule and the time requirements to meet task milestones. Record drawings will be prepared approximately 4-weeks following the completion of the remedial facilities.

Table 7-2
Remedial Measures - Implementation Schedule
(First Quarter)
CES - Abandoned Diesel Plant

Week Completed	Task	Duration
0	RAP Approval from FDER	0
4	City Electric System Receives Authorization to Proceed with RAP Implementation From Board of Directors.	4 Weeks
4	First Monthly Site Inspection	1 Week
6	Recovery Wells Installed	2 Weeks
8	Impermeable Cap/Cover Installed	2 Weeks
8	Second Monthly Site Inspection	1 Week
10	Free Product Recovery System Installed	6 Weeks
11	Begin Free Product Recovery	
12	First Quarterly Sampling and Third Monthly Site Inspection	1 Week
14	Prepare and Submit Record Drawings	4 Weeks
16	Fourth Monthly Site Inspection First Quarterly Report Submitted to FDER.	1 Week

Note
- Site inspections occur every month
- Groundwater sampling is conducted every 3-months
- Quarterly Reports are submitted to FDER approximately 4 weeks following groundwater sampling

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REMEDIAL ACTION PLAN MODIFICATION

ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA
FDEP FAC #449101950

JUNE 1993

Prepared for:

Mr. James Greenshields, Jr.
Environmental Services
Supervisor
City Electric System
Post Office Drawer 6100
Key West, FL 33040-6100

Prepared by:

PDG Environmental Services

Gary E. Kihn, P.G.
Senior Hydrogeologist

James H. Carter, P.G.
General Manager

943802

PROFESSIONAL ENGINEER CERTIFICATION

For

ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA
FDEP FAC #449101950

JUNE 1994

I hereby certify that in my professional judgement, the components of this Remedial Action Plan Modification satisfy the requirements set forth in Chapter 17-770, F.A.C., and that the engineering design features incorporated in this plan provide reasonable assurances of achieving the objectives stated in this Remedial Action Plan Modification.

Robert E. Penoyer 6/9/94

Robert E. Penoyer, P.E.
Florida License #PE0043384
PDG Environmental Services
4450 West Eau Gallie Boulevard
Suite 164, Perimeter Center
Melbourne, Florida 32934-7277
(407) 259-6600

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LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

1.1 REMEDIATION HISTORY

A Remedial Action Plan (RAP) was submitted by CH_2M Hill on 30 October 1992. In response to comments from the Florida Department of Environmental Protection (FDEP), a Remedial Action Plan Addendum (RAPA) was submitted by CH_2M Hill in May 1993. The RAPA was subsequently approved by the FDEP on 7 July 1993 (Appendix A).

A free product recovery system was proposed by CH_2M Hill in the RAP. The system involved the installation of three monitoring wells around MW-7. Free product would be removed from each monitoring well, including MW-7, with a Clean Environmental Engineers, Inc. oil skimmer sensor. The sensors are mounted on a 54-inch long guide tube to accommodate large tidal fluctuations in the well. A high level sensor would be placed in one well to deactivate the recovery system until skimmer sensors can be manually reset. The skimmer sensors are driven by a pneumatic pump and air compressor located adjacent to a 100 gallon temporary recovery tank. The anticipated cleanup period for this system is approximately one to two years. The estimated cost for free product recovery and groundwater monitoring is $49,730.

Based on prior experience in areas with similar geological settings, PDGE feels that a more aggressive and technologically feasible method can be utilized for free product recovery. PDGE prepared and implemented a RAP at the Miami International Airport. Free product and excessively contaminated soil was detected widespread across the facility. Groundwater contaminant levels were, however, within "Monitoring Only" guidelines. The geology consisted of corallin limestone, similar to that encountered at the Abandoned Diesel Plan facility. Previous remedial efforts included high permeability trenches, drawdown wells and skimmer pumps. Due to the low permeability of the surficial material, these techniques were not effective in

recovering significant quantities of free product.

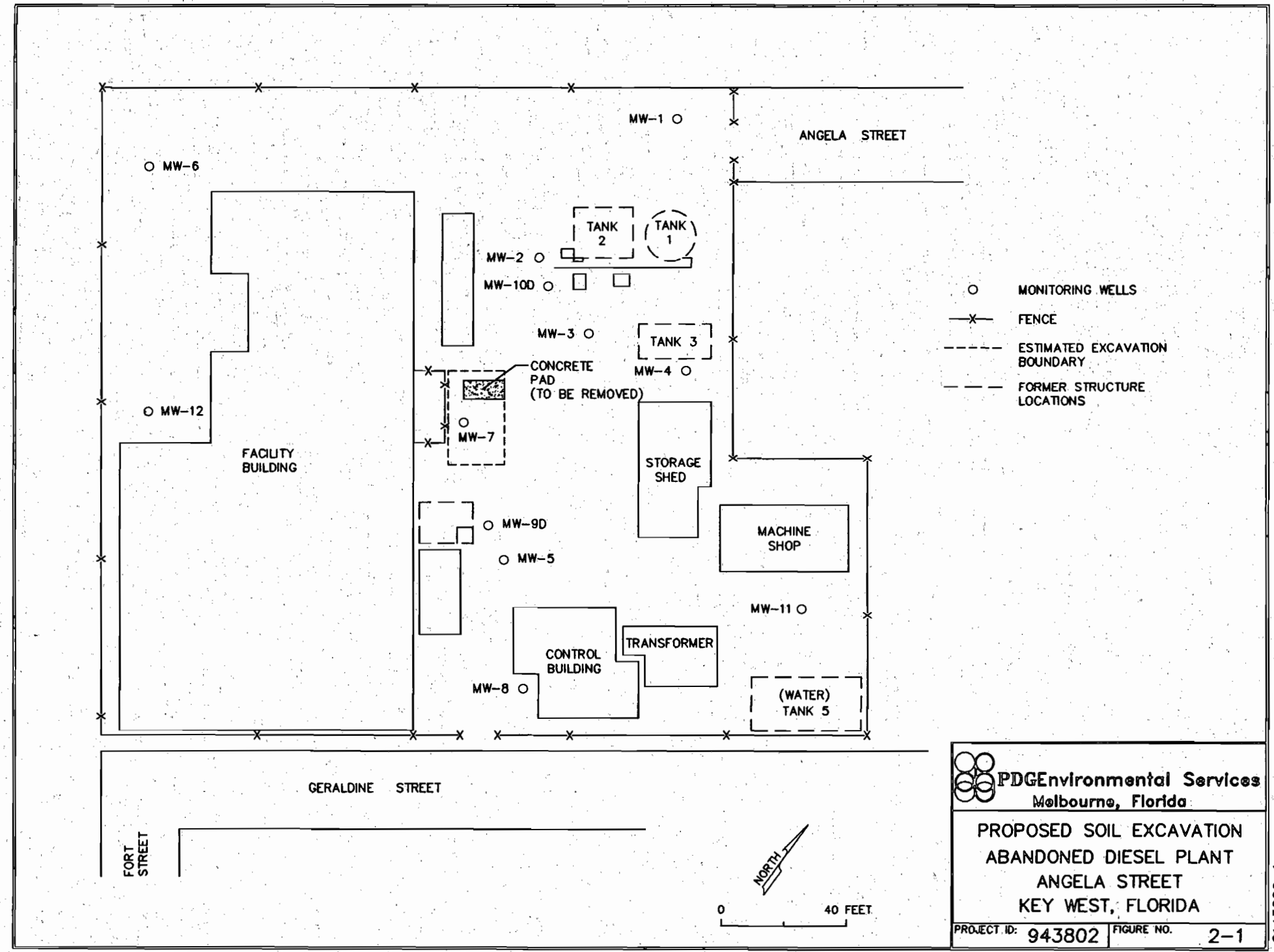
Thus, PDGE proposed to demolish several inactive aboveground storage tanks, associated piping and related fueling structures. After the removal of the fueling equipment, approximately 3,850 cubic yards (5,769.75 tons) of excessively contaminated soil were removed and thermally treated off-site. During the excavation process, approximately 30,000 gallons of free product/ contaminated water were removed from the water table with a vacuum truck. Upon removal of the soil and free product, the excavation was backfilled with clean fill and compacted to the original grade. Nine shallow and one deep monitoring wells were subsequently reinstalled in the excavation area. Liquid levels were gauged in each well and samples collected for laboratory analysis. The analytical results revealed low levels of groundwater contaminants. In addition, free product was not detected in any of the new monitoring wells.

The modified methodology and cost analysis for the soil excavation and free product recovery at the Abandoned Diesel Plant facility are presented in the following sections.

2 FREE PRODUCT RECOVERY

Soil excavation/free product recovery in the vicinity of monitoring well MW-7 is proposed for remediation at the facility. The excavation process is necessary to remove free product laden soil and moreover, free product trapped in the low permeable deposits comprising the vadose zone. Due to the extremely low permeability of the surficial sediments, trenches and dynamic recovery systems are not economically feasible nor effective. Thus, excavation is necessary to expedite remediation at the site by removing free product from the vadose zone that may otherwise continue to leach into the aquifer due to significant water table fluctuations. In addition, the excavation process may provide a means to determine from which direction free product is entering the excavation. This information will be extremely useful in identifying potential unknown contaminant sources, including concrete tanks located within the former diesel plant building or other undocumented underground storage tanks.

The horizontal extent of the proposed excavation will be concentrated around MW-7 (Figure 2-1). The excavation will extend vertically to approximately one foot below the water table to allow for free product recovery. Free product encountered in the excavation will be concentrated with booms and removed with a vacuum truck and/or absorbent pads. The excavation will be allowed to remain open for a period of several days to determine the recoverable free product in the vicinity of the excavation has been remediated. Free product recovered with a vacuum truck will be properly manifested, while booms and pads will be placed in 55 gallon drums and sampled for proper disposal. It is estimated that approximately 120 cubic yards of excessively contaminated soil (greater than 50 ppm from an OVA) will be removed during the excavation process. The soil will be manifested and transported to the Rinker Materials facility in Miami, Florida for thermal treatment.



PDGEnvironmental Services
Melbourne, Florida

PROPOSED SOIL EXCAVATION
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

PROJECT ID: 943802 | FIGURE NO. 2-1

C143802-1

3 REMEDIATION MONITORING SCHEDULE

3.1 GROUNDWATER REMEDIAL MONITORING

One shallow monitoring well will be installed to replace monitoring well MW-7, which will be destroyed during soil excavation. The shallow monitoring well will be constructed of 2-inch-diameter, Schedule 40 PVC with 0.010-inch slotted screen. The well is designed to bracket the water table during seasonal and tidal fluctuations. The borehole will be backfilled with 20/30 silica sand and a bentonite and portland cement seal. The well will be equipped with a locking well cap housed in an 8-inch-diameter manhole.

Groundwater samples will be collected following completion of the proposed remedial activities from monitoring wells designated for "Monitoring Only" sampling (MW-1, MW-2, MW-4, MW-6, MW-7, MW-8 and MW-9D). These wells will be sampled quarterly for a period of one year and analyzed by EPA Method 610 for polynuclear aromatic hydrocarbons (PAH) and EPA Method 418.1 for total recoverable petroleum hydrocarbons (TRPH). The groundwater samples will be collected as per PDGE's State-approved Comprehensive Quality Assurance Plan (CompQAP #920253G).

A report will be submitted to the FDEP detailing the results of the soil excavation, free product recovery and monitoring well reinstallation. Quarterly reports will then be submitted within 60 days of groundwater sampling documenting the water quality results, the occurrence of free product, and the water table configuration.

4 REMEDIAL COST SUMMARY

4.1 SOIL EXCAVATION/FREE PRODUCT RECOVERY AND TREATMENT COSTS

Materials (Fill Dirt, Booms, Pads, Poly Sheeting and Drums)	$ 2,385
Equipment Rental	$ 8,140
Subcontractors (Trucking/Soil Incineration @ $81/ton, Debris Disposal, and Product Recovery/ Disposal Services)	$ 18,180
Professional Services (Project Management, Technicians, and Expenses)	$ 12,550
TOTAL SOIL EXCAVATION/FREE PRODUCT RECOVERY AND TREATMENT COSTS	**$ 41,255**

4.2 GROUNDWATER MONITORING COSTS

Subcontractors (Drilling and Analytical)	$ 9,000
Professional Services (Project Management, Labor, Report Preparation and Expenses)	$ 10,200
Equipment Rental	$ 600
TOTAL GROUNDWATER MONITORING COSTS	**$ 19,800**

TOTAL REMEDIATION SYSTEM COST	**$ 61,055**

PDGEnvironmental Services, Inc. #12222

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407-259-6600 • Fax 407-259-0066

Bureau of Waste Cleanup
MAY 3 1995
Engineering Support Section

RECEIVED
APR 20 1995
D.E.P. Marathon, FL

17 April 1995

CERTIFIED MAIL
P 021 223 846

PDGE Project #943802

Ms. Lisa L. Gordon
Environmental Specialist
Florida Department of Environmental Protection
South District, Marathon Branch Office
2796 Overseas Highway, Suite 221
Marathon, FL 33050-2200

Stone-9

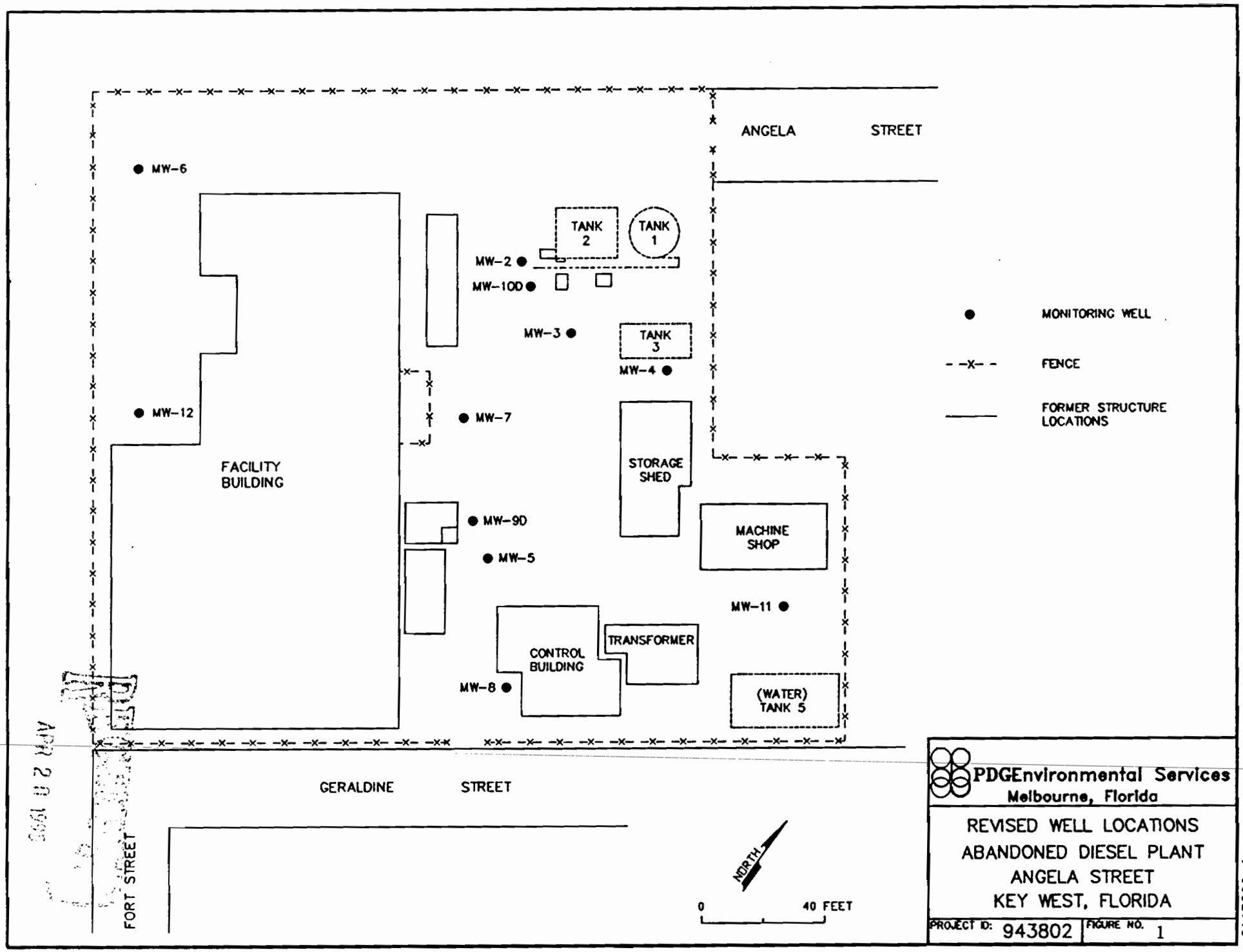
RE: THIRD QUARTER "MONITORING ONLY" WATER QUALITY RESULTS
Abandoned Diesel Plant
Angela Street
Key West, Florida
FDEP FAC #449101950

Dear Ms. Gordon:

The Remedial Action Plan Modification/"Monitoring Only" Proposal for the above referenced facility was approved by the Florida Department of Environmental Protection (FDEP) on 21 July 1994 (Attachment A). The "Monitoring Only" Proposal entailed the collection of groundwater samples from MW-1, MW-2, MW-4, MW-6, MW-7, MW-8 and MW-9D (Figure 1) on a quarterly basis for a period of one year. Samples were to be analyzed by EPA Method 610 for total naphthalene and polynuclear aromatic hydrocarbons (PAH), and EPA Method 418.1 for total recoverable petroleum hydrocarbons (TRPH).

Groundwater samples were collected from the designated monitoring wells on 23 March 1995. All parameters were below detection limits (BDL) or below State Maximum Contaminant Levels (MCLs) in the designated monitoring wells sampled (Table 1; Attachment B).

Due to the consistent lack of appreciable groundwater contamination, PDGE requests a Site Rehabilitation Completion Order be issued for this site.



PDGEnvironmental Services
Melbourne, Florida

REVISED WELL LOCATIONS
ABANDONED DIESEL PLANT
ANGELA STREET
KEY WEST, FLORIDA

PROJECT ID: 943802 | FIGURE NO. 1

C143802-1

D.E.P. Marathon, FL

APR 2 8 1995

TABLE 1
GROUNDWATER QUALITY (ppb)

Well ID	Date Sampled	Total Naphthalenes	PAH	TRPH*
MW-1	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
MW-2	3/23/95	BDL	BDL	4.97
MW-4	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	3
	3/23/95	BDL	BDL	BDL
MW-6	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
MW-7	9/23/94	91	91	14.7
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
MW-8	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
MW-9D	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
MW-20	9/23/94	91	96	39.6
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL
Eq Blk	9/23/94	BDL	BDL	BDL
	12/28/94	BDL	BDL	BDL
	3/23/95	BDL	BDL	BDL

BDL = Below Detection Limits

* = Reported in parts per million

Note: MW-20 is a duplicate sample collected from MW-7

Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,
PDG ENVIRONMENTAL SERVICES, INC.

Maryann T. Civil, P.G.
Senior Hydrogeologist

cc: J. Greenshields; City Electric System
D. Tremore; Rose, Sundstrom and Bentley
File

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ATTACHMENT A

FDEP CORRESPONDENCE

Florida Department of
Environmental Protection

COPY

Lawton Chiles
Governor

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

July 21, 1994

CERTIFIED # Z 784 102 703
RETURN RECEIPT REQUESTED

Robert Padron, General Manager
City Electric System
Post Office Box 6100
Key West, Florida 33041

Re: Monroe County-TK
City Electric System
Abandoned Diesel Plant
Facility No. 449101950

Dear Mr. Padrón:

The Department has concluded its review of the Remedial Action Plan (RAP) Modification dated June 1993 (received June 13, 1993), submitted for this site. The Department has determined that the actions proposed in this RAP Modification provide reasonable assurance that the contaminant concentrations at the site will be reduced to the levels set forth in Chapter 17-770, Florida Administrative Code (F.A.C.). Pursuant to Rule 17-770.700(3), F.A.C., the Department approves the RAP.

You are required to initiate the remedial actions described in the RAP Modification within two (2) months of receipt of this Order. These remedial actions are to be implemented in accordance with Chapter 17-770, F.A.C., and shall continue until a cleanup of the contaminated area(s) to the target levels set forth in Rule 17-770.730(5), F.A.C., is achieved.

Persons whose substantial interests are affected by this Remedial Action Plan Approval Order have the right to challenge the Department's decision. Such a challenge may include filing a petition for an administrative determination (hearing) as described in the following paragraphs. However, pursuant to Chapter 17-103, F.A.C., you may request an extension of time to file the petition. All requests for extension of time or petitions for administrative hearing must be filed directly with the Department's Office of General Counsel at the Address given below within twenty-one (21) days of receipt of this notice (do not send them to the Bureau of Waste Cleanup).

RECEIVED
APR 20 1995
D.E.P. Marathon, FL

Notwithstanding the above, a person whose substantial interests are affected by this Remedial Action Plan Approval Order may petition for an administrative proceeding (hearing) in accordance with Section 120.57. Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within twenty-one (21) days of receipt of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The petition shall contain the following information:
(a) The name, address and telephone number of each petitioner; the Department file number (DEP facility number), and the name and address of the facility;
(b) A statement of how and when each petitioner received notice of the Departments action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by each petitioner, if any;
(e) A statement of facts which each petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action;
(g) A statement of the relief sought by each petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

This Remedial Action Plan Approval Order is final and effective on the date of receipt of this Order unless a petition (or time extension) is filed in accordance with the preceding paragraphs. Upon the timely filing of the petition, this Order will not be effective until further order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The notice of appeal must be filed within thirty (30) days from the date the Final Order is filed with the clerk of the Department.

The DEP Facility Number for this site is 449101950. Please use this identification number on all future correspondence with the Department.

IF YOU HAVE ANY QUESTIONS ON THE TECHNICAL ASPECTS OF THIS APPROVAL ORDER, PLEASE CONTACT LISA L. GORDON OR DAVID P. GRABKA OF THE MARATHON OFFICE AT 2796 OVERSEAS HIGHWAY, SUITE 221, MARATHON, FLORIDA 33050-2200, PHONE 305/289-2310. Contact with the above named person(s) does not constitute a petition for administrative determination.

Sincerely,

Ronald D. Blackburn
Acting Director of
District Management

RDB/LLG/DPG
cc: Phil Barbaccia, DEP Fort Myers
David P. Grabka, DEP Marathon
Leslie Rosch, MCPHU Key West
Gary E. Kihn, PDG Environmental Services
Bill Neimes, DEP Tallahassee
Diane D. Tremor, Rose Sundstrom & Bentley

ATTACHMENT B

FIELD SAMPLE DATA SHEET AND
WATER QUALITY ANALYTICAL REPORT

FIELD SAMPLE DATA SHEET

SITE NAME: ABANDONED DIESEL PLANT

DATE SAMPLED: 23 MARCH 1995

PROJECT NUMBER: 943802

SAMPLED BY: M. DAWLEY

WELL ID	Time	Depth to Water (ft)	Depth to Product (ft)	Depth of Well (ft)	Purge Volume (gal)
MW-1	1250	4.29	--	13.90	8.0
MW-2	1345	4.13		14.00	8.0
MW-4	1335	4.14	--	12.60	7.0
MW-6	1240	3.23	--	11.90	7.0
MW-7	1355	4.70	--	12.75	7.0
MW-8	1305	4.03	--	11.80	6.5
MW-9D	1320	3.82	--	28.45	21.0
MW-20	1400	--	--	--	--
Eq Blk	1230	--	--	--	--

Note: Temperature, pH and Specific Conductance not required for purging by State approved CompQAP #920253G

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945

ENCO
Laboratories
DHRS Certification No. 83318, E83182

CLIENT : PDG Environmental of FL
ADDRESS: 4450 West Eau Gallie Blvd.
Suite 164, Perimeter Center
Melbourne, FL 32934-7277

REPORT # : OR9932
DATE SUBMITTED: March 24, 1995
DATE REPORTED : March 31, 1995

ATTENTION: Maryann Civil

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

Abandoned Diesel
Project #943802
03/23/95

#1 - Eq Blk 1230

#2 - MW-1 1250

#3 - MW-2 1345

#4 - MW-4 1335

#5 - MW-6 1240

#6 - MW-7 1355

#7 - MW-8 1305

#8 - MW-9D 1320

#9 - MW-20 1400

PROJECT MANAGER _____
Tracy A. Atkins

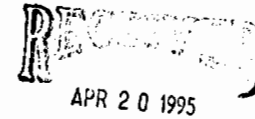
APR
D.E.P. Marathon, FL

RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	Eq Blk	MW-1	MW-2	units
Acenaphthene	10 U	10 U	10 U	µg/L
Acenaphthylene	10 U	10 U	10 U	µg/L
Anthracene	10 U	10 U	10 U	µg/L
Benzo (a) anthracene	10 U	10 U	10 U	µg/L
Benzo (a) pyrene	10 U	10 U	10 U	µg/L
Benzo (b) fluoranthene	10 U	10 U	10 U	µg/L
Benzo (g,h,i) perylene	10 U	10 U	10 U	µg/L
Benzo (k) fluoranthene	10 U	10 U	10 U	µg/L
Chrysene	10 U	10 U	10 U	µg/L
Dibenzo (ah) anthracene	10 U	10 U	10 U	µg/L
Fluoranthene	10 U	10 U	10 U	µg/L
Fluorene	10 U	10 U	10 U	µg/L
Indeno (123-cd) pyrene	10 U	10 U	10 U	µg/L
1-Methyl naphthalene	10 U	10 U	10 U	µg/L
2-Methyl naphthalene	10 U	10 U	10 U	µg/L
Naphthalene	10 U	10 U	10 U	µg/L
Phenanthrene	10 U	10 U	10 U	µg/L
Pyrene	10 U	10 U	10 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
2-Fluorobiphenyl	91	93	68	43-134
Date Analyzed	03/30/95	03/30/95	03/30/95	
Date Extracted	03/28/95	03/28/95	03/28/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

U = Analyte not detected to indicated level



D.E.P. Marathon, FL

ENCO LABORATORIES
REPORT # : OR9932
DATE REPORTED: March 31, 1995
REFERENCE : Abandoned Diesel
Project #943802

RESULTS OF ANALYSIS

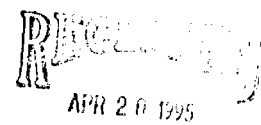
EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	Eq Blk	MW-1	MW-2	units
Total Petroleum Hydrocarbons	3 U	3 U	4.97	mg/L
Date Analyzed	03/30/95	03/30/95	03/30/95	

U = Analyte not detected to indicated level

RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	MW-4	MW-6	MW-7	units
Acenaphthene	10 U	10 U	10 U	µg/L
Acenaphthylene	10 U	10 U	10 U	µg/L
Anthracene	10 U	10 U	10 U	µg/L
Benzo (a) anthracene	10 U	10 U	10 U	µg/L
Benzo (a) pyrene	10 U	10 U	10 U	µg/L
Benzo (b) fluoranthene	10 U	10 U	10 U	µg/L
Benzo (g,h,i) perylene	10 U	10 U	10 U	µg/L
Benzo (k) fluoranthene	10 U	10 U	10 U	µg/L
Chrysene	10 U	10 U	10 U	µg/L
Dibenzo (ah) anthracene	10 U	10 U	10 U	µg/L
Fluoranthene	10 U	10 U	10 U	µg/L
Fluorene	10 U	10 U	10 U	µg/L
Indeno (123-cd) pyrene	10 U	10 U	10 U	µg/L
1-Methyl naphthalene	10 U	10 U	10 U	µg/L
2-Methyl naphthalene	10 U	10 U	10 U	µg/L
Naphthalene	10 U	10 U	10 U	µg/L
Phenanthrene	10 U	10 U	10 U	µg/L
Pyrene	10 U	10 U	10 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
2-Fluorobiphenyl	80	71	105	43-134
Date Analyzed	03/30/95	03/30/95	03/30/95	
Date Extracted	03/28/95	03/28/95	03/28/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

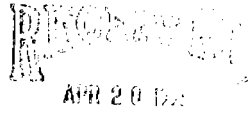


U = Analyte not detected to indicated level

RESULTS OF ANALYSIS

EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	MW-4	MW-6	MW-7	units
Total Petroleum Hydrocarbons	3 U	3 U	3 U	mg/L
Date Analyzed	03/30/95	03/30/95	03/30/95	

U = Analyte not detected to indicated level



RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	MW-8	MW-9D	MW-20	units
Acenaphthene	10 U	10 U	10 U	µg/L
Acenaphthylene	10 U	10 U	10 U	µg/L
Anthracene	10 U	10 U	10 U	µg/L
Benzo (a) anthracene	10 U	10 U	10 U	µg/L
Benzo (a) pyrene	10 U	10 U	10 U	µg/L
Benzo (b) fluoranthene	10 U	10 U	10 U	µg/L
Benzo (g,h,i) perylene	10 U	10 U	10 U	µg/L
Benzo (k) fluoranthene	10 U	10 U	10 U	µg/L
Chrysene	10 U	10 U	10 U	µg/L
Dibenzo (ah) anthracene	10 U	10 U	10 U	µg/L
Fluoranthene	10 U	10 U	10 U	µg/L
Fluorene	10 U	10 U	10 U	µg/L
Indeno (123-cd) pyrene	10 U	10 U	10 U	µg/L
1-Methyl naphthalene	10 U	10 U	10 U	µg/L
2-Methyl naphthalene	10 U	10 U	10 U	µg/L
Naphthalene	10 U	10 U	10 U	µg/L
Phenanthrene	10 U	10 U	10 U	µg/L
Pyrene	10 U	10 U	10 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
2-Fluorobiphenyl	85	80	111	43-134
Date Analyzed	03/30/95	03/30/95	03/30/95	
Date Extracted	03/28/95	03/28/95	03/28/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

U = Analyte not detected to indicated level

ENCO LABORATORIES
REPORT # : OR9932
DATE REPORTED: March 31, 1995
REFERENCE : Abandoned Diesel Project #943802

RESULTS OF ANALYSIS

EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	MW-8	MW-9D	MW-20	units
Total Petroleum Hydrocarbons	3 U	3 U	3 U	mg/L
Date Analyzed	03/30/95	03/30/95	03/30/95	

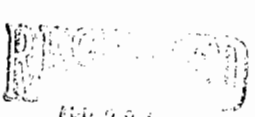
U = Analyte not detected to indicated level

RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	Laboratory Blank	units
Acenaphthene	10 U	µg/L
Acenaphthylene	10 U	µg/L
Anthracene	10 U	µg/L
Benzo (a) anthracene	10 U	µg/L
Benzo (a) pyrene	10 U	µg/L
Benzo (b) fluoranthene	10 U	µg/L
Benzo (g,h,i) perylene	10 U	µg/L
Benzo (k) fluoranthene	10 U	µg/L
Chrysene	10 U	µg/L
Dibenzo (ah) anthracene	10 U	µg/L
Fluoranthene	10 U	µg/L
Fluorene	10 U	µg/L
Indeno (123-cd) pyrene	10 U	µg/L
1-Methyl naphthalene	10 U	µg/L
2-Methyl naphthalene	10 U	µg/L
Naphthalene	10 U	µg/L
Phenanthrene	10 U	µg/L
Pyrene	10 U	µg/L
Surrogate:	**% Recov**	**Limits**
2-Fluorobiphenyl	98	43-134
Date Analyzed	03/30/95	
Date Extracted	03/28/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

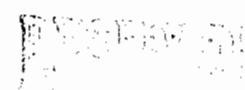
U = Analyte not detected to indicated level



RESULTS OF ANALYSIS

EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	Laboratory Blank	units
Total Petroleum Hydrocarbons	3 U	mg/L
Date Analyzed	03/30/95	

U = Analyte not detected to indicated level



QUALITY CONTROL DATA

Parameter	% Recovery MS/MSD/LCS	% Recovery Limits	RPD	RPD Limit
EPA 610				
2-Methylnaphthalene	74/ 95/ 84	54-129	25	27
1-Methylnaphthalene	90/114/102	26-136	24	40
Acenaphthylene	93/115/104	40-134	21	34
Fluorene	93/110/106	60-136	17	22
Pyrene	97/120/114	40-139	21	43
EPA 418.1				
Total Petroleum Hydrocarbons	70/ 75/ 86	65-113	7	12

LABORATORY MANAGER David J. Vesey

Environmental Conservation Laboratories Comprehensive QA Plan #880817G

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

ENCO Laboratories

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 · Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 · Fax (407) 850-6945

Page _____ of _____

CHAIN OF CUSTODY RECORD

CLIENT NAME: PDG ENVIRONMENTAL
PROJECT MANAGER: MARY ANN CIVIL
PROJECT NUMBER: 943802
PROJECT NAME: ABANDONED DIESEL
SAMPLER'S SIGNATURE: [signature]

STATION NO.	DATE	TIME	COMPOSITE	GRAB	STATION LOCATION	NO. OF CONTAINERS	610	418.1	REMARKS
EQBLK	3-23-95	1230		X		2	X	X	DI
MW1	3-23-95	1250		X		2	X	X	
MW2	3-23-95	1345		X		2	X	X	
MW4	3-23-95	1335		X		2	X	X	
MW6	3-23-95	1240		X		2	X	X	
MW7	3-23-95	1355		X		2	X	X	
MW8	3-23-95	1305		X		2	X	X	
MW9D	3-23-95	1320		X		2	X	X	
MW20	3-23-95	1400		X		2	X	X	

RECEIVED
APR 20 1995
D.E.P. Marathon, FL

RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	REMARKS
[signature]	3/21/95 12:15pm	[signature]	[signature]	3-23-95 1500	OR9932
SAMPLE KIT PREPARED BY: ☒ ORLANDO ☐ JACKSONVILLE	DATE/TIME	RECEIVED BY	RECEIVED FOR LABORATORY BY:	☐ ORL ☐ JAX	
RELINQUISHED BY	DATE/TIME	RECEIVED BY		DATE/TIME 8:55AM 3-24-95	

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

July 27, 1995

Bureau of Waste Cleanup

AUG 2 1995

Engineering Support Section

CERTIFIED MAIL NO. P 328 145 224
RETURN RECEIPT REQUESTED

Leo Carey, General Manager
City Electric System
Post Office Box 6100
Key West, Florida 33041

Re: Monroe County - TK
City Electric System
Abandoned Diesel Plant
DEP Facility No. 449101950

Dear Mr. Carey :

The Department has reviewed the Site Rehabilitation Completion Report (SRCR) dated April 17, 1995 for the referenced site, and has determined that this site has been rehabilitated in accordance with Chapter 62-770, Florida Administrative Code (F.A.C.). Documentation and supporting data included in the completion report, and reports submitted during a monitoring period, pursuant to Section 62-770.660, F.A.C., demonstrate that both the degree and extent of remedial action was adequate: contaminants either meet the cleanup target concentrations set forth in F.A.C. Rule 62-770.730(5)(a) or within reason and for practical purposes, have asymptotically leveled off at concentrations which approach the targets or are acceptable to the Department, pursuant to F.A.C. Rule 62-770.730(7). The Department is therefore reasonably assured that contamination concentrations will remain in check at the site. The Site Rehabilitation Completion Report is approved, and a Site Rehabilitation Completion Order is hereby issued. The SRCR is hereby incorporated by reference in this Order. Except as set forth below, you are released from any further obligation to conduct site rehabilitation at this site.

In the event contamination concentrations increase significantly from the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Department may require site rehabilitation in order to reduce contaminant concentrations to the levels approved through review of the SRCR or otherwise allowed by Chapter 62-770, F.A.C.

Continued.....

Additionally, you are required to properly abandon all monitoring wells except compliance wells required by Chapter 62-761, F.A.C., for release detection. The wells must be abandoned in accordance with the requirements of F.A.C. Rule 62-532.500(4).

Persons whose substantial interests are affected by this Site Rehabilitation Completion Order have the right to challenge the Department's decision. Such a challenge may include filing a petition for an administrative determination (hearing) as described in the following paragraphs. However, pursuant to Chapter 62-103, F.A.C., you may request an extension of time to file the petition. All requests for extensions of time or petitions for administrative determinations must be filed directly with the Department's Office of General Counsel at the address given below within twenty-one (21) days of receipt of this notice (do not send them to the Bureau of Waste Cleanup).

Notwithstanding the above, a person whose substantial interests are affected by this Site Rehabilitation Completion Order may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within twenty-one (21) days of receipt of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the Department file number (DEP facility number), and the name and address of the facility;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by each petitioner, if any;
(e) A statement of facts which each petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by each petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

Continued.....

This Site Rehabilitation Completion Order is final and effective on the date of receipt of this Order unless a petition (or time extension) is filed in accordance with the preceding paragraphs. Upon the timely filing of the petition, this Order will not be effective until further order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be file within thirty (30) days from the date the Final Order is filed with the clerk of the Department.

The DEP Facility Number for this site is 449101950. Please use this identification on all future correspondence with the Department.

Any questions you may have on the technical aspects of this Approval Order should be directed to Bill Neimes at (904) 488-3935. Contact with the above named persons does not constitute a petition for administrative determination.

Sincerely,

P J Ware

Peter J. Ware
Director of
District Management

PJW/LLG/DPG
cc: Phil Barbaccia, DEP Ft. Myers
Bill Neimes, DEP Tallahassee
David P. Grabka, DEP Marathon
Maryann T. Civil, PDG

Final

SITE INSPECTION REPORT
KEY WEST GAS AND ELECTRIC CO.
KEY WEST, MONROE COUNTY, FLORIDA
EPA ID. No. FLN000410751
FDEP Comet Site ID #303264

Investigation Conducted Jointly By:

Florida Department of Environmental Protection **Division of Waste Management** **Bureau of Waste Clean-up** **Program and Technical Support Section** **Jim McCarthy, PG I** **Project Manager**	**Environmental Protection Agency** **Region 4** **Science and Ecosystem Support Division** **Athens, Georgia** **Tim Slagle Project Manager** **Roger Carlton Co-Project Manager**

August 16, 2012

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Key West Gas and Electric Co.
Key West, Monroe County, Florida
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Key West Gas and Electric Co.
Key West, Monroe County, Florida
Site Inspection Report

1.0 Introduction

This Site Inspection (SI) report for the Key West Gas and Electric Co. has been prepared by the Florida Department of Environmental Protection (FDEP) Program and Technical Support Section (PTSS). The SI work for this site was conducted pursuant to the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 United States Code (USC) 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Public Law 99-499, and Florida Statutes (FS), Chapter 403. This report was developed, based on an initial Pre-CERCLIS Screening Assessment (PSA), dated January 7, 2011 and an Abbreviated Preliminary Assessment (APA), dated October 31, 2011. The field sampling investigation was conducted the week of February 6-10, 2012 for this SI. FDEP PTSS also consulted with the FDEP South District, regarding past activities at this site. The purpose of the SI is to determine whether this site warrants further CERCLA Superfund action. SI activities included:

- Collecting environmental samples
- Interviewing the property owner and business manager,
- Using health and safety instrumentation during field activities
- Photographing site features and environmental sampling locations
- Preparing sampling and chain of custody documentation
- Collecting and confirming target information to evaluate the site
- Preparing a draft Hazard Ranking System[1] (HRS) score using data gathered during the SI investigation.

2.0 Site Description and History

The former Key West Gas and Electric Co (KWGE) operated a manufactured gas plant (MGP) at this site during the middle to late 1880's. It is situated within Section 6, Township 68S, Range 25E, the site address includes eight adjacent parcels (Parcel #s 13830, 13860, 13870, 13900, 13910, 13950, 13960, 13970) located at the corner of Fort and Geraldine Streets, in Key West, Monroe County, Fl. These addresses include 101-111 Geraldine Street and 709 Fort Street. The approximate geographic coordinates of the site are 24°33'4.23" N latitude and 81°48'17.36" W. longitude [1]. The decimal geographic coordinates are 24.5512 and -81.8048. (Figures 1, 2, 2a & 2b) [1, 4].

On March 18, 1884, the Key West Gas Light Company constructed a manufactured gas plant (MGP), which reportedly used the Oil Gasification (OG) process. This is based on Sanborn Fire

[1] The HRS is the scoring system used by EPA's Superfund program to assess the relative threat, associated with the actual or potential releases of hazardous substances. The HRS is the primary screening tool for determining whether a site warrants further CERCLA Superfund action and is considered for inclusion on the National Priorities List (NPL). The HRS rule and Guidance manual can be accessed via this link http://www.epa.gov/superfund/sites/npl/hrsres/index.htm

Insurance maps from this time period, historical information concerning the City of Key West and the annual Browns Directory for American Gas Companies for the years 1887 and 1889. However, the gas furnished by the company's plant was deemed smoky with inferior lighting power (low BTU value) and the company did not thrive. John Jay Philbrick subsequently acquired controlling interest in the gas company's stock [5, 8, 10, 26, 40].

By 1887, the name of the Key West Gas Light Company had been changed to the Key West Gas and Electric Light Company [8, 23]. In 1889, Philbrick reportedly discontinued the manufacture of gas on the property formerly occupied by the old gas plant and erected an electrical lighting power house, using water-gas or oil-gas to generate electricity, in its place [5, 40]. The Browns Directory for American Gas Companies for the years 1891 and 1892 indicate that crude petroleum was used. Soon after 1890, Philbrick bought an existing ice manufacturing company—established in 1890 in the southeast quadrant of town (on County Road near George Street)—and moved its equipment to the new electrical plant for the purpose of manufacturing ice [5, 12, 40]. The Key West Gas and Electric Light Company ceased operations under that name prior to 1899, possibly during 1898 [24] (Figures 2a & 2b).

The Key West Electric Company was incorporated in 1898 and carried on general electric business at the subject site for the City of Key West [2, 7, 18, 40]. The electrical lighting power plant, also referred to as the Angela Street Diesel plant, included dynamo engines, boilers and oil tanks for the generation of electricity. In 1943, the City of Key West acquired the Key West Electric Company [6, 40]. The electric company was subsequently referred to as the City Electrical System (CES). Most of the Angela Street Diesel plant operations ceased by the late 1960's. However, a high speed diesel generator, located just outside the plant building, operated on-site till the 1970's. The diesel engines were fueled by four diesel fuel ASTs. Tank 1 (27,000 gallon capacity) and Tank 2 (25,000 gallons) were situated in the northwest corner of the site. They were constructed of steel and concrete, respectively. A containment wall surrounded both these tanks. Portions of Tank 2 were below grade. Tank 3 (12,000 gallons), a steel tank, was located near Tanks 1 & 2 in the northern part of the site. Tank 4 (500 gallons) was situated just south of Tank 3. However, based on Sanborn Insurance maps, prior to 1912 and before 1926, six 25,000-gallon capacity crude oil tanks were located along the eastern edge of the site adjacent to Geraldine Street. The fuel from the tanks was subsequently piped into Building via underground piping. A cement groundwater pit, approximately 20 feet deep, was located in the central part of the site near the Plant building. The pit was used for cooling water for the diesel generators. In 2002, the name of the company was changed to Keys Energy Services (KEYS). The former Angela Street Diesel plant building is currently abandoned and in disrepair. The actual area of the former MGP operations is now an electrical substation for KEYS [10, 11, 40, 49].
The City of Key West is the current owner of the subject property. Portions of the site are now occupied by Keys Energy Services (KEYS), the present provider of electricity for Key West [3, 4,

40]. The old abandoned electrical plant occupies the southernmost parcels of the site (Parcels 13950, 13960 & 13970). It is a two story brick building and is in disrepair. The dynamo engines, which utilized diesel fuel, are still visible inside the old plant building. The KEYS substation occupies parcels 13830, 13870 and 13910). The substation consists of transformers, two brick one story buildings, and a concrete block building. One of the brick buildings appears to have been a blacksmith shop. The brick buildings are currently used as a storage shed and machine shop. The

concrete block building serves as the control building. All the buildings in the substation area were built after the operation of the MGP. No remnants of the former MGP structures (Retort & Holder tank) were found in the substation area. The holder tank was located in the area of the transformers. A common area, maintained by KEYS, exists outside the substation. A large concrete pad, associated with a former above ground storage tank (AST), occupies the common area adjacent to the old plant building. The site is located within the area of the historic Bahama Village Community Redevelopment Area (CRA) and is located adjacent to the Naval Air Station Key West – Truman Annex [33, 47, 49] (Appendix A).

Operation of the subject MGP predated environmental regulatory authority [5, 14 & 15]. During 9/93, a CERCLA Site Inspection was conducted on property formerly occupied by the Key West Gasification Plant on Catherine Street. However, the latter plant is unrelated to the subject MGP [4, 5, 11, 19 & 25].

2.1 Previous Site Contamination Information

Previous investigations involved contamination assessment activities related to the abandoned Diesel Plant and its fuel storage and distribution system. These activities, conducted from 1991 to 1995, were conducted and monitored under the State of Florida Petroleum Cleanup Programs (FDEP Facility No. 449101950). In July 1995, following successful completion of these activities, a Site Rehabilitation Completion Order (SRCO) was issued by FDEP [59]. The activities included:

- Petroleum Above Ground Storage Tank Removal (Tanks 1-4)
- Tank Content Removal (Diesel fuel and residual petroleum sludge)
- Groundwater concrete Pit abandonment and sealing
- Free-product removal
- Groundwater monitoring via monitor wells
- Soil contamination assessment
- Contaminated soil excavation and removal (near MW-7)
-

However, it should be noted that no assessment activities, directed specifically to the MGP, were conducted. A comparison of the petroleum program related sample locations to the CERCLA sample locations is presented in Figure 4. A detailed summary of the petroleum contamination assessment and cleanup activities is presented in Appendix E of this report.

On April 27, 1992, as part of FDEP search of MGPs in Florida, Metcalf and Eddy provided information regarding MGPs in the State of Florida. One of the MGPs was the KWGE site in Key West [12, 13].

On January 7, 2011, FDEP completed a Pre-CERCLIS Screening Assessment (PSA) on the KWGE site. The PSA documented the site history, potential contaminants of concern and evaluated potential receptors. The PSA noted possible concerns to surface water and sensitive environments from MGP wastes as well as possible soil contamination both on and immediately off-site. Based on these concerns, the PSA recommended a Pre-CERCLIS Screening Assessment with Sampling (PSAWS) [60].

On March 11, 2011, FDEP notified the City of Key West of the PSA and its intent to conduct contamination assessment activities at the site under the CERCLA Superfund program [61] On March 29, 2011, the City of Key West's attorney sent a letter to FDEP requesting a copy of the PSA report and provided a copy of the SRCO regarding the petroleum cleanup at the Abandoned Angela Street Diesel Electric Plant [62]. On April 11, 2011, FDEP notified the City of Key West's attorney that its CERCLA assessment pertained to the former MGP and not the abandoned diesel plant. FDEP also noted that, despite the previous remediation activities, remnant petroleum contamination could not be discounted but would be exempt from CERCLA Superfund action under the CERCLA petroleum exclusion rule (Section 101 [14]) [63]. On October 31, 2011, as part of an upgrade from PSAWS to SI evaluation, FDEP completed an Abbreviated Preliminary Assessment (APA) [64]. The SI QAPP Work plan for the site was finalized January 27, 2012 [65].

2.2 Historical Sanborn Insurance Map and Aerial Photography Review

FDEP conducted a review of the years 1892, 1899, 1912, 1926 and 1948 Sanborn Insurance Maps of the site area. The 1889 Sanborn Insurance map did not include the site. In addition, the aerial photographs for 1959, 1963, 1971, 1985, 1994 and 2009 were reviewed [2, 10, 11, 35] (Figure 2a; Appendix D).

- 1892 Sanborn, The actual MGP consisted of a Retort Room and Gas Holder. The electrical lighting power house, which consisted of dynamo engines and boilers, occupied the southwestern and southern parts of the site. A number of unidentified buildings were associated with the operation. Government Slip, a water body, is visible across Fort Street southwest of the site in this and the 1889 Index Key map. Standard Oil Co and tanks visible on east side of Geraldine Lane across street from former MGP.

- 1899 Sanborn, After operation of the MGP, the Gas Holder was being used as a cistern. The Retort is still present. Standard Oil Co and tanks still visible on east side of Geraldine Lane across street from former MGP.

- 1912 Sanborn, The Retort is gone. The electrical lighting power house still present. Six 25,000-gallon crude oil above ground storage tanks (ASTs) are located along the eastern edge of the site near Geraldine Lane. Two elevated 500-gallon ASTs are situated adjacent to the electrical lighting power house. Oil House situated just north of the two 500-gallon ASTs. Former Gas Holder apparently used as Stock Room. A Machine Shop and Blacksmith Shop located in northern and central parts of site, respectively. Government Slip, a water body, has been filled in and is now part of the Government Reservation. Standard Oil Co and tanks still visible on east side of Geraldine Lane across street from former MGP.

- 1926 Sanborn, Similar to 1912. A new rectangular cistern replaces former Gas Holder tank and Stock Room. Standard Oil Co and tanks gone from east side of Geraldine Lane across street from former MGP.

- 1948 Sanborn, The six 25,000-gallon crude oil ASTs formerly located along the eastern edge of the site near Geraldine Lane are gone. However, two Oil Tanks (concrete [square]

& iron [round]), surrounded by 4-foot concrete wall, are situated in the northwest part of the site. Oil House and Machine Shop have been converted to storage. Cistern is still present. The electrical lighting power house building still present. Residential homes situated on former Standard Oil Co.

- 1959 Aerial, The two Oil Tanks (concrete & iron-Tanks 1 & 2) are visible in the northwest part of the site. Storage Buildings, Blacksmith Shop and Cistern still visible. The electrical lighting power house building still present.

- 1963 and 1971 Aerials, Similar to 1959 aerial.

- 1985 Aerial, Similar to 1971 aerial. Poor resolution. Part of site obscured in deep shadow from the electrical lighting power house building. Some structures visible in the future area of the transformers and power grid area.

- 1994 Aerial, Electrical Substation structures visible. Portions of the two elevated 500-gallon ASTs visible on north side of plant building. The two Oil Tanks (concrete & iron-tanks 1 & 2) formerly located in the northwest part of site are gone.

- 2009 Aerial, Electrical Substation structures visible. Northern Storage Building and former Blacksmith Shop visible. Cistern gone. The electrical lighting power house building still present.

2.3 Typical MGP Operations and Waste Characteristics

OG MGPs typically produced a relatively high quality of gas (approximately 1,000 BTU/Cu. Ft) that was rich in methane, ethane, hydrogen and light hydrocarbons. This gas was produced by the pyrolysis of naphtha and heavier petroleum oils. Feedstocks at OG MGPs included kerosene or diesel oil, including Bunker C fuel oil. A single shell or double shell apparatus, utilizing checkerboard brick, was commonly utilized. The production of the gas involved several cycles which included the injection of air, heating with air and oil and injection of high pressure steam and oil. Following the steam purge, the gas was usually routed through iron oxide purifiers for the removal of hydrogen sulfide (H_2S). The gas was then placed into a Gas Holder for distribution to area customers. Toxic, persistent and bio-accumulative wastes, including tars, lamp black, polycyclic aromatic hydrocarbons (PAHs), benzene, metals, aqueous ammoniacal liquor and hydrogen cyanide, are common contaminants at MGP sites. Based on the literature, OG waste types typically included Lamp Black, Iron Oxide Box wastes with ferri-ferrocyanides, sludges, tars, pitch and some ash. The ash often contained vanadium and nickel compounds. Tar yields at OG MGPs ranged from 2 gallons per thousand cubic feet (gal/MCF) for light oil feedstocks to over 4 gal/MCF for heavy oils. MGP wastes were routinely disposed at or near such plants as a matter of convenience [26, 33, 34].

2.4 Site Ownership

The City of Key West currently owns all the parcels of the site. A KEY is owned by the City of Key West and operates an electrical substation at the site at parcels 13910, 13870 & 13830. The KEYS administration offices are located at 1001 James Street, Key West, Florida [4, 40].


81°49'0"W
81°48'30"W
81°48'0"W
81°47'30"W
'N
'N
'N
'N
'N
1 Mile
Figure 1:
Key West Gas & Electric Company Site Vicinity Map
101-111Geraldine Sreet / 709 Fort Street
Key West, Monroe County, Florida 33040
(Aerial Imagery 2004-2009)
Prepared by: B.K. McClain Date: 12/8/2010
Key West Gas & Electric Company Site Location
Radius Buffer
0 750 1,500 3,000
Feet
N
W
E
S
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA

Figure 2:
Key West Gas & Electric Company Site Vicinity Map
101-111Geraldine Sreet / 709 Fort Street
Key West, Monroe County, Florida 33040
(2009 Aerial Imagery)
Prepared by: B.K. McClain Date: 12/8/2010

Key West Gas & Electric Company Site Location
Site Boundary
0 250 500 1,000 Feet

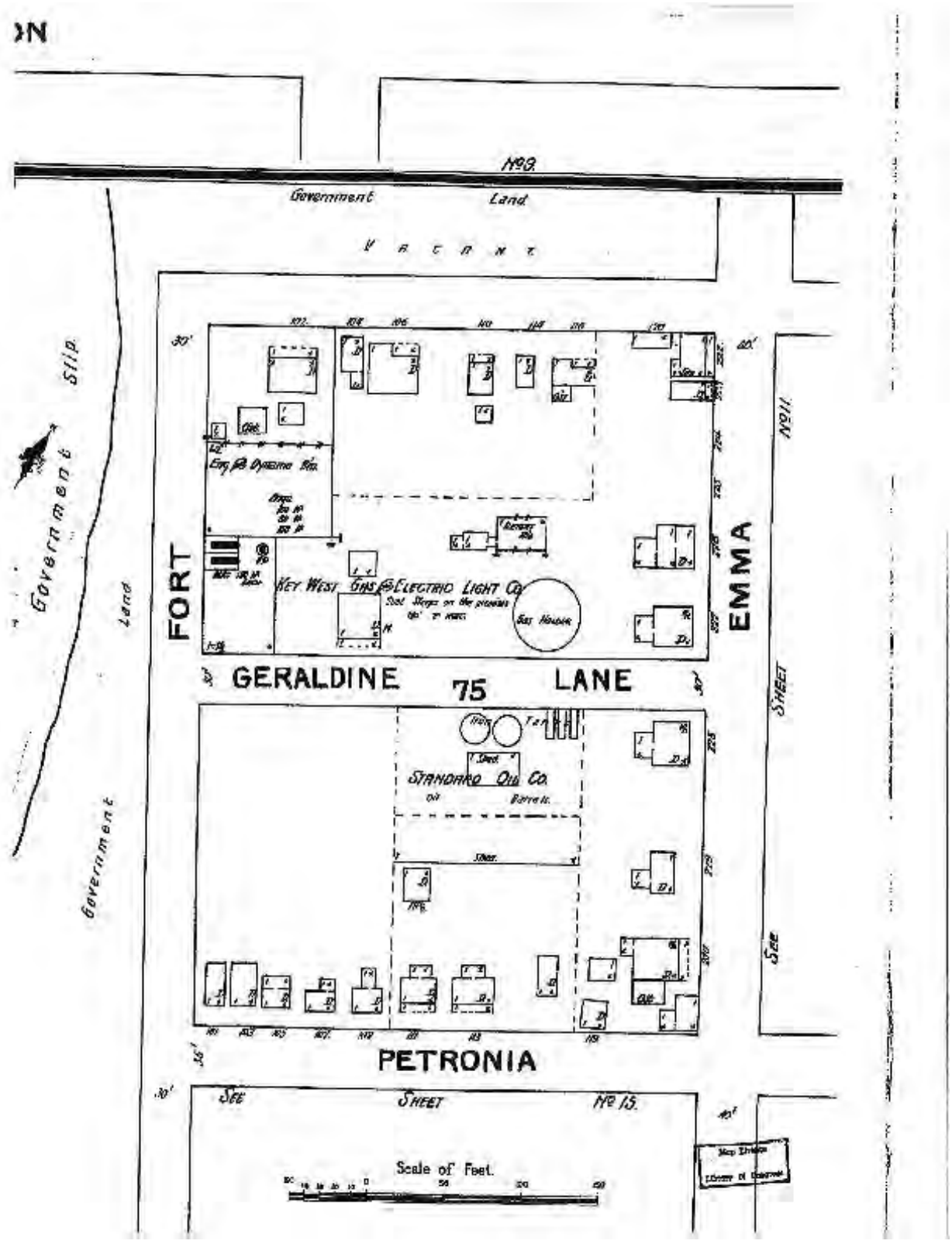

Figure 2a 1892 Sanborn Insurance map

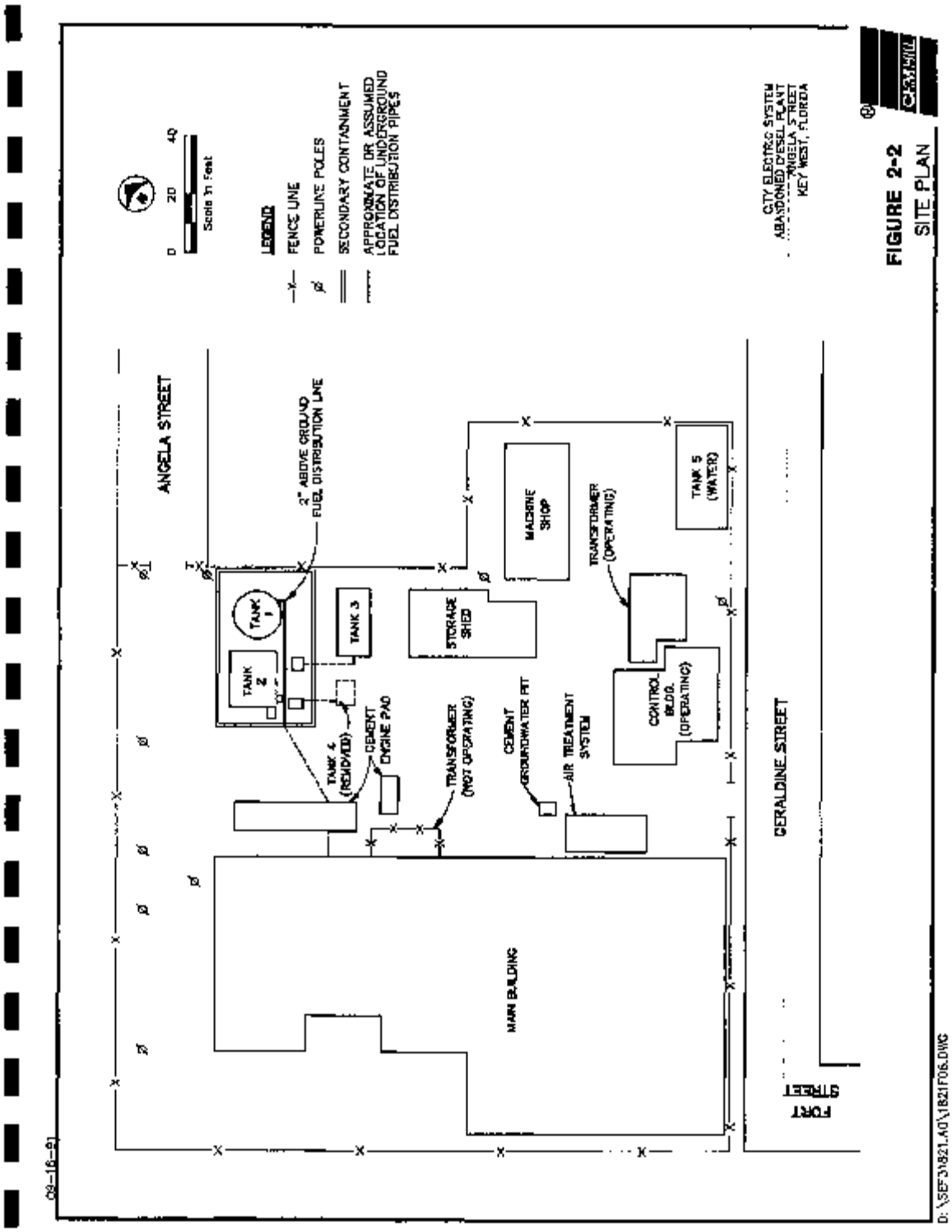

Figure 2b KEYS Substation Layout Circa early 1990s

3.0 Regional Geology and Hydrogeology

Key West is located in the Oolite Keys geomorphologic feature of the Southern or Distal Zone geomorphologic province. The lower Florida Keys are an extension of the same oolitic limestone lithology underlying Miami and much of southeastern Florida. The Keys represent coral reef colonies which built up during the Pleistocene Epoch as a result of fluctuations in sea level. The last major drop in sea level exposed the ancient reefs which make up to Keys today [20, 32, 36, 37].

The Pleistocene age deposits underlying the site include, in descending order, the Miami Limestone (Miami oolite) and the Key Largo Limestone. The Pleistocene deposits are underlain, in descending order, by the Hawthorn Group (Miocene age) and the Suwannee Limestone (Oligocene age) [20, 32, 36, 37].

The Miami Limestone (5 to 35 feet thick) is composed of white-cream to pale orange, crystalline, granular, and porous to cavernous oolitic limestone. The ooliths may be up to 2.0 mm in diameter. The existence and plenitude of corals and other marine fossils indicates deposition in a marine environment. The oolitic limestone is honeycombed with solution holes, giving it an extremely high permeability. Porosity generally increases with depth. The solution holes may connect with channels open to the ocean. This interconnection would allow for interchange of rainwater to the ocean and sea water into the oolitic limestone. The oolitic limestone in Key West extends to a depth of about 200 feet [20,32,36,37].

The coralline Key Largo Limestone underlies the Miami Limestone in the lower (oolite) keys. The Key Largo Limestone is a white to tan limestone, consisting of lime-sand, coral skeletal remains and invertebrate shells, marine plant and algal debris. The thickness of the Key Largo Limestone varies irregularly from 75 feet to over 200 feet [20, 32, 36, 37,38].

The Hawthorn Group includes the Arcadia and Peace River Formations. The Hawthorn Group consists primarily of interbedded carbonates (limestone, dolostone), quartz sands and clays. The Hawthorn is considered to be a confining unit and is approximately 900 feet thick in the Key West area. The Suwannee Limestone is composed of highly fossiliferous, cream colored limestone and is found approximately 1300 feet bls in the Key West area [20, 32, 36, 37].

The Miami and Key Largo Limestones together comprise the surficial aquifer system on the island. A freshwater lens exists on the western half of the island. No measurable fresh water lens exists in the eastern half of the island due to extensive areas of artificial fill. A fresh groundwater lens exists on top of the saltwater due to the density differences The lens exists under water-table conditions and is found between 5 to 8 feet bls in the site area. The water-table fluctuates and the shape of the lens changes due to tidal effects. Precipitation is the primary type of recharge to the fresh water lens. The lens is approximately 5 feet thick (less than 250 mg/L chloride) in the center of the island. The freshwater head is greater in the center of the island where land surface elevations are higher. Ground water moves from the center of to lens and discharges along beaches and salt ponds. Based on regional flow patterns, the surfical aquifer flow in the site area is to the southwest [20, 32, 36, 37].

The surficial aquifer system in Key West is generally not considered to be an adequate or reliable source of potable water. As stated earlier, due to density differences, a small freshwater lens floats on top the salt water. The freshwater lens on Key West has chloride concentrations varying from zero to 250 milligrams per liter [mg/l]. It is underlain by a number of successively deeper transition zones. These transition zones become progressively more saline with depth and include a very slightly saline water zone (250-400 mg/l), a slightly saline water zone (400-1,500 mg/l), a moderately saline water zone (1,500-5,000 mg/l) and very saline water zone (5,000-19,000 mg/l). The water table has been known to fluctuate from 0.8 feet above mean sea level [MSL] to 2.4 feet above MSL near the center of Old Town. Tidal effects greatly influence the depth to water table and configuration of the freshwater lens. The freshwater lens averages about 5 feet in thickness in the center of the western half (Old Town) of Key West. The thickness and amount of the freshwater is dependent on precipitation, discharge to the ocean, evapotranspiration and withdrawal. It is underlain by a freshwater-saltwater mixture. This mixture extends to a depth of about 40 feet deep in the center of the island. The salt-water interface (19,000 mg/l chloride) exists around this depth. A number of private wells may tap the fresh-water lens in the western half of the island. Most of them are used primarily for irrigation purposes. However, Florida Keys Aqueduct Authority (FKAA) and Monroe County Health Department (MCHD) report that an undetermined number of residents on the island refuse to hookup to the FKAA water lines and use private wells for potable water [16, 18, 19, 32, 34, 35, 36, 37, 49]

The Suwannee Limestone forms the upper part of the Floridan aquifer system in south Florida. This aquifer exists under artesian conditions. Water in this aquifer is saline and unsuitable as a potable water source [32, 33, 34, 43, 44].

3.1 Site Specific Geology and Hydrogeology

A number of borings were conducted as part of the Key West Gas and Electric SI. Gravel and brown, fine sand were encountered in the shallow portion of the aquifer. Some of this shallow material appeared to be fill material. “Cap rock”, a local term, and tan limestone were encountered in a few of the borings between depths of 12 to 24 inches. Gray crushed limestone, fine sand and some oolitic limestone was encountered between the depths of 24 to 45 inches. However, in some places a light tan or brown sand was encountered at the same depth intervals. A USGS Core (MO-155) from the center of the island near White Street consisted of vary pale orange, oolitic limestone from land surface to a depth of 40 feet. Numerous vugs and caverns were found in the core. Abundant corals (*Monastrea sp*), worm borings and mollusks were observed in the lower portions of the core. The water table at the site was encountered between 3.7 and 4.5 below ground surface [32; Appendix B].

3.2 Climate

The climate of Key West is categorized as Tropical Savannah. The average temperatures at the Key West Weather Bureau weather station ranged from 89.5^{o} F in the summer (August) to 75.3^{o} F during the winter (January). The temperature rarely gets below 50^{o} F. The average annual rainfall in the area is 38.94 inches per year. The heaviest amount of rainfall (53%) occurs between May and October during the islands wet season. Numerous showers and summer thunderstorms account for most of the rainfall. Infrequent tropical storms and hurricanes, migrating from the Atlantic

Ocean and Florida Straits, also occur during this period. The 2-Year, 24 Hour rainfall value is approximately 5 inches [41, 42].

4.0 Potential Receptors

4.1 Groundwater Migration Pathway

The vast majority of Key West residents are provided drinking water by the Florida Keys Aqueduct Authority (FKAA). The water is drawn from a Florida City, Miami-Dade County well field. This well field is situated on the mainland more than 100 miles from Key West. The water is piped to Key West via a 130 mile long transmission main. This system supplies water to approximately 30,000 people in the Key West area. In addition, in the event of an emergency or pipeline disruption, the FKAA maintains two reverse-osmosis (RO) WTPs on Stock Island and Marathon, respectively. The two RO WTPs extract salt water and produce freshwater. The water for the Kermit H. Lewis RO facility on Stock Island RO is derived from two 24-inch "seawater wells", Well #1 & Well# 2, located adjacent to the plant on the southern part of Stock Island. These wells range in depth from 102 to 110 feet are located approximately 4.5 miles east-northeast of the site. The RO plants serve as an emergency source of 3 million gallons per day (MGD) of potable water to the middle and lower Keys [9, 43, 44]. No other community or non-community wells systems were identified within the 4-mile Target Distance Limit (TDL).

The FKAA and Monroe County Health Department have reported that a number of unpermitted private wells exist in Key West [32]. These wells tap the fresh-water lens present on the island. The aqueduct water is utilized for cooking, bathing, and drinking purposes. The private wells are generally used for flushing toilets, washing clothes and lawn irrigation. A FKAA official has reported that as many as 2,000 private wells exist in the Key West area. However, only a few of these wells are used for drinking water purposes. Based on this information, the groundwater migration pathway is not a major pathway of concern.
A summary of drinking water well systems within 4-miles of the site is presented in Table 1.

Table 1
Estimated Number of Potable Wells and Population Served
Key West Gas and Electric
Key West, Monroe, Florida
Surficial aquifer (AOC)
(# wells/Population served)

Well Type	0-1/4	1/4-1/2	1/2-1	1-2	2-3	3-4
FKAA[1]						
Community/non community	0/0	0/0	0/0	0/0	0/0	0/0
[2]Private	0/0	0/0	0/0	0/0	0/0	0/0
Totals	0/0	0/0	0/0	0/0	0/0	0/0

Total Estimated Population served by wells located within 4 miles = 0

Key:
AOC=Aquifer of Concern
TDL=Target Distance Limit
Footnotes:

[1] Key West residents and businesses are provided drinking water by the Florida Keys Aqueduct Authority (FKAA). The water is drawn from a Florida City, Miami-Dade County well field. This well field, which consists of ten Biscayne aquifer (60-80 feet deep) and four Floridan aquifer wells, is situated on the mainland more than 100 miles from Key West. In the event of an emergency or pipeline disruption, the FKAA maintains two reverse-osmosis (RO) WTPs on Stock Island and Marathon, respectively. The two RO WTPs extract salt water and produce freshwater. The water for the Kermit H. Lewis RO facility on Stock Island RO is derived from two 24-inch "seawater wells", Well #1 & Well# 2, located adjacent to the plant on the southern part of Stock Island. These wells range in depth from 102 to 110 feet.

[2] The FKAA and Monroe County Health Department have reported that a number of unpermitted private wells exist in Key West. These wells tap the fresh-water lens present on the island. A FKAA official has reported that as many as 2,000 private wells exist in the Key West area. However, only a few of these wells are used for drinking water purposes.

4.2 Surface Water Migration Pathway

This site is located approximately 8 feet above National Geodetic Vertical datum (NGVD) [1]. According to the FEMA floodplain map, the site area is located within the 100-year floodplain zone [27] (Figure 1). Based on field observations, it appears that the site slopes gently to the south and southeast (Appendix D). Storm water runoff from the site area is collected by a catch basin situated near the intersection of Geraldine Street and Fort Street. According to the City of Key West Storm water drainage map and conversations with the City of Key West Storm water division, water collected in this catch basin is routed south down Fort Street, through Navy property and discharges via a permitted outfall pipe situated 60 to 80 feet out into the Florida Straits. The distance from the catch basin to the end of the outfall pipe is approximately 2,250 feet [39] (Appendix D). Surrounding marine waters (≥ 34 ‰) [21] of the Gulf of Mexico and Florida Straits are unsuitable for potable use.

Recreational fisheries supported by the Gulf include red snapper, Florida pompano, snook, bluefish, permit, bonefish, great barracuda, and silver perch. An exclusively commercial fishery for white mullet has also been identified within the Gulf. Gulf species, exploited both as sports and commercial fisheries, include the stone crab; pink. brown and white shrimp; spiny lobster; king mackerel; Cero; mutton, gray, lane, and yellowtail snappers; red grouper; grunt; and Crevalle jack [22].

The off-shore waters are habitats for the Federally-designated endangered Green sea turtle (Chelonia mydas mydas), the Leatherback sea turtle (Dermochelys coriacea), Kemp's Ridley sea turtle (Lepidochelys kempii), the Hawksbill sea turtle (Eretmochelys imbricata) and West Indian manatee (Trichechus manatus latirostris). The Federally-designated threatened Atlantic Loggerhead sea turtle (Caretta caretta) has also been identified as an inhabitant of the Keys. In addition, the Key West National Wildlife Refuge borders the western end of Key West [28, 29, 30, 31, 45, 48].

Based on the available information, prior to the SI, the surface water migration pathway was deemed to be the major pathway of concern at this time

4.3 Soil Exposure and Air Migration Pathways

The site now consists of the abandoned Angela Street Diesel plant and the KEYS electrical substation. The site is surrounded by a maintained 6-foot, barbed wire top chain link fence. Site access is further restricted by a locking sliding gate. The substation is periodically maintained by KEYS employees. Residential properties bound the northern and northwestern parts of the site. No schools or day-care center were identified near the site [46, 60, 61]. Based on this information, the soil exposure and air migration pathways were not deemed to be a major concern.

5.0 Scope of Work and Methodology

Based on the available information and the findings of the PSA and the APA, the surface water migration pathway was identified as the primary pathway of concern. This assessment focused on 1). Obtaining on-site soil samples for laboratory analysis; 2). Installation of temporary monitor wells; 3). Collection of groundwater samples from the temporary monitor wells for laboratory analyses; 4). Collection of a sediment sample from the nearby storm drain for laboratory analysis and 5). Collection of sediment samples were from the Florida Straits adjacent to the Fort Street outfall for laboratory analysis. The purpose of sampling was to determine whether potentially contaminated areas of the site were impacting soils and/or surface water. However, groundwater samples were also collected to assess possible impacts to the shallow fresh water lens. The work for the assessment was jointly conducted by the FDEP PTSS in Tallahassee and the EPA Region 4 Science and Ecosystem Support Division (SESD) personnel out of Athens, Georgia. FDEP PTSS, EPA Region 4 and EPA Region 4 SESD mobilized to the site Tuesday February 7, 2012. The fieldwork for this investigation was completed Friday February 10, 2012.

FDEP and EPA work together. It is important to note that EPA is not a contractor responsible for a certain aspect of the job. FDEP and EPA work as a team with committed and shared responsibilities. As part of that committed and shared effort, SESD provided: 1) The necessary equipment and containers to collect the soil and groundwater samples. 2) A Health and Safety Plan

for the site. 3) A sample custodian to maintain the Sample Chain-of-Custody (SCRIBE); & 4) assistance with packaging and shipping samples to the EPA SESD and/or Contract Laboratory Program (CLP) Laboratories for subsequent sample analysis. FDEP secured site access, completed a site sampling Plan and Quality Assurance Project Plan (QAPP), cleared underground utilities, provided photo documentation resources and assisted in the field sampling activities. FDEP assessed the data and completed a SI report. All sampling and fieldwork activities were conducted in accordance with FDEP's SOPs and US-EPA, Region-4, Science and Ecosystem Support Division, Field Branches Quality System and Technical Procedures.

- The members of the site field sampling team included:

KWGE Site Planning and Sampling Team		
Name	**Organization**	**Responsibilities**
Jim McCarthy, PG	FDEP/BWC/PTSS/CERCLA	FDEP Site Project Mgr/Sampler
Barbara Alfano	EPA Region 4	EPA Florida Project Mgr
Roger Carlton	EPA Region 4 SESD	SESD Project Mgr
Linda George	EPA Region 4 SESD	Safety Officer/Sampler
Brian Striggow	EPA Region 4 SESD	Geoprobe Operator
Tim Slaggle	EPA Region 4 SESD	SESD Field Project Leader
Fred Sloan	EPA Region 4 SESD	Sample Custodian
Jerry Ackerman	EPA Region 4 SESD	Geoprobe Assistant/Sampler
Phyllis Meyer	EPA Region 4 SESD	Geoprobe Assistant/Sampler
Don Forston	ESAT-ILS	Sampler/Air Monitoring

A4 Scientific Inc. of The Woodlands, Texas was responsible for the metals and cyanide analyses. KAP Technologies, Inc, also of The Woodlands, Texas was responsible for the semi-volatile analyses and the EPA Region 4 SESD Analytical Support Branch (ASB) in Athens, Georgia was responsible for the volatile organic analyses (Appendix C).

5.1 Soil Sampling

Seven surface (0-2 feet BLS) and six subsurface (2-4 feet BLS) soil samples, including background samples (KGE001SF/SB), were collected and analyzed for VOCs, SVOCs, RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium & silver) and Cyanide (Figure 3). A surface and subsurface soil sample was collected at each boring location. The one exception was the subsurface soil sample for KGE002 which was not collected due to boring refusal. The presence of the substation transformers precluded detailed sampling of the former Gas Holder location. A number of the soil samples were dedicated to the former Retort location. Due to the shallow depth to bedrock (Miami Limestone), a Geoprobe® Macrocore system with PVC liners was employed to collect the soil samples. The contents of the core were transferred
To a decontaminated Pyrex glass pan, the soil was thoroughly mixed to form a homogenous sample, prior to filling the appropriate sample containers. The aliquots for VOC analyses were collected directly from the core using 5 gram o2si Smart Solutions VOC sampling kit in accordance with EPA 5035 methodology. The mouth of the o2si Smart Solutions sampler was placed into the 40ml VOA vial containing the appropriate amount of distilled water or preservative

(methanol). Due to the remote location of the site, the vials were subsequently placed into a small dorm sized freezer and frozen to extend the normal 48 hour hold time. A breakdown of the sampling location rationale is presented in Table 2. The sampling locations are shown on Figure 3.

5.2 Temporary Monitor Well Installation

Six temporary monitor wells were installed during the investigation using a Geoprobe® 6620DT track mounted, direct-push rig and a Geoprobe® Screen Point (SPT) 15 groundwater sampler. The temporary monitor well planned for KGE002 was not collected due to boring refusal. It was replaced with a temporary well at the KGE007 location. With the exception of the KGE002 location, the six temporary monitor wells were collocated with the same numbered soil sample locations (i.e. KGE-001SF/SB and KGE-001GW). The SPT 15 sampler consists of a drive point, screen, sampler sheath and drive head. The sampler is typically pushed using a 1.25-inch outside diameter (OD) steel rod. The sampler (i.e. well screen) consists of a wire-wound, stainless steel screen with a 1.0-inch OD and a 0.010-inch screen slot. The minimum inside diameter (ID) of the screen is 0.65 inches. As much as 44 inches of screen can be exposed to the formation for sampling. The stainless steel screen, protected in a steel sheath (1.5 inches OD), is driven to the desired depth for deployment and sampling. The rods are then pulled up about 4 feet, exposing the well screen. A knockout grout plug is provided at the end of the screen for grouting purposes. The temporary wells were installed to a depth of between 12 to 14 feet. At the conclusion of the investigation, the down-hole well components were withdrawn and the boreholes backfilled from bottom to top, with appropriate grout material. The rationale for each temporary monitor well location is explained in Table 2. The general areas of the temporary well locations are shown on Figure 3.

5.3 Groundwater Sampling

Groundwater samples were collected from each of the six temporary monitor wells using low flow/low stress sampling techniques in accordance with FDEP's SOP and the EPA Region 4 Field Branches Quality System and Technical Procedures. Groundwater samples collected from the temporary wells were analyzed for VOCs, SVOCs, RCRA 8 Metals and Cyanide.

Prior to sampling, each well was purged with a variable speed, Geotech Geopump2 peristaltic pump. At the initiation of purging, an appropriate length of pre-cleaned disposable Teflon® tubing was slowly lowered to the bottom of the well screen. A new piece of Teflon® tubing was used at each well location. The purpose of lowering the tubing to the bottom of the screen is to achieve low turbidity conditions by removing any formation material, which may have entered the well screen during installation. Upon the removal of this material, the tubing was slowly raised through the water column to near the top of the column. The pump speed was adjusted, to match the draw down in the well. Field parameters (including temperature, pH, specific conductance, and turbidity) were measured and recorded in a bound logbook. The goal of purging water in a temporary well is to reduce turbidity and remove the water in the area directly impacted by the temporary well installation. When the field parameters stabilized and water turbidity was less than 10 Nephelometric Turbidity Units (NTU), the groundwater sample is typically collected. Stabilization is achieved when the pH remains constant (within 0.1 Standard Unit), specific

conductivity varies no more than 10% and temperature is constant for at least three consecutive readings. If for any reason, parameters did not stabilize or turbidity of less than 10 NTU could not be achieved, it was at the discretion of the EPA SESD and FDEP project leaders whether to sample or continue the purging process. It should be noted that despite stabilization of the other parameters and additional purging, two of the final turbidity values were greater than 10 NTU. The VOC samples for laboratory analysis were collected with as little agitation or disturbance as possible.

5.4 Sediment Sampling

Five sediment samples were collected to assess possible impacts to surface water. The sediment samples were analyzed for VOCs, SVOCs, RCRA 8 Metals and Cyanide One of the sediment samples (KGES005SD) was collected from the storm drain located near the intersection of Geraldine and Fort Streets. Three of the sediment samples (KGES002SD to KGES004SD) were collected from the Florida Straits adjacent to the Fort Street outfall pipe. A background sediment sample (KGES001SD) was collected from the Florida Straits further to the northeast. The sediment sample from the storm drain was collected using a decontaminated stainless steel ice scoop attached to a piece of metal conduit pipe. A Zodiac inflatable dinghy, procured from nearby EPA Ocean Survey Vessel Bold, was utilized to collect the sediment samples from the Florida Straits. The sediment samples from the Florida Straits were collected using a decontaminated Ponar dredge. The contents of the sampling device were transferred to a decontaminated Pyrex glass pan. The soil was thoroughly mixed to form a homogenous sample, prior to filling the appropriate sample containers. The aliquots for VOC analyses were collected directly from the sampling device using a 5 gram o2si Smart Solutions VOC sampling kit in accordance with EPA 5035 methodology. The mouth of the o2si Smart Solutions sampler was placed into the 40ml VOA vial containing the appropriate amount of distilled water or preservative (methanol). Due to the remote location of the site, the vials were subsequently placed into a small freezer and frozen to extend the normal 48 hour hold time. A breakdown of the sampling location rationale is presented in Table 2. The sampling locations are shown on Figure 5.


Emma Street
Emma Street
KGE001SF/SB/GW
Retort
KGE003SF/SB/GW
KGE007SF/SB/GW
KGE002SF
KGE005GW
KGE004SF/SB/GW
KGE005SF/SB
KGE006SF/SB/GW
Gas Holder
Geraldine Street
Storm Drain
KGE005SD
Underground Storm Line
Fort Street
Petronia Street
Key West Gas & Electric Company Site
Figure 3: EPA SESD Sample Location Map
101-111Geraldine Sreet / 709 Fort Street
Key West, Monroe County, Florida 33040
(2007 Aerial Imagery)
Prepared by: B.K. McClain Date: 4/30/2012
Ground Water Sample Location
Surface and Soil Boring Sample Location
Storm Drain Sample Location
Underground Storm Drain Line
Key West Gas & Electric Site Boundary
0 25 50 100
Feet
N
W
E
S
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA


MW-1
KGE001SF/SB/GW
SB-21
SB-19
SB-1
SB-24
SB-18
SB-22
SB-13
SB-14
MW-2
SB-6
SB-20
SB-2
MW-10D
SB-25
Retort
SB-23
SB-7
MW-3
SB-15
SB-4
MW-4
SB-17
SB-5
SB-3
KGE003SF/SB/GW
KGE007SF/SB/GW
SB-12
KGE004SF/SB/GW
MW-6
SB-10
MW-11
KGE002SF
SB-26
SB-28
MW-7
KGE005GW
KGE005SF/SB
SB-11
SB-16
MW-9D
SB-8
KGE006SF/SB/GW
MW-5
SB-27
Gas Holder
MW-8
MW-12
SB-9
Geraldine Street
Storm Drain
KGE005SD
Fort Street
Underground Storm Line
Key West Gas & Electric Company Site
Figure 4: EPA SESD Sample Location Map
101-111Geraldine Sreet / 709 Fort Street
Key West, Monroe County, Florida 33040
(2007 Aerial Imagery)
Prepared by: B.K. McClain Date: 4/30/2012
CERCLA Ground Water Sample Location
CERCLA Surface and Soil Boring Sample Location
Storm Drain Sample Location
Petroleum Monitor Well Location
Petroleum Soil Boring Location
Underground Storm Drain Line
Key West Gas & Electric Site Boundary
0 20 40 80
Feet
N
W
E
S
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA


81°48'0"W
'N
Angela Street
Geraldine Street
Petronia Street
Fort Street
Olivia Street
Emma Street
Thomas Street
Whitehead Street
Duval Street
Truman Avenue
Julia Street
Virginia Street
Amelia Street
United Street
KGE005SD
KGE001SD
KGE004SD
KGE003SD
KGE002SD
Key West Gas & Electric Company Site
Figure 5: EPA SESD Offsite Sampling Location Map
101-111Geraldine Sreet / 709 Fort Street
Key West, Monroe County, Florida 33040
(2007 Aerial Imagery)
Prepared by: B.K. McClain Date: 4/30/2012
Sediment Sample Location
Storm Drain Sediment Sample Location
Underground Storm Drain Line
0 150 300 600
Feet
N
W
E
S
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA

Table 2
KWGE Sample Identification and Rationale

Surface "SF" 0-2' & Subsurface "SB" 2'-4'				
Station ID	**Sample ID**	**Rationale**	**Sample Media**	**Analysis**
KGE001	KGE001SF	Background/ Control	SOIL	VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGE001SB			
KGE002	KGE002SF	Potentially Impacted/Affected Area		VOCs, SVOCs,8 RCRA Metals & Cyanide
KGE003	KGE003SF			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGES003SB			
KGE004 Duplicate MS/MSD	KGE004SF			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGE604SF			
	KGE004SB			
KGE005	KGE005SF			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGE005SB			
KGE006	KGE006SF			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGE006SB			
KGE007	KGE007SF			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGE007SB			
GROUNDWATER				
KGE001	KGE001GW	Background/ Control	WATER	VOCs, SVOCs, 8 RCRA Metals & Cyanide
KGE002	KGE002GW	Potentially Impacted/Affected Area		VOCs, SVOCs, 8 RCRA Metals & Cyanide
KGE003	KGE003GW			VOCs, SVOCs, 8 RCRA Metals & Cyanide
KGES004 Duplicate MS/MSD	KGE004GW			VOCs, SVOCs, 8 RCRA Metals & Cyanide
	KGE904GW			
KGE005	KGE005GW			VOCs, SVOCs, 8 RCRA Metals & Cyanide
KGE006	KGE006GW			VOCs, SVOCs, 8 RCRA Metals & Cyanide

KWGE Table 2 (Cont)
Sample Identification and Rationale

SEDIMENT				
KGES001 (background)	KGES001SD	Background/ Control Florida Straits	SEDIMENT	VOCs, SVOCs,8 RCRA Metals & Cyanide
KGES002 Florida Straits	KGES002SD	Potentially Impacted/Affected Area		VOCs, SVOCs,8 RCRA Metals & Cyanide
KGES003 Florida Straits	KGES003SD			VOCs, SVOCs,8 RCRA Metals & Cyanide
KGES004 Duplicate MS/MSD Florida Straits	KGES004SD			VOCs, SVOCs,8 RCRA Metals & Cyanide
	KGES604SD			
KGES005 (Storm Sewer)	KGES005SD			VOCs, SVOCs,8 RCRA Metals & Cyanide

Key:

MS/MSD-Matrix Spike/Matrix Spike Duplicate
QA/QC- Quality Assurance/Quality Control
VOC-Volatile Organic Compounds
SF-Surface soil
SB-Subsurface Soil
GW-Groundwater
KGE Key West Gas & Electric
TB-Trip Blank Soil
TW-Trip Blank Water
RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium & silver)

The metals and cyanide water samples were directly collected from the peristaltic pump discharge tubing. The semi-volatile organic samples were collected using the peristaltic pump/vacuum jug assembly. The vacuum jug assembly, which included an amber 1-liter glass sample bottle, was situated between the pump and the well for sample collection. The volatile organic samples were collected utilizing the "back flow" method. This involved running the pump at a slower speed and filling the Teflon® tubing with the sample. The pump speed was then further reduced and the direction of flow reversed to push out the sample into the 40 milliliter sample vials. In order to prevent water that may have been in contact with the flexible pump head tubing, the sampler avoided completely emptying the tubing when filling the sample vials. The sampling locations and rationale are presented in Table 2. The sampling locations are shown on Figure 3.

5.5 Quality Assurance/Quality Control

The field sampling equipment was cleaned and decontaminated at EPA's Field Equipment Center (FEC) prior to coming to the site. As a result, in accordance with the EPA Region 4 Field Branches Quality System and Technical Procedures, no equipment rinseate quality assurance/quality control (QA/QC) samples were collected. The decontaminated sampling equipment was wrapped in aluminum foil prior to leaving the FEC. Due to the ample supply of decontaminated sampling equipment, field cleaning of augers, bowls and spoons was not necessary. A soil sample duplicate and groundwater sample duplicate were collected. A metals and preservative blank were carried on-site and transported with the metals samples to assess possible cross contamination of the samples during transport. In addition a VOC sand (soil) trip blank and VOC (water) trip blank were prepared and placed in the VOC soil and groundwater sample coolers, respectively. All samples were collected, packaged, preserved and transported, in accordance with FDEP's SOP and EPA's Region 4 Field Branches Quality System and Technical Procedures. Furthermore, chain-of custody using EPA's SCRIBE software was utilized. Field notes were recorded in a bound field book (Appendix D). The GPS locations of the groundwater and soil samples were collected using a Garman® GPSmap76CSx unit, capable of between one to five meters accuracy. These coordinates were rectified using Google Earth Pro. The Reference datum used was WGS 84 and the coordinates were recorded in decimal degrees (Table 9).

6.0 Findings and Results

A more detailed description of the groundwater, soil and sediment analytical and QA/QC results is detailed below.

6.1 Groundwater Sampling Results

Detectable levels of volatile organic compounds (VOCs), semi-VOCs (SVOCs) and metals were detected in site groundwater. The sample locations are shown on Figure 3 and the groundwater analytical results are presented on Tables 4c, 5c, 6c and Appendix C.

6.1.1 Groundwater Chemistry Results

The final groundwater chemistry results were recorded at the end of the purging process. The pH of the groundwater was determined to be between 7.59 (KGE007GW) to 8.10 (KGE005GW) standard units (SUs). The pH values are reflective of groundwater from a carbonate bearing aquifer. All the measured pH values were determined to be within the range of acceptable pH values (6.5 to 8.5 SU) for State of Florida Secondary Drinking Water Standard (SDWS). Specific conductivity in the wells ranged from 756 (KGE007GW) to 7,460 (KGE001GW) micro-mhos per centimeter (µmhos/cm). The elevated specific conductance readings likely reflect carbonate content and increased total dissolved solids (TDS) as a result of increased salinity.. The temperatures in the well formation water ranged from 25 degrees Centigrade (^{o}C) [KGE001GW] to 30^{o} C [KGE003GW]. Following an extended purging process, the turbidity values exceeded 10

nephelometric turbidity units (NTUs) in two of the wells. These final values were 15.3 NTU (KGE001GW) and 70 NTU (KGE007GW) [66].

Please refer to Table 3 for a summary of the groundwater chemistry results.

6.1.2 Groundwater Sampling Laboratory Results

Detectable levels of chromium (3.0J [estimated] micrograms per liter [ug/l]) and cyanide (10 ug/l) were detected in groundwater samples KGE005GW and KGE007GW, respectively. Cyanide, which was detected right at the detection limit, is a component of MGP purifier waste. However, both these levels were below both EPA MCL and State of Florida GCTL criteria. Isopropylbenzene, also known as Cumene, was detected above background levels and State GCTLs in KGE004GW (1.9 ug/l), its duplicate KGE904GW (2.6 ug/l), KGE005GW (6.6 ug/l) and KGE007GW (4.6 ug/l). Isopropylbenzene is used as a high octane gasoline component and used as a thinner for paints and lacquers [67]. No other VOCs were detected in groundwater above EPA MCL and State of Florida GCTL criteria.

A number of PAHs were detected in groundwater above background concentration. Acenaphthene (48 ug/l) and naphthalene (32 ug/l) were detected in the groundwater sample KGE005GW above State GCTLs. None of the other detected PAHs exceeded State GCTLs. KGE005GW was located near the former retort location of the MGP (Figures 2a, 3). It should be noted that the detected PAHs are common to both petroleum and MGP wastes. However, the cyanide detection in groundwater, albeit low and below GCTLs, could be related to ferrocyanides, commonly associated with MGP spent purifier wastes. [33, 34, 68]. Please refer to Figures 2a & 3 for the former MGP layout and sample locations and Tables 4c, 5c & 6c for Summary of the detected metals, cyanide, VOCs and SVOCs in groundwater.

6.2 Soil Sampling Results

Detectable levels of metals**,** VOCs and semi-VOCs were found in site soils. The sample locations are shown on Figure 3 and the soil analytical results are presented on Tables 4a, 4b, 5a, 5b, 6a & 6b and Appendix C.
The metals detected included arsenic, chromium and lead. Arsenic was detected in surface soil sample KGE002SF (19 milligrams per kilogram [mg/kg]) in excess of the State of Florida Soil Cleanup Target Levels (SCTLs) for direct exposure for both residential (2.1 mg/kg) and industrial (12 mg/kg) settings. Elevated levels of lead were detected in background surface soil sample KGE001SF (900 mg/kg) and KGE006SF (440 mg/kg) in excess the State SCTL for direct exposure for residential (400 mg/kg) settings. Lead is a component of Gasifier ash and bag ore associated with MGPs. However, it is also used in paint, caulking, pipe work and roofing and was a former octane booster in gasoline [33, 67]. The chromium detection in subsurface soil sample KGE006SB was below State SCTL criteria.

A number of VOCs were also detected in the soil samples at low or trace levels. The VOCs included 1, 2, 4 trimethylbenzene, 1, 3, 5 trimethylbenzene, isopropylbenzene, *n*-propylbenzene, *o*-xylene, *p*-isopropyltoluene and sec-butylbenzene and were elevated with respect to the background samples. Many of these VOCs are common to both MGPs and petroleum products. However, none of the detected VOCs exceeded SCTLs for direct exposure (residential or industrial settings) or

groundwater leachability. Detectable levels of semi-VOCs, in particular PAHs, were found in the soil samples collected from the site. These levels were significantly above the background soil concentrations of KGE001SF/SB. The following PAHs were detected above State SCTLs for groundwater leacability criteria. They included benzo (a) anthracene (1,900 to 4,500 ug/kg), benzo (a) pyrene (10,000 to 19,000 ug/kg), benzo (b) fluoranthene (2,700 to 12,000 ug/kg), dibenzo (a, h) anthracene (1,500 to 7,000 ug/kg) and indeno (1,2,3-cd) pyrene (7,800 to 14,000 ug/kg). The benzo (a) pyrene toxic equivalent [BaP TEQ] concentrations in four locations (eight samples) exceeded the State SCTL for direct exposure under an industrial setting. The sample included KGE002SF, KGE004SF, KGE004SB, KGE604SB, KGE005SF, KGE005SB and KGE007SF. The soil BaP TEQ calculations are presented in Appendix F. The highest levels of PAHs were found in the KGE004 (KGE004SF/SB) and KGE005 (KGE005SF/SB) boring locations. These two locations were adjacent to the former MGP retort (Figures 2a, 3). Many of the detected PAHs are common to both MGPs and petroleum products [33, 34, 68].

6.3 Sediment Sampling Results

Detectable levels of metals**,** VOCs and semi-VOCs were found in site soils. The sample locations are shown on Figures 3, 4 & 5 and the soil analytical results are presented on Tables 4d, 5d & 6d and Appendix C.

Detectable concentrations of barium (51 mg/kg) and lead (26 mg/kg) were found in the storm drain sediment sample KGES005SD. The storm drain, located at the intersection of Geraldine and Fort Streets, presumably collects runoff from the KWGE site. Lead (58 mg/kg) was detected in sediment sample KGES002SD collected from the Florida Straits adjacent to the Fort Street outfall. This level was significantly above the concentration of lead (8.2 mg/kg) found in the background sediment level. The lead level in KGES002SD exceeded the State FDEP Sediment Quality Assessment Guideline[2] (SQAG) Threshold Effect Level (TEL) of 30.2 mg/kg but is below the probable effects level (PEL) of 112 mg/kg. It also exceeded the EPA Region 4 Sediment Screening Value (SSV). Lower levels of lead, below SQAGs, were found in the two other sediment samples located near the outfall. It is important to note that the Fort Street outfall represents the discharge for a large area of Key West. As such, with the limited number of sediment samples, it is difficult, if not impossible, to specifically attribute the lead detections to the former MGP operation. A number of VOCs were also detected in the sediment samples at low or trace levels. No SQAGs have been developed for VOCs. The higher levels of VOCs were in the sediment sample collected from the storm drain KGES005SD. The VOCs included acetone, carbon disulfide, 1, 2, 4 trimethylbenzene, 1, 3, 5 trimethylbenzene, benzene, ethylbenzene, methyl ethyl ketone, isopropylbenzene, *n*-propylbenzene, *o*-xylene, *m* and/or *p*-xylene, *p*-isopropyltoluene and sec-butylbenzene. Acetone and carbon disulfide are common laboratory contaminants. Again, many of these VOCs are common to both MGPs and petroleum products. Detectable levels of semi-VOCs, in particular PAHs, were found in the sediment sample collected from the storm drain (KGES005SD). A number of unidentified semi-VOC compounds were detected in the Florida Straits sediment samples. However, no specific semi-VOC analytes were detected.

[2] The SQAGs are intended to assist sediment quality assessment applications, such as identifying priority areas for non-point source management actions, designing wetland restoration projects, and monitoring trends in environmental contamination. They are not intended to be used as sediment quality criteria.

6.4 Quality Assurance/Quality Control Results

Low, estimated levels of mercury, 0.090J ug/l and 0.027J ug/l, were detected in the metals (KGEQA01) and preservative (KGEQA02) metals blanks, respectively. No other metals were detected. A low qualified concentration of toluene (1.8 J ug/kg) was detected in the soil trip blank sample KGEQA04. No other VOCs were detected. No VOCs were detected, above the detection limits; in the water trip blank KGEQA03. Based on the review of the QA/QC results, the detected analytes in the metals, preservative and trip blanks are of no consequence in the interpretation of potential contamination at this site. The analytical results of the groundwater duplicate (KGE904GW) and its parent sample (KGE004GW) were comparable. The analytical results of the soil duplicate (KGE604SB) and its parent sample (KGE004SB) were also comparable (Tables 4 through 7).

7.0 Conclusions and Recommendations

The conclusions and findings of this investigation follow:

- A review of Sanborn Insurance maps from 1912 and 1926 indicates that six 25,000-gallon crude oil above ground storage tanks (ASTs) were located along the eastern edge of the site near Geraldine Lane (now Street). This is currently the area of the KEYS substation transformers and electrical equipment. The earlier petroleum contamination assessment did not focus on this area. The CERCLA SI was also limited in this area due to the transformers and safety concerns.

- Heavy metals (arsenic & lead) and PAHs (benzo [a] pyrene, dibenzo [a, h] anthracene et. al) have been detected in soils from the KWGE site above State Soil Cleanup Target Levels (SCTLs) for direct contact and/or groundwater leachability criteria. The arsenic and benzo [a] pyrene TEQ concentrations exceed the State SCTLs for direct exposure under a commercial/industrial setting.

- A low concentration of cyanide, below its State Groundwater Cleanup Target Levels (GCTL), was detected at the detections limit in one of the groundwatwer samples. As mentioned above, the cyanide detection could be related to ferrocyanides, commonly associated with MGP spent purifier wastes. However, cyanide was not detected, above the detection limit, in any of the soil samples.

- Isopropylbenzene, acenaphthene and naphthalene were detected in on-site groundwater above State Groundwater Cleanup Target Levels (GCTLs).

- Lead was found in both the nearby storm sewer (KGES005SD) and Florida Straits sediment (KGES002SD) sample near the Fort Street outfall. The level of lead in the Florida Straits sediment sample exceeded both the State Sediment Quality Assessment Guideline (SQAG) Threshold Effect Level (TEL) and EPA Region 4 Sediment Screening Value (SSV). This level was significantly above the background sediment sample concentration. The other two

sediment samples near the outfall had lower levels of lead.. However, the concentrations were below SQAG and SSV criteria. As noted above, the Fort Street outfall is part of a permitted discharge for a large area of Key West. As such, with the limited number of sediment samples, it is difficult, if not impossible, to specifically attribute the lead detections to the former MGP operation.

The recommendations of this investigation are:

- Additional soil and groundwater contamination assessment of the KWGE may be necessary. Any further investigation should include the delineation of lead in the soils. However, it may be difficult to separate MGP vs. petroleum fuel related impacts.

- No assessment activities were ever conducted on the vacant land situated across Fort Street, southwest of the site. This was a water body called "Government Slip" during the 1880s and 1890's. This was around the time of reported MGP operations. Government Slip was subsequently filled in during the late 1890s or early 1900's. Any future assessment activities, related to the MGP operations, should include this area. Although ultimately filled, nearby surface water bodies were often used for disposal of MGP wastes [10, 11] (Figure 2a).

- Possible impacts from the Standard Oil Co and tanks formerly located on east side of Geraldine Street, across street from former MGP, should be taken into account in any further contamination assessment activities.

- It is recommended that any future groundwater samples fromthe site be analyzed for total dissolved solids (TDS). The results can be used to determine whether Class G-II (potable) or Class G-III (non-potable) groundwater use criteria are applicable [69].

Site related soil and groundwater contamination is documented. However, many of the detected contaminants are common to both MGPs and petroleum fuels (leaded gasoline & diesel fuel). At this time, it is not possible to distinguish between MGP and petroleum impacts from the site. Based on the minimal impacts, a No Further CERCLA action is appropriate. However, the site will be referred to the FDEP South District office for consideration for further evaluation.

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Note: With the passage of time and different or disconnected servers and websites, some of the hyperlinks will not be able to connect with the websites or PDF references. Also, all pertinent reports and documents have been and will be stored on FDEP's Oculus™ database under Comet number 303264 (COM_303264) and Petroleum FAC #449101950. The link to Oculus is http://dwmedms.dep.state.fl.us/Oculus/servlet/login.

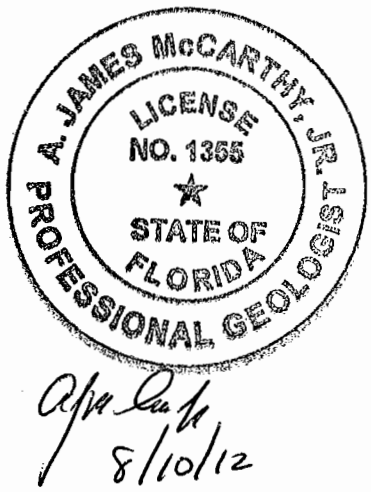
9.0 Florida Professional Geologist Seal

I hereby affix my seal to this Site Inspection (SI) report for the Key West Gas and Electric Co. site located Key West, Monroe County, Florida, in accordance with **Chapter 492 of the Florida Statutes** and applicable rules and regulations developed pursuant thereto:

Name:	**A. James McCarthy Jr.**
License Number	**1355**
State	**Florida**
Expiration Date	**July 31, 2014**

A. James McCarthy, Jr. PG

August 10, 2012
Date



8/10/12

Table 3
Groundwater Chemistry Results
Final Field Parameters
Key West Gas and Electric Light Company
Key West, Monroe County, Florida
February 2012

Sample ID	Monitoring Well	Well depth (feet)	Screen Interval (feet)	pH (Standard Units)	Temperature (Degrees C)	Specific Conductance (µmhos/cm)	Turbidity (NTU)
KGE001GW	TMW-1	14	10-14	7.8	25.0	7,460	15.3
KGE003GW	TMW-3	12	8-12	7.91	30.7	1,861	5.89
KGE004GW	TMW-4	12	8-12	7.68	27.0	1,289	5.21
KGE005GW	TMW-5	12	8-12	8.10	28.4	1,019	8.37
KGE006GW	TMW-6	12	8-12	7.61	25.6	756	9.78
KGE007GW	TMW-7	12	8-12	7.59	28.3	763	70

Note: These final values were collected after the purging phase just prior to sampling.

Key:

NTU= nephelometric turbidity units
µmhos/cm= micro-mhos per centimeter
C= Centigrade

Table 4a
Surface Soil Metals & Cyanide Analyses
Key West Gas and Electric Light Company
Key West, Monroe County, Florida
February 2012

SURFACE SOIL								**SCTL**	**SCTL**	**SCTL**
	KGE001SF*	KGE003SF	KGE004SF	KGE002SF	KGE005SF	KGE006SF	KGE007SF	**Residential Soil**	**Industrial Soil**	**GW Leach**
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**
Arsenic	11	—	—	**19**	—	11	—	**2.1**	**12**	**NS**
Barium	140	—	62	110	61 J	160	67 J	**120**	**130,000**	**1600**
Cadmium	1.9 R	—	—	1.4 R	—	3.5 R	—	**82**	**1,700**	**7.5**
Chromium	12	2.8 J	9.0	9.6	5.1 J	18	4.5 J	**210**	**470**	**38**
Cyanide	—	—	—	—	—	—	—	**34**	**11,000**	**0.80**
Lead	**900**	55	150	170	260	**440**	380	**400**	**1,400**	**NS**
Mercury	0.92	—	—	0.13	—	0.28	0.12	**3**	**17**	**2.1**
Selenium	—	—	—	—	—	1.6 J	—	**440**	**11,000**	**5.2**
Silver	—	—	—	—	—	—	—	**410**	**8,200**	**17**

Table 4b
Subsurface Soil Metals & Cyanide Analyses
Key West Gas and Electric Light Company
Key West, Monroe County, Florida
February 2012

SUBSURFACE SOIL **Dup-004SB**

Analyte	KGE001SB* mg/kg	KGE003SB mg/kg	KGE004SB mg/kg	KGE604SB mg/kg	KGE005SB mg/kg	KGE006SB mg/kg	KGE007SB mg/kg	**SCTL Residential Soil mg/kg**	**SCTL Industrial Soil mg/kg**	**SCTL GW Leach mg/kg**
Arsenic	–	–	–	–	–	–	–	**2.1**	**12**	**NS**
Barium	–	–	–	–	–	–	–	**120**	**130,000**	**1600**
Cadmium	–	–	–	–	–	–	–	**82**	**1,700**	**7.5**
Chromium	5.7U	–	–	–	–	13	–	**210**	**470**	**38**
Cyanide	–	–	–	–	–	–	–	**34**	**11,000**	**0.80**
Lead	2.5 J	–	–	–	–	2.7 J	–	**400**	**1,400**	**NS**
Mercury	–	–	–	–	–	–	–	**3**	**17**	**2.1**
Selenium	–	–	–	–	–	–	–	**440**	**11,000**	**5.2**
Silver	–	–	–	–	–	–	–	**410**	**8,200**	**17**

Table 4c
Groundwater Metals & Cyanide Analyses
Key West Gas and Electric Light Company
Key West, Monroe County, Florida
February 2012

GROUNDWATER											
Analyte	KGE001GW µg/l	KGE003GW µg/l	KGE004GW µg/l	KGE904GW µg/l	KGE005GW µg/l	KGE006GW µg/l	KGE007GW µg/l	**GCTL µg/l**	**Federal MCL µg/l**	CLP Metals Blank KGEQA01	Preservative Blank KGEQA02 µg/l
Arsenic	—	—	—	—	—	—	—	**10**	**10**	—	—
Barium	—	—	—	—	—	—	—	**2000**	**2000**	—	—
Cadmium	—	—	—	—	—	—	—	**5**	**5**	—	—
Chromium	—	—	—	—	3.0 J	—		**100**	**100**	—	—
Cyanide	10U	—	—	—	—	—	10	**200**	**200**	—	—
Lead	—	—	—	—	—	—	—	**15**	**15**	—	—
Mercury	0.036 J	0.11 J	0.22	0.050 J	0.055 J	0.12 J	0.076 J	**2**	**2**	0.090 J	0.027 J
Selenium	—	—	—	—	—	—	—	**50**	**50**	—	—
Silver	—	—	—	—	—	—	—	**100**	**NA**	—	—

Table 4d
Sediment Soil Metals Analyses
Key West Gas and Electric Light Company
Key West, Monroe County, Florida
February 2012

SEDIMENT							**SQAG**	**SQAG**
Analyte	KGES001SD* mg/kg	KGES002SD mg/kg	KGES003SD mg/kg	KGES603SD mg/kg	KGES004SD mg/kg	KGES005SD mg/kg	**TEL ppm**	**PEL ppm**
Arsenic	–	3.6	–	–	–	–	**7.24**	**41.6**
Barium	–	–	–	–	–	51	**NG**	**NG**
Cadmium	–	–	–	–	–	0.25 R	**0.676**	**4.21**
Chromium	2.6 J	2.1	2.0	2.4	2.1	7.0	**52.3**	**160**
Cyanide	–	–	–	–	–	–	**NG**	**NG**
Lead	8.2	**58**	10	12	10	26	**30.2**	**112**
Mercury	–	–	–	–	–	–	**0.13**	**0.696**
Selenium	–	–	–	–	–	–	**NG**	**NG**
Silver	–	–	–	–	–	–	**ID**	**ID**

QUALIFIER:

J – The identification of the analyte is acceptable; the reported value is an estimate.
R – The presence or absence of the analyte cannot be determined from the data due to severe quality control problems. The data are rejected and considered unusable.
U – The analyte was not detected at or above the reporting limit.
NS – No Standard

KEY:

Bold-lettering implies exceedance of State SCTLs, GCTLs, MCLs or SQAGs.
Shaded-Observed Contamination per Federal Register. 12-14-90. Vol. 55 No.241. EPA 40 CFR Part 300 Hazard Ranking System Table 2-3
* Background Sample
*** Leachability values may be derived using SPLP Test to calculate site specific SCTLs or may be determined using TCLP as described in the December 14, 2004 "Final Technical Report: Development of Clean-up Target Levels (TCLs) for Chapter 62-777, F.A.C
SCTL-State of Florida Soil Cleanup Target Level- Chapter 62-777, F.A.C (revised 4/17/05)
GCTL-Groundwater Cleanup Target Level 62-777 F.A.C. (rev. 4/17/05)
MCL-maximum contaminant Level
SQAG-Sediment Quality Assessment Guideline Based on Approach to Assessment of Sediment Quality in Florida Coastal Waters by D.D MacDonnald. 11/94
TEL-Toxic Effect Level
PEL-Probable Effect Level
NG- No Guideline

Table 5a
Volatile Organic Compounds in Surface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

SURFACE SOIL

	Trip Blank	Background								
	KGEQA04	KGE001SF	KGE002SF	KGE003SF	KGE004SF	KGE005SF	KGE006SF	KGE007SF	**SCTL Industrial Soil**	**SCTL GW Leach Soil**
Analyte	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	**µg/kg**	**µg/kg**
1,2,3-Trichlorobenzene	–	–	–	–	–	0.42 J	–	–	**8,2000,000**	**4,600**
1,2-Dibromoethane (EDB)	–	–	–	–	0.19 J	–	–	–	**200**	**0.1**
Benzene	–	–	–	–	0.51 J	2.1 J	–	–	**1,700**	**7**
Dibromochloromethane	–	–	–	–	0.19 J	–	–	–	**2,300**	**3**
Dimethyloctane (TIC)	–	–	–	–	–	10 NJ	–	–	**NS**	**NS**
Tetrachloroethene (Tetrachloroethylene)	–	–	–	–	–	–	1.6 J	–	**18,000**	**30**
Toluene	1.8 J	0.31 J	–	–	0.45 J	2.0 J	–	–	**60,000,000**	**500**
Trimethyldodecane (TIC)	–	–	–	–	–	10 NJ	–	–	**NS**	**NS**

Table 5b
Volatile Organic Compounds in Subsurface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

	Trip Blank	Background								
SUBSURFACE SOIL	KGEQA04	KGE001SB	KGE003SB	KGE004SB	KGE604SB	KGE005SB	KGE006SB	KGE007SB	**SCTL Industrial Soil**	**SCTL GW Leach Soil**
Analyte	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	**µg/kg**	**µg/kg**
1,1,1-Trichloroethane	—	—	—	1.9 J	2.4 J	—	—	—	**3,900,000**	**1,900**
1,2,4-Trimethylbenzene	—	0.52UJ	—	4.7 J	12 J	0.18 J	—	2.4 J	**95,000**	**300**
1,3,5-Trimethylbenzene	—	—	—	2.6 J	7.3 J	0.44 J	—	—	**80,000**	**300**
Ethyl Benzene	—	—	—	—	0.27 J	0.30 J	—	—	**9,200,000**	**600**
Isopropylbenzene	—	0.52UJ	—	0.38 J	0.95 J	1.2 J	—	42 J	**1,200,000**	**200**
n-Propylbenzene	—	0.52UJ	—	—	—	0.28 J	—	74 J	**NS**	**NS**
m- and/or p-Xylene	—	—	—	—	0.58 J	—	—	—	**700,000**	**200**
o-Xylene	—	0.52UJ	—	0.72 J	1.8 J	0.72 J	—	5.2 J	**700,000**	
p-Isopropyltoluene	—	0.52UJ	—	0.95 J	2.4 J	—	—	36 J	**NS**	**NS**
sec-Butylbenzene	—	0.52UJ	—	0.21 J	—	0.50 J	—	52 J	**NS**	**NS**
Styrene	—	—	—	0.75 J	0.91 J	—	—	—	**23,000,000**	**3,600**
Tetrachloroethene (Tetrachloroethylene)	—	—	—	—	—	—	1.3 J	—	**18,000**	**30**
Toluene	1.8 J	—	—	—	—	—	0.32 J	0.23 J	**60,000,000**	**500**

Table 5c
Volatile Organic Compounds in Groundwater
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

GROUNDWATER	Trip Blank	Background		Dup - 004					**GCTL**	**Federal MCL**
Analyte	KGEQA03 µg/L	KGE001GW µg/L	KGE003GW µg/L	KGE004GW µg/L	KGE904GW µg/L	KGE005GW µg/L	KGE006GW µg/L	KGE007GW µg/L	**µg/L**	**µg/L**
1,2,4-Trimethylbenzene	–	–	–	0.75	1.5	5.6	–	1.7	**10**	**NS**
1,3,5-Trimethylbenzene	–	–	–	0.45	0.87	1.4	–	0.78	**10**	**NS**
Benzene	–	–	–	–	0.18	–	–	–	**1**	**5**
Bromomethane	–	–	–	–	–	–	–	0.33	**9.8**	**NS**
Carbon disulfide	–	–	1.0	1.4	1.2	–	–	–	**700**	**NS**
Chlorobenzene	–	–	–	–	–	0.23	–	–	**100**	**100**
Cyclohexane	–	–	–	1.1	3.7	8.1	–	–	**NS**	**NS**
Ethyl Benzene	–	–	–	0.12	0.28	2.1	–	–	**30**	**700**
Isopropylbenzene	–	0.5U	–	**1.9**	**2.6**	**6.6**	–	**4.6**	**0.80**	**NS**
Methylcyclohexane	–	–	–	–	–	1.0	–	–	**NS**	**NS**
n-Butylbenzene	–	–	–	–	–	–	–	1.4	**NS**	**NS**
n-Propylbenzene	–	–	–	0.78	1.1	1.6	–	0.18	**NS**	**NS**
(m- and/or p-)Xylene	–	–	–	0.84	1.2	4.3	–	–	**NS**	**NS**
o-Xylene	–	–	–	0.40	0.70	2.1	–	0.84	**NS**	**NS**
Total Xylenes	–	–	–	1.24	1.90	6.4	–	0.84	**20**	**10,000**
p-Isopropyltoluene	–	–	–	0.5	0.68	2.7	–	–	**NS**	**NS**
sec-Butylbenzene	–	–	–	0.35	0.44	1.2	–	1.3	**NS**	**NS**
Styrene	–	–	–	–	–	0.72	–	0.21	**100**	**100**
tert-Butylbenzene	–	–	–	0.21	0.28	0.20	–	0.27	**NS**	**NS**
Toluene	–	–	–	–	0.14	0.63	–	–	**40**	**1000**

Table 5d
Volatile Organic Compounds in Sediments
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

SEDIMENTS	KGEQA04	KGES001SD Background	KGES002SD	KGES003SD	KGES603SD	KGES004SD	KGES005SD Stormdrain	**SQAG TEL**	**SQAG PEL**
Analyte	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	**µg/kg**	**µg/kg**
1,2,4-Trimethylbenzene	—	—	—	—	—	—	26 J	**NG**	**NG**
1,3,5-Trimethylbenzene	—	—	—	—	—	—	17 J	**NG**	**NG**
Acetone	—	6.3UJ	—	—	—	—	140 J	**NG**	**NG**
Benzene	—	—	—	—	—	—	0.50 J	**NG**	**NG**
Carbon disulfide	—	0.66 J	0.42 J	0.49 J	0.59 J	0.56 J	4.8 J	**NG**	**NG**
Ethyl Benzene	—	—	—	—	—	—	11 J	**NG**	**NG**
Limonene (TIC)	—	—	—	—	—	—	400 NJ	**NG**	**NG**
Methyl Ethyl Ketone	—	1.6UJ	—	—	—	—	340 J	**NG**	**NG**
n-Propylbenzene	—	—	—	—	—	—	2.9 J	**NG**	**NG**
p-Isopropyltoluene	—	—	—	—	—	—	50 J	**NG**	**NG**
sec-Butylbenzene	—	—	—	—	—	—	1.2 J	**NG**	**NG**
Toluene	1.8 J	0.79UJ	—	—	—	—	230 J	**NG**	**NG**
o-Xylene	—	—	—	—	—	—	10 J	**NG**	**NG**
(m- and/or p-)Xylene	—	—	—	—	—	—	24 J	**NG**	**NG**

QUALIFIER:

J — The identification of the analyte is acceptable; the reported value is an estimate.
N — There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.
NJ — Presumptive evidence that analyte is present; reported as a tentative identification with an estimated value.
R —The presence or absence of the analyte cannot be determined from the data due to severe quality control problems. The data are rejected and considered unusable.
U&— —The analyte was not detected at or above the reporting limit.
NS — No Standard

KEY:

Bold - lettering implies exceedance of State SCTLs, GCTLs, MCLs or SQAGs.
Shaded-Observed Contamination per Federal Register. 12-14-90. Vol. 55 No.241. EPA 40 CFR Part 300 Hazard Ranking System Table 2-3
* Background Sample
*** Leachability values may be derived using SPLP Test to calculate site specific SCTLs or may be determined using TCLP as described in the December 14, 2004 “Final Technical Report: Development of Clean-up Target Levels (TCLs) for Chapter 62-777, F.A.C
SCTL-State of Florida Soil Cleanup Target Level- Chapter 62-777, F.A.C (revised 4/17/05)
GCTL-Groundwater Cleanup Target Level 62-777 F.A.C. (rev. 4/17/05)

KEY (Cont.):

MCL-maximum contaminant Level
SQAG-Sediment Quality Assessment Guideline Based on Approach to Assessment of Sediment Quality in Florida Coastal Waters by D.D MacDonnald. 11/94
TEL-Toxic Effect Level
PEL-Probable Effect Level
NG- No Guideline

Table 6a
Semi-Volatile Organic Compounds in Surface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

Analyte	KGE001SF Background µg/kg dry	KGE002SF µg/kg dry	KGE003SF µg/kg dry	KGE004SF µg/kg dry	KGE005SF µg/kg dry	KGE006SF µg/kg dry	KGE007SF µg/kg dry	**SCTL Resident Soil** µg/kg	**SCTL Industrial Soil** µg/kg	**SCTL GW Leach** µg/kg
1,1-Biphenyl	210U	–	–	–	130 J	–	–	**3,000,000**	**34,000,000**	**200**
2-Methyl-4,6-dinitrophenol	410U	–	–	–	–	370 J	–	**NS**	**NS**	**NS**
2-Methylnaphthalene	270	–	–	210 J	850 J	–	–	**210,000**	**2,100,000**	**8,500**
Acenaphthylene	120 J	260 J	–	2500	5500	80 J	130 J	**1,800,000**	**20,000,000**	**27,000**
Anthracene	94 J,	84 J	–	1000 J	2400 J	–	78 J	**21,000,000**	**300,000,000**	**2,500,000**
Benzo(a)anthracene	430	310	–	**3100**	**4500**	120 J,O	380	**#**	**#**	**800**
Benzo(a)pyrene	**450**	**820**	–	**10000**	**19000**	**200**	**690**	**100**	**700**	**8,000**
Benzo(b)fluoranthene	330	440	–	**5300**	**12000**	220	420	**#**	**#**	**2,400**
Benzo(g,h,i)perylene	350	1800	–	19000	29000	–	850	**2,500,000**	**52,000,000**	**32,000**
Benzo(k)fluoranthene	510	420	–	4600	11000	180 J,O	440	**#**	**#**	**24,000**
Dibenzo(a,h)anthracene	140 J	290	–	**3900**	**7000**	85 J	200	**#**	**#**	**700**
Fluoranthene	580	360	–	2400 J	1800 J	310	390 J	**3,200,000**	**59,000,000**	**1,200,000**
Fluorene	210U	–	–	350 J	1100 J	–	–	**2,600,000**	**33,000,000**	**160,000**
Indeno (1,2,3-cd) pyrene	320	760	110 J	**7800**	**14000**	170 J	450	**#**	**#**	**6,600**
Naphthalene	160 J	81 J	–	–	510 J	–	–	**55,000**	**300,000**	**1,200**
Phenanthrene	300	310	–	390 J	710 J	210	240 J	**2,200,000**	**36,000,000**	**250,000**
Pyrene	510	760	–	13000	8100	220	870	**2,400,000**	**45,000,000**	**880,000**
BaP TEQ	**700**	**1300**	**200**	**15600**	**29200**	**300**	**1,000**	**100**	**700**	**NS**
11H-Benzo[a]fluoren-11-one	700 NJ	600 NJ	NR	1000 NJ	NR	NR	NR	**NS**	**NS**	**NS**
11H-Benzo[a]fluorene	NR	NR	NR	2000 NJ	NR	NR	NR	**NS**	**NS**	**NS**
1H-Indene, 1-ethylidene-	NR	NR	NR		1000 NJ	NR	NR	**NS**	**NS**	**NS**
1H-Phenalene	NR	NR	NR	2000 NJ,	2000 NJ	NR	NR	**NS**	**NS**	**NS**
3-Formoxy-androstan-11-ol-17-one	NR	600 NJ	NR	NR	NR	NR	NR	**NS**	**NS**	**NS**
9,10-Dimethylanthracene	NR	NR	NR	NR	2000 NJ	NR	NR	**NS**	**NS**	**NS**
Anthracene, 2-methyl-	NR	NR	NR	NR	2000 NJ	NR	NR	**NS**	**NS**	**NS**

Table 6a
Semi-Volatile Organic Compounds in Surface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

Analyte	KGE001SF Background	KGE002SF	KGE003SF	KGE004SF	KGE005SF	KGE006SF	KGE007SF	**SCTL Resident Soil**	**SCTL Industrial Soil**	**SCTL GW Leach**
	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg dry	µg/kg	µg/kg	µg/kg
Bacchotricuneatin c	NR	NR	NR	NR	2000 NJ	NR	NR	**NS**	**NS**	**NS**
Benzene, (2-methyl-1-propenyl)-	NR	NR	NR	NR	1000 NJ	NR	NR	**NS**	**NS**	**NS**
Benzocycloheptatriene	NR	NR	NR	900 NJ	4000 NJ	NR	NR	**NS**	**NS**	**NS**
Benzo[e]pyrene	NR	900 NJ	NR	NR	NR	NR	NR	**NS**	**NS**	**NS**
Chrysene, 6-methyl-	NR	NR	NR	1000 NJ	NR	NR	NR	**NS**	**NS**	**NS**

Table 6b
Semi-Volatile Organic Compounds in Subsurface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

SUBSURFACE SOIL

Analyte	KGE001SB Background µg/kg dry	KGE003SB µg/kg dry	KGE004SB µg/kg dry	KGE604SB µg/kg dry	KGE005SB µg/kg dry	KGE006SB µg/kg dry	KGE007SB µg/kg dry	**SCTL Resident Soil µg/kg**	**SCTL Industrial Soil µg/kg**	**SCTL GW Leach Soil µg/kg**
			Dup - 004							
2-Methylnaphthalene	200U	–	990 J	710 J	–	200U	370 J	**210,000**	**2,100,000**	**8,500**
Acenaphthene	200U	–	590 J	380 J	–	200U	410 J	**2,400,000**	**20,000,000**	**2,100**
Acenaphthylene	200U	–	3700	2800 J	1500	200U	–	**1,800,000**	**20,000,000**	**27,000**
Anthracene	200U	–	1700	1000	300	200U	380	**21,000,000**	**300,000,000**	**2,500,000**
Benzo(a)anthracene	200U	–	**3900**	**1900**	**580**	200U	80 J	#	#	**800**
Benzo(a)pyrene	200U	–	**18000**	**10000**	**5200**	200U	–	**100**	**700**	**8,000**
Benzo(b)fluoranthene	200U	–	**9000**	**5300**	**2700**	200U	–	#	#	**2,400**
Benzo(g,h,i)perylene	200U	–	18000	10000	5600	200U	–	**2,500,000**	**52,000,000**	**32,000**
Benzo(k)fluoranthene	200U	–	6500	4900	2000	200U	–	#	#	**24,000**
Dibenzo(a,h)anthracene	200U	–	**4000**	**2700**	**1500**	200U	–	#	#	**700**
Fluoranthene	200U	–	2800	1800	130 J	200U	430	**3,200,000**	**59,000,000**	**1,200,000**
Fluorene	200U	–	580 J	640 J	–	200U	990 J	**2,600,000**	**33,000,000**	**160,000**
Indeno (1,2,3-cd) pyrene	200U	–	**9200**	5300	2700	200U	–	#	#	**6,600**
Naphthalene	200U	–	580 J	350 J	–	200U	–	**55,000**	**300,000**	**1,200**
Phenanthrene	200U	–	2200	1300	–	200U	2300	**2,200,000**	**36,000,000**	**250,000**
Pyrene	200U	–	21000	12000	7000	200U	350	**2,400,000**	**45,000,000**	**880,000**
BaP TEQ	0	0	**24300**	**14000**	**7300**	0	**200**	**100**	**700**	**NA**
1-Iodo-2-methylundecane	–	–	–	–	1000 NJ	–	–	**NS**	**NS**	**NS**
1-Nonadecene	–	–	–	900 NJ	–	–	–	**NS**	**NS**	**NS**
Benzo[b]triphenylene	–	–	–	NR	1000 NJ	–	–	**NS**	**NS**	**NS**
Cyclopenta(def)phenanthrenone	–	–	2000 NJ	NR	3000 NJ	–	–	**NS**	**NS**	**NS**
Ethanol, 2-(tetradecyloxy)-	–	–	–	900 NJ	–	–	–	**NS**	**NS**	**NS**
Methylanthracene	–	–	1000 NJ	–	–	–	–	**NS**	**NS**	**NS**
Naphthalene, 1,4,6-trimethyl-	–	–	–	–	–	–	1000 NJ	**NS**	**NS**	**NS**
Perylene	–	–	–	800 NJ	–	–	–	**NS**	**NS**	**NS**

Table 6b
Semi-Volatile Organic Compounds in Subsurface Soils
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

SUBSURFACE SOIL			Dup - 004							
Analyte	KGE001SB Background µg/kg dry	KGE003SB µg/kg dry	KGE004SB µg/kg dry	KGE604SB µg/kg dry	KGE005SB µg/kg dry	KGE006SB µg/kg dry	KGE007SB µg/kg dry	**SCTL Resident Soil µg/kg**	**SCTL Industrial Soil µg/kg**	**SCTL GW Leach Soil µg/kg**
Perylene, 3-methyl-	–	–	–	–	1000 NJ	–	–	**NS**	**NS**	**NS**
Phenanthrene, 1-methyl-	–	–	–	–	1000 NJ	–	–	**NS**	**NS**	**NS**
Pyrene, 2-methyl-	–	–	–	–	–	–	900 NJ	**NS**	**NS**	**NS**
Trimesic trihydroxamic acid	–	–	–	–	1000 NJ	–	–	**NS**	**NS**	**NS**
Unidentified Compound(s)	2000 J	300 J	30000 J	20000 J	20000 J	2000 J	20000 J	**NS**	**NS**	**NS**

Table 6c
Semi-Volatile Organic Compounds in Groundwater
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

Analyte	KGE001GW µg/l	KGE003GW µg/l	KGE004GW µg/l	Dup - 004 KGE904GW µg/l	KGE005GW µg/l	KGE006GW µg/l	KGE007GW µg/l	State GCTL ug/l	Federal MCL µg/l
2-Methylnaphthalene	5.0U	–	–	–	13	–	–	**28**	**NS**
Acenaphthene	5.0U	–	–	–	**48**	–	29	**20**	**NS**
Acenaphthylene	5.0U	–	–	–	15	–	19	**210**	**NS**
Acetophenone	5.0U	–	–	–	4.3 J	–	–	**700**	**NS**
Anthracene	5.0U	–	–	–	7.8	–	–	**2,100**	**NS**
Fluoranthene	5.0U	–	4.7 J	6.1	6.5	3.1 J	6.1	**280**	**NS**
Fluorene	5.0U	–	–	–	3.2 J	–	–	**280**	**NS**
Naphthalene	5.0U	–	2.4 J	–	**32**	–	2.5 J	**14**	**NS**
Phenanthrene	5.0U	–	6.8	4.8 J	40	–	–	**210**	**NS**
Pyrene	5.0U	–	8.7	11	11	6.8	11	**210**	**NS**
Unidentified Compound(s)	70 J	50 J	70 J	10 J	50 J	40 J	70 J	**NS**	**NS**
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene	–	–	–	10 NJ	–	–	–	**NS**	**NS**
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	–	–	20 NJ	–	–	–	–	**NS**	**NS**
1H-Indene, 1,3-dimethyl-	–	–	–	–	20 NJ	–	–	**NS**	**NS**
1H-Indene, 2,3-dimethyl-	–	–	–	–	20 NJ	–	–	**NS**	**NS**
1H-Phenalene	–	–	–		20 NJ	–	20 NJ	**NS**	**NS**
4H-Cyclopenta[def]phenanthrene	–	–	–	20 NJ	–	–	–	**NS**	**NS**
Bromacil	–	–	–	–	–	10 NJ	–	**NS**	**NS**
Naphthalene, 1,3-dimethyl-	–	–	–	–	–	–	50 NJ	**NS**	**NS**
Naphthalene, 1,6,7-trimethyl-	–	–	–	–	–	–	20 NJ	**NS**	**NS**
Naphthalene, 1-ethyl-	–	–	–	–	–	–	20 NJ	**NS**	**NS**
Naphthalene, 1-methyl-	–	–	–	–	50 NJ	–	–	**NS**	**NS**
Naphthalene, 2,3,6-trimethyl-	–	–	–	–	20 NJ	–	–	**NS**	**NS**
Naphthalene, 2,3-dimethyl-	–	–	–	–	40 NJ	–	–	**NS**	**NS**
Naphthalene, 2,7-dimethyl-	–	–	–	–	20 NJ	–	20 NJ	**NS**	**NS**
Phenanthrene, 1-methyl-	–	–	–	10 NJ	–	–	–	**NS**	**NS**
Phenanthrene, 2-methyl-	–	–	–	–	–	–	20 NJ	**NS**	**NS**

Table 6d
Semi-Volatile Organic Compounds in Sediments
Key West Gas & Electric Light Company
Key West, Monroe County, Florida
February 2012

SEDIMENTS **Analyte**	KGES001SD Background ug/kg dry	KGES002SD ug/kg dry	KGES003SD ug/kg dry	KGES603SD ug/kg dry	KGES004SD ug/kg dry	KGES005SD Stormdrain ug/kg dry	**SQAG TEL** **ug/kg**	**SQAG PEL** **ug/kg**
(3 &/or 4) methylphenol	280U	–	–	–	–	850J	**NG**	**NG**
Benzo(a)anthracene	280U	–	–	–	–	**140J**	**74.8**	**693**
Benzo(b)fluoranthene	280U	–	–	–	–	350	**NG**	**NG**
Benzo(k)fluoranthene	280U	–	–	–	–	260J	**NG**	**NG**
Bis (2-ethyl hexyl) phthalate	280U	--	--	--	--	**490**	**182**	**2,647**
Chrysene	280U	–	–	–	–	**340J**	**108**	**846**
Fluoranthene	280U	–	–	–	–	**290J**	**113**	**1,494**
Indeno (1,2,3-cd) pyrene	280U	–	–	–	–	220J	**NS**	**NG**
Pyrene	280U	–	–	–	–	**340J**	**153**	**1,398**
Unidentified Compound(s)	1000J	--	1000J	2000J	3000J	6000J	**NG**	**NG**

QUALIFIER:

J – The identification of the analyte is acceptable; the reported value is an estimate.
N – There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.
NJ – Presumptive evidence that analyte is present; reported as a tentative identification with an estimated value.
R – The presence or absence of the analyte cannot be determined from the data due to severe quality control problems. The data are rejected and considered unusable.
U& – – The analyte was not detected at or above the reporting limit.
NS – No Standard

KEY:

Bold - lettering implies exceedance of State SCTLs, GCTLs, MCLs or SQAGs.
Shaded-Observed Contamination per Federal Register. 12-14-90. Vol. 55 No.241. EPA 40 CFR Part 300 Hazard Ranking System Table 2-3
* Background Sample
*** Leachability values may be derived using SPLP Test to calculate site specific SCTLs or may be determined using TCLP as described in the December 14, 2004 "Final Technical Report: Development of Clean-up Target Levels (TCLs) for Chapter 62-777, F.A.C
SCTL-State of Florida Soil Cleanup Target Level- Chapter 62-777, F.A.C (revised 4/17/05)
GCTL-Groundwater Cleanup Target Level 62-777 F.A.C. (rev. 4/17/05)
MCL-maximum contaminant Level
SQAG-Sediment Quality Assessment Guideline Based on Approach to Assessment of Sediment Quality in Florida Coastal Waters by D.D MacDonnald. 11/94
TEL-Toxic Effect Level
PEL-Probable Effect Level
NG- No Guideline

Appendix D

PM ENVIRONMENTAL Environmental & Engineering Services

ENVIRONMENTAL DATABASE SEARCH

101-111 GERALDINE ST
101-111 GERALDINE ST
Key West, FL 33040

Inquiry Number: 03662252.2r
July 11, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

101-111 GERALDINE ST
KEY WEST, FL 33040

COORDINATES

Latitude (North):	24.5512000 - 24° 33' 4.32''
Longitude (West):	81.8051000 - 81° 48' 18.36''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	418461.8
UTM Y (Meters):	2715336.8
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	24081-E7 KEY WEST, FL
Most Recent Revision:	1977

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS ..... Florida's State-Funded Action Sites

State and tribal leaking storage tank lists

LAST ..... Leaking Aboveground Storage Tank Listing
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ..... Underground Storage Tanks on Indian Land
FF TANKS ..... Federal Facilities Listing
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

VCP ---------- Voluntary Cleanup Sites

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfield Areas

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
SWRCY ---------- Recycling Centers
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---------- Clandestine Drug Labs
Fl Sites ---------- Sites List
PRIORITYCLEANERS ---------- Priority Ranking List
US HIST CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
SPILLS ---------- Oil and Hazardous Materials Incidents
SPILLS 90 ---------- SPILLS 90 data from FirstSearch
SPILLS 80 ---------- SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---------- RCRA - Non Generators
DOT OPS ---------- Incident and Accident Data
DOD ---------- Department of Defense Sites
CONSENT ---------- Superfund (CERCLA) Consent Decrees
ROD ---------- Records Of Decision
UMTRA ---------- Uranium Mill Tailings Sites
US MINES ---------- Mines Master Index File
TRIS ---------- Toxic Chemical Release Inventory System
TSCA ---------- Toxic Substances Control Act
FTTS ---------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---------- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---------- Section 7 Tracking Systems
ICIS ---------- Integrated Compliance Information System
PADS ---------- PCB Activity Database System

MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
UIC	Underground Injection Wells Database Listing
DRYCLEANERS	Drycleaning Facilities
DEDB	Ethylene Dibromide Database Results
NPDES	Wastewater Facility Regulation Database
AIRS	Permitted Facilities Listing
FL Cattle Dip. Vats	Cattle Dipping Vats
TIER 2	Tier 2 Facility Listing
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
PRP	Potentially Responsible Parties
2020 COR ACTION	2020 Corrective Action Program List
US AIRS	Aerometric Information Retrieval System Facility Subsystem
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
Financial Assurance	Financial Assurance Information Listing
LEAD SMELTERS	Lead Smelter Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 02/04/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KEY WEST GAS LIGHT CO	GERALDINE ST AND 709 FO	S 0 - 1/8 (0.010 mi.)	1	7

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 02/12/2013 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HRS ROOSEVELT SANDS CLINIC	105 OLIVIA ST	SSE 0 - 1/8 (0.121 mi.)	8	19
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
NAVAL AIR STATION TRUMAN ANNEX	SOUTHARD ST	SSW 0 - 1/8 (0.082 mi.)	B3	9

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environmental Protection's Facility Directory (Solid Waste Facilities).

A review of the SWF/LF list, as provided by EDR, and dated 04/24/2013 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRUMAN ANNEX WATERFRONT ESA Facility-Site Id: 98405	TRUMAN ANNEX	SW 1/8 - 1/4 (0.211 mi.)	11	31

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's PCTO1--Petroleum Contamination Detail Report.

A review of the LUST list, as provided by EDR, and dated 04/09/2013 has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KEY WEST CITY-DIESEL PLANT Facility-Site Id: 9101950 Discharge Cleanup Status: SRCR - SRCR COMPLETE	***ANGELA ST***	***ENE 0 - 1/8 (0.083 mi.)***	***A6***	***15***
MARINE BANK Facility-Site Id: 8732429 Discharge Cleanup Status: PNTD - PARTIAL ELIGIBILITY - NO TASK LEVEL DATA	***701 WHITEHEAD ST***	***NE 1/8 - 1/4 (0.193 mi.)***	***10***	***27***
MONROE CNTY KEY WEST COURTHOUS Facility-Site Id: 9103265 Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED	***310 FLEMING ST***	***N 1/8 - 1/4 (0.214 mi.)***	***12***	***31***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOAS TIRE SERVICE	***825 DUVAL ST***	***ENE 1/4 - 1/2 (0.284 mi.)***	***13***	***37***
Facility-Site Id: 9101760				
Discharge Cleanup Status: SA - SA ONGOING				
KEY WEST CITY-CITY HALL	***525 ANGELA ST***	***NE 1/4 - 1/2 (0.330 mi.)***	***14***	***42***
Facility-Site Id: 9200099				
Discharge Cleanup Status: RA - RA ONGOING				
TEXACO STATION	***500 TRUMAN AVE***	***E 1/4 - 1/2 (0.338 mi.)***	***15***	***46***
Facility-Site Id: 8511960				
Discharge Cleanup Status: RA - RA ONGOING				
SIMONTON ST PROPERTY	***800 SIMONTON ST***	***ENE 1/4 - 1/2 (0.384 mi.)***	***17***	***52***
Facility-Site Id: 9400281				
Discharge Cleanup Status: ENTD - ELIGIBLE - NO TASK LEVEL DATA				
MOPED HOSPITAL	***601 TRUMAN AVE***	***E 1/4 - 1/2 (0.423 mi.)***	***18***	***56***
Facility-Site Id: 8841232				
Discharge Cleanup Status: SA - SA ONGOING				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRUMAN ANNEX CO FUEL ISLAND	***201 FRONT ST***	***NNW 1/4 - 1/2 (0.373 mi.)***	***16***	***49***
Facility-Site Id: 8626055				
Discharge Cleanup Status: NFA - NFA COMPLETE				
TRUMAN ANNEX CO MAINLAND	***FRONT ST***	***NNW 1/4 - 1/2 (0.435 mi.)***	***19***	***60***
Facility-Site Id: 8944051				
Discharge Cleanup Status: NFA - NFA COMPLETE				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. Shortly after the September 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the UST list, as provided by EDR, and dated 04/09/2013 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KEY WEST CITY-DIESEL PLANT	***ANGELA ST***	***ENE 0 - 1/8 (0.083 mi.)***	***A6***	***15***
Facility-Site Id: 9101950				
FL KEYS AQUEDUCT AUTH-KEY WEST	***301 SOUTHARD ST***	***NNE 1/8 - 1/4 (0.145 mi.)***	***9***	***20***
Facility-Site Id: 8624737				
MARINE BANK	***701 WHITEHEAD ST***	***NE 1/8 - 1/4 (0.193 mi.)***	***10***	***27***
Facility-Site Id: 8732429				
MONROE CNTY KEY WEST COURTHOUS	***310 FLEMING ST***	***N 1/8 - 1/4 (0.214 mi.)***	***12***	***31***
Facility-Site Id: 9103265				

AST: Shortly after the Sept 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the AST list, as provided by EDR, and dated 04/09/2013 has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KEY WEST CITY-DIESEL PLANT Facility-Site Id: 9101950	***ANGELA ST***	***ENE 0 - 1/8 (0.083 mi.)***	***A6***	***15***
FL KEYS AQUEDUCT AUTH-KEY WEST Facility-Site Id: 8624737	***301 SOUTHARD ST***	***NNE 1/8 - 1/4 (0.145 mi.)***	***9***	***20***

State and tribal institutional control / engineering control registries

ENG CONTROLS: The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass avariety of engineered remedies to contain and/or reduce , contamination , and/or physical barriers intended to limit access to property ECs include fences, signs, guards, landfill caps, provision of potable water , slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

A review of the ENG CONTROLS list, as provided by EDR, and dated 04/01/2013 has revealed that there are 2 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRUMAN ANNEX DDT MIX AREA Facility-Site Id: NAS KEY WEST IR-3	***NAS KEY WEST***	***SSW 0 - 1/8 (0.082 mi.)***	***B4***	***13***
TRUMAN ANNEX DISPOSAL AREA Facility-Site Id: KEY WEST NAS IR-1	***NAS KEY WEST***	***SSW 0 - 1/8 (0.082 mi.)***	***B5***	***14***

INST CONTROL: The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

A review of the INST CONTROL list, as provided by EDR, and dated 04/01/2013 has revealed that there are 2 INST CONTROL sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRUMAN ANNEX DDT MIX AREA Facility-Site Id: NAS KEY WEST IR-3	***NAS KEY WEST***	***SSW 0 - 1/8 (0.082 mi.)***	***B4***	***13***
TRUMAN ANNEX DISPOSAL AREA Facility-Site Id: KEY WEST NAS IR-1	***NAS KEY WEST***	***SSW 0 - 1/8 (0.082 mi.)***	***B5***	***14***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/31/2011 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORT TAYLOR		SW 1/2 - 1 (0.523 mi.)	20	64

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRUMBO POINT NAS ANNEX		ENE 1/2 - 1 (0.793 mi.)	22	65

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KEY WEST GASIFICATION PLT	726 CATHERINE STREET	E 1/2 - 1 (0.577 mi.)	21	65

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	813 BAPTIST LN	ESE 0 - 1/8 (0.121 mi.)	7	19

EXECUTIVE SUMMARY

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

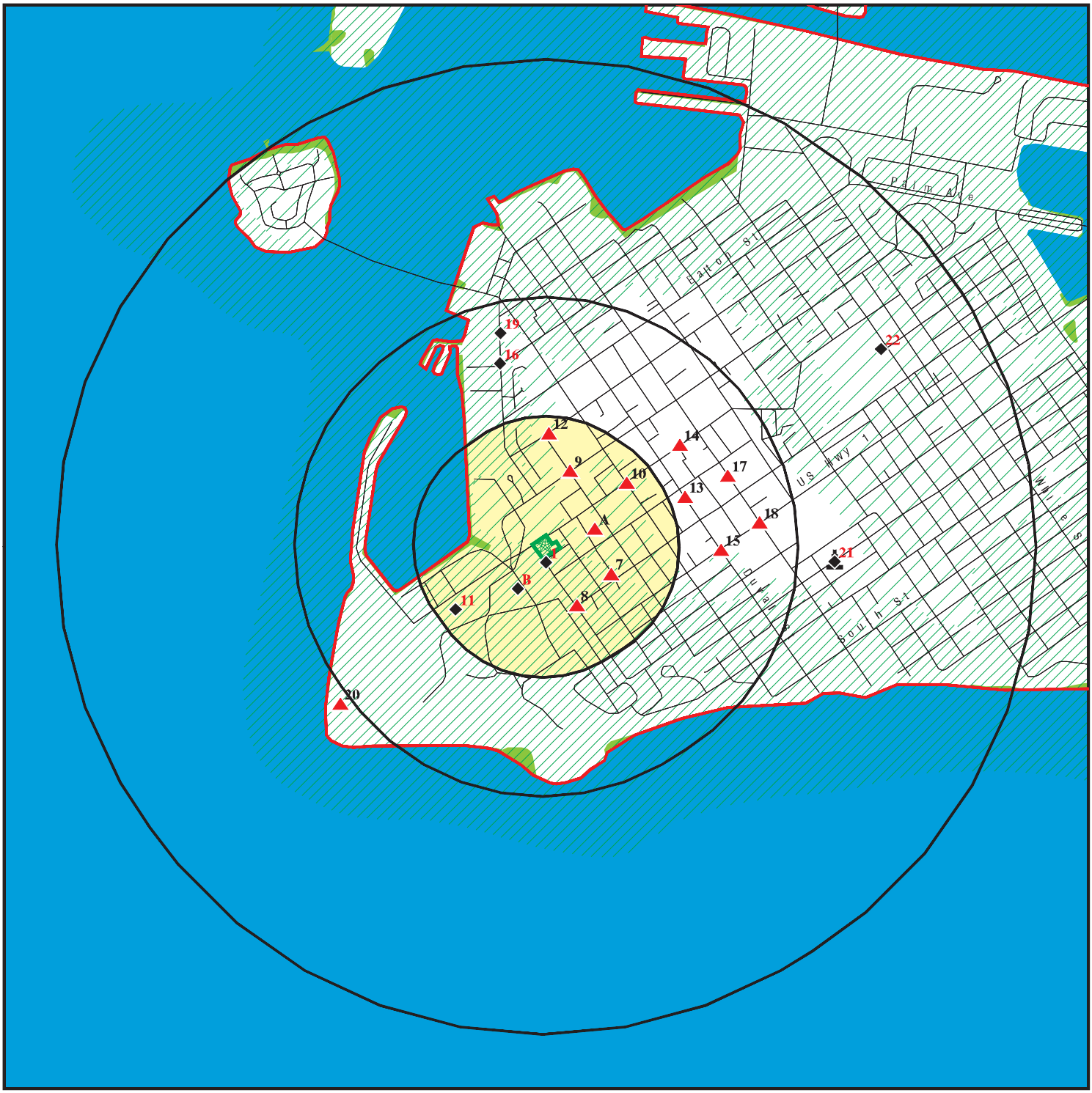
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	207 PETRONIA ST	E 0 - 1/8 (0.055 mi.)	A2	8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 25 records.

Site Name	Database(s)
KEY WEST NAS DEMOLITION KEY	RCRA-TSDF, CORRACTS, RCRA NonGen / NLR, 2020 COR ACTION
GEORGE ST. STORMWATER	UIC
US NAVY-TRUMAN ANNEX-CARIBROC	FF TANKS
US NAVY-SPECIAL FORCES GENERATOR	FF TANKS
US NAVY-SPECIAL FORCES MARINA	FF TANKS
US NAVY-NAS TRUMAN ANNEX SECURITY	FF TANKS
US NAVY-TRUMAN ANNEX JIATF EAST BL	FF TANKS
US NAVY-TRUMAN ANNEX MOLE	FF TANKS
US NAVY-TRUMAN ANNEX PORT SRVCS	FF TANKS
US NAVY-TRUMAN ANNEX WTR TANK EMER	FF TANKS
TRUMAN ANNEX WATERFRONT SITE2 ESA	SWF/LF
LAUREL ROAD	SWF/LF
FKAA BIG COPP. H WWTP	AST, Financial Assurance
CITY OF KEY WEST-TRANSFER STATION	AST, Financial Assurance
TOPPINO INC-BLAYLOCK OIL CO	AST
FLEET INC	AST
SOUTHEAST HOUSING LLC	RCRA NonGen / NLR
PARADISE POWDER COATING INC	RCRA NonGen / NLR
COURTESY AUTO SPECIALTIES	RCRA NonGen / NLR
ALEX'S AUTO WRECKING & PARTS INC.	RCRA-CESQG
TOPPINO INC	RCRA-CESQG
END OF SOUTHARD ST	ERNS
631 GREEN ST	ERNS
743 122 ST	ERNS
6810 FRONT ST SAFE HARBOR MARINA	ERNS

OVERVIEW MAP - 03662252.2r



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

County Boundary

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 101-111 GERALDINE ST	CLIENT: PM Environmental, Inc.
ADDRESS: 101-111 GERALDINE ST Key West FL 33040	CONTACT: Matthew Brainard INQUIRY #: 03662252.2r
LAT/LONG: 24.5512 / 81.8051	DATE: July 11, 2013 9:57 am

DETAIL MAP - 03662252.2r

0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 101-111 GERALDINE ST	CLIENT: PM Environmental, Inc.
ADDRESS: 101-111 GERALDINE ST Key West FL 33040	CONTACT: Matthew Brainard
LAT/LONG: 24.5512 / 81.8051	INQUIRY #: 03662252.2r DATE: July 11, 2013 10:00 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	0	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		2	0	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	1	0	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		1	2	7	NR	NR	10
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	3	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST	0.250		1	1	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
FF TANKS	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		2	0	0	NR	NR	2
INST CONTROL	0.500		2	0	0	NR	NR	2
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
Fl Sites	1.000		0	0	0	0	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	2	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DEDB	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	1	NR	1
EDR US Hist Auto Stat	0.250		1	0	NR	NR	NR	1
EDR US Hist Cleaners	0.250		1	0	NR	NR	NR	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
South
< 1/8
0.010 mi.
54 ft.

KEY WEST GAS LIGHT CO
GERALDINE ST AND 709 FORT ST
KEY WEST, FL 33041

CERCLIS **1014914937**
FLN000410751

Relative:
Lower

Actual:
6 ft.

CERCLIS:

Site ID:	0410751
EPA ID:	FLN000410751
Facility County:	MONROE
Short Name:	KEY WEST GAS LIGHT CO
Congressional District:	Not reported
IFMS ID:	Not reported
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	04
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information
Non NPL Status Date:	08/16/12
Site Fips Code:	12087
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported
Alias Comments:	Not reported

Site Description: Not reported

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	10/30/10
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	PRE-CERCLIS SCREENING
Date Started:	/ /
Date Completed:	01/07/11

KEY WEST GAS LIGHT CO (Continued) **1014914937**

Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	10/01/11
Date Completed:	10/31/11
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	SITE INSPECTION
Date Started:	01/01/12
Date Completed:	08/16/12
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

A2 **EDR US Hist Cleaners** **1015015610**
East **207 PETRONIA ST** **N/A**
< 1/8 **KEY WEST, FL 33040**
0.055 mi.
288 ft. **Site 1 of 2 in cluster A**

Relative:
Higher

Actual:
8 ft.

EDR Historical Cleaners:

Name:	PETRONIA STREET LAUNDRY
Year:	2004
Address:	207 PETRONIA ST

Name:	BAHAMA VILLAGE LAUNDRY
Year:	2009
Address:	207 PETRONIA ST

B3
SSW
< 1/8
0.082 mi.
432 ft.

NAVAL AIR STATION TRUMAN ANNEX
SOUTHARD ST
KEY WEST, FL 33040

Site 1 of 3 in cluster B

RCRA-CESQG **1000101470**
FL4170023788

Relative:
Lower

Actual:
6 ft.

RCRA-CESQG:

Date form received by agency:	08/16/2012
Facility name:	NAVAL AIR STATION TRUMAN ANNEX
Facility address:	SOUTHARD ST KEY WEST, FL 33040
EPA ID:	FL4170023788
Mailing address:	PO BOX 9007 SOUTHARD ST KEY WEST, FL 33040-9007
Contact:	PATRICIA MCNEILL
Contact address:	PO BOX 9007/CODE 1883PM KEY WEST, FL 33040-9001
Contact country:	US
Contact telephone:	3052932583
Contact email:	Not reported
EPA Region:	04
Land type:	Federal
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	09/07/2011

NAVAL AIR STATION TRUMAN ANNEX (Continued) **1000101470**

Facility name: NAVAL AIR STATION TRUMAN ANNEX
Classification: Not a generator, verified

Date form received by agency: 04/12/2010
Facility name: NAVAL AIR STATION TRUMAN ANNEX
Classification: Not a generator, verified

Date form received by agency: 03/28/2000
Facility name: NAVAL AIR STATION TRUMAN ANNEX
Site name: NAVAL AIR STATION, TRUMAN ANNEX
Classification: Large Quantity Generator

Date form received by agency: 03/03/1998
Facility name: NAVAL AIR STATION TRUMAN ANNEX
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/14/1996
Facility name: NAVAL AIR STATION TRUMAN ANNEX
Site name: USNAS TRUMAN ANNEX
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Facility name: NAVAL AIR STATION TRUMAN ANNEX
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Facility Has Received Notices of Violations:
Regulation violated: 62-710.401(6)
Area of violation: State Statute or Regulation
Date violation determined: 04/22/2009
Date achieved compliance: 08/19/2009
Violation lead agency: State
Enforcement action: DEP NON-COMPLIANCE LETTER
Enforcement action date: 06/18/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: GGR:40 CFR 262.11
Area of violation: Generators - General
Date violation determined: 08/13/1996
Date achieved compliance: 01/24/1997
Violation lead agency: State
Enforcement action: DEP WARNING LETTER

NAVAL AIR STATION TRUMAN ANNEX (Continued) **1000101470**

Enforcement action date: 11/19/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 08/13/1996
Date achieved compliance: 01/24/1997
Violation lead agency: State
Enforcement action: DEP WARNING LETTER
Enforcement action date: 11/19/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: GGR:
Area of violation: Generators - General
Date violation determined: 09/24/1987
Date achieved compliance: 11/13/1987
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/01/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/03/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/17/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

NAVAL AIR STATION TRUMAN ANNEX (Continued) **1000101470**

Area of violation: State Statute or Regulation
Date achieved compliance: 08/19/2009
Evaluation lead agency: State

Evaluation date: 05/23/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/02/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/03/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/09/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/27/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/11/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/06/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

NAVAL AIR STATION TRUMAN ANNEX (Continued) **1000101470**

Evaluation date: 07/24/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/13/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 01/24/1997
Evaluation lead agency: State

Evaluation date: 08/13/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/24/1997
Evaluation lead agency: State

Evaluation date: 08/11/1995
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/21/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/24/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/24/1987
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 11/13/1987
Evaluation lead agency: State

B4 **TRUMAN ANNEX DDT MIX AREA** **ENG CONTROLS S105589156**
SSW **NAS KEY WEST** **INST CONTROL N/A**
< 1/8 **KEY WEST, FL 33040**
0.082 mi.
432 ft. **Site 2 of 3 in cluster B**

Relative:
Lower

Actual:
6 ft.

ENG CONTROLS:
Facility ID: NAS KEY WEST IR-3
ICR Site: 94
Inst Control Type: LAND USE RESTRICTION
Engg Control Type: IMPERVIOUS CAP
Contaminated Media: SOIL
Contamination: PESTICIDES (INCLUDES HERBICIDES, FUNGICIDES AND INSECTICIDES)
Lat/Long (dms): 24 33 1.2100 / 81 48 18.1700
Data Ammended: Not reported
Date Removed: Not reported
Mechanism - Date Order Issued: 07/02/1999

TRUMAN ANNEX DDT MIX AREA (Continued) **S105589156**

Inspection Date:	11/27/2000
Mechanism - Date IC Removed:	08/31/1998
Legal Description:	Not reported
Mechanism - Program Area:	CERCLA
Comments:	Not reported

Inst Control:

Facility Id:	NAS KEY WEST IR-3
Inst Control Type:	LAND USE RESTRICTION
Eng Control Type:	IMPERVIOUS CAP
Contaminated Media:	SOIL
Contamination:	PESTICIDES (INCLUDES HERBICIDES, FUNGICIDES AND INSECTICIDES)
Lat/Long (dms):	24 33 1.2100 / 81 48 18.1700
Date Amended:	Not reported
Mechanism - Date IC Removed:	08/31/1998
Mechanism - Program Area:	CERCLA
Mechanism - Date Order Issued:	07/02/1999
Date Removed:	Not reported
Inspection Date:	11/27/2000
Legal Description:	Not reported
Comments:	Not reported

B5 **TRUMAN ANNEX DISPOSAL AREA** **ENG CONTROLS** **S105589155**
SSW **NAS KEY WEST** **INST CONTROL** **N/A**
< 1/8 **KEY WEST, FL 33040**
0.082 mi.
432 ft. **Site 3 of 3 in cluster B**

Relative:
Lower

Actual:
6 ft.

ENG CONTROLS:

Facility ID:	KEY WEST NAS IR-1
ICR Site:	93
Inst Control Type:	LAND USE RESTRICTION
Engg Control Type:	SOIL CAP
Contaminated Media:	SOIL
Contamination:	METAL - OTHER
Lat/Long (dms):	24 32 40.2600 / 81 48 15.9300
Data Ammended:	Not reported
Date Removed:	Not reported
Mechanism - Date Order Issued:	12/29/2000
Inspection Date:	Not reported
Mechanism - Date IC Removed:	08/31/1998
Legal Description:	Not reported
Mechanism - Program Area:	CERCLA
Comments:	Not reported

Inst Control:

Facility Id:	KEY WEST NAS IR-1
Inst Control Type:	LAND USE RESTRICTION
Eng Control Type:	SOIL CAP
Contaminated Media:	SOIL
Contamination:	METAL - OTHER
Lat/Long (dms):	24 32 40.2600 / 81 48 15.9300
Date Amended:	Not reported
Mechanism - Date IC Removed:	08/31/1998
Mechanism - Program Area:	CERCLA
Mechanism - Date Order Issued:	12/29/2000
Date Removed:	Not reported

TRUMAN ANNEX DISPOSAL AREA (Continued) **S105589155**

Inspection Date:	Not reported
Legal Description:	Not reported
Comments:	Not reported
Facility Id:	KEY WEST NAS IR-1
Inst Control Type:	LAND USE RESTRICTION
Eng Control Type:	Not reported
Contaminated Media:	SEDIMENT
Contamination:	METAL - OTHER
Lat/Long (dms):	24 32 40.2600 / 81 48 15.9300
Date Amended:	Not reported
Mechanism - Date IC Removed:	08/31/1998
Mechanism - Program Area:	CERCLA
Mechanism - Date Order Issued:	12/29/2000
Date Removed:	Not reported
Inspection Date:	Not reported
Legal Description:	Not reported
Comments:	Not reported

A6 **KEY WEST CITY-DIESEL PLANT** **LUST** **U001048822**
ENE **ANGELA ST** **UST** **N/A**
< 1/8 **KEY WEST, FL 33040** **AST**
0.083 mi.
439 ft. **Site 2 of 2 in cluster A**

Relative:
Higher

Actual:
8 ft.

LUST:

Region:	STATE
Facility Id:	9101950
Facility Status:	CLOSED
Facility Type:	H - Local Government
Facility Phone:	(305)296-2133
Facility Cleanup Rank:	Not reported
District:	South District
Lat/Long (dms):	24 33 4.7 / 81 48 18.
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	01/06/1998
Score When Ranked:	Not reported
Operator:	WALLACE, ROBERT W
Name Update:	Not reported
Address Update:	Not reported

Discharge Cleanup Summary:

Discharge Date:	03/07/1991
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	07/27/1995
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	Not reported

KEY WEST CITY-DIESEL PLANT (Continued) **U001048822**

Site Mgr End Date:	Not reported
Tank Office:	-

Petroleum Cleanup Program Eligibility:

Facility ID:	9101950
Discharge Date:	07-MAR-91
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	07/27/1995
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Application Received Date:	30-JUN-92
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	01-JUN-93
Elig Status Date:	01-JUN-93
Letter Of Intent Date:	06/30/1992
Redetermined:	No
Inspection Date:	06/18/1992
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	500
Deductible Paid To Date:	500
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	9101950
Facility Status:	CLOSED
Facility Type:	H - Local Government -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	07-27-1995
Discharge Date:	03-07-1991
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	07-27-1995
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	04-17-1995
SRC Review Date:	07-27-1995
SRC Completion Status:	A - APPROVED
SRC Issue Date:	07-27-1995
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported

KEY WEST CITY-DIESEL PLANT (Continued) **U001048822**

SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44241
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	07-17-1992
SA Payment Date:	Not reported
RAP Task ID:	44242
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	07-21-1994
RAP Payment Date:	Not reported
RAP Last Order Approved:	1994-07-21 00:00:00
RA Task ID:	44243
RA Cleanup Responsible:	RP - RESPONSIBLE PARTY
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility Id:	9101950
Facility Status:	CLOSED
Type Description:	Local Government
Facility Phone:	(305) 296-2133
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 7 / 81 48 12

Owner:

Owner Id:	11927
Owner Name:	KEY WEST CITY
Owner Address:	PO BOX 1409
Owner Address 2:	ATTN: ANGELA BUDDE
Owner City,St,Zip:	KEY WEST, FL 33040
Owner Contact:	PAUL CATES
Owner Phone:	(305) 292-8117

Tank Info:

Tank Id:	2
Status:	Removed
Status Date:	30-JUN-1992
Install Date:	Not reported
Substance:	Diesel-generator,pump
Content Description:	Generator/Pump Diesel

KEY WEST CITY-DIESEL PLANT (Continued) **U001048822**

Gallons: 24200
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Click here for Florida Oculus:

AST:
Facility ID: 9101950
Facility Status: CLOSED
Type Description: Local Government
Facility Phone: (305) 296-2133
DEP Contractor Own: No
Region: STATE
Positioning Method: UNVR
Lat/Long (dms): 24 33 7 / 81 48 12

Owner:
Owner Id: 11927
Owner Name: KEY WEST CITY
Owner Address: PO BOX 1409
Owner Address 2: ATTN: ANGELA BUDDE
Owner City,St,Zip: KEY WEST, FL 33040
Owner Contact: PAUL CATES
Owner Phone: (305) 292-8117

Tank Id: 1
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Diesel-generator,pump
Content Description: Generator/Pump Diesel
Gallons: 26400
Tank Location: ABOVEGROUND

Tank Id: 3
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Diesel-generator,pump
Content Description: Generator/Pump Diesel
Gallons: 11800
Tank Location: ABOVEGROUND

Click here for Florida Oculus:

7
ESE
< 1/8
0.121 mi.
638 ft.

813 BAPTIST LN
KEY WEST, FL 33040

Database(s): **EDR US Hist Auto Stat**
EDR ID Number: **1015644603**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
8 ft.

EDR Historical Auto Stations:

Name:	LEROY MECHANIC
Year:	2008
Address:	813 BAPTIST LN
Name:	LEROY MECHANIC
Year:	2009
Address:	813 BAPTIST LN

8
SSE
< 1/8
0.121 mi.
639 ft.

HRS ROOSEVELT SANDS CLINIC
105 OLIVIA ST
KEY WEST, FL 33040

Database(s): **RCRA-CESQG**
EDR ID Number: **1014467613**
EPA ID Number: **FLT950052456**

Relative:
Higher

Actual:
7 ft.

RCRA-CESQG:

Date form received by agency:	08/09/1995
Facility name:	HRS ROOSEVELT SANDS CLINIC
Facility address:	105 OLIVIA ST KEY WEST, FL 330407379
EPA ID:	FLT950052456
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	04
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

HRS ROOSEVELT SANDS CLINIC (Continued) **1014467613**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

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9 **FL KEYS AQUEDUCT AUTH-KEY WEST PLT** **UST U001362601**
NNE **301 SOUTHARD ST** **AST N/A**
1/8-1/4 **KEY WEST, FL 33040** **Financial Assurance**
0.145 mi.
764 ft.

Relative:
Higher

Actual:
9 ft.

UST:
Facility Id: 8624737
Facility Status: OPEN
Type Description: State Government
Facility Phone: (305) 296-2454
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 24 33 15 / 81 48 15

Owner:
Owner Id: 7437
Owner Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address 2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Owner Contact: JOLYNN CATES-REYNOLDS
Owner Phone: (305) 296-2454

Tank Info:
Tank Id: 4
Status: Removed
Status Date: 28-FEB-1992
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 888
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Click here for Florida Oculus:

AST:
Facility ID: 8624737
Facility Status: OPEN
Type Description: State Government
Facility Phone: (305) 296-2454
DEP Contractor Own: No
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 24 33 15 / 81 48 15

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

Owner:
Owner Id: 7437
Owner Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address 2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Owner Contact: JOLYNN CATES-REYNOLDS
Owner Phone: (305) 296-2454

Tank Id: 1
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Diesel-generator,pump
Content Description: Generator/Pump Diesel
Gallons: 1000
Tank Location: ABOVEGROUND

Tank Id: 2
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Waste oil
Content Description: Waste Oil
Gallons: 600
Tank Location: ABOVEGROUND

Tank Id: 3
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unleaded gas
Content Description: Unleaded Gas
Gallons: 1000
Tank Location: ABOVEGROUND

Tank Id: 5
Status: Removed
Status Date: Removed
Install Date: 01-FEB-1993
Substance: Diesel-generator,pump
Content Description: Generator/Pump Diesel
Gallons: 1000
Tank Location: ABOVEGROUND

Tank Id: 6
Status: In service
Status Date: In service
Install Date: 01-FEB-2006
Substance: Diesel-emergen generator
Content Description: Emerg Generator Diesel
Gallons: 5200
Tank Location: ABOVEGROUND

Construction:
Tank Id: 6

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

Construction Category: Overfill/Spill
Construction Description: Flow shut-Off

Tank Id: 6
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 6
Construction Category: Secondary Containment
Construction Description: Double wall - tank jacket

Tank Id: 6
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 6
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 6
Construction Category: Primary Construction
Construction Description: Fiberglass

Tank Id: 6
Construction Category: Primary Construction
Construction Description: Concrete

Monitoring:
Tank ID: 6
Monitoring Description: Visual inspection of ASTs

Tank ID: 6
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Monitoring Description: Monitor tank bottom space

Piping:
Tank ID: 6
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank ID: 6
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Click here for Florida Oculus:

FL Financial Assurance 3:
Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: PLUS
Effective Date: 01-NOV-1996
Expire Date: 01-NOV-1997
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: HUDSON SPECIALTY INSURANCE COMPANY
Effective Date: 01-JAN-2006
Expire Date: 01-JAN-2009
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 23-DEC-2007
Expire Date: 23-DEC-2010
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 23-DEC-2010
Expire Date: 23-DEC-2013
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

FL Financial Assurance 3:
Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: PLUS
Effective Date: 01-NOV-1996
Expire Date: 01-NOV-1997
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: HUDSON SPECIALTY INSURANCE COMPANY
Effective Date: 01-JAN-2006
Expire Date: 01-JAN-2009
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 23-DEC-2007
Expire Date: 23-DEC-2010
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 23-DEC-2010
Expire Date: 23-DEC-2013
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

FL Financial Assurance 3:
Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN
Facility Type: G
Type Description: State Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: PLUS
Effective Date: 01-NOV-1996
Expire Date: 01-NOV-1997
Owner ID: 7437
Onwer Name: FL KEYS AQUEDUCT AUTHORITY
Owner Address: PO BOX 1239
Owner Address2: ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip: KEY WEST, FL 33041
Contact: JOLYNN CATES-REYNOLDS
Resp Party Phone: (305) 296-2454

Region: 3
Facility ID: 8624737
Facility Phone: (305) 296-2454
Facility Status: OPEN

FL KEYS AQUEDUCT AUTH-KEY WEST PLT (Continued) **U001362601**

Facility Type:	G
Type Description:	State Government
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	HUDSON SPECIALTY INSURANCE COMPANY
Effective Date:	01-JAN-2006
Expire Date:	01-JAN-2009
Owner ID:	7437
Onwer Name:	FL KEYS AQUEDUCT AUTHORITY
Owner Address:	PO BOX 1239
Owner Address2:	ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	JOLYNN CATES-REYNOLDS
Resp Party Phone:	(305) 296-2454

Region:	3
Facility ID:	8624737
Facility Phone:	(305) 296-2454
Facility Status:	OPEN
Facility Type:	G
Type Description:	State Government
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	INDIAN HARBOR
Effective Date:	23-DEC-2007
Expire Date:	23-DEC-2010
Owner ID:	7437
Onwer Name:	FL KEYS AQUEDUCT AUTHORITY
Owner Address:	PO BOX 1239
Owner Address2:	ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	JOLYNN CATES-REYNOLDS
Resp Party Phone:	(305) 296-2454

Region:	3
Facility ID:	8624737
Facility Phone:	(305) 296-2454
Facility Status:	OPEN
Facility Type:	G
Type Description:	State Government
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	INDIAN HARBOR
Effective Date:	23-DEC-2010
Expire Date:	23-DEC-2013
Owner ID:	7437
Onwer Name:	FL KEYS AQUEDUCT AUTHORITY
Owner Address:	PO BOX 1239
Owner Address2:	ATTN: JOLYNN CATES REYNOLDS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	JOLYNN CATES-REYNOLDS
Resp Party Phone:	(305) 296-2454

10
NE
1/8-1/4
0.193 mi.
1018 ft.

MARINE BANK
701 WHITEHEAD ST
KEY WEST, FL 33040

LUST **U001362665**
UST **N/A**

Relative:
Higher

Actual:
9 ft.

LUST:

Region:	STATE
Facility Id:	8732429
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	Not reported
Facility Cleanup Rank:	11086
District:	South District
Lat/Long (dms):	24 33 11. / 81 48 7.6
Section:	002
Township:	003
Range:	004
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	10/20/2003
Score When Ranked:	9
Operator:	MARINE BANK
Name Update:	Not reported
Address Update:	Not reported

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	APPL - APPLICATION
Contact:	EDWARD WATTS
Contact Company:	MARINE BANK
Contact Address:	701 WHITEHEAD ST
Contact City/State/Zip:	KEY WEST, FL 33040
Phone:	Not reported
Bad Address Ind:	Y
State:	FL
Zip:	33040, 7419
Score:	9
Score Effective Date:	20-OCT-03 12.00.00.000000
Related Party ID:	13573
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	04/14/1987
RP Zip:	7419
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	01/01/1996
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	PNTD - PARTIAL ELIGIBILITY - NO TASK LEVEL DATA
Disch Cleanup Status Date:	03/22/1996
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-

MARINE BANK (Continued) **U001362665**

Petroleum Cleanup Program Eligibility:

Facility ID:	8732429
Discharge Date:	01-JAN-96
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	PNTD - PARTIAL ELIGIBILITY - NO TASK LEVEL DATA
Disch Cleanup Status Date:	03/22/1996
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Application Received Date:	19-MAR-96
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	22-MAR-96
Elig Status Date:	22-MAR-96
Letter Of Intent Date:	03/19/1996
Redetermined:	No
Inspection Date:	02/08/1996
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	500
Deductible Paid To Date:	0
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	8732429
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	01-01-1996
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	PNTD - PARTIAL ELIGIBILITY - NO TASK LEVEL DATA
Disch Cleanup Status Date:	03-22-1996
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported

MARINE BANK (Continued) **U001362665**

SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	Not reported
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	Not reported
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility Id:	8732429
Facility Status:	CLOSED
Type Description:	Fuel user/Non-retail
Facility Phone:	Not reported
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 50 / 81 46 1

Owner:

Owner Id:	13573
Owner Name:	MARINE BANK
Owner Address:	701 WHITEHEAD ST
Owner Address 2:	Not reported
Owner City,St,Zip:	KEY WEST, FL 33040
Owner Contact:	EDWARD WATTS
Owner Phone:	Not reported

Tank Info:

Tank Id:	1
Status:	Closed in place
Status Date:	Not reported
Install Date:	01-JUL-1952
Substance:	Leaded gas
Content Description:	Leaded Gas
Gallons:	2500
Vessel Indicator:	TANK

MARINE BANK (Continued) **U001362665**

Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 2
Status: Closed in place
Status Date: Not reported
Install Date: 01-JUL-1952
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 2500
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 3
Status: Closed in place
Status Date: Not reported
Install Date: 01-JUL-1952
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 2500
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 4
Status: Closed in place
Status Date: Not reported
Install Date: 01-JUL-1952
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 2500
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 5
Status: Removed
Status Date: Not reported
Install Date: 01-JUL-1952
Substance: Kerosene
Content Description: Kerosene
Gallons: 500
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 6
Status: Removed
Status Date: Not reported
Install Date: 01-JUL-1952
Substance: Waste oil
Content Description: Waste Oil
Gallons: 275
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

MARINE BANK (Continued) **U001362665**

Click here for Florida Oculus:

11
SW
1/8-1/4
0.211 mi.
1113 ft.

TRUMAN ANNEX WATERFRONT ESA **SWF/LF** **S109689136**
TRUMAN ANNEX **N/A**
KEY WEST, FL 33041

Relative:
Lower

Actual:
6 ft.

SWF/LF:

Facility ID:	98405
District:	SD
Lat/Long:	24:32:57.34 / 81:48:29.11
Class Type:	910
Classification:	DISASTER DEBRIS MANAGEMENT SITE
Class Status:	INACTIVE (I)
Section:	Not reported
Township:	Not reported
Range:	Not reported
Responsible Authority Name:	Not reported
Responsible Authority Address:	Not reported
Responsible Authority City,St,Zip:	Not reported
Responsible Authority Phone:	Not reported
EMail Address1:	Not reported
EMail Address2:	Not reported
Site Supervisor Name:	Not reported
Site Supervisor Addr:	Not reported
Site Supervisor City/State/Zip:	Not reported
Site Supervisor Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City/State/Zip:	Not reported
Land Owner Telephone:	Not reported

Click here for Florida Oculus:

12
North
1/8-1/4
0.214 mi.
1130 ft.

MONROE CNTY KEY WEST COURTHOUSE ANNEX **LUST** **U001362838**
310 FLEMING ST **UST** **N/A**
KEY WEST, FL 33040 **Financial Assurance**

Relative:
Higher

Actual:
9 ft.

LUST:

Region:	STATE
Facility Id:	9103265
Facility Status:	OPEN
Facility Type:	I - County Government
Facility Phone:	(305)292-4531
Facility Cleanup Rank:	Not reported
District:	South District
Lat/Long (dms):	24 33 17. / 81 48 16.
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	AGPS

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

Datum: 0
Score: 8
Score Effective Date: 03/01/2002
Score When Ranked: Not reported
Operator: JOHN KING
Name Update: 02/26/2004
Address Update: 05/09/2006

Discharge Cleanup Summary:
Discharge Date: 01/27/1999
PCT Discharge Combined: Not reported
Cleanup Required: N - NO CLEANUP REQUIRED
Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date: 08/07/2002
Cleanup Work Status: COMPLETED
Information Source: D - DISCHARGE NOTIFICATION
Other Source Description: Not reported
Eligibility Indicator: I - INELIGIBLE
Site Manager: NORMAN_T
Site Mgr End Date: 05/12/2006
Tank Office: PCSD - SD STORAGE TANK PROGRAM

Contaminated Media:
Discharge Date: 01/27/1999
Pct Discharge Combined With: Not reported
Cleanup Required: N - NO CLEANUP REQUIRED
Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date: 08/07/2002
Cleanup Work Status: COMPLETED
Information Source: D - DISCHARGE NOTIFICATION
Other Source Description: Not reported
Elig Indicator: I - INELIGIBLE
Site Manager: NORMAN_T
Site Mgr End Date: 05/12/2006
Tank Office: PCSD - SD STORAGE TANK PROGRAM
Contaminated Drinking Wells: Not reported
Contaminated Monitoring Well: Not reported
Contaminated Soil: Yes
Contaminated Surface Water: Not reported
Contaminated Ground Water: No
Pollutant: G - EMERG GENERATOR DIESEL
Pollutant Other Description: Not reported
Gallons Discharged: Not reported

Task Information:
District: SD
Facility ID: 9103265
Facility Status: OPEN
Facility Type: I - County Government -
County: MONROE
County ID: 44
Cleanup Eligibility Status: I
Source Effective Date: Not reported
Discharge Date: 01-27-1999
Cleanup Required: N - NO CLEANUP REQUIRED
Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date: 08-07-2002
SRC Action Type: -
SRC Submit Date: Not reported

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	NORMAN_T
Site Mgr End Date:	05-12-2006
Tank Office:	PCSD - South District
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	Not reported
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	Not reported
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility Id:	9103265
Facility Status:	OPEN
Type Description:	County Government
Facility Phone:	(305) 292-4531
Region:	STATE
Positioning Method:	AGPS
Lat/Long (dms):	24 33 15 / 81 48 15

Owner:

Owner Id:	14802

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

Owner Name: MONROE CNTY PUBLIC WORKS DIV
Owner Address: 3583 S ROOSEVELT BLVD
Owner Address 2: ATTN: RON CHERRY JR
Owner City,St,Zip: KEY WEST, FL 33040
Owner Contact: RON CHERRY JR
Owner Phone: (305) 292-3452

Tank Info:
Tank Id: 1
Status: Removed
Status Date: 16-APR-1999
Install Date: 01-JAN-1984
Substance: Diesel-emergen generator
Content Description: Emerg Generator Diesel
Gallons: 1000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 2
Status: In service
Status Date: 01-JAN-2001
Install Date: 01-JAN-2001
Substance: Diesel-emergen generator
Content Description: Emerg Generator Diesel
Gallons: 4000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Construction:
Tank Id: 2
Construction Category: Primary Construction
Construction Description: Fiberglass clad steel

Tank Id: 2
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 2
Construction Category: Secondary Containment
Construction Description: Double wall - tank jacket

Tank Id: 2
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Monitoring:
Tank ID: 2
Monitoring Description: Monitor dbl wall tank space

Tank ID: 2
Monitoring Description: Electronic line leak detector

Tank ID: 2
Monitoring Description: Continuous electronic sensing

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

Tank ID: 2
Monitoring Description: Electronic monitor pipe sumps

Piping:
Tank ID: 2
Piping Category: Secondary Containment
Piping Description: Double wall

Tank ID: 2
Piping Category: Primary Construction
Piping Description: Approved synthetic material

Tank ID: 2
Piping Category: Miscellaneous Attributes
Piping Description: Pressurized piping system

Click here for Florida Oculus:

FL Financial Assurance 3:
Region: 3
Facility ID: 9103265
Facility Phone: (305) 292-4531
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 02-APR-2008
Expire Date: 02-APR-2009
Owner ID: 14802
Onwer Name: MONROE CNTY PUBLIC WORKS DIV
Owner Address: 3583 S ROOSEVELT BLVD
Owner Address2: ATTN: RON CHERRY JR
Owner City,St,Zip: KEY WEST, FL 33040
Contact: RON CHERRY JR
Resp Party Phone: (305) 292-3452

Region: 3
Facility ID: 9103265
Facility Phone: (305) 292-4531
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 12-MAR-2008
Expire Date: 12-MAR-2011
Owner ID: 14802
Onwer Name: MONROE CNTY PUBLIC WORKS DIV
Owner Address: 3583 S ROOSEVELT BLVD
Owner Address2: ATTN: RON CHERRY JR
Owner City,St,Zip: KEY WEST, FL 33040

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

Contact: RON CHERRY JR
Resp Party Phone: (305) 292-3452

FL Financial Assurance 3:
Region: 3
Facility ID: 9103265
Facility Phone: (305) 292-4531
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 02-APR-2008
Expire Date: 02-APR-2009
Owner ID: 14802
Onwer Name: MONROE CNTY PUBLIC WORKS DIV
Owner Address: 3583 S ROOSEVELT BLVD
Owner Address2: ATTN: RON CHERRY JR
Owner City,St,Zip: KEY WEST, FL 33040
Contact: RON CHERRY JR
Resp Party Phone: (305) 292-3452

Region: 3
Facility ID: 9103265
Facility Phone: (305) 292-4531
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 12-MAR-2008
Expire Date: 12-MAR-2011
Owner ID: 14802
Onwer Name: MONROE CNTY PUBLIC WORKS DIV
Owner Address: 3583 S ROOSEVELT BLVD
Owner Address2: ATTN: RON CHERRY JR
Owner City,St,Zip: KEY WEST, FL 33040
Contact: RON CHERRY JR
Resp Party Phone: (305) 292-3452

FL Financial Assurance 3:
Region: 3
Facility ID: 9103265
Facility Phone: (305) 292-4531
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: N
Finaincial Responsibility: INSURANCE
Insurance Company: INDIAN HARBOR
Effective Date: 02-APR-2008
Expire Date: 02-APR-2009
Owner ID: 14802
Onwer Name: MONROE CNTY PUBLIC WORKS DIV

MONROE CNTY KEY WEST COURTHOUSE ANNEX (Continued) **U001362838**

Owner Address:	3583 S ROOSEVELT BLVD
Owner Address2:	ATTN: RON CHERRY JR
Owner City,St,Zip:	KEY WEST, FL 33040
Contact:	RON CHERRY JR
Resp Party Phone:	(305) 292-3452
Region:	3
Facility ID:	9103265
Facility Phone:	(305) 292-4531
Facility Status:	OPEN
Facility Type:	I
Type Description:	County Government
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	INDIAN HARBOR
Effective Date:	12-MAR-2008
Expire Date:	12-MAR-2011
Owner ID:	14802
Onwer Name:	MONROE CNTY PUBLIC WORKS DIV
Owner Address:	3583 S ROOSEVELT BLVD
Owner Address2:	ATTN: RON CHERRY JR
Owner City,St,Zip:	KEY WEST, FL 33040
Contact:	RON CHERRY JR
Resp Party Phone:	(305) 292-3452

---

13 **BOAS TIRE SERVICE** **LUST U000687389**
ENE **825 DUVAL ST** **UST N/A**
1/4-1/2 **KEY WEST, FL 33040** **Financial Assurance**
0.284 mi.
1497 ft.

Relative:
Higher

Actual:
9 ft.

LUST:

Region:	STATE
Facility Id:	9101760
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	(305)296-2000
Facility Cleanup Rank:	11086
District:	South District
Lat/Long (dms):	24 33 6.6 / 81 48 0.1
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	09/30/2003
Score When Ranked:	9
Operator:	DION OIL CO
Name Update:	Not reported
Address Update:	Not reported

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	SUSAN BANKS
Contact Company:	DION OIL CO
Contact Address:	PO BOX 1209

BOAS TIRE SERVICE (Continued) **U000687389**

Contact City/State/Zip:	KEY WEST, FL 33041
Phone:	(305)296-2000
Bad Address Ind:	N
State:	FL
Zip:	33040, 7405
Score:	9
Score Effective Date:	30-SEP-03 12.00.00.000000
Related Party ID:	5851
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	05/20/1994
RP Zip:	1209
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	03/27/1991
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	ALLARD_M
Site Mgr End Date:	10/05/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM 5

Petroleum Cleanup Program Eligibility:

Facility ID:	9101760
Discharge Date:	27-MAR-91
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Application Received Date:	27-MAR-91
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	21-OCT-91
Elig Status Date:	21-OCT-91
Letter Of Intent Date:	03/27/1991
Redetermined:	No
Inspection Date:	10/14/1991
Site Manager:	ALLARD_M
Site Mgr End Date:	10/05/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM 5
Deductible Amount:	500
Deductible Paid To Date:	500
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Contaminated Media:

Discharge Date:	03/27/1991
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING

BOAS TIRE SERVICE (Continued) **U000687389**

Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	ALLARD_M
Site Mgr End Date:	10/05/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No
Pollutant:	D - VEHICULAR DIESEL
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported
Discharge Date:	03/27/1991
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	ALLARD_M
Site Mgr End Date:	10/05/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No
Pollutant:	P - GENERIC GASOLINE
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	SD
Facility ID:	9101760
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	03-27-1991
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09-30-2011
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	ALLARD_M

BOAS TIRE SERVICE (Continued) **U000687389**

Site Mgr End Date:	10-05-2011
Tank Office:	PCTM5 - Team 5
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44240
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	Not reported
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

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UST:

Facility Id:	9101760
Facility Status:	CLOSED
Type Description:	Fuel user/Non-retail
Facility Phone:	(305) 296-2000
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 2 / 81 48 5

Owner:

Owner Id:	5851
Owner Name:	DION OIL CO
Owner Address:	PO BOX 1209
Owner Address 2:	ATTN: JUDY SIMONS
Owner City,St,Zip:	KEY WEST, FL 33041
Owner Contact:	SUSAN BANKS
Owner Phone:	(305) 296-2000

BOAS TIRE SERVICE (Continued) **U000687389**

Tank Info:

Tank Id:	1
Status:	Closed in place
Status Date:	31-MAR-1991
Install Date:	Not reported
Substance:	Vehicular diesel
Content Description:	Vehicular Diesel
Gallons:	550
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	2
Status:	Closed in place
Status Date:	31-MAR-1991
Install Date:	Not reported
Substance:	Vehicular diesel
Content Description:	Vehicular Diesel
Gallons:	550
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Click here for Florida Oculus:

FL Financial Assurance 3:

Region:	3
Facility ID:	9101760
Facility Phone:	(305) 296-2000
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	PLUS
Effective Date:	23-AUG-1994
Expire Date:	23-AUG-1995
Owner ID:	5851
Onwer Name:	DION OIL CO
Owner Address:	PO BOX 1209
Owner Address2:	ATTN: JUDY SIMONS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	SUSAN BANKS
Resp Party Phone:	(305) 296-2000

FL Financial Assurance 3:

Region:	3
Facility ID:	9101760
Facility Phone:	(305) 296-2000
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	PLUS

BOAS TIRE SERVICE (Continued) **U000687389**

Effective Date:	23-AUG-1994
Expire Date:	23-AUG-1995
Owner ID:	5851
Onwer Name:	DION OIL CO
Owner Address:	PO BOX 1209
Owner Address2:	ATTN: JUDY SIMONS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	SUSAN BANKS
Resp Party Phone:	(305) 296-2000

FL Financial Assurance 3:

Region:	3
Facility ID:	9101760
Facility Phone:	(305) 296-2000
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	N
Finaincial Responsibility:	INSURANCE
Insurance Company:	PLUS
Effective Date:	23-AUG-1994
Expire Date:	23-AUG-1995
Owner ID:	5851
Onwer Name:	DION OIL CO
Owner Address:	PO BOX 1209
Owner Address2:	ATTN: JUDY SIMONS
Owner City,St,Zip:	KEY WEST, FL 33041
Contact:	SUSAN BANKS
Resp Party Phone:	(305) 296-2000

14
NE
1/4-1/2
0.330 mi.
1744 ft.

KEY WEST CITY-CITY HALL **LUST U001362848**
525 ANGELA ST **UST N/A**
KEY WEST, FL 33040

Relative:
Higher

Actual:
12 ft.

LUST:

Region:	STATE
Facility Id:	9200099
Facility Status:	CLOSED
Facility Type:	H - Local Government
Facility Phone:	(305)292-8277
Facility Cleanup Rank:	11086
District:	South District
Lat/Long (dms):	24 33 16. / 81 48 2.6
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	05/23/2002
Score When Ranked:	9
Operator:	MANNIX, ANA LISA
Name Update:	Not reported
Address Update:	Not reported

KEY WEST CITY-CITY HALL (Continued) **U001362848**

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	RAYMOND ARCHER
Contact Company:	KEY WEST CITY
Contact Address:	PO BOX 1409
Contact City/State/Zip:	KEY WEST, FL 33041
Phone:	(305)293-8315
Bad Address Ind:	N
State:	FL
Zip:	33040
Score:	9
Score Effective Date:	23-MAY-02 12.00.00.000000
Related Party ID:	11924
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	05/20/1994
RP Zip:	1409
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	09/14/1992
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	07/09/2001
Cleanup Work Status:	INACTIVE
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - SD STORAGE TANK PROGRAM

Petroleum Cleanup Program Eligibility:

Facility ID:	9200099
Discharge Date:	14-SEP-92
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	07/09/2001
Cleanup Work Status:	INACTIVE
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Application Received Date:	14-SEP-92
Cleanup Program:	C - PETROLEUM CLEANUP PARTICIPATION PROGRAM
Eligibility Status:	17-APR-08
Elig Status Date:	17-APR-08
Letter Of Intent Date:	Not reported
Redetermined:	No
Inspection Date:	Not reported
Site Manager:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - SD STORAGE TANK PROGRAM
Deductible Amount:	Not reported
Deductible Paid To Date:	0
Co-Pay Amount:	25
Co-Pay Paid To Date:	0
Cap Amount:	400000

KEY WEST CITY-CITY HALL (Continued) **U001362848**

Contaminated Media:

Discharge Date:	09/14/1992
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	07/09/2001
Cleanup Work Status:	INACTIVE
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - SD STORAGE TANK PROGRAM
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	No
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	A - LEADED GAS
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	SD
Facility ID:	9200099
Facility Status:	CLOSED
Facility Type:	H - Local Government -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	09-14-1992
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	07-09-2001
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - South District
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported

KEY WEST CITY-CITY HALL (Continued) **U001362848**

SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44167
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	09-20-1995
SA Payment Date:	Not reported
RAP Task ID:	63880
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	64724
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

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UST:

Facility Id:	9200099
Facility Status:	CLOSED
Type Description:	Local Government
Facility Phone:	(305) 292-8277
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 7 / 81 48 3

Owner:

Owner Id:	11924
Owner Name:	KEY WEST CITY
Owner Address:	PO BOX 1409
Owner Address 2:	Not reported
Owner City,St,Zip:	KEY WEST, FL 33041
Owner Contact:	RAYMOND ARCHER
Owner Phone:	(305) 293-8315

Tank Info:

Tank Id:	1
Status:	Removed
Status Date:	31-AUG-1992
Install Date:	Not reported
Substance:	Leaded gas
Content Description:	Leaded Gas
Gallons:	550
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

KEY WEST CITY-CITY HALL (Continued) **U001362848**

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15 **TEXACO STATION** **LUST U001362544**
East **500 TRUMAN AVE** **UST N/A**
1/4-1/2 **KEY WEST, FL 33040**
0.338 mi.
1785 ft.

Relative:
Higher

Actual:
9 ft.

LUST:

Region:	STATE
Facility Id:	8511960
Facility Status:	CLOSED
Facility Type:	A - Retail Station
Facility Phone:	(305)296-6123
Facility Cleanup Rank:	11086
District:	South District
Lat/Long (dms):	24 33 3.9 / 81 47 56.
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	01/15/2004
Score When Ranked:	9
Operator:	RAMSINGH FRANK
Name Update:	Not reported
Address Update:	Not reported

Discharge Cleanup Summary:

Discharge Date:	08/24/1987
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	09/22/1994
Cleanup Work Status:	INACTIVE
Information Source:	E - EDI
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-

Petroleum Cleanup Program Eligibility:

Facility ID:	8511960
Discharge Date:	24-AUG-87
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	09/22/1994
Cleanup Work Status:	INACTIVE
Information Source:	E - EDI
Other Source Description:	Not reported
Application Received Date:	22-OCT-87
Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	08-DEC-89
Elig Status Date:	08-DEC-89

TEXACO STATION (Continued) **U001362544**

Letter Of Intent Date:	12/29/1988
Redetermined:	No
Inspection Date:	12/02/1987
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	Not reported
Deductible Paid To Date:	0
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	8511960
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	08-24-1987
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	09-22-1994
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	ALL DATES DELETED, ADDITIONAL WORK COMPLETED
Cleanup Work Status:	INACTIVE
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	44402
SR Cleanup Responsible:	RP - RESPONSIBLE PARTY
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44403
SA Cleanup Responsible:	RP - RESPONSIBLE PARTY
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	08-11-1993
SA Payment Date:	Not reported

TEXACO STATION (Continued) **U001362544**

RAP Task ID:	44404
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	$23,003.00
RAP Completion Date:	08-11-1993
RAP Payment Date:	03-12-1990
RAP Last Order Approved:	1993-08-11 00:00:00
RA Task ID:	44405
RA Cleanup Responsible:	RP - RESPONSIBLE PARTY
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

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UST:

Facility Id:	8511960
Facility Status:	CLOSED
Type Description:	Retail Station
Facility Phone:	(305) 296-6123
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 3 / 81 47 56

Owner Records Not Found for this facility id:

Tank Info:

Tank Id:	1
Status:	Removed
Status Date:	01-JUL-1994
Install Date:	01-NOV-1971
Substance:	Leaded gas
Content Description:	Leaded Gas
Gallons:	8000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	2
Status:	Removed
Status Date:	01-JUL-1994
Install Date:	01-NOV-1971
Substance:	Unleaded gas
Content Description:	Unleaded Gas
Gallons:	8000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	3
Status:	Removed
Status Date:	01-JUL-1994
Install Date:	01-NOV-1971
Substance:	Unleaded gas
Content Description:	Unleaded Gas
Gallons:	8000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND

TEXACO STATION (Continued) **U001362544**

DEP Contractor: No

Tank Id: 4
Status: Removed
Status Date: 01-JUL-1994
Install Date: 01-JUL-1986
Substance: Waste oil
Content Description: Waste Oil
Gallons: 550
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

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16 TRUMAN ANNEX CO FUEL ISLAND **LUST S101264866**
NNW 201 FRONT ST **AST N/A**
1/4-1/2 KEY WEST, FL 33040
0.373 mi.
1971 ft.

Relative:
Lower

Actual:
4 ft.

LUST:
Region: STATE
Facility Id: 8626055
Facility Status: CLOSED
Facility Type: C - Fuel user/Non-retail
Facility Phone: (305)296-7988
Facility Cleanup Rank: Not reported
District: South District
Lat/Long (dms): 24 33 41. / 81 48 49.
Section: 006
Township: 68S
Range: 25E
Feature: Not reported
Method: UNVR
Datum: 0
Score: 10
Score Effective Date: 01/06/1998
Score When Ranked: Not reported
Operator: FRANCES L FLANAGEN
Name Update: Not reported
Address Update: Not reported

Discharge Cleanup Summary:
Discharge Date: 12/04/1988
PCT Discharge Combined: Not reported
Cleanup Required: R - CLEANUP REQUIRED
Discharge Cleanup Status: NFA - NFA COMPLETE
Disch Cleanup Status Date: 10/18/1989
Cleanup Work Status: COMPLETED
Information Source: E - EDI
Other Source Description: Not reported
Eligibility Indicator: E - ELIGIBLE
Site Manager: Not reported
Site Mgr End Date: Not reported
Tank Office: -

TRUMAN ANNEX CO FUEL ISLAND (Continued) **S101264866**

Petroleum Cleanup Program Eligibility:

Facility ID:	8626055
Discharge Date:	04-DEC-88
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/18/1989
Cleanup Work Status:	COMPLETED
Information Source:	E - EDI
Other Source Description:	Not reported
Application Received Date:	06-JAN-89
Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	02-OCT-89
Elig Status Date:	02-OCT-89
Letter Of Intent Date:	12/22/1988
Redetermined:	No
Inspection Date:	07/12/1989
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	Not reported
Deductible Paid To Date:	0
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	8626055
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	10-18-1989
Discharge Date:	12-04-1988
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-18-1989
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	09-29-1989
SRC Review Date:	10-18-1989
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-18-1989
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	44348
SR Cleanup Responsible:	RP - RESPONSIBLE PARTY
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported

TRUMAN ANNEX CO FUEL ISLAND (Continued) **S101264866**

SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44349
SA Cleanup Responsible:	RP - RESPONSIBLE PARTY
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	44350
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	44351
RA Cleanup Responsible:	RP - RESPONSIBLE PARTY
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

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AST:

Facility ID:	8626055
Facility Status:	CLOSED
Type Description:	Fuel user/Non-retail
Facility Phone:	(305) 296-7988
DEP Contractor Own:	No
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 42 / 81 48 47

Owner:

Owner Id:	22378
Owner Name:	TRUMAN ANNEX RETAIL DEVELOPMENT
Owner Address:	PO BOX 6200
Owner Address 2:	Not reported
Owner City,St,Zip:	KEY WEST, FL 33041
Owner Contact:	ANTHONY F MACINA JR
Owner Phone:	(305) 665-9201

Tank Id:	1
Status:	Removed
Status Date:	Removed
Install Date:	Not reported
Substance:	Unleaded gas
Content Description:	Unleaded Gas
Gallons:	1000

TRUMAN ANNEX CO FUEL ISLAND (Continued) **S101264866**

Tank Location: ABOVEGROUND

Tank Id: 2
Status: Removed
Status Date: Removed
Install Date: 01-JUL-1966
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 42000
Tank Location: ABOVEGROUND

Tank Id: 3
Status: Removed
Status Date: Removed
Install Date: 01-JUL-1966
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 42000
Tank Location: ABOVEGROUND

Click here for Florida Oculus:

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17 **SIMONTON ST PROPERTY** **LUST U001823925**
ENE **800 SIMONTON ST** **UST N/A**
1/4-1/2 **KEY WEST, FL 33040**
0.384 mi.
2026 ft.

Relative:
Higher

Actual:
10 ft.

LUST:

Region:	STATE
Facility Id:	9400281
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	(703)549-1772
Facility Cleanup Rank:	7562
District:	South District
Lat/Long (dms):	24 33 12. / 81 47 57.
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	01/22/2007
Score When Ranked:	13
Operator:	WELLINGTON GODDIN
Name Update:	Not reported
Address Update:	Not reported

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	APPL - APPLICATION
Contact:	WELLINGTON GODDIN
Contact Company:	GODDIN, WELLINGTON TRUSTEE
Contact Address:	112 S PATRICK ST
Contact City/State/Zip:	ALEXANDRIA, VA 22314
Phone:	(703)549-1772

SIMONTON ST PROPERTY (Continued) **U001823925**

Bad Address Ind:	N
State:	FL
Zip:	33040
Score:	9
Score Effective Date:	22-JAN-07 12.00.00.000000
Related Party ID:	26730
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	03/07/1994
RP Zip:	Not reported
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	02/01/1995
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	ENTD - ELIGIBLE - NO TASK LEVEL DATA
Disch Cleanup Status Date:	12/13/1996
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-

Petroleum Cleanup Program Eligibility:

Facility ID:	9400281
Discharge Date:	01-FEB-95
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	ENTD - ELIGIBLE - NO TASK LEVEL DATA
Disch Cleanup Status Date:	12/13/1996
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Application Received Date:	21-JUL-95
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	13-DEC-96
Elig Status Date:	13-DEC-96
Letter Of Intent Date:	Not reported
Redetermined:	No
Inspection Date:	11/01/1996
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	500
Deductible Paid To Date:	0
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	9400281
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44

SIMONTON ST PROPERTY (Continued) **U001823925**

Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	02-01-1995
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	ENTD - ELIGIBLE - NO TASK LEVEL DATA
Disch Cleanup Status Date:	12-13-1996
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44132
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	44133
RAP Cleanup Responsible ID:	ST - STATE
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	44134
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility Id:	9400281
Facility Status:	CLOSED

SIMONTON ST PROPERTY (Continued) **U001823925**

Type Description: Fuel user/Non-retail
Facility Phone: (703) 549-1772
Region: STATE
Positioning Method: UNVR
Lat/Long (dms): 24 33 30 / 81 48 0

Owner:
Owner Id: 26730
Owner Name: GODDIN, WELLINGTON TRUSTEE
Owner Address: 112 S PATRICK ST
Owner Address 2: Not reported
Owner City,St,Zip: ALEXANDRIA, VA 22314
Owner Contact: WELLINGTON GODDIN
Owner Phone: (703) 549-1772

Tank Info:
Tank Id: 1
Status: Removed
Status Date: 01-JUN-1996
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 888
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 2
Status: Removed
Status Date: 01-JUN-1996
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 888
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 3
Status: Removed
Status Date: 01-JUN-1996
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 888
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: No

Tank Id: 4
Status: Removed
Status Date: 01-JUN-1996
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 888
Vessel Indicator: TANK

SIMONTON ST PROPERTY (Continued) **U001823925**

Tank Location: UNDERGROUND
DEP Contractor: No

Click here for Florida Oculus:

18
East
1/4-1/2
0.423 mi.
2232 ft.

MOPED HOSPITAL **LUST U001362771**
601 TRUMAN AVE **UST N/A**
KEY WEST, FL 33040

Relative:
Higher

Actual:
9 ft.

LUST:

Region:	STATE
Facility Id:	8841232
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	(305)294-6902
Facility Cleanup Rank:	11086
District:	South District
Lat/Long (dms):	24 33 7.8 / 81 47 52.
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	9
Score Effective Date:	09/24/2003
Score When Ranked:	9
Operator:	MOPED HOSPITAL
Name Update:	Not reported
Address Update:	09/26/1997

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	DAVID SPACKMAN
Contact Company:	SPACKMAN, DAVID
Contact Address:	4229 SANCTUARY WAY
Contact City/State/Zip:	BONITA SPRINGS, FL 34134
Phone:	(941)498-9573
Bad Address Ind:	N
State:	FL
Zip:	33040, 3234
Score:	9
Score Effective Date:	24-SEP-03 12.00.00.000000
Related Party ID:	20441
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	08/17/1988
RP Zip:	Not reported
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	06/28/1996
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011

MOPED HOSPITAL (Continued) **U001362771**

Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	ALLARD_M
Site Mgr End Date:	10/06/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM 5

Petroleum Cleanup Program Eligibility:

Facility ID:	8841232
Discharge Date:	28-JUN-96
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Application Received Date:	30-JUN-96
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	06-NOV-96
Elig Status Date:	06-NOV-96
Letter Of Intent Date:	Not reported
Redetermined:	No
Inspection Date:	09/30/1996
Site Manager:	ALLARD_M
Site Mgr End Date:	10/06/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM 5
Deductible Amount:	500
Deductible Paid To Date:	0
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Contaminated Media:

Discharge Date:	06/28/1996
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09/30/2011
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	ALLARD_M
Site Mgr End Date:	10/06/2011
Tank Office:	PCTM5 - PETROLEUM CLEANUP TEAM
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No
Pollutant:	P - GENERIC GASOLINE
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	SD
Facility ID:	8841232

MOPED HOSPITAL (Continued) **U001362771**

Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	06-28-1996
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SA - SA ONGOING
Disch Cleanup Status Date:	09-30-2011
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	ALLARD_M
Site Mgr End Date:	10-06-2011
Tank Office:	PCTM5 - Team 5
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44128
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	44129
RAP Cleanup Responsible ID:	ST - STATE
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	44130
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

MOPED HOSPITAL (Continued) **U001362771**

Click here for Florida Oculus:

UST:

Facility Id:	8841232
Facility Status:	CLOSED
Type Description:	Fuel user/Non-retail
Facility Phone:	(305) 294-6902
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 9 / 81 47 50

Owner:

Owner Id:	20441
Owner Name:	SPACKMAN, DAVID
Owner Address:	4229 SANCTUARY WAY
Owner Address 2:	Not reported
Owner City,St,Zip:	BONITA SPRINGS, FL 34134
Owner Contact:	DAVID SPACKMAN
Owner Phone:	(941) 498-9573

Tank Info:

Tank Id:	1
Status:	Closed in place
Status Date:	30-JUN-1988
Install Date:	Not reported
Substance:	Unknown/Not reported
Content Description:	Unknown/Not Reported
Gallons:	3000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	2
Status:	Closed in place
Status Date:	30-JUN-1988
Install Date:	Not reported
Substance:	Unknown/Not reported
Content Description:	Unknown/Not Reported
Gallons:	3000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	3
Status:	Closed in place
Status Date:	30-JUN-1988
Install Date:	Not reported
Substance:	Unknown/Not reported
Content Description:	Unknown/Not Reported
Gallons:	3000
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Tank Id:	4
Status:	Closed in place
Status Date:	30-JUN-1988

MOPED HOSPITAL (Continued) **U001362771**

Install Date:	Not reported
Substance:	Waste oil
Content Description:	Waste Oil
Gallons:	550
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No
Tank Id:	5
Status:	Closed in place
Status Date:	30-JUN-1988
Install Date:	Not reported
Substance:	Z
Content Description:	Other Non Regulated
Gallons:	550
Vessel Indicator:	TANK
Tank Location:	UNDERGROUND
DEP Contractor:	No

Click here for Florida Oculus:

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19 **TRUMAN ANNEX CO MAINLAND** **LUST S102533824**
NNW **FRONT ST** **AST N/A**
1/4-1/2 **KEY WEST, FL 33041**
0.435 mi.
2297 ft.

Relative:
Lower

Actual:
3 ft.

LUST:

Region:	STATE
Facility Id:	8944051
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	(305)577-2939
Facility Cleanup Rank:	Not reported
District:	South District
Lat/Long (dms):	24 33 26. / 81 48 25.
Section:	006
Township:	68S
Range:	25E
Feature:	Not reported
Method:	UNVR
Datum:	0
Score:	33
Score Effective Date:	01/06/1998
Score When Ranked:	Not reported
Operator:	JOHN BUTLER
Name Update:	Not reported
Address Update:	Not reported

Discharge Cleanup Summary:

Discharge Date:	05/01/1988
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/18/1989
Cleanup Work Status:	COMPLETED
Information Source:	E - EDI

TRUMAN ANNEX CO MAINLAND (Continued) **S102533824**

Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-

Petroleum Cleanup Program Eligibility:

Facility ID:	8944051
Discharge Date:	01-MAY-88
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/18/1989
Cleanup Work Status:	COMPLETED
Information Source:	E - EDI
Other Source Description:	Not reported
Application Received Date:	23-DEC-88
Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	01-NOV-89
Elig Status Date:	01-NOV-89
Letter Of Intent Date:	12/21/1988
Redetermined:	No
Inspection Date:	07/11/1989
Site Manager:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
Deductible Amount:	Not reported
Deductible Paid To Date:	0
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	0
Cap Amount:	Not reported

Task Information:

District:	SD
Facility ID:	8944051
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	MONROE
County ID:	44
Cleanup Eligibility Status:	E
Source Effective Date:	10-18-1989
Discharge Date:	05-01-1988
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-18-1989
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	05-05-1989
SRC Review Date:	10-18-1989
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-18-1989
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	Not reported
Site Mgr End Date:	Not reported
Tank Office:	-
SR Task ID:	44276
SR Cleanup Responsible:	RP - RESPONSIBLE PARTY
SR Funding Eligibility Type:	-

TRUMAN ANNEX CO MAINLAND (Continued) **S102533824**

SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	44277
SA Cleanup Responsible:	RP - RESPONSIBLE PARTY
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	10-18-1989
SA Payment Date:	08-05-1993
RAP Task ID:	44278
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	$80,280.98
RAP Completion Date:	Not reported
RAP Payment Date:	08-05-1993
RAP Last Order Approved:	Not reported
RA Task ID:	44279
RA Cleanup Responsible:	RP - RESPONSIBLE PARTY
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

AST:

Facility ID:	8944051
Facility Status:	CLOSED
Type Description:	Fuel user/Non-retail
Facility Phone:	(305) 577-2939
DEP Contractor Own:	No
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	24 33 23 / 81 48 26

Owner:

Owner Id:	26404
Owner Name:	GRIFFITH, RONALD
Owner Address:	330 E LAMBERT RD
Owner Address 2:	Not reported
Owner City,St,Zip:	BREY, CA 92621
Owner Contact:	KENNETH D REED V P
Owner Phone:	(714) 255-7498

Tank Id:	1
Status:	Removed

TRUMAN ANNEX CO MAINLAND (Continued) **S102533824**

Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 122000
Tank Location: ABOVEGROUND

Tank Id: 2
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 115000
Tank Location: ABOVEGROUND

Tank Id: 3
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 102000
Tank Location: ABOVEGROUND

Tank Id: 4
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 11000
Tank Location: ABOVEGROUND

Tank Id: 5
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 11000
Tank Location: ABOVEGROUND

Tank Id: 6
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported
Content Description: Unknown/Not Reported
Gallons: 16000
Tank Location: ABOVEGROUND

Tank Id: 7
Status: Removed
Status Date: Removed
Install Date: Not reported
Substance: Unknown/Not reported

TRUMAN ANNEX CO MAINLAND (Continued) **S102533824**

Content Description: Unknown/Not Reported
Gallons: 36000
Tank Location: ABOVEGROUND

Click here for Florida Oculus:

20
SW
1/2-1
0.523 mi.
2761 ft.

Relative:
Higher

Actual:
8 ft.

FORT TAYLOR **FUDS** **1007212692**
N/A

KEY WEST, FL

FUDS:
Federal Facility ID: FL9799F4447
FUDS #: I04FL0227
INST ID: 55772
Facility Name: FORT TAYLOR
City: KEY WEST
State: FL
EPA Region: 04
County: MONROE
Congressional District: 18
US Army District: Jacksonville District (SAJ)
Fiscal Year: 2011
Telephone: 904-232-2235
NPL Status: Not Listed
RAB: Not reported
CTC: 5116.3
Current Owner: STATE
Current Prog: No IRP or BD/DR projects at this property. No MMRP activity during this period.
Future Prog: No IRP or BD/DR projects at this property.No MMRP activity scheduled during this period.
Description: The 164.03 acre site is located in Key West FL.
The site was originally transferred in 1845 to the War Department for construction of a harbor defense site. More property was acquired between 1943 and 1968. On the old Fort Taylor site, the Department of the Army and Department of the Navy constructed approximately 86 buildings including warehouses, housing units, office buildings, water towers, fuel storage facilities, parking areas, administration buildings, and antennas. The old Fort Zachary Taylor, built in the late 1800's, was also located on this property. Of the total of 164.03 acres acquired and filled for the Fort Taylor site, approximately 112.71 acres are still utilized and under the control of the Department of the Navy. Therefore, these 112.71 acres known as Truman Annex are not eligible for the Defense Environmental Restoration Program - Formerly Used Defense Sites. The other 51.32 acres were declared excess by the Department of the Navy in the early 1970's. Of the excess property, 51.32 acres were conveyed to the state of Florida for public park purposes. This acreage contained the old Fort Zachary Taylor. The state of Florida now operates a park and recreation area on the 51.32 acres. An Archive Search Report indicates that ordnance was found to be present on the site and the project was recommended and approved for an Ordnance and Explosive Waste project in September of 1991. However, while ordnance is known to be on-site at this project, the ordnance items present are considered historic artifacts and the Fort is listed in the National

FORT TAYLOR (Continued) **1007212692**

Register of Historic places and declared a National Historic Landmark in 1973. Because of the historic designation, remediation has not been allowed.

21
East
1/2-1
0.577 mi.
3049 ft.

KEY WEST GASIFICATION PLT **EDR MGP** **1008407142**
726 CATHERINE STREET **N/A**
KEY WEST, FL 33040

Relative:
Lower

Actual:
6 ft.

Manufactured Gas Plants:
Alternate Name:SUBURBAN PROPANE. No additional information available

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22
ENE
1/2-1
0.793 mi.
4188 ft.

TRUMBO POINT NAS ANNEX **FUDS** **1007212691**
N/A
KEY WEST, FL

Relative:
Lower

Actual:
5 ft.

FUDS:

Federal Facility ID:	FL9799F4719
FUDS #:	I04FL0973
INST ID:	60653
Facility Name:	TRUMBO POINT NAS ANNEX
City:	KEY WEST
State:	FL
EPA Region:	04
County:	MONROE
Congressional District:	18
US Army District:	Jacksonville District (SAJ)
Fiscal Year:	2011
Telephone:	904-232-2235
NPL Status:	Not Listed
RAB:	Not reported
CTC:	17
Current Owner:	FEDERAL
Current Prog:	PRP/HTRW project closed out FY 2009. No MMRP project at this property.
Future Prog:	PRP/HTRW project closed out FY 2009. No MMRP project at this property.
Description:	The site consists of 132.69 acres, 15.49 of which are eligible for Defense Environmental Restoration Program Formerly Used Defense Sites (DERP-FUDS), located within the City of Key West on the northwestern tip of the island in Monroe County. The site was acquired from1940 to 1946 for expansion of the Naval Operating Base, Key West, which later became a Naval Air Station. The Naval Operating Base later became a Naval Air Station (NAS) and an additional 1.785 acres were added. There were two portions to the site - the NAS Annex and the Housing Annex. On June 20, 1973, 1.14 acres of Trumbo Point Annex was conveyed by the US to the City of Key West. By deed dated June 20, 1973, 1.09 acres of the Trumbo Point Annex was conveyed to the Monroe County School Board, and 4.82 acres was conveyed to the Monroe County School Board by deed dated October 26, 1978. By letter dated February 23, 1976, the Navy transferred 11.43 acres of the Trumbo Point Annex to the Department of Transportation for use by the U.S. Coast Guard (USCG). An additional 1.30 acres was transferred by letter dated May 1985 from the Navy to

TRUMBO POINT NAS ANNEX (Continued) **1007212691**

the USCG. The remaining 114.695 acres of fee land and 2.50 acres of easement are still under control and ownership of the Navy. The 117.2 acre portion owned by the Navy is not eligible for restoration. An Agreement was reached between the Navy and the U.S. Army Corps of Engineers (CEEC-EB) regarding a hazardous/Toxic Waste (HTW) remedial action at this site. Approximately 12.8 acres were involved. The site was formerly owned by the Navy but is now owned by the local Coast Guard Station. The site consists of two piers and adjoining lands with still-active Navy piers on either side. (A quantity of petroleum was discovered by the Coast Guard while a contractor was excavating a utility trench on one of the piers.) The Navy has agreed to oversee the remedial cleanup on Coast Guard property. The Corps (CEEC-EB) has agreed to reimburse the Navy for cleanup costs from DERP funds.

Count: 25 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KEY WEST	S109700628	FKAA BIG COPP. H WWTP	9500 HWY 45 OVERSEASMM 95	33040	AST, Financial Assurance
KEY WEST	1000333902	KEY WEST NAS DEMOLITION KEY	IS ACROSS WATER FROM FLEMI	33040	RCRA-TSDF, CORRACTS, RCRA Nor / NLR, 2020 COR ACTION
KEY WEST	S109353604	US NAVY-TRUMAN ANNEX-CARIBROC	COVINGTON AVE		FF TANKS
KEY WEST	1012176992	SOUTHEAST HOUSING LLC	513 DEKALB AVE	33040	RCRA NonGen / NLR
KEY WEST	2010942619	END OF SOUTHARD ST	END OF SOUTHARD ST		ERNS
KEY WEST	2010946580	631 GREEN ST	631 GREEN ST		ERNS
KEY WEST	S109353593	US NAVY-SPECIAL FORCES GENERATOR	NAVAL AIR STATION FLEMING KY		FF TANKS
KEY WEST	S109353594	US NAVY-SPECIAL FORCES MARINA	NAVAL AIR STATION FLEMING KY		FF TANKS
KEY WEST	S109700622	CITY OF KEY WEST-TRANSFER STATION	141 OVERSEAS HWY	33040	AST, Financial Assurance
KEY WEST	S109353555	US NAVY-NAS TRUMAN ANNEX SECURITY	TRUMAN ANX		FF TANKS
KEY WEST	S109353598	US NAVY-TRUMAN ANNEX JIATF EAST BL	TRUMAN ANX		FF TANKS
KEY WEST	S109353599	US NAVY-TRUMAN ANNEX MOLE	TRUMAN ANX		FF TANKS
KEY WEST	S109353602	US NAVY-TRUMAN ANNEX PORT SRVCS	TRUMAN ANX		FF TANKS
KEY WEST	S109353603	US NAVY-TRUMAN ANNEX WTR TANK EMER	TRUMAN ANX		FF TANKS
KEY WEST	S113415833	TRUMAN ANNEX WATERFRONT SITE2 ESA	TRUMAN ANNEX CITY OF KY W	33040	SWF/LF
KEY WEST	1009311846	PARADISE POWDER COATING INC	111 USHY 1		RCRA NonGen / NLR
KEY WEST	1010784001	ALEX'S AUTO WRECKING & PARTS INC.	111 USHY 1	33040	RCRA-CESQG
KEY WEST	1001404489	COURTESY AUTO SPECIALTIES	USHY 1	33040	RCRA NonGen / NLR
KEY WEST	1008880180	TOPPINO INC	USHY 1 M & M 85	33040	RCRA-CESQG
KEY WEST	A100131531	TOPPINO INC-BLAYLOCK OIL CO	USHY 1 MM 85	33040	AST
MARATHON	2008867261	743 122 ST	743 122 ST	33040	ERNS
MONROE COUNTY	S113416185	GEORGE ST. STORMWATER	1200 BLOCK OF ASHBY ST		UIC
STOCK ISLAND	2009923195	6810 FRONT ST SAFE HARBOR MARINA	6810 FRONT ST	33040	ERNS
STOCK ISLAND	A100131435	FLEET INC	FRONT ST	33040	AST
STOCK ISLAND	S113415802	LAUREL ROAD	LAUREL RD	33040	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 12

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 12

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2013
Next Scheduled EDR Contact: 05/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 6

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Florida's State-Funded Action Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: Department of Environmental Protection
Telephone: 850-488-0190
Last EDR Contact: 05/31/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/24/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 41

Source: Department of Environmental Protection
Telephone: 850-922-7121
Last EDR Contact: 04/24/2013
Next Scheduled EDR Contact: 08/05/2013
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Petroleum Contamination Detail Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/06/2013
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

A statewide listing of leaking aboveground storage tank site locations.

Date of Government Version: 05/13/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/07/2013
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 850-245-8799
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/01/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/05/2013
Number of Days to Update: 29
Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/05/2013
Number of Days to Update: 29
Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

FF TANKS: Federal Facilities Listing

A listing of federal facilities with storage tanks.

Date of Government Version: 04/08/2013
Date Data Arrived at EDR: 04/09/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 9

Source: Department of Environmental Protection
Telephone: 850-245-8250
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/18/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/09/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 10

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/09/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 10

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/02/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites
Listing of closed and active voluntary cleanup sites.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/07/2013
Number of Days to Update: 9
Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfield Areas
Brownfields are abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. Florida's Brownfields Redevelopment Acti primary goals are to reduce health and environmental hazards on existing commercial and industrial sites that are abandoned or underused due to these hazards and create financial and regulatory incentives to encourage voluntary cleanup and redevelopment of sites.

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/09/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 9
Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 9
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Centers
A listing of recycling centers located in the state of Florida.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 11/13/2012
Date Made Active in Reports: 12/05/2012
Number of Days to Update: 22
Source: Department of Environmental Protection
Telephone: 850-245-8718
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/05/2013
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/03/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/12/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 59
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Quarterly

FL SITES: Sites List
This summary status report was developed from a number of lists including the Eckhardt list, the Moffit list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/07/2013
Number of Days to Update: 17

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 05/21/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

SPILLS: Oil and Hazardous Materials Incidents

Statewide oil and hazardous materials inland incidents.

Date of Government Version: 04/23/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 41

Source: Department of Environmental Protection
Telephone: 850-245-2010
Last EDR Contact: 04/15/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/04/2013
Number of Days to Update: 60

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/19/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 01/15/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/11/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 04/18/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/04/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/29/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/15/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/19/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/11/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/30/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Biennially

UIC: Underground Injection Wells Database Listing

A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 04/29/2013
Date Data Arrived at EDR: 04/29/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 04/26/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities

The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 34

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 05/01/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

DEDB: Ethylene Dibromide Database Results

Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 04/23/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 41

Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database

Domestic and industrial wastewater facilities.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/07/2013
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 05/15/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

AIRS: Permitted Facilities Listing

A listing of Air Resources Management permits.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/06/2013
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 02/04/2005
Date Data Arrived at EDR: 06/29/2007
Date Made Active in Reports: 07/11/2007
Number of Days to Update: 12

Source: Department of Environmental Protection
Telephone: 850-488-3601
Last EDR Contact: 04/15/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: No Update Planned

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 04/23/2013
Number of Days to Update: 20

Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/19/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/05/2013
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/17/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/06/2013
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 04/04/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 97

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/18/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/03/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/19/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: N/A

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/18/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/14/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 05/07/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 28

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 28

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

Facility List

List of all regulated facilities in Alachua County.

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 04/23/2013
Number of Days to Update: 20

Source: Alachua County Environmental Protection Department
Telephone: 352-264-6800
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

BROWARD COUNTY:

Aboveground Storage Tanks

Aboveground storage tank locations in Broward County.

Date of Government Version: 03/14/2012
Date Data Arrived at EDR: 03/15/2012
Date Made Active in Reports: 04/18/2012
Number of Days to Update: 34

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 06/12/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Varies

Underground Storage Tanks

All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 03/14/2012
Date Data Arrived at EDR: 03/15/2012
Date Made Active in Reports: 04/18/2012
Number of Days to Update: 34

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 06/12/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Annually

HILLSBOROUGH COUNTY:

HILLSBOROUGH CO LF

Hillsborough county landfill sites.

Date of Government Version: 06/01/2010
Date Data Arrived at EDR: 01/18/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 34

Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 04/15/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

Air Permit Sites

Facilities that release or have a potential to release pollutants.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Grease Trap Sites

Any non-residential facility that discharges waste to a sanitary sewer.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Dade County Dept. of Env. Resources Mgmt.
Telephone: 305-372-6508
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Marine Facilities Operating Permit

What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Quarterly

Maimi River Enforcement

The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Quarterly

Hazardous Waste Sites

Sites with the potential to generate waste

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Dade County Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Industrial Waste Type 2-4 Sites

IW2s are facilities having reclaim or recycling systems with no discharges, aboveground holding tanks or spill prevention and countermeasure plans. IW4s are facilities that discharge an effluent to the ground.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Industrial Waste Type 5 Sites

Generally these facilities fall under the category of "conditionally exempt small quantity generator" or "small quantity generator".

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Industrial Waste Type 6

Permits issued to those non-residential land uses located within the major drinking water wellfield protection areas that are not served by sanitary sewers. These facilities do not handle hazardous materials but are regulated because of the env. sensitivity of the areas where they are located.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Enforcement Case Tracking System Sites
Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Fuel Spills Cases
DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

Storage Tanks
A listing of aboveground and underground storage tank site locations.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/05/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 44

Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 06/05/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

PALM BEACH CO. LF
Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 37

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/21/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/19/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 57

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/23/2013
Next Scheduled EDR Contact: 08/05/2013
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/28/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Department of Children & Families
Source: Provider Information
Telephone: 850-488-4900

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

101-111 GERALDINE ST
101-111 GERALDINE ST
KEY WEST, FL 33040

TARGET PROPERTY COORDINATES

Latitude (North):	24.5512 - 24° 33' 4.32''
Longitude (West):	81.8051 - 81° 48' 18.36''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	418461.8
UTM Y (Meters):	2715336.8
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	24081-E7 KEY WEST, FL
Most Recent Revision:	1977

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

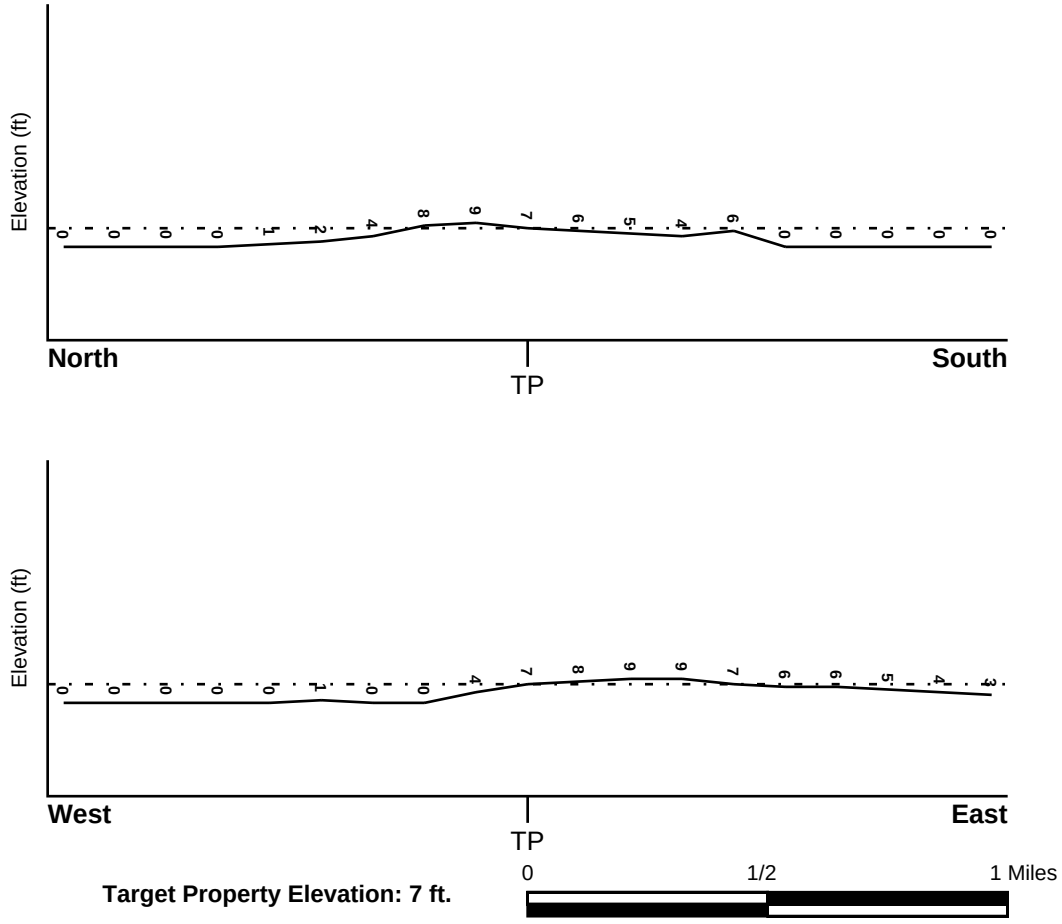
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
MONROE, FL	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 12087C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KEY WEST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

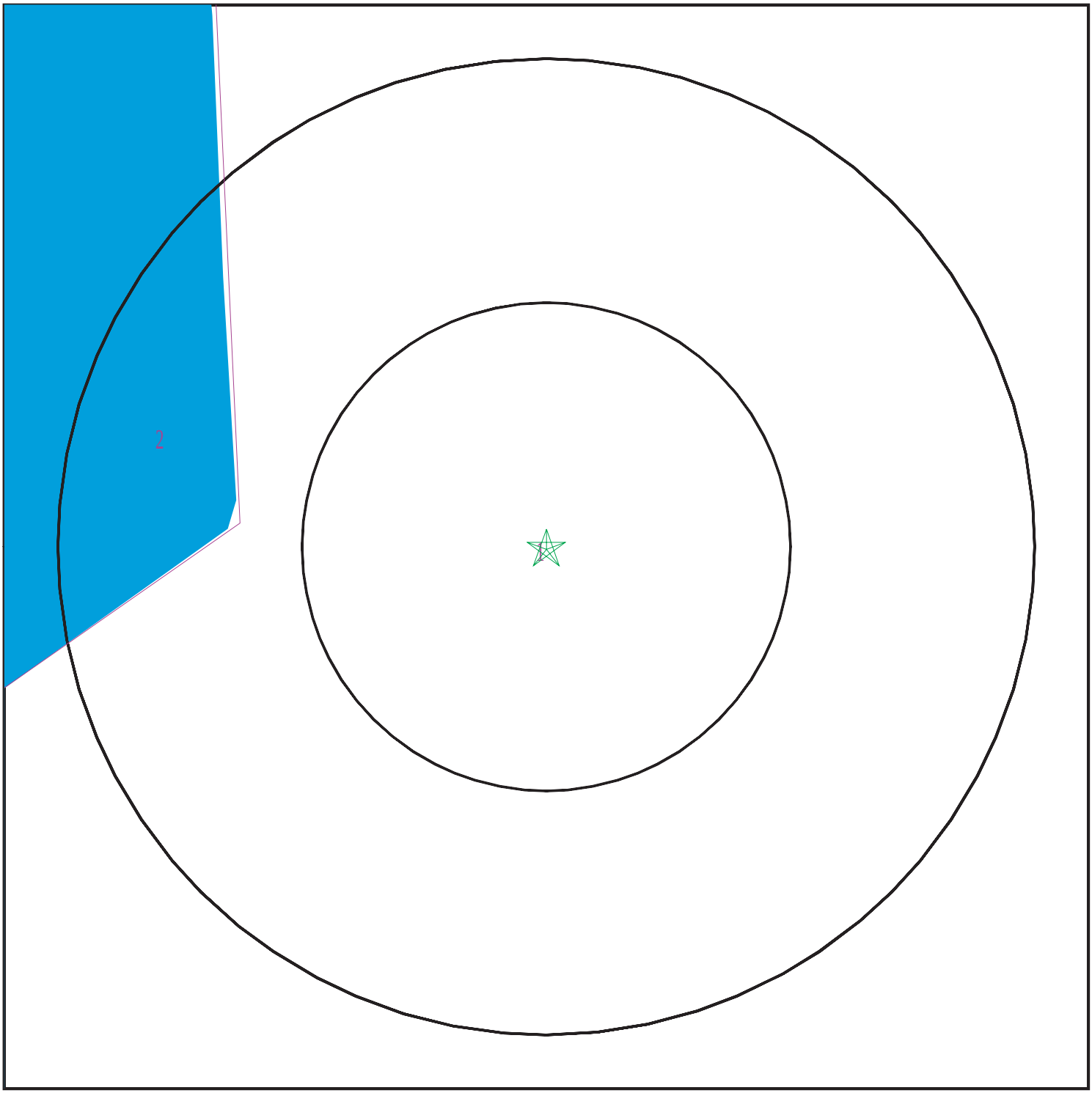
Era:	Cenozoic
System:	Quaternary
Series:	Pleistocene
Code:	Qp *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 03662252.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	101-111 GERALDINE ST	CLIENT:	PM Environmental, Inc.
ADDRESS:	101-111 GERALDINE ST Key West FL 33040	CONTACT:	Matthew Brainard
LAT/LONG:	24.5512 / 81.8051	INQUIRY #:	03662252.2r
		DATE:	July 11, 2013 10:00 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	5 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:
2	0 inches	5 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 2

Soil Component Name: Waters of the Atlantic Ocean

Soil Surface Texture: water

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	0 inches	water	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000232065	0 - 1/8 Mile SE
A2	USGS40000232064	1/8 - 1/4 Mile ESE
B3	USGS40000232078	1/8 - 1/4 Mile NNE
B4	USGS40000232079	1/8 - 1/4 Mile NNE
B5	USGS40000232080	1/8 - 1/4 Mile NNE
6	USGS40000232075	1/8 - 1/4 Mile NE
B7	USGS40000232087	1/8 - 1/4 Mile North
B8	USGS40000232088	1/8 - 1/4 Mile North
C9	USGS40000232091	1/4 - 1/2 Mile North
C10	USGS40000232090	1/4 - 1/2 Mile NNE
E14	USGS40000232089	1/4 - 1/2 Mile NE
E15	USGS40000232086	1/4 - 1/2 Mile NE
16	USGS40000232063	1/4 - 1/2 Mile ESE
F17	USGS40000232074	1/4 - 1/2 Mile ENE
19	USGS40000232104	1/4 - 1/2 Mile NNE
G20	USGS40000232060	1/4 - 1/2 Mile ESE
21	USGS40000232113	1/4 - 1/2 Mile NNE
H23	USGS40000232103	1/2 - 1 Mile NE
24	USGS40000232061	1/2 - 1 Mile ESE
25	USGS40000232059	1/2 - 1 Mile SE
I26	USGS40000232116	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H27	USGS40000232107	1/2 - 1 Mile NE
J28	USGS40000232110	1/2 - 1 Mile NNE
J29	USGS40000232111	1/2 - 1 Mile NNE
J30	USGS40000232112	1/2 - 1 Mile NNE
31	USGS40000232115	1/2 - 1 Mile North
I32	USGS40000232118	1/2 - 1 Mile North
I33	USGS40000232119	1/2 - 1 Mile North
J34	USGS40000232114	1/2 - 1 Mile NNE
K35	USGS40000232100	1/2 - 1 Mile NE
K36	USGS40000232101	1/2 - 1 Mile NE
K37	USGS40000232102	1/2 - 1 Mile NE
H39	USGS40000232109	1/2 - 1 Mile NE
L40	USGS40000232072	1/2 - 1 Mile East
L41	USGS40000232073	1/2 - 1 Mile East
42	USGS40000232123	1/2 - 1 Mile NNE
M43	USGS40000232085	1/2 - 1 Mile ENE
44	USGS40000232106	1/2 - 1 Mile NE
M45	USGS40000232081	1/2 - 1 Mile ENE
M46	USGS40000232082	1/2 - 1 Mile ENE
N47	USGS40000232070	1/2 - 1 Mile East
48	USGS40000232096	1/2 - 1 Mile ENE
49	USGS40000232124	1/2 - 1 Mile NE
N50	USGS40000232069	1/2 - 1 Mile East
51	USGS40000232062	1/2 - 1 Mile East
52	USGS40000232125	1/2 - 1 Mile NE
53	USGS40000232108	1/2 - 1 Mile ENE
O54	USGS40000232121	1/2 - 1 Mile NE
O55	USGS40000232122	1/2 - 1 Mile NE
56	USGS40000232077	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
11	FLSA70000002103	1/4 - 1/2 Mile East
D12	FLDGW4000007588	1/4 - 1/2 Mile SW
D13	FLDGW4000006680	1/4 - 1/2 Mile SW
G18	FLSA70000002102	1/4 - 1/2 Mile ESE
F22	FLSO70000000002	1/2 - 1 Mile ENE
K38	FLSA70000002104	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 03662252.2r

0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME:	101-111 GERALDINE ST	CLIENT:	PM Environmental, Inc.
ADDRESS:	101-111 GERALDINE ST Key West FL 33040	CONTACT:	Matthew Brainard
		INQUIRY #:	03662252.2r
LAT/LONG:	24.5512 / 81.8051	DATE:	July 11, 2013 10:00 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
SE **FED USGS** **USGS40000232065**
0 - 1/8 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243300081481501		
Monloc name:	MO - 150		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.550425
Longitude:	-81.8039807	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	28
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A2
ESE **FED USGS** **USGS40000232064**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243259081481101		
Monloc name:	S - 617		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5501473
Longitude:	-81.8028696	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B3
NNE **FED USGS** **USGS40000232078**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243311081481501		
Monloc name:	F - 645		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5534805
Longitude:	-81.8039808	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B4
NNE **FED USGS** **USGS40000232079**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243312081481701		
Monloc name:	MO - 149A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5537583
Longitude:	-81.8045363	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	32
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B5
NNE **FED USGS** **USGS40000232080**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243312081481702		
Monloc name:	MO - 149B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5537583
Longitude:	-81.8045363	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	13
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

6
NE **FED USGS** **USGS40000232075**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243310081481001		
Monloc name:	F - 637		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5532027
Longitude:	-81.8025918	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B7
North **FED USGS** **USGS40000232087**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243315081481701		
Monloc name:	MO - 148A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5545916
Longitude:	-81.8045363	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	51
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B8
North **FED USGS** **USGS40000232088**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243315081481702		
Monloc name:	MO - 148B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5545916
Longitude:	-81.8045363	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	16
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

C9
North
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232091**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243317081481601		
Monloc name:	F - 636		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5551471
Longitude:	-81.8042586	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

C10
NNE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232090**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243316081481201		
Monloc name:	MO - 117		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5548693
Longitude:	-81.8031474	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Floridan aquifer system		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	2399
Welldepth units:	ft	Wellholedepth:	2399
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

11
East
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA70000002103**

Fluwid:	440000301	Well type:	Private Water Well
Status :	ERROR	Casing mat:	Not Reported
Longitude:	-81.80029		
Latitude:	24.55121		
Well depth:	0		
Length :	0		
Diameter:	0	Permit num:	Not Reported
Comment :	Not Reported		
Sanit seal:	Not Reported	Name :	Not Reported
First name:	Not Reported	Last name:	Not Reported
Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	WS1984		
Hae:	0		
Gps date:	01/30/2003	Loc method:	ADDR
Project id:	ANDREW	Insp fname:	Not Reported
Insp lname:	Not Reported	Insp chd:	Not Reported
Req numb:	Not Reported	Property i:	Not Reported
County:	MONROE	Address:	900 DUVAL ST
Number :	900	Predir:	Not Reported
Prefix:	Not Reported	Street:	DUVAL
Suffix:	ST	Postdir:	Not Reported
Zipcode:	Not Reported	City:	KEY WEST
Loc id:	460530		
Gps id:	460530		
Wsrp id:	440000301	Action:	NO ACTION AT THI
Port stat:	POTABLE	Res type:	Not Reported
Other id:	Not Reported	Software:	Not Reported
Streetside:	Not Reported	Agency:	Not Reported
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA70000002103		

D12
SW
1/4 - 1/2 Mile
Lower

FL WELLS **FLDGW4000007588**

Pk station:	35099
Station na:	FORT ZACHERY TAYLOR
Station al:	Not Reported
Waterbody :	UNKNOWN
Water reso:	UNCONFINED AQUIFER
Lat dd:	24
Lat mm:	32
Lat ss:	48.224
Long dd:	81
Long mm:	48

Long ss:	30.312
Cmcd coord:	DGPS
Dcd datum :	WGS84
Well type:	Not Reported
Well statu:	Not Reported
Well drill:	06/05/1997
Well total:	31
Well casin:	22
Well scree:	22
Well scr 1:	27
Well cas 1:	2
Site id:	FLDGW4000007588

D13
SW
1/4 - 1/2 Mile
Lower

FL WELLS **FLDGW4000006680**

Pk station:	13049
Station na:	FT ZACHARY TAYLOR
Station al:	Not Reported
Waterbody :	UNKNOWN
Water reso:	UNCONFINED AQUIFER
Lat dd:	24
Lat mm:	32
Lat ss:	48.168
Long dd:	81
Long mm:	48
Long ss:	30.325
Cmcd coord:	DGPS
Dcd datum :	WGS84
Well type:	Not Reported
Well statu:	Not Reported
Well drill:	01/15/1969
Well total:	0
Well casin:	0
Well scree:	0
Well scr 1:	0
Well cas 1:	0
Site id:	FLDGW4000006680

E14
NE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232089**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243316081480101		
Monloc name:	F - 631		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5548693
Longitude:	-81.8000918	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E15
NE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232086**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243315081480001		
Monloc name:	S - 613		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5545915
Longitude:	-81.799814	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

16
ESE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232063**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243258081475601		
Monloc name:	F - 639		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5498695
Longitude:	-81.7987028	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

F17
ENE **FED USGS** **USGS40000232074**
1/4 - 1/2 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243308081475501		
Monloc name:	F - 632		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5526471
Longitude:	-81.798425	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

G18
ESE **FL WELLS** **FLSA70000002102**
1/4 - 1/2 Mile
Lower

Fluwid:	440000401	Well type:	Private Water Well
Status :	ERROR	Casing mat:	Not Reported
Longitude:	-81.79885		
Latitude:	24.54823		
Well depth:	0		
Length :	0		
Diameter:	0	Permit num:	Not Reported
Comment :	SEE WELINFO MAY BE IRRIG. WELL		
Sanit seal:	Not Reported	Name :	Not Reported
First name:	Not Reported	Last name:	Not Reported

Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	WS1984		
Hae:	0		
Gps date:	01/30/2003	Loc method:	ADDR
Project id:	ANDREW	Insp fname:	Not Reported
Insp lname:	Not Reported	Insp chd:	Not Reported
Req numb:	Not Reported	Property i:	Not Reported
County:	MONROE	Address:	411 CATHERINE ST
Number :	411	Predir:	Not Reported
Prefix:	Not Reported	Street:	CATHERINE
Suffix:	ST	Postdir:	Not Reported
Zipcode:	Not Reported	City:	KEY WEST
Loc id:	460532		
Gps id:	460532		
Wsrp id:	440000401	Action:	NO ACTION AT THI
Port stat:	POTABLE	Res type:	Not Reported
Other id:	Not Reported	Software:	Not Reported
Streetside:	Not Reported	Agency:	Not Reported
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA70000002102		

19
NNE **FED USGS** **USGS40000232104**
1/4 - 1/2 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243323081480601		
Monloc name:	S - 604		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5568137
Longitude:	-81.8014807	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G20
ESE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000232060**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243252081475601		
Monloc name:	F - 640		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5482029
Longitude:	-81.7987028	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

21
NNE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000232113**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243327081480901		
Monloc name:	F - 630		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5579248
Longitude:	-81.8023141	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

F22
ENE **FL WELLS** **FLSO70000000002**
1/2 - 1 Mile
Higher

Permit no:	44-00485-W	App no:	110215-3
Permit typ:	pumpage of <100000/gpd.		
Project na:	STORMWATER GRAVITY INJECTION WELLS ELIZABETH/OLIVIA		
Land Use:	dewatering		
Acres serv:	.1		
Facil id:	258938		
Facil type:	PUMP		
Facil name:	Elizabeth St/Olivia St		
Pump type:	CEN		
Diameter:	4		
Pump capac:	750		
Pump depth:	0		
X coord:	391094		
Y coord:	80772		
Well depth:	0		
Case depth:	0		
Use status:	Primary	Fac status:	Proposed
Water use:	Mining / Dewatering		
Source:	Water Table aquifer		
Reviewer:	Stephen E. Bell		
Secno:	06		
Twp:	68		
Rge:	25		
Cnty code:	Monroe		
Fee catego:	STDEW		
Site id:	FLSO70000000002		

H23
NE **FED USGS** **USGS40000232103**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243323081480001		
Monloc name:	S - 605		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5568137
Longitude:	-81.799814	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

24
ESE **FED USGS** **USGS40000232061**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243253081475101		
Monloc name:	F - 635		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5484806
Longitude:	-81.7973139	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

25
SE **FED USGS** **USGS40000232059**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243242081475901		
Monloc name:	S - 618		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5454252
Longitude:	-81.7995361	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I26
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000232116**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243331081481901		
Monloc name:	F - 633		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5590359
Longitude:	-81.805092	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H27
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000232107**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243325081480001		
Monloc name:	EATON&FRANCES& GRINNELL ST KEY WEST		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5573692
Longitude:	-81.799814	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J28
NNE **FED USGS** **USGS40000232110**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243327081480301		
Monloc name:	S - 614		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5579248
Longitude:	-81.8006474	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J29
NNE **FED USGS** **USGS40000232111**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243327081480302		
Monloc name:	S - 615		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5579248
Longitude:	-81.8006474	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J30
NNE **FED USGS** **USGS40000232112**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243327081480303		
Monloc name:	S - 616		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5579248
Longitude:	-81.8006474	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

31
North **FED USGS** **USGS40000232115**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243331081481301		
Monloc name:	F - 629		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5590359
Longitude:	-81.8034252	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I32
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000232118**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243332081481801		
Monloc name:	MO - 147A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5593136
Longitude:	-81.8048142	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	29
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I33
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000232119**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243332081481802		
Monloc name:	MO - 147B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5593136
Longitude:	-81.8048142	Sourcemap scale:	Not Reported

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	8
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J34
NNE **FED USGS** **USGS40000232114**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243329081480301		
Monloc name:	F - 628		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5584803
Longitude:	-81.8006474	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K35
NE **FED USGS** **USGS40000232100**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243323081475401		
Monloc name:	MO - 152		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5568137
Longitude:	-81.7981473	Sourcemap scale:	Not Reported

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	8
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K36
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000232101**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243323081475402		
Monloc name:	MO - 152A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5568137
Longitude:	-81.7981473	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	52
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K37
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000232102**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243323081475403		
Monloc name:	MO - 152B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5568137
Longitude:	-81.7981473	Sourcemap scale:	Not Reported

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	10
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K38
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSA70000002104**

Fluwid:	440000501	Well type:	Private Water Well
Status :	ERROR	Casing mat:	Not Reported
Longitude:	-81.7974		
Latitude:	24.55601		
Well depth:	0		
Length :	0		
Diameter:	0	Permit num:	Not Reported
Comment :	SEE WELINFO MAY BE IRRIG. WELL		
Sanit seal:	Not Reported	Name :	Not Reported
First name:	Not Reported	Last name:	Not Reported
Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	WS1984		
Hae:	0		
Gps date:	01/30/2003	Loc method:	ADDR
Project id:	ANDREW	Insp fname:	Not Reported
Insp lname:	Not Reported	Insp chd:	Not Reported
Req numb:	Not Reported	Property i:	Not Reported
County:	MONROE	Address:	810 CAREY LANE
Number :	810	Predir:	Not Reported
Prefix:	Not Reported	Street:	CAREY LANE
Suffix:	Not Reported	Postdir:	Not Reported
Zipcode:	Not Reported	City:	KEY WEST
Loc id:	460534		
Gps id:	460534		
Wsrp id:	440000501	Action:	NO ACTION AT THI
Port stat:	POTABLE	Res type:	Not Reported
Other id:	Not Reported	Software:	Not Reported
Streetside:	Not Reported	Agency:	Not Reported
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA70000002104		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H39
NE **FED USGS** **USGS40000232109**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243327081475801		
Monloc name:	F - 625		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5579248
Longitude:	-81.7992585	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L40
East **FED USGS** **USGS40000232072**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243308081474301		
Monloc name:	MO - 153A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5526471
Longitude:	-81.7950916	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	52
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L41
East **FED USGS** **USGS40000232073**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243308081474302		
Monloc name:	MO - 153B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5526471
Longitude:	-81.7950916	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	8
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

42
NNE **FED USGS** **USGS40000232123**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243336081480301		
Monloc name:	F - 626		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5604247
Longitude:	-81.8006474	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

M43
ENE **FED USGS** **USGS40000232085**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243315081474001		
Monloc name:	MO - 116		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5545915
Longitude:	-81.7942583	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Floridan aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19100101	Welldepth:	1010
Welldepth units:	ft	Wellholedepth:	1010
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1941-05-30	5.67	

44
NE **FED USGS** **USGS40000232106**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243325081474501		
Monloc name:	S - 623		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5573692
Longitude:	-81.7956472	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

M45
ENE **FED USGS** **USGS40000232081**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243313081473701		
Monloc name:	S - 602		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.554036
Longitude:	-81.7934249	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

M46
ENE **FED USGS** **USGS40000232082**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243313081473702		
Monloc name:	S - 603		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.554036
Longitude:	-81.7934249	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

N47
East
1/2 - 1 Mile
Lower

FED USGS **USGS40000232070**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243306081473101		
Monloc name:	S - 608		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5520916
Longitude:	-81.7917582	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

48
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000232096**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243322081473501		
Monloc name:	F - 620		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5565359
Longitude:	-81.7928694	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

49
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000232124**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243337081474701		
Monloc name:	S - 621		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5607024
Longitude:	-81.7962028	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

N50
East
1/2 - 1 Mile
Lower

FED USGS **USGS40000232069**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243306081472901		
Monloc name:	S - 609		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5520916
Longitude:	-81.7912026	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

51
East
1/2 - 1 Mile
Lower

FED USGS **USGS40000232062**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243258081472701		
Monloc name:	F - 643		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5498694
Longitude:	-81.790647	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

52
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000232125**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243338081474101		
Monloc name:	F - 618		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5609802
Longitude:	-81.7945361	Sourcemap scale:	Not Reported

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

53
ENE **FED USGS** **USGS40000232108**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243326081473001		
Monloc name:	S - 620		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5576469
Longitude:	-81.7914805	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

O54
NE **FED USGS** **USGS40000232121**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243335081473501		
Monloc name:	MO - 151A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5601469
Longitude:	-81.7928694	Sourcemap scale:	Not Reported

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	21
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

O55
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000232122**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243335081473502		
Monloc name:	MO - 151B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5601469
Longitude:	-81.7928694	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	10
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

56
East
1/2 - 1 Mile
Lower

FED USGS **USGS40000232077**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-243311081472301		
Monloc name:	WELL 1125UNITED ST BIG PINE KEY FL		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	24.5534804
Longitude:	-81.7895359	Sourcemap scale:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: FL Radon

Radon Test Results

Zip	Total Buildings	% of sites>4pCi/L	Data Source
33040	16	0.0	Certified Residential Database
33040	41	7.3	Mandatory Non-Residential Database

Federal EPA Radon Zone for MONROE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MONROE COUNTY, FL

Number of sites tested: 11

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.630 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watersed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investiagations of drinking water contamination complaints and education of the public
Source: Department of Health
Telephone: 850-245-4250

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

OTHER STATE DATABASE INFORMATION

Florida Sinkholes
Source: Department of Environmental Protection, Geological Survey
The sinkhole data was gathered by the Florida Sinkhole Research Institute, University of Florida.

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

STREET AND ADDRESS INFORMATION

Appendix E

PM ENVIRONMENTAL Environmental & Engineering Services

PM PROFESSIONAL RESUMES

PM ENVIRONMENTAL Environmental & Engineering Services

RAYMOND H. SIEGMANN

PROJECT CONSULTANT

1-800-485-0090
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siegmann@pmenv.com

Education

- Michigan State University
  B.S. Psychology
- Specialization: Environmental Studies, Environmental Economics

Certifications

- Certified Asbestos Building Inspector State of Michigan Accreditation #A30923, State of Florida
- Meets the definition of Environmental Professional in § 312.10 of 40 CFR 312

Mr. Siegmann is a Project Consultant at PM Environmental, Inc. and has served clients in over 15 states since 2001. He specializes in Environmental Due Diligence, Brownfield Redevelopment, and Asbestos Containing Building Material Surveys. Mr. Siegmann has successfully managed several EPA Site Assessment Grant Applications for multiple municipalities in Tennessee, Alabama, and Michigan. He has managed thousands of environmental due diligence projects. His recent focus includes serving commercial/industrial clients, private equity, and banking/lending institutions.

Areas of expertise

- Data collection, site investigation, and preparation of Phase I ESAs.
- Collection and evaluation of data for Transaction Screens, Phase II and Phase III ESAs and preparation of reports.
- Design and implementation of PM site database for historical research.
- Implementation of various site assessment standards and professional protocol (ASTM E-1527).
- Peer technical review of Phase I ESA projects using ASTM Standard 1527.
- Preparation of Baseline Environmental Assessments (BEAs. Projects in accordance with the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, Parts 201 and 213.
- Asbestos renovation and demolition inspections for commercial and industrial properties.
- Completion of Brownfield Plans and associated regulatory paperwork.
- Completion of successful EPA Brownfield Grant Applications for multiple municipalities.
- Project Investigator for Part 201 and Part 213 projects, including delineation and Initial Assessment Reports (IARs), and leading underground storage tank (LUST) Closure Report preparation.

PM ENVIRONMENTAL Environmental & Engineering Services

CANDACE E. CHIN FATT

PROJECT MANAGER

1-888-763-6835
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chinfatt@pmenv.com

Education

- Florida International University
  B.S. Geology

Certifications

- OSHA 29 CFR 1910, 120 40 –hour HAZWOPER Training
- Meets the definition of Environmental Professional in § 312.10 of 40 CFR 312
- AHERA Certified Building Inspector

Ms. Chin Fatt is a Project Manager at PM Environmental, Inc. and has served clients in over nine states since 2004. She specializes in Phase I and Phase II Environmental Site Assessments (ESAs), underground storage tanks, Asbestos Containing Building Materials Surveys, and Post Remedial Monitoring. Ms. Chin Fatt has managed hundreds of Phase I and Phase II ESA Projects. Her recent focus includes serving commercial/industrial clients, private equity, petroleum jobbers, and banking/lending institutions.

Areas of expertise

- Data collection, site investigation, and preparation of Phase I Environmental Site Assessments (ESAs).
- Data collection, site investigation, and preparation of Transaction Screen Site Assessments.
- Experience in implementation of various site assessment standards and professional protocol and commercial lending requirements (ASTM E1527 and ASTM E1528).
- Project Investigator and Preparer for Phase II ESAs.
- Experience in implementation and completion of Site Assessments and Tank Closure Assessments.

PM ENVIRONMENTAL Environmental & Engineering Services

GENE M. BAILEY, P.E.

REGIONAL MANAGER AND SENIOR CONSULTANT

Mr. Bailey is a Regional Manager/Senior Consultant at PM Environmental, Inc. and has served clients in the mid-south region since 1984. His diverse project experience includes specializations in environment compliance, site investigation, storm water management, and environmental due diligence services. Mr. Bailey is focused on serving financial, industrial, and municipal clients, and recently managed the environmental due diligence associated with the acquisition of a Fortune 100 company with multiple manufacturing and office locations in several states. He is a Professional Engineer licenses in 15 states, Mississippi Brownfields Consultant, and Tennessee Dry Cleaning Corrective Action Contractor. His recent focus includes providing environmental due diligence services such as environmental escrow deliberations and technical review services, during acquisitions and dispositions with diverse amounts of environmental expenditures.

Areas of expertise

- Regional Manager responsible for the administration and technical oversight for multi-disciplinary projects involving assessment, design, implementation and contract management.
- Senior consultant for multiple Phase I and Phase II environmental Site Assessment (ESA) projects throughout the United States.
- Senior Consultant for Environmental Regulatory Compliance Audits.
- Senior Consultant for numerous leaking underground storage tank (LUST) projects including removal and in-place closures, contaminant delineation, and remediation using Risk-Based Corrective Action (RBCA) procedures.
- Senior consultant responsible for CERCLA site investigations such as municipal landfill closure requiring regulatory negotiations, development of a site conceptual model, and development of a site screening work plan.
- Senior Consultant responsible for expert environmental engineering review of site characterization and remediation cost estimates and the support of negotiations during the conclusion of a post-closing environmental escrow fund.
- Senior consultant for Spill Prevention, Control, and Countermeasure (SPCC) plans including the review of SPCC plans for national retailers across their 15 state geographic footprint.
- Senior Consultant for Resource Conservation and Recovery Act (RCRA) assessments including industrial wood treatment drip pad assessments for a portfolio of sites spanning four states.

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Education

- Christian Brothers University
  B.S. Civil Engineering

Registrations

Professional Engineer

- Tennessee, Mississippi, Arkansas, Georgia, Florida, Kentucky, Alabama, Texas, Iowa, New Jersey, Illinois, Oregon, Indiana, Louisiana, and Oklahoma

Certifications

- OSHA 1910.120 HAZWOPER 40-hour Training
- EPA Asbestos Project Designer
- Mississippi Brownfield Consultant (PE)
- Tennessee Dry Cleaning Corrective Action Contractor (DCAC)
- Meets the definition of Environmental Professional as defined in § 312.10 or 40 CFR 312

Professional Activities

- Tennessee Society of Professional Engineers
- Tennessee Chamber of Commerce and Industry Environment Committee

Appendix F

PM ENVIRONMENTAL Environmental & Engineering Services

COMMON ACRONYMS AND TERMINOLOGY USED IN THE COURSE OF THIS PHASE I ESA

The following is a list of common acronyms:

All Appropriate Inquiry	AAI
Asbestos Containing Materials	ACM
Aboveground Storage Tank	AST
American Society for Testing Materials	ASTM
Approximate Minimum Search Distance	ASMD
Comprehensive Environmental Response, Compensation and Liability Act	CERCLA
Environmental Data Resources	EDR
Environmental Site Assessment	ESA
Federal Emergency Response Notification System	FERNS
Large Quantity Generator	LQG
Leaking Underground Storage Tank	LUST
National Priority List	NPL
No Further Remedial Action Planned	NFRAP
PM Environmental, Inc.	PME
Polychlorinated Biphenyls	PCBs
Resource Conservation and Recovery Act	RCRA
Small Quantity Generator	SQG
Treatment Storage and Disposal Facility	TSD
Underground Storage Tank	UST
United States Environmental Protection Agency	USEPA

TERMINOLOGY

The following provides definitions and descriptions of certain terms that may be used in this report. Several terms are defined by ASTM Standard Practice E 1527. The Standard Practice should be referenced for further detail (such as the precise wording), related definitions, or additional explanation regarding the meaning of terms.

Asbestos containing material (ACM): Any material found to contain greater than 1% asbestos using an analytical method that is approved by the USEPA for asbestos analysis.

De minimis conditions: Conditions that generally do not present a material risk or harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Friable material: Defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) as a material that can be pulverized or reduced to dust using hand pressure only.

General risk of enforcement action: The likelihood that an environmental condition would be subject to enforcement action if brought to the attention of appropriate governmental agencies. If the circumstances suggest an enforcement action would be more likely than not, then the condition is considered a general risk of enforcement action.

Historical recognized environmental condition (HREC): Environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently. The final decision rests

with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the subject property. If a past release of any hazardous substances or petroleum products has occurred in connection with the subject property, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered a historical recognized environmental condition.

Non-friable material: Defined by National Emission Standards for Hazardous Air Pollutants (NESHAP) as a material that cannot be pulverized or reduced to dust using hand pressure only. According to NESHAP, non-friable building materials include those in Category I (packings, gaskets, resilient floor coverings/adhesives, and asphalt roofing materials) and those in Category II (all other materials).

Recognized environmental condition (REC): The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the subject property or into the ground, ground water, or surface water of the subject property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Subject property: The area that is the focus of a Phase I Environmental Site Assessment. The boundaries are not necessarily consistent with recorded legal descriptions of real estate, and are defined by the User.

Suspect ACM of concern: Defined as "(I) all friable suspect ACMs (II) any non-friable suspect ACMs expected to be disturbed by renovation or demolition activities planned for the subject property."

USER'S CONTINUING OBLIGATIONS UNDER CERCLA

Conducting a Phase I ESA alone does not provide a landowner with protection against CERCLA liability. Landowners who want to maintain a bona Fide Prospective Purchaser, an Innocent Landowner, or a Contiguous Property Owner Defense must also comply with other pre-acquisition and post-acquisition requirements in the CERCLA regulations and AAI standards. The responsibilities for each defense are summarized below.

Bona Fide Prospective Purchaser Responsibilities

The Bona Fide Prospective Purchaser defense is intended for individuals or entities purchasing a property known to be contaminated. To obtain and maintain the defense, the individual or entity seeking the defense must also satisfy the following requirements (AAI, Section II D.1.):

- Have acquired a property after all disposal activities involving hazardous substances ceased at the property;
- Provide all legally required notices with respect to the discovery or release of any hazardous substances at the property;
- Exercise appropriate care by taking reasonable steps to stop continuing releases, prevent any threatened future releases, and prevent or limit human, environmental, or natural resources exposure to any previously released hazardous substance;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena; and
- Not be potentially liable, or affiliated with any other person who is potentially liable for response costs for addressing releases at the property.

Innocent Landowner Responsibilities

The Innocent Landowner Defense protects individuals or entities (ultimately the "property owner") purchasing a property that is not known to be contaminated. The property owner must also satisfy the following requirements to obtain and maintain the defense (AAI, Section II D.3 and CERCLA Section 107(b)(3)):

- Have no reason to know that any hazardous substance which is the subject of a release of threatened release was disposed of on, in, or at the facility;
- Provide full cooperation, assistance and access to persons authorized to conduct response actions at the property;
- Comply with any land use restrictions and not impeding the effectiveness or integrity of any institutional controls;

- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent to limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Demonstrate that the act or omission that caused the release or threat of release of hazardous substances and the resulting damages were caused by the third party with whom the person does not have employment, agency, or contractual relationship;
- Exercise due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances;
- Take precautions against foreseeable acts or omissions of a third party and the consequences that could result from such acts or omissions.

Contiguous Property Owner Defense

The Contiguous Property Owner Defense protects individuals or entities purchasing a property that is not known to be contaminated, but could be contaminated by migration from a contiguous property owned by someone else. To qualify as a contiguous property owner, a landowner must have no knowledge of contamination prior to acquisition, or reason to know of contamination at the time of acquisition, have conducted AAI, and meet all of the criteria set forth in AAI Section II.D.2 and CERCLA Section 107(q)(1)(A), which include:

- Not cause, contribute, or consent to the release or threatened release;
- Not be potentially liable nor affiliated with nay other person potentially liable for response costs at the property;
- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent or limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena;
- Provide all legally required notices with respect to discovery or release of any hazardous substances at the property.

Persons who know, or have reason to know, that the property is or could be contaminated at the time of acquisition of a property cannot qualify for the liability protection as a contiguous property owner, but may be entitles to Bona Fide Prospective Purchaser status.