



# CONTAMINATION SCREENING EVALUATION REPORT

Florida Department of Transportation

District 5

**I-95 INTERCHANGE AT PIONEER TRAIL**

**PD&E STUDY**

Volusia County, Florida

Financial Management Number: 436292-1-22-01

GEC Project No. 4162E

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

May 2019

Revised January 2020



**Geotechnical  
and  
Environmental  
Consultants, Inc.**

*At the very foundation of our community*

May 10, 2019

Revised January 21, 2020

Stantec Consulting Services, Inc.  
300 Primera Boulevard, Suite 300  
Lake Mary, Florida 32746

Attention: Mr. Luis Diaz, P.E.

Subject: Contamination Screening Evaluation Report  
**I-95 INTERCHANGE AT PIONEER TRAIL  
PD&E STUDY**  
Volusia County, Florida  
Financial Project ID 436292-1-22-01  
GEC Project No. 4162E

Dear Mr. Diaz:

Geotechnical and Environmental Consultants, Inc. (GEC) is pleased to present this Contamination Screening Evaluation Report (CSER) for the above-referenced project. This report describes our evaluation procedures, presents the information we obtained and identifies four sites that have been assigned Contamination Risk Potential Ratings.

We appreciate the opportunity to work with Stantec Consulting Services, Inc. and the Florida Department of Transportation on this project. If you have any questions concerning this report, or if we may be of further assistance, please contact us.

Sincerely,

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.

Richard P. McCormick, P.G.  
Senior Geologist

Gary L. Kuhns, P.E.  
President

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## EXECUTIVE SUMMARY

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This Contamination Screening Evaluation Report (CSER) for the I-95 Interchange at Pioneer Trail Project Development and Environment (PD&E) Study was performed as part of Financial Project ID No. 436292-1-22-01.

The purpose of this evaluation was to assess the risk of encountering petroleum or hazardous substance contamination of soil, groundwater, surface water, or sediment that could adversely affect this project. The CSER activities included a review of public regulatory files, historical data sources, and a site reconnaissance of the project study area.

As a result of this evaluation, we have assigned Contamination Risk Ratings to five sites. The five site locations are shown on **Figure 3** and the contamination status of each site is summarized in **Table 1**; a more detailed description and photographs of each site are included in **Appendix A**.

Using the FDOT Risk Ratings presented in **Appendix D**, we have identified **1 Medium Risk** and **4 Low Risk** sites as shown below.

### Low Risk Sites (4)

Site No.	Site Name	Site Address	Risk Potential
2	Sampling Station #27080084	Pioneer Trail at Unnamed Ditch	Low
3	Sampling Station #27080085	I-95 at Unnamed Ditch	Low
4	USGS Site 1	Pioneer Trail	Low
5	USGS Well #8455	Pioneer Trail	Low

### Medium Risk Site (1)

Site No.	Site Name	Site Address	Risk Potential
1	Tornelli Property	3160 Pioneer Trail	Medium

Level II Impact to Construction Assessments (ICAs) were recommended by Mr. Randy Stafford, the FDOT District 5 Contamination Impact Coordinator as follows:

- ICAs are recommended for Site 1, the Tornelli Property in the SE quadrant of the project; the two plant nursery locations, burn mound, and the truck parking area should be assessed for chemicals of concern.
- The USGS well(s) in this quadrant should be investigated to determine if they still exist and if they will need to be protected or accommodated during construction activities.

## 1.0 INTRODUCTION

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### 1.1 Contract Information

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This Contamination Screening Evaluation Report (CSER) for the I-95 Interchange at Pioneer Trail Project Development and Environment (PD&E) Study was performed as part of Financial Project ID No. 436292-1-22-01.

### 1.2 Purpose

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The purpose of this evaluation is the early identification of potential contamination sites that could impact this project...

The presence of contaminated environmental media (soil, groundwater, surface water, and sediment) can have a significant negative impact on the cost and schedule to complete an interchange design and construction project. The purpose of this evaluation was the early identification of potential contamination sites that could impact this project and to provide valuable input for the design and construction phases.

## 2.0 PROJECT DESCRIPTION

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The following sections describe the current study area conditions, the project construction plans and elements of the project that could be impacted by soil or groundwater contamination. Common terms used in this report can be found in **Appendix C**.

### 2.1 Site Description

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The study area consists of the I-95 at Pioneer Trail intersection and surrounding vicinity in New Smyrna Beach, Volusia County, Florida. The intersection is being proposed for the construction of an interchange to provide Pioneer Trail and I-95 connectivity. The study area is shown on an excerpt of the U.S. Geological Survey (USGS) Samsula, Florida Quadrangle map (**Figure 1**) in the Appendix.

### 2.2 Current Land Use

---

The current land uses within the study area are shown on the Saint Johns Water Management District (SJRWMD) Map on **Figure 2** and are summarized as follows:

- Woodland Pastures
- Upland Shrub and Brushland
- Mixed Rangeland
- Pine Flatwoods
- Melaleuca
- Coniferous Plantations
- Forest Regeneration Areas
- Lakes
- Mixed Wetland Hardwoods
- Cypress
- Wet Pineland Hydric Pine
- Wetland Forested Mix
- Wet Prairies
- Emergent Aquatic Vegetation
- Mixed Scrub-Shrub Wetlands
- Electrical Power Transmission Lines

### **2.3 Project Description**

---

Based on our review of the project plans, we understand the following project elements are proposed:

- The I-95 at Pioneer Trail overpass is being considered for the construction of an interchange. Diamond and partial loop interchange alternatives (to the northeast and southwest) are being proposed as part of the PD&E Study. Stormwater retention ponds are included within and adjacent to the interchange alternatives.

### **2.4 Potential Contamination Impacts**

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The project elements that could be impacted by soil and/or groundwater contamination include the following:

- Soil excavation for roadway and drainage improvements
- Soil excavation for auger cast pile foundations for signage
- Excavation dewatering

## **3.0 CONTAMINATION SCREENING METHODOLOGY**

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We conducted this evaluation in general accordance with Chapter 20 of the FDOT PD&E Manual dated January 14, 2019. The study area is defined by the following distances from the right of way:

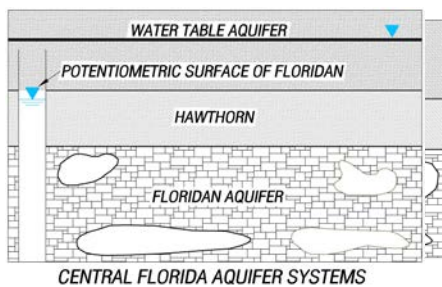
- **All sites within 500 feet**
- **Non-landfill solid waste sites within 1,000 feet**
- **Solid waste landfills, CERCLA, or National Priorities List (NPL) sites within ½ mile**

We reviewed relevant information from the FDEP, USEPA, and local agencies in Volusia County to identify known or potential contamination sites within the study area. Historical aerial photographs and other published historical sources were reviewed as part of this CSER. We performed a site reconnaissance of the properties within the study area and attempted to interview individuals with knowledge of the study area’s environmental status.

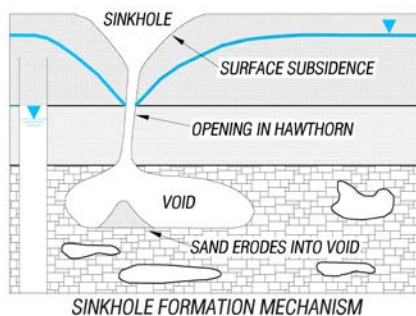
Based on the results of the contamination screening activities, we assigned Risk Ratings to the identified sites. The risk rating system was developed by FDOT and incorporates four levels of risk: **No**, **Low**, **Medium**, and **High**. For a description of the four risk levels please refer to **Appendix D**.

#### 4.0 GEOLOGIC AND GEOGRAPHIC CONDITIONS

##### 4.1 Central Florida Geology



Due to its prevalent geology, referred to as karst, Central Florida is prone to the formation of sinkholes, or large, circular depressions created by local subsidence of the ground surface. The nature and relationship of the three sedimentary layers typical of Central Florida geology cause sinkholes. The deepest, or basement, layer is a massive cavernous limestone formation known as the Floridan aquifer. The Floridan aquifer limestone is overlain by a silty or clayey sand, clay, phosphate, and limestone aquitard (or flow-retarding layer) ranging in thickness from nearly absent to greater than 100 feet and locally referred to as the Hawthorn Group (Hawthorn). The Hawthorn is in turn overlain by a 40 to 70-foot thick surficial layer of sand, bearing the water table aquifer. The likelihood of sinkhole occurrence at a given site within the region is determined by the relationship among these three layers, specifically by the water (and soil)-transmitting capacity of the Hawthorn at that location.



The water table aquifer is comprised of Recent and Pleistocene sands and is separated from the Eocene limestone of the Floridan aquifer by the Miocene sands, clays and limestone of the Hawthorn. Since the thickness and consistency of the Hawthorn is variable across Central Florida, the likelihood of groundwater flow from the upper to the lower aquifer (known as aquifer recharge) will also vary by geographical location.

In areas where the Hawthorn is absent, water table groundwater (and associated sands) can flow downward to cavities within the limestone aquifer, like sand through an hourglass, recharging the Floridan aquifer, and sometimes causing the formation of surface sinkholes. This process of subsurface erosion associated with recharging the Floridan aquifer is known as raveling. Thus, in Central Florida, areas of effective groundwater recharge to the Floridan aquifer have a higher potential for the formation of surface sinkholes.

Based on the U.S. Geological Survey Map entitled “Recharge and Discharge Areas of the Floridan Aquifer in the St. Johns River Water Management District and Vicinity, Florida,” 1984, the study area lies in areas of low to moderate recharge; therefore, we can conclude based solely on this data that it also lies in an area where the relative risk of sinkhole formation is generally low compared to the overall risk across Central Florida.

#### ***4.2 USGS Quadrangle Map***

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The study area has been transposed onto the USGS Samsula, Florida Quadrangle map for this area, as shown on **Figure 1**. According to the quadrangle map, the ground surface profile across the proposed interchanges ranges from +25 feet to +27 feet. Wetlands are present throughout the study area. A borrow pit is located in the northwest quadrant of the proposed interchange. This pit was likely used to provide fill for construction of I-95.

No other landfills, borrow pits, or quarries are depicted that would represent potential contamination concerns on, or in the immediate vicinity of, the study area. **Figure 2** depicts land use in the project area.

#### ***4.3 NRCS Soil Survey Review***

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The NRCS Soil Survey of Volusia County, Florida was reviewed for information regarding near-surface soil conditions within the project limits, as shown on **Figure 1**. The following soil types were identified within the study area:

Unit No.	Soil Name
17	Daytona sand, 0 to 5 percent slopes
29	Immokalee sand
32	Myakka fine, wet, fine sands, 0 to 2 percent slopes
49	Pomona fine sand
50	Pomona fine sand, depressionnal, 0 to 2 percent slopes
51	Pomona-St Johns complex
52	Pompano fine sand
56	Samsula muck, frequently ponded, 0 to 1 percent slopes

Unit No.	Soil Name
60	Smyrna-Smyrna, wet, fine sand, 0 to 2 percent slopes
61	St Johns fine sand
63	Tavares fine sand, 0 to 5 percent slopes
73	Wabasso fine sand
99	Water (borrow pit)

The NRCS soil survey map depicts Samsula muck (Soil Unit No. 56) in the western portion of the shady area. This soil type has a high organic content and is classified as A-8 in the AASHTO system. Organic soils can have severe limitations for construction.

No additional landfills, borrow pits, quarries, or other conditions are depicted that would represent potential contamination concerns on, or in the immediate vicinity of, the study area.

*Information contained in the NRCS Soil Survey is very general and may be outdated.* It may not therefore be reflective of actual soil and groundwater conditions, particularly if recent development in the site vicinity has modified soil conditions or surface/subsurface drainage.

#### ***4.4 Previous Geotechnical Investigation***

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A Geotechnical Investigation is being performed for this project, and will be submitted under a separate cover.

### **5.0 HISTORICAL DATA REVIEW**

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#### ***5.1 Historical Aerial Photographs***

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Historical aerial photographs of the study area were reviewed to evaluate past land use and to identify features that may indicate hazardous material or petroleum contamination. Available historical aerial photographs of the study area were accessed from Google Earth, the Florida Department of Transportation, [www.Historicaerials.com](http://www.Historicaerials.com), and the University of Florida websites. Aerial photographs for the following years were reviewed: 1943, 1957, 1969, 1976, 1980, 1984, 1995, 1999, 2004, 2009, 2014, and 2019.

The 1943 aerial photograph shows Pioneer Trail and the Turnbull Bay Road and Pioneer Trail intersection. The surrounding vicinity is either wooded or apparent cattle rangeland.

The 1957 aerial photograph (could not be downloaded at this time) showed the excavation of the unnamed ditch that crosses the study area. The ditch runs south to intersect Pioneer Trail

(west of the Turnbull Road intersection) and then continues on a southwest/northeast axis south of Pioneer Trail.

The 1969 aerial photograph shows the construction of I-95, borrow pits on the east and west sides of I-95 in the study area vicinity, and the Pioneer Trail overpass. The present-day electrical powerline easement is visible west of I-95.

The 1976 through 1984 aerial photographs show a residence on the northeast corner of the unnamed ditch and Pioneer Trail intersection.

The 1995 and 1999 aerial photographs show the electrical powerline easement extending north of Pioneer Trail. The residence on the northeast corner of the unnamed ditch and Pioneer Trail intersection is not visible.

The 2004 aerial photograph shows the initial development of the facility on the southeast quadrant of the I-95 at Pioneer Trail intersection. The driveway, residence, an excavated pond, and some tractor-trailer truck and/or equipment parking are visible.

The 2009 aerial photograph shows the construction of a barn and formal truck parking area in the southwestern portion of that site. A burn area is visible within the tractor-trailer truck parking area. Some trees or plants are visible in rows in the northeastern portion of the site, on the east side of the driveway (area of present-day plant nursery).

The 2014 and 2019 aerial photographs show a plant nursery area located northeast of the tractor-trailer truck parking area. Debris and the burn pile are visible in the truck parking area.

Site details identified in the historical aerial photographs are included in the Potential Contamination Site Descriptions in **Appendix A**. The historical aerial photographs are provided in **Appendix B**.

## ***5.2 City Directories***

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City Directories are historical listings of businesses and residences in a given area, similar to a standard telephone book. The site occupant and addresses listed for previous years can identify past land uses. We contracted with Environmental Data Resources (EDR) to provide a city directory review for the study area. EDR researched city directories from 1962 through 2014 at approximately 5-year intervals.



The address for the facility on the southeastern quadrant of the I-95 and Pioneer Trail intersection has an address of 3160 or 3156 Pioneer Trail. No listings were identified for these addresses. The EDR City Directory Review report is provided in **Appendix E**.

### ***5.3 Fire Insurance Maps***

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Fire insurance maps are used by insurance companies in assessing fire risk. These maps contain details about building construction, business type, building contents, fuel storage tanks, and other factors affecting fire risk.

Historical fire insurance maps were not available for the study area. The Sanborn Map search confirmation letter is provided in **Appendix F**.

### ***5.4 Historical Quadrangle Maps***

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We reviewed historical quadrangle maps at the [www.Historicaerials.com](http://www.Historicaerials.com) website. The maps for 1956, 1959, 1972, 1981, 1988, 1993, 2012, and 2015 were reviewed.

- Pioneer Trail is visible in the 1956 map.
- I-95 is visible in the 1981 map.
- Apparent borrow pits (ponds) from the construction of I-95 are visible on the west side of the northern portion of the study area and southeast of the study area in the 1981 map.
- No buildings are visible in the historical quadrangle maps.

The historical quadrangle maps do not depict other landfills, borrow pits, or quarries that would represent potential environmental concerns on, or in the immediate vicinity of, the study area.

### ***5.5 Historical Contamination Screening Evaluation Report***

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No historical Contamination Screening Evaluation Reports were available for the study area.

## **6.0 PUBLIC RECORD REVIEW**

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We conducted a review of the public record for the study area including information obtained from the USEPA and the FDEP. As a part of our review, we subcontracted with EDR for a regulatory database search. The EDR Radius Map Report is included in **Appendix G**.

### ***6.1 Florida Department of Environmental Protection (FDEP) Databases***

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The FDEP has compiled several databases that are useful in identifying potential sources of hazardous material or petroleum product contamination. The FDEP databases reviewed for this study and their common abbreviations are provided in **Appendix H**.

### ***6.2 United States Environmental Protection Agency (USEPA) Databases***

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The federal government has compiled several databases that are useful in identifying potential sources of hazardous material or petroleum product contamination. The federal databases reviewed for this study and their common abbreviations are provided in **Appendix I**.

### ***6.3 FDEP OCULUS Document Management System, Map Direct Website, and Nexus Portal***

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The FDEP uses the OCULUS Document Management System, Map Direct Website, and Nexus Portal to provide public record information for petroleum or hazardous material releases to the environment, generators of hazardous waste, and solid waste facilities. Information contained in this data management system includes the status of active and abandoned storage tanks, tank inspection reports, tank closure reports, environmental assessment reports, remedial action reports, hazardous waste generator compliance details, and solid waste facility compliance details.

We reviewed the OCULUS Document Management System, Map Direct Website, and Nexus Portal within the search distances provided in Section 4.0. The results of our review have been incorporated in our Potential Contamination Site Descriptions in **Appendix A**. The FDEP OCULUS, Map Direct and Nexus Portal Information can be found in **Appendix J**.

### ***6.4 EDB Delineated Areas***

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The Florida Legislature had the FDEP implement the Delineated Areas Program in 1988 under Chapter 62-524, FAC. The purpose of the program was to protect public health and groundwater resources by regulating potable water well construction and testing standards for areas of known groundwater contamination. During the period 1962 to 1980, the Florida Department of Agriculture and Consumer Services (FDACS) conducted widespread applications of ethylene dibromide (EDB), an agricultural pesticide, to control nematodes in citrus groves. In 1983, the FDEP began testing groundwater in potable wells throughout Florida due to the discovery of EDB in wells in other states. The delineated areas of EDB groundwater contamination are shown on the FDEP Map Direct website. The potable wells, agricultural or residential, with confirmed impacts were shown on the website with a 1,000-foot buffer zone in

an attempt to project future migration of contaminants. However, this does not mean that there is not EDB contamination outside of that 1,000-foot zone.

After reviewing these EDB-delineated areas on the FDEP Map Direct website, in the vicinity of the study area, we found that no EDB-delineation areas appear within the study area.

### ***6.5 Agricultural Land Use***

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The study area and surrounding vicinity was not historically used for agricultural purposes. The study area does not reflect an obvious concern for agricultural chemical contamination. A plant nursery was identified on **Site No 1** and is discussed in **Appendix A**.

We did not identify any crop fields or groves, cattle pens, farm/ranch buildings, irrigation wells, or water towers in the study area during the historical aerial photograph review or during the site reconnaissance.

### ***6.6 Railroad Corridors***

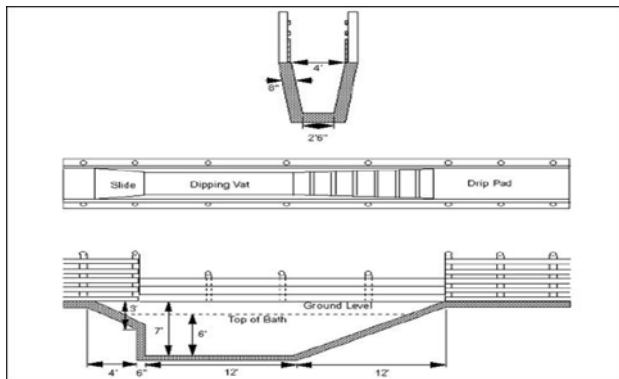
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No railroad corridors were identified within the study area.

### ***6.7 Cattle Dip Vats***

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Cattle dip vats were a response to cattle tick fever in the 1890s. The USDA initiated the cattle dip vat program in 1906 and approximately 3,200 cattle dip vats had been constructed by 1940.



Cattle dip vats were used until the 1960s and many vats have not been located, or documented. Cattle dip vats were used to apply pesticides to cattle and other livestock, kill ticks, and thereby eliminate tick-borne diseases. The vats were typically constructed of concrete. They consisted of four sections; the entrance slide, dipping vat, exit stairs and drip pad. Cattle were funneled into a chute leading to the entrance slide, then slide down

into the pesticide-filled vat, swim or walk across the vat and walk up the exit stairs to the drip pad. The vats were roughly four feet wide, seven feet deep, and 40 feet long as shown on the following diagram.

Due to the relatively small size of the vat and the narrow profile, it is difficult to identify a cattle dip vat from aerial photographs, or in a wooded area. Cattle dip vats are typically identified when the land owner reveals the location, when they are located near historical cattle pens and chutes, and by happening upon them. To add to the difficulty in identifying historical cattle dip vats, many landowners removed the vats when the program was closed. They either dug up the vat or broke up the concrete and covered it with soil.

No cattle dip vats were identified within the study area through public record and database review, historical aerial photograph review, or site reconnaissance. Based on available information, we found no evidence that cattle dip vats within the study area contribute to contamination risk for this project.

## **7.0 INTERVIEWS**

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We contacted Ms. Denise Miller at FDEP Central District regarding the two impaired water sampling stations. The inquiries requested information relative to the impaired waters and the results of the sampling performed at these locations.

On May 7, 2019, Mr. William Lasley with FDEP contacted us via telephone and email regarding the impaired waters information request. Mr. Lasley discussed the sampling conditions and the status of the sampling stations. It appears that there was a concern relative to the dissolved oxygen levels in the unnamed ditch in the 1990's, indicating "no causative pollutant". Sampling in 2005 and 2010 found the dissolved oxygen concern to be "natural condition" and then "not impaired", respectively.

Mr. Lasley also indicated that there is a biological station there where the habitat was assessed. In 2005 it was scored a 121 for overall habitat. The score of 121 indicates optimal conditions.

Based on the conversation with Mr. Lasley and the information he provided, the impaired waters and biological sampling stations are for measuring the overall condition of the unnamed ditch and surrounding habitat and the results are positive. The sampling stations do not appear to indicate an underlying contamination condition.

No additional interviews were performed in the preparation of this assessment. See **Appendix K** for interview documentation.

## 8.0 SITE RECONNAISSANCE

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We performed a site reconnaissance of the study area on April 15, 2019. The purpose of the visit was to document existing conditions and evaluate whether current land uses could result in hazardous material or petroleum product contamination of environmental media.

The properties within the project study area were visually inspected for evidence of contamination such as stressed vegetation, underground tank vent and fill pipes, dumping, accumulated areas of debris, evidence of buried materials, and ground staining.

Details of the site reconnaissance are incorporated in the Potential Contamination Site Descriptions in **Appendix A**. Photographs obtained for each potential contamination site are also included in **Appendix A**.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

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This CSER has identified the five sites that, in our opinion, have risk of contamination impacts to this project. The site locations are shown on **Figure 3**. **Table 1** summarizes the findings for each rated site.

### 9.1 Potential Contamination Sites

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#### Low Risk Sites (4)

Site No.	Site Name	Site Address	Risk Potential
2	Sampling Station #27080084	Pioneer Trail at Unnamed Ditch	Low
3	Sampling Station #27080085	I-95 at Unnamed Ditch	Low
4	USGS Site 1	Pioneer Trail	Low
5	USGS Well #8455	Pioneer Trail	Low

#### Medium Risk Site (1)

Site No.	Site Name	Site Address	Risk Potential
1	Tornelli Property	3160 Pioneer Trail	Medium

## **9.2 Level II Impact to Construction Assessment (ICA) Recommendations**

Level II Impact to Construction Assessments (ICAs) were recommended by Mr. Randy Stafford, the FDOT District 5 Contamination Impact Coordinator as follows:

- ICAs are recommended for Site 1, the Tornelli Property in the SE quadrant of the project; the two plant nursery locations, burn mound, and the truck parking area should be assessed for chemicals of concern.
- The USGS well(s) in this quadrant should be investigated to determine if they still exist and if they will need to be protected or accommodated during construction activities.

## **9.3 CSER Update**

This CSER should be updated if construction will occur more than **one year** from the date of this report to determine if additional assessment is warranted due to significant changes in site conditions or project design.

## **10.0 LIMITATIONS**

The findings, opinions, conclusions and recommendations presented herein are based in part on reasonably ascertainable information contained in the public record. We do not warrant or guarantee the accuracy or completeness of this information. Some of this public record information may be dated and not representative of conditions at the time of this report was prepared (April and May 2019), or in the future. Additional limitations are as follows:

- Not discussed in this report are properties that have been historically undeveloped land, are associated with residential use and do not appear to pose a contamination risk, or are professional/commercial establishments that are not associated with hazardous materials or petroleum products.
- This study also does not include surveys of wetlands, endangered species, asbestos containing materials, lead-based paints, or other potential hazardous building materials.

## **11.0 USE OF THIS REPORT**

This report has been prepared for the exclusive use of FDOT, and for application to this project. We will not be held responsible for any other party's interpretation or use of this report's data or recommendations without our written authorization.

We performed the services described in this report in a manner consistent with that level of care and skill ordinarily exercised by members of our profession currently practicing in Central Florida. No other representation is made or implied in this document.

The conclusions and recommendations should be disregarded if the final project design differs from the project description in this report. If such changes are contemplated, we should be retained to review the new plans to assess the applicability of this report in light of proposed changes.



# FIGURES



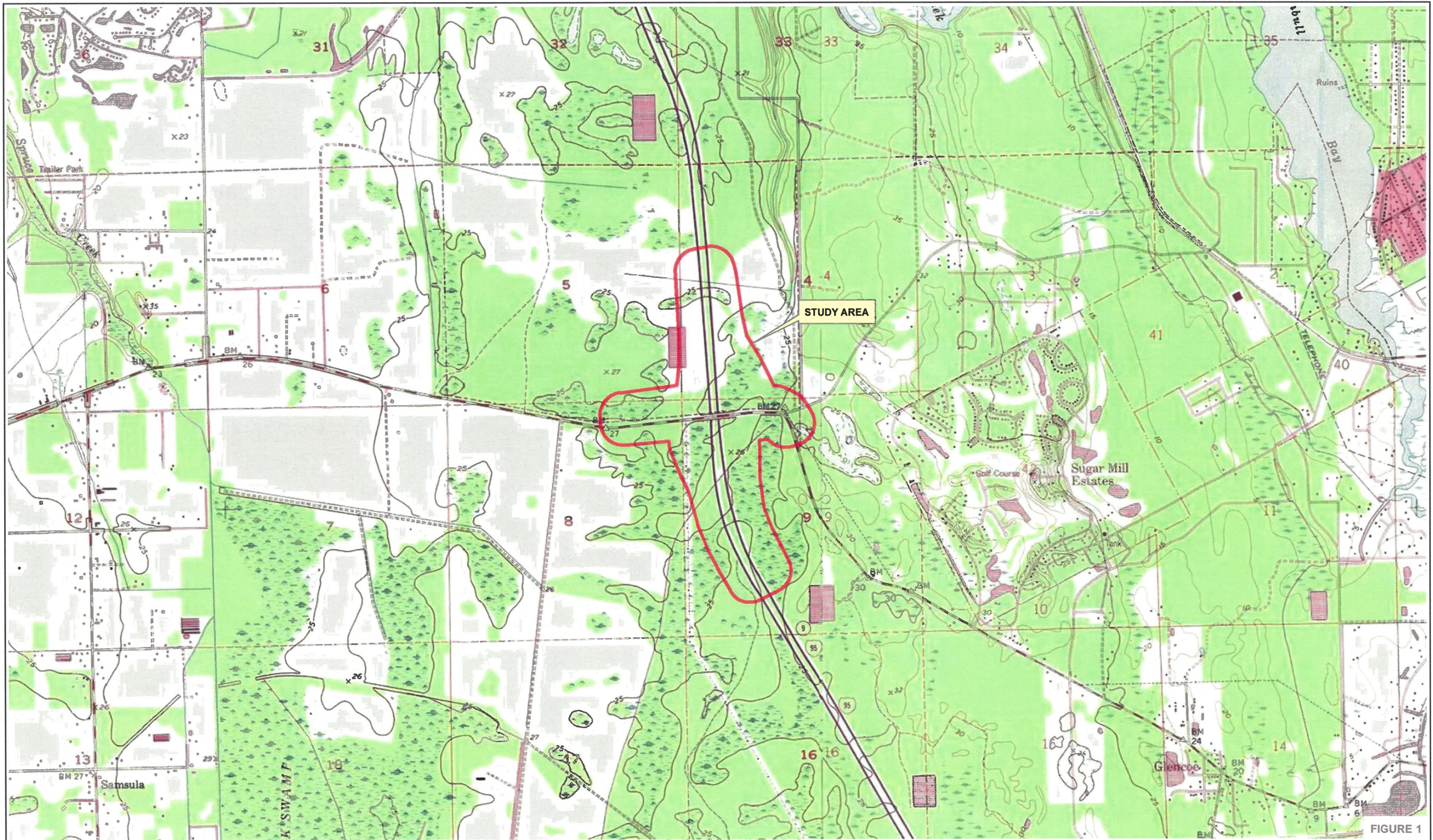
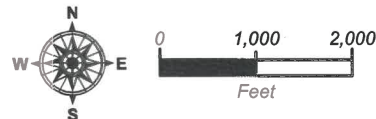


FIGURE 1

USGS Samsula, FL Quadrangle Map  
 Dated: 1993



RICHARD P. McCORMICK, P.G.  
 P.G. LICENSE NUMBER 2096  
 GEOTECHNICAL AND ENVIRONMENTAL  
 CONSULTANTS, INC.  
 919 LAKE BALDWIN LANE  
 ORLANDO, FL 32814  
 CERTIFICATE OF AUTHORIZATION 00005882

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-95	VOLUSIA	436292-1-22-01

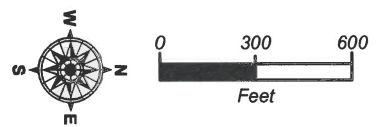
USGS QUADRANGLE MAP

SHEET NO.





FIGURE 2



RICHARD P. McCORMICK, P.G.  
 P.G. LICENSE NUMBER 2096  
 GEOTECHNICAL AND ENVIRONMENTAL  
 CONSULTANTS, INC.  
 919 LAKE BALDWIN LANE  
 ORLANDO, FL 32814  
 CERTIFICATE OF AUTHORIZATION 00005882

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-95	VOLUSIA	436292-1-22-01

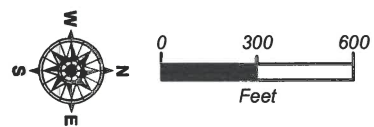
*SJRWMD LAND USE MAP*

SHEET NO.





FIGURE 3



RICHARD P. McCORMICK, P.G.  
 P.G. LICENSE NUMBER 2096  
 GEOTECHNICAL AND ENVIRONMENTAL  
 CONSULTANTS, INC.  
 919 LAKE BALDWIN LANE  
 ORLANDO, FL 32814  
 CERTIFICATE OF AUTHORIZATION 00005882

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-95	VOLUSIA	436292-1-22-01

*NRCS SOIL SURVEY MAP*

SHEET NO.





FIGURE 4

**RISK RATING**

- HIGH
- MEDIUM
- LOW

**PLANT NURSERY**

**TRUCK PARKING**

RICHARD P. McCORMICK, P.G.  
 P.G. LICENSE NUMBER 2096  
 GEOTECHNICAL AND ENVIRONMENTAL  
 CONSULTANTS, INC.  
 919 LAKE BALDWIN LANE  
 ORLANDO, FL 32814  
 CERTIFICATE OF AUTHORIZATION 00005882

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-95	VOLUSIA	436292-1-22-01

**POTENTIAL CONTAMINATION  
SITE MAP**

SHEET NO.



# **TABLES**

Table 1  
 Potential Contamination Site Summary  
**I-95 INTERCHANGE AT PIONEER TRAIL**  
**PD&E STUDY**  
 Financial Project ID: 436292-1-22-01  
 GEC Project No. 4162E

Site No.	Site Name	Site Address	Facility ID	Contaminants of Concern	Active Storage Tanks (Y/N)	Distance/Direction from Row	Database Source	Location Verified (Y/N)	Risk Potential	Comments
1	Tornelli Property	3160 Pioneer Trail	N/A	Hazardous Materials and Petroleum Products	N	Adjacent to E and S	Aerial Photographs	Y	Medium	This site may be within the proposed interchange footprint. The site is used as a farm, plant nursery, tractor-trailer storage facility, and a residence. A burn mound was observed on-site, near the truck parking.
2	Sampling Station #27080084	Pioneer Trail at Unnamed Ditch	#27080084	Hazardous Materials and Petroleum Products	N	Adjacent to S and E	FDEP MAP DIRECT	Y	Low	This site is an Impaired Waters sampling station. This sampling station is utilized to assess the overall environmental health of the unnamed ditch and does not reflect an underlying contamination concern.
3	Sampling Station #27080085	I-95 at Unnamed Ditch	#27080085	Hazardous Materials and Petroleum Products	N	Adjacent to E	FDEP MAP DIRECT	Y	Low	This site is an Impaired Waters sampling station. This sampling station is utilized to assess the overall environmental health of the unnamed ditch and does not reflect an underlying contamination concern.
4	USGS Site 1	Pioneer trail	USGS Site 1	N/A	N	Adjacent to S	FDEP MAP DIRECT	N	Low	This is a geophysical logging location for a 700-foot deep boring. No obvious contamination concerns are noted in the public records.
5	USGS Well #8455	Pioneer Trail	USGS Well #8455	N/A	N	Adjacent to S	FDEP MAP DIRECT	N	Low	This is a 700-foot deep well that appears to be used to monitor deep aquifer conditions. It is likely this well is associated with the boring USGS Site 1.



# **APPENDIX A**

## **POTENTIAL CONTAMINATION SITE DESCRIPTIONS**

Site No.:	<b>1</b>	Site Name:	Tornelli Property		Risk Rating:	<b>MED</b>
Street Address:		3160 Pioneer Trail				
Location:		Southeast corner of the I-95 and Pioneer Trail intersection				
Distance from Right of Way:		Adjacent				
Current Land Use:		Residence, farm, plant nursery, tractor-trailer truck parking				
Historical Land Use:		Vacant Land				
Database Listings / Sources:		Aerial Photographs				
Facility ID Nos.:		N/A				
Storage Tank Description:		N/A				
Discharge Date:		<b>N/A</b>	SRCO/NFA:		<b>N/A</b>	
Hazardous Materials:		<b>Yes</b>	Petroleum Products:		<b>Yes</b>	
Soil Concern:		<b>Yes</b>	Groundwater Concern:		<b>Yes</b>	
Public Record Findings:		<p>This property was developed between 1999 and 2004 with an excavated pond, residence and vehicle parking. In later years, a barn, plant nursery, tractor-trailer truck parking, and a burn mound are visible.</p> <p>No documented violations or releases of hazardous materials or petroleum products have been reported for this property.</p>				
Interview Information:		No one was available for an interview at the time of the site reconnaissance.				
Site Observations:		The site is currently operating as a small farm, plant nursery, and tractor-trailer truck parking facility.				
Conclusions:		Based on the presence of the plant nursery, burn mound, truck parking, and heavy equipment on-site, and the potential for the proposed northbound exit ramp to encompass this facility, this site has been assigned a <b>Medium Risk</b> .				

Site No.:	<b>1</b>	Site Name:	Tornelli Property	Risk Rating:	<b>MED</b>
-----------	----------	------------	-------------------	--------------	------------



Photo Description: Tornelli Property as seen on the 2019 Google Earth imagery.



Site No.:	1	Site Name:	Tornelli Property	Risk Rating:	MED
-----------	---	------------	-------------------	--------------	-----



Photo Description:	Truck parking and burn mound on-site.
--------------------	---------------------------------------



Site No.:	<b>1</b>	Site Name:	Tornelli Property	Risk Rating:	<b>MED</b>
-----------	----------	------------	-------------------	--------------	------------



Photo Description:	Plant nursery area on-site.
--------------------	-----------------------------

Site No.:	<b>2</b>	Site Name:	Sampling Station #27080084	Risk Rating:	<b>LOW</b>
Street Address:		Pioneer Trail at Unnamed Ditch			
Location:		Southeastern quadrant of I-95 and Pioneer Trail intersection			
Distance from Right of Way:		Adjacent			
Current Land Use:		Unnamed ditch			
Historical Land Use:		Vacant Land			
Database Listings / Sources:		FDEP Map Direct – STORET and Impaired Waters			
Facility ID Nos.:		27080084			
Storage Tank Description:		N/A			
Discharge Date:		<b>N/A</b>	SRCO/NFA:	<b>N/A</b>	
Hazardous Materials:		<b>No</b>	Petroleum Products:	<b>No</b>	
Soil Concern:		<b>No</b>	Groundwater Concern:	<b>No</b>	
Public Record Findings:		This location is listed as an impaired waters sampling station.			
Interview Information:		<p>On May 7, 2019, Mr. William Lasley with FDEP contacted us via telephone and email regarding the impaired waters information request. Mr. Lasley discussed the sampling conditions and the status of the sampling stations. It appears that there was a concern relative to the dissolved oxygen levels in the unnamed ditch in the 1990's, indicating "no causative pollutant". Sampling in 2005 and 2010 found the dissolved oxygen concern to be "natural condition" and then "not impaired", respectively.</p> <p>Mr. Lasley also indicated that there is a biological station there where the habitat was assessed. In 2005 it was scored a 121 for overall habitat. The score of 121 indicates optimal conditions.</p> <p>Based on the conversation with Mr. Lasley and the information he provided, the impaired waters and biological sampling stations are for measuring the overall condition of the unnamed ditch and surrounding habitat and the results are positive. The sampling stations do not appear to indicate an underlying contamination condition.</p>			
Site Observations:		The sampling location was found to contain water and did not have a formal sampling station or water gauging equipment.			
Conclusions:		Based on the sampling station being used to evaluate the overall health of the habitat and not to monitor contamination impacts, this site has been assigned a <b>Low Risk</b> .			



Site No.:	2	Site Name:	Sampling Station #27080084	Risk Rating:	LOW
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Photo Description:	Looking at existing site conditions.
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Site No.:	<b>3</b>	Site Name:	Sampling Station #27080085	Risk Rating:	<b>LOW</b>
Street Address:	I-95 at Unnamed Ditch				
Location:	Southeastern quadrant of I-95 and Pioneer Trail intersection				
Distance from Right of Way:	Adjacent				
Current Land Use:	Unnamed ditch				
Historical Land Use:	Vacant Land				
Database Listings / Sources:	FDEP Map Direct – STORET and Impaired Waters				
Facility ID Nos.:	27080085				
Storage Tank Description:	N/A				
Discharge Date:	<b>N/A</b>	SRCO/NFA:	<b>N/A</b>		
Hazardous Materials:	<b>No</b>	Petroleum Products:	<b>No</b>		
Soil Concern:	<b>No</b>	Groundwater Concern:	<b>No</b>		
Public Record Findings:	This location is listed as an impaired waters sampling station.				
Interview Information:	<p>On May 7, 2019, Mr. William Lasley with FDEP contacted us via telephone and email regarding the impaired waters information request. Mr. Lasley discussed the sampling conditions and the status of the sampling stations. It appears that there was a concern relative to the dissolved oxygen levels in the unnamed ditch in the 1990's, indicating "no causative pollutant". Sampling in 2005 and 2010 found the dissolved oxygen concern to be "natural condition" and then "not impaired", respectively.</p> <p>Mr. Lasley also indicated that there is a biological station there where the habitat was assessed. In 2005 it was scored a 121 for overall habitat. The score of 121 indicates optimal conditions.</p> <p>Based on the conversation with Mr. Lasley and the information he provided, the impaired waters and biological sampling stations are for measuring the overall condition of the unnamed ditch and surrounding habitat and the results are positive. The sampling stations do not appear to indicate an underlying contamination condition.</p>				
Site Observations:	The sampling location was found to contain water and did not have a formal sampling station or water gauging equipment.				
Conclusions:	Based on the sampling station being used to evaluate the overall health of the habitat and not to monitor contamination impacts, this site has been assigned a <b>Low Risk</b> .				

Site No.:	<b>3</b>	Site Name:	Sampling Station #27080085	Risk Rating:	<b>LOW</b>
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Photo Description:	Apparent location of Sampling Station #27080085 (I-95 northbound in background).
--------------------	--

Site No.:	<b>4</b>	Site Name:	USGS Site 1	Risk Rating:	<b>LOW</b>
Street Address:	Pioneer Trail				
Location:	Southeastern quadrant of I-95 and Pioneer Trail intersection				
Distance from Right of Way:	Adjacent to right of way				
Current Land Use:	Pioneer Trail right of way				
Historical Land Use:	Vacant Land				
Database Listings / Sources:	FDEP Map Direct				
Facility ID Nos.:	N/A				
Storage Tank Description:	N/A				
Discharge Date:	<b>N/A</b>	<b>SRCO/NFA:</b>	<b>N/A</b>		
Hazardous Materials:	<b>No</b>	<b>Petroleum Products:</b>	<b>No</b>		
Soil Concern:	<b>No</b>	<b>Groundwater Concern:</b>	<b>No</b>		
Public Record Findings:	This site is called USGS Site 1. It is a 700-foot deep exploratory soil boring that was logged for geophysical information.				
Interview Information:	N/A				
Site Observations:	USGS Site 1 was not observed in the field.				
Conclusions:	Based on the geophysical nature of this boring, this site has been assigned a <b>Low Risk</b> .				

Site No.:	4	Site Name:	USGS Site 1	Risk Rating:	LOW
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Photo Description:	FDEP Map Direct Image showing this site.
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Site No.:	<b>5</b>	Site Name:	USGS Well #8455	Risk Rating:	<b>LOW</b>
Street Address:	Pioneer Trail				
Location:	Southeastern quadrant of I-95 and Pioneer Trail intersection				
Distance from Right of Way:	Adjacent to right of way				
Current Land Use:	Pioneer Trail right of way				
Historical Land Use:	Vacant Land				
Database Listings / Sources:	FDEP Map Direct				
Facility ID Nos.:	N/A				
Storage Tank Description:	N/A				
Discharge Date:	<b>N/A</b>	<b>SRCO/NFA:</b>	<b>N/A</b>		
Hazardous Materials:	<b>No</b>	<b>Petroleum Products:</b>	<b>No</b>		
Soil Concern:	<b>No</b>	<b>Groundwater Concern:</b>	<b>No</b>		
Public Record Findings:	This site is called USGS Well #8455. It is a 700-foot deep well that is/was used to monitor deep aquifer conditions for the United States Geological Survey.				
Interview Information:	N/A				
Site Observations:	USGS Well #8455 was not observed in the field.				
Conclusions:	Based on the natural conditions monitoring nature of this well, this site has been assigned a <b>Low Risk</b> .				



Site No.:	5	Site Name:	USGS Well #8455	Risk Rating:	LOW
-----------	---	------------	-----------------	--------------	-----



Photo Description:	FDEP Map Direct Image showing this site.
--------------------	--

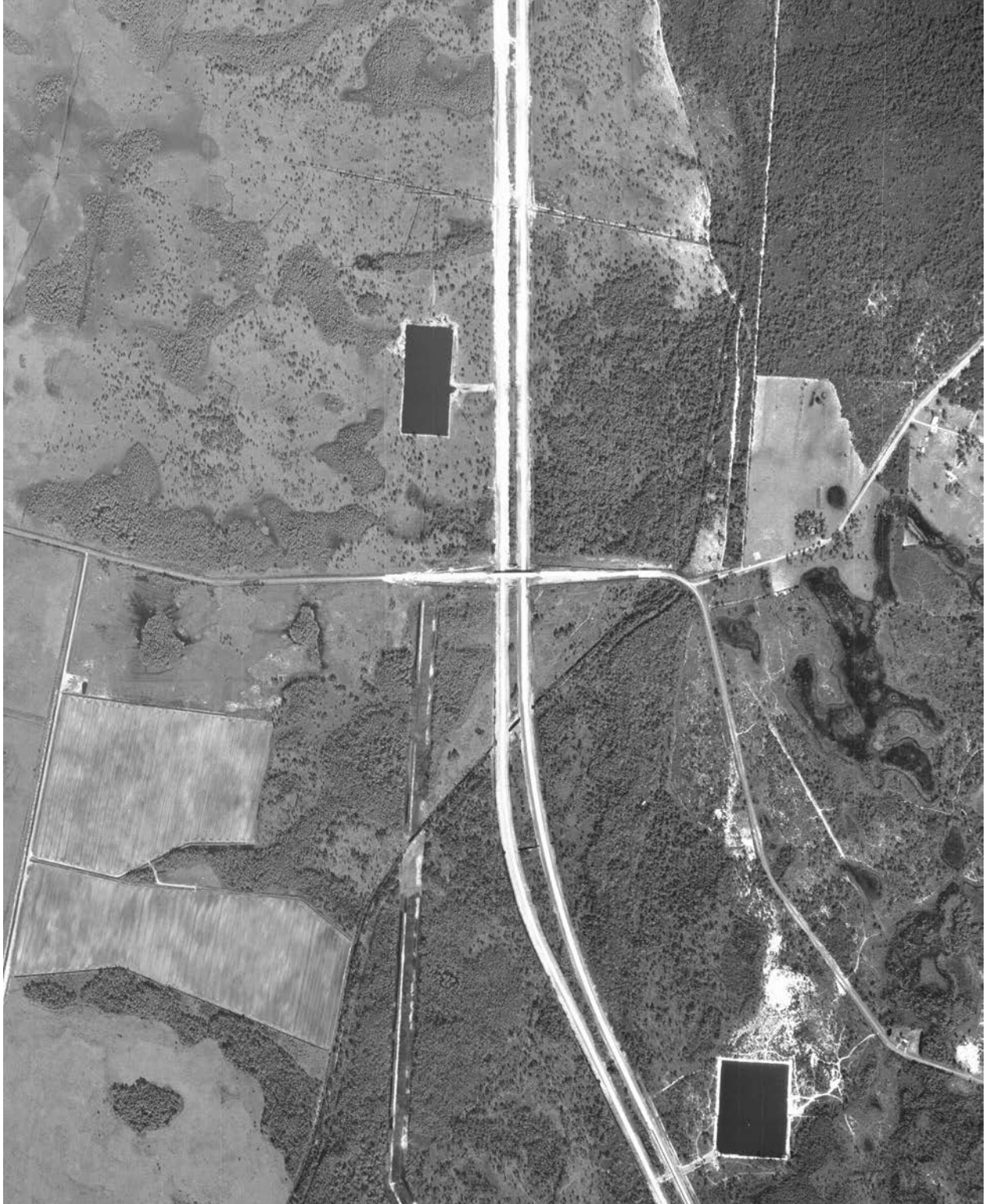
# **APPENDIX B**

## **Historical Aerial Photographs**



1943





1969



1976



1980



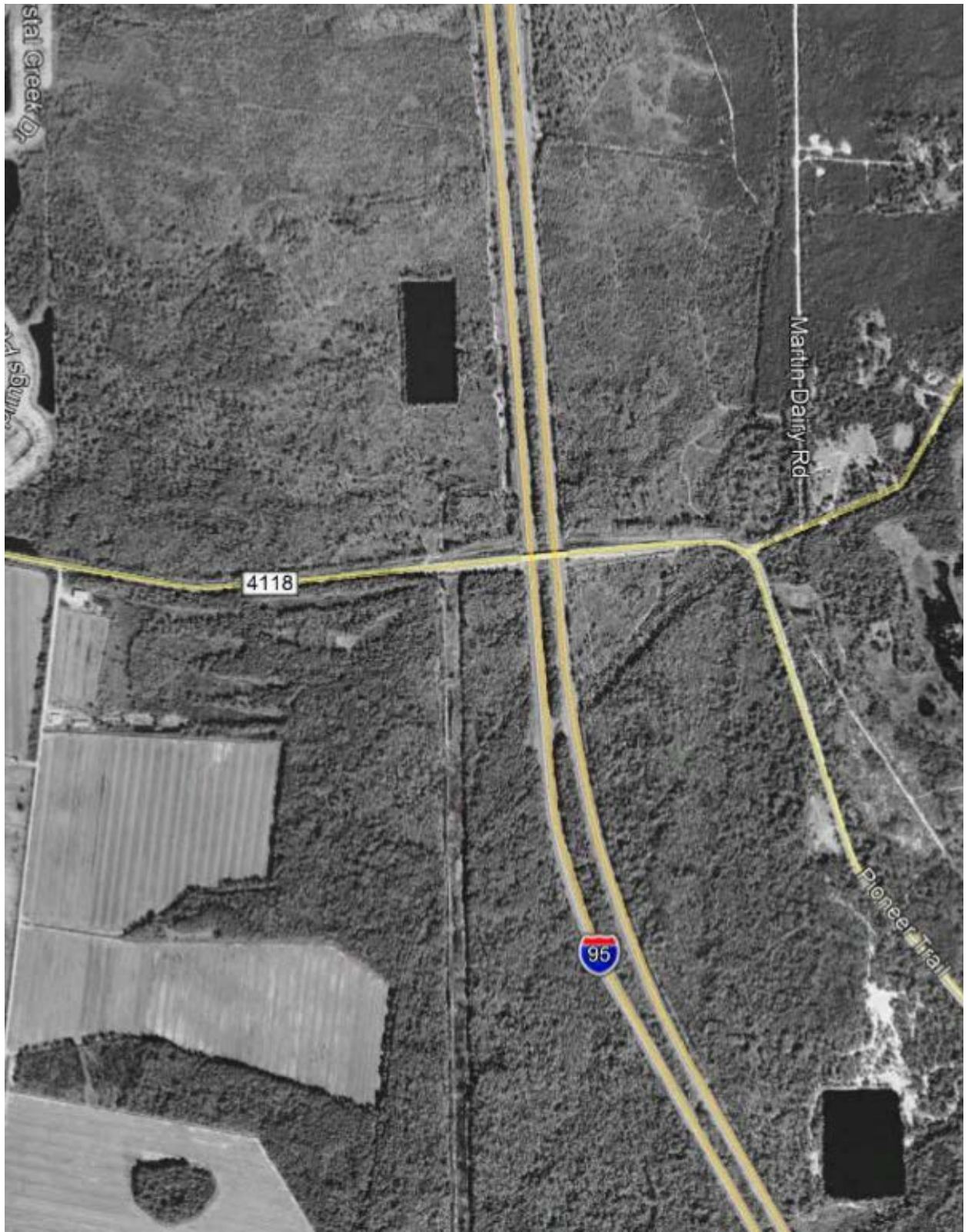


1984

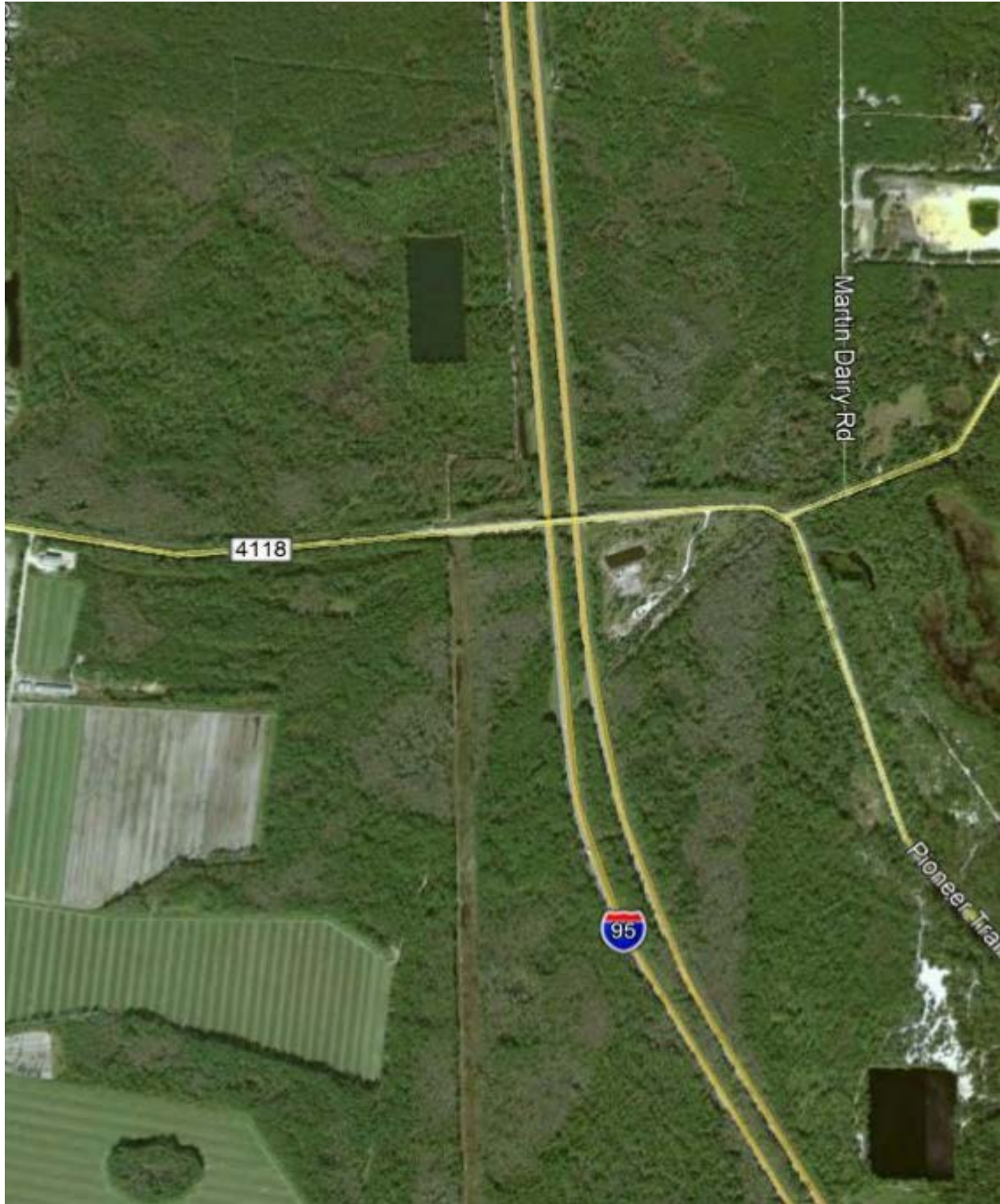


1995



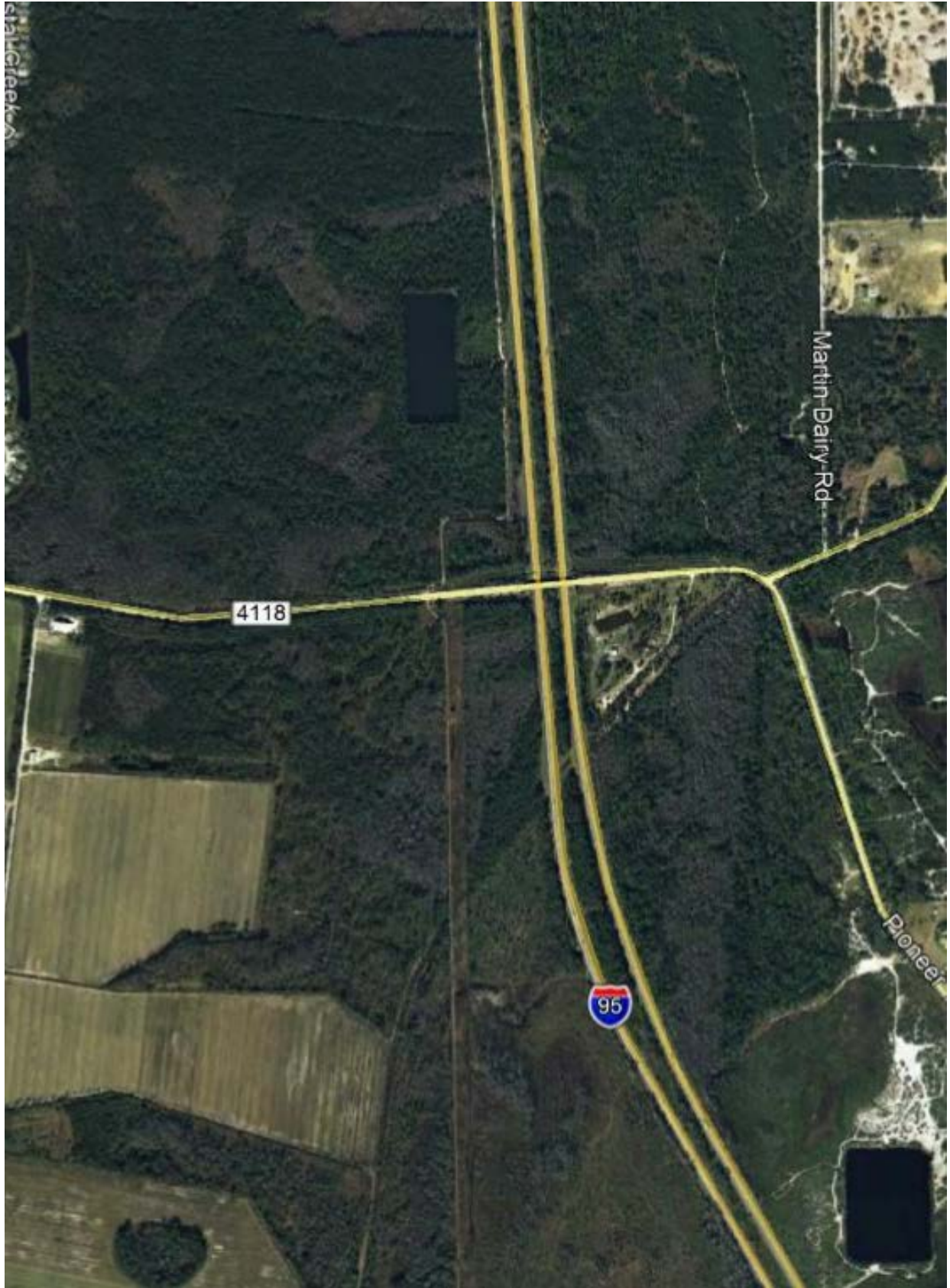


1999



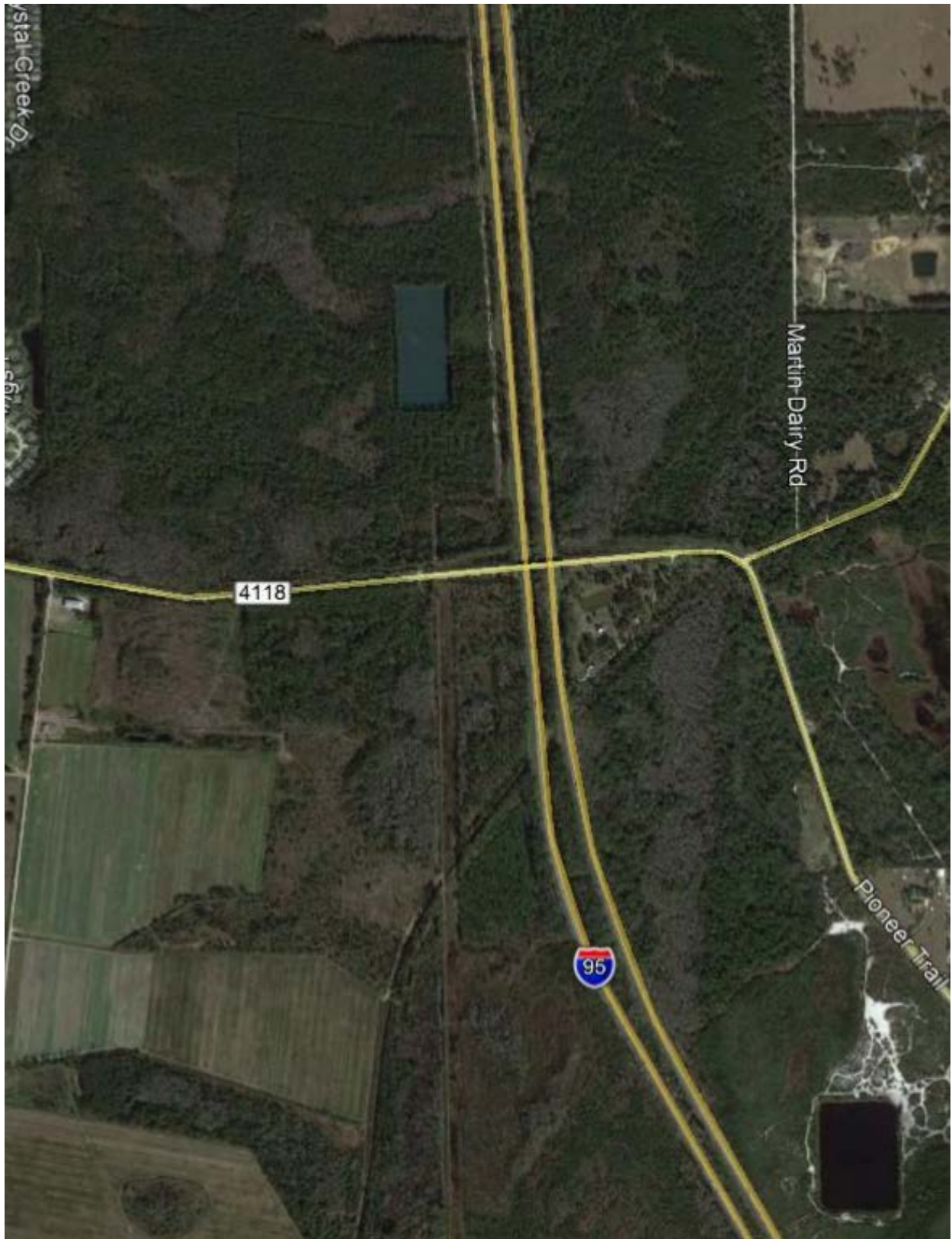
2004





2009





2014



2019

# **APPENDIX C**

## **Definitions of Common Report Terms**

Aboveground Storage Tank (AST) - A storage tank that is situated on the ground surface and may or may not be installed on a concrete pad with secondary spill containment.

Active Remediation (AR) - Implementation of an approved Remedial Action Plan.

Contamination - The presence of any material or chemical contained within the soil, surface water, sediment, or groundwater on or adjacent to the project corridor, that may require assessment, remediation, or special handling, or that has a potential for liability.

Contamination Risk Potential Rating (CRPR) - Site risk rating system defined in Chapter 20 of the FDOT PD&E Manual.

Engineering Control (EC) - A modification to a site to reduce or eliminate the potential for migration of, and exposure to, contaminants of concern. Examples of ECs include slurry walls, sheet pile walls, and engineered liners to prevent exposure.

Hazardous Material - Any solid, liquid, or gas that has the potential to harm people, other living organisms, property, or the environment, either by itself or through interaction with other factors. Hazardous material may be radioactive, flammable, explosive, toxic, corrosive, biohazardous, an oxidizer, an asphyxiant, a pathogen, an allergen, or may have other characteristics that render it hazardous in specific circumstances. These materials may threaten workers through occupational exposure and the general public in their homes, communities, and general environment. Exposure to these materials can occur near the site of generation, along the path of its transportation, or near their ultimate disposal sites. Hazardous materials are often subject to laws and regulations on the use and handling of such materials and may differ depending on the activity or status of the material.

Institutional Controls (IC) - A restriction on use of, or access to, a site to eliminate or minimize exposure to contaminants of concern. Examples of ICs include deed restrictions, use restrictions, or restrictive zoning.

Natural Attenuation Monitoring (NAM) - A means of conducting site rehabilitation in which natural degradation of media contaminants are monitored for extended periods of time provided that human health, public safety, and the environment are protected.

No Further Action with Conditions (CNFA) - No further assessment or remediation is required at a site provided that certain conditions are met as approved by the lead regulatory agency. Conditional No Further Actions can be granted to sites that employ ICs and/or ECs as part of the site rehabilitation strategy.

No Further Action without Conditions (NFA) - No further assessment or remediation is required at a site. No contaminants are present at the site above default or approved alternative clean-up standards.

Petroleum Products - Liquid crude oil derivatives that are derived by distillation, cracking, hydro forming and/or other petroleum refinery processes falling under the description of either "Gasoline Analytical Group," "Kerosene Analytical Group" or "Used Oil" as defined in Florida Administrative Code (FAC) 62-770.200(24), (29) and (64), respectively. These materials include, but are not limited to: leaded and unleaded gasoline, gasohol, aviation and jet fuels, diesel fuel, kerosene, new or used motor oil, hydraulic fluid, and gear oil.

Potential Hazardous Material or Petroleum Contamination Site - A potential hazardous material or petroleum contamination site is a parcel of land upon which hazardous materials or petroleum products are produced, stored, accumulated, used, or disposed of. These sites typically include existing or former gasoline stations, dry cleaners, auto repair facilities, and other businesses where hazardous substances or petroleum product are present. The presence of hazardous substances and/or petroleum products does not mean that contamination is present, but merely indicates that the potential for contamination exists if the materials are not handled or disposed of properly.

Remedial Action Plan (RAP) - A plan that details a means by which contamination may be cleaned up.

Site Assessment Report (SAR) - Summarizes all tasks that were implemented pursuant to the Contamination Assessment.

Site Rehabilitation Complete Report (SRCR) - A report that describes that cleanup goals have been met.

Site Rehabilitation Completion Order (SRCO) - An order issued by the lead regulatory agency that approves the SRCR. No further assessment or remediation activities need to be conducted at the site once an SRCO has been issued unless a new release is discovered.

Source Removal (SR) - The removal of free petroleum product or excessively contaminated soil.

Underground Storage Tank (UST) - A storage tank that has been installed below the ground surface that may or may not contain secondary containment or leak detection systems. The FDEP has compiled several database lists that are useful in identifying potential sources of hazardous material or petroleum product contamination.

# **APPENDIX D**

## **Contamination Risk Potential Rating Descriptions**



The contamination potential risk rating system was developed by FDOT and is included in Chapter 20 of the PD&E Manual, dated June 14, 2017. The rating system incorporates four levels of risk:

1. **No** – A review of available information on the property and a review of the design plans indicates there is no potential for contamination to impact the project. It is possible that contaminants had been handled on the property. However, all information (assessment reports, monitoring well abandonments, results of recent soil and groundwater sampling, etc.) indicate that contamination impacts are not expected.
2. **Low** – A review of available information indicates that former or current activities on the property have an ongoing contamination concern, have a hazardous waste generator identification (ID) number, or have included handling hazardous materials in some capacity. However, based on all available information and current design plans, it is not likely that there would be any contamination impacts related to this project.
3. **Medium** - After a review of all available information, potential contamination has been identified. This may include known soil and/or water contamination that may not require remediation, is currently being remediated, or that is currently in the monitoring-only phase. The complete status of remediation is important to determine what FDOT must do if the property were to be acquired. If there is insufficient reliable information (such as regulatory records or historical documents) to make a determination as to the potential for contamination, and there is reasonable suspicion that contamination may exist, the property should be rated at least as a “Medium.”

A recommendation should be made for each property falling into this category based on whether it would be within the proposed project, what additional assessment or remedial actions may be required if the property is acquired, and the possible requirements for additional actions if there is a need to avoid the property.

This ranking is the lowest possible rating a currently operating petroleum fueling or storage facility can receive in an assessment document, based on its distance to the right of way, contamination type, need for dewatering in the area, etc.

4. **High** - After a review of all available information and current conceptual or design plans, there is a reasonable potential for contamination impacts during construction. Once the design alternative has been selected, sites rated with “High” contamination potential require further assessment to confirm and delineate potential contaminants and to determine if remediation or special construction provisions will be needed during construction.

The recommendation for this rating should include a listing of the parameters of concern and media to be assessed, and if known, what construction activities will occur within or adjacent to the contaminated media. Properties used historically as gasoline stations and which have not been evaluated or assessed would likely receive this rating.

# **APPENDIX E**

## **EDR City Directory Image Report**

**I-95 At Pioneer Trail**

3156 County Road 4118  
New Smyrna Beach, FL 32168

Inquiry Number: 5605613.5  
April 03, 2019

# The EDR-City Directory Image Report

## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

City Directory Images

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

#### **Disclaimer - Copyright and Trademark Notice**

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

**infoUSA**<sup>®</sup>

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### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1988	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1983	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1978	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1973	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1968	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1962	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory



## FINDINGS

### TARGET PROPERTY STREET

3156 County Road 4118  
New Smyrna Beach, FL 32168

Year

CD Image

Source

### COUNTY RD 4118

2014	-	EDR Digital Archive	Target and Adjoining not listed in Source
2010	-	EDR Digital Archive	Target and Adjoining not listed in Source
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1988	-	Polk's City Directory	Street not listed in Source
1983	-	Polk's City Directory	Street not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1973	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1962	-	Polk's City Directory	Street not listed in Source

### PIONEER TRL

2014	pg A1	EDR Digital Archive	
2010	pg A2	EDR Digital Archive	
2005	pg A3	EDR Digital Archive	
2000	pg A4	EDR Digital Archive	
1995	pg A5	EDR Digital Archive	
1992	pg A6	EDR Digital Archive	
1988	pg A7	Polk's City Directory	
1983	-	Polk's City Directory	Target and Adjoining not listed in Source
1978	-	Polk's City Directory	Target and Adjoining not listed in Source
1973	-	Polk's City Directory	Target and Adjoining not listed in Source
1968	-	Polk's City Directory	Target and Adjoining not listed in Source
1962	-	Polk's City Directory	Target and Adjoining not listed in Source

## FINDINGS

### CROSS STREETS

No Cross Streets Identified

## **City Directory Images**

**PIONEER TRL 2014**

3011 OCCUPANT UNKNOWN,  
3031 SAGE ROBERT M  
SAGE, ROBERT H  
3049 LENZ, WILLIAM D  
3051 JONES, MARVIN E  
3055 OCCUPANT UNKNOWN,  
3085 GROOME, SAM  
3298 GULF ATLANTIC VEHICLES INC  
3390 ZARAGOZA, MARCOS  
3410 BEATTY, MITCH  
3508 OCCUPANT UNKNOWN,

**PIONEER TRL 2010**

2990	MIGNOT, FRANK P
3011	OCCUPANT UNKNOWN,
3031	SAGE, ROBERT M
3049	LENZ, WILLIAM D
3051	JONES, MARVIN E
3055	OCCUPANT UNKNOWN,
3085	GROOME, SAM
	MARATHON ALPACAS
3298	GULF ATLANTIC VEHICLES INC
	NOLAND SALES INC
3390	NOLAND, JAMES A
3410	BEATTY, JILL J
3454	THOMPSON, CHARLES E
3508	OCCUPANT UNKNOWN,
3531	OCCUPANT UNKNOWN,
3541	PLETERSKI, RUDOLPH W
3549	JAMAR FARM
	PLETERSKI MARY E CAP CUNSELING
	PLETERSKI, JACK L
3561	JONTES FARMS
	OCCUPANT UNKNOWN,
3585	OCCUPANT UNKNOWN,
3593	OCCUPANT UNKNOWN,

**PIONEER TRL 2005**

2990	TURNEY, JAMES L
3031	SAGE, ROBERT M
3049	LENZ, WILLIAM D
3051	JONES, MARVIN E
3298	GULF ATLANTIC VEHICLES INC NOLAND SALES INC
3390	SARAGOZA, MARCOS
3410	BEATTY, JILL J
3454	THOMPSON, CHARLES E
3508	OCCUPANT UNKNOWN,
3511	KEYES DEBORAH M KEYES, ROBERT P
3531	HUDAK, RANDY M
3541	PLETERSKI, ANTON L
3549	PLETERSKI MARY E CAP CUNSELING PLETERSKI, JACK L
3561	JONTES FARMS JONTES, ROBERT M
3585	OCCUPANT UNKNOWN,
3593	JONTES, STEVE A WESTMORELAND FRAMING INC
3606	WHITLOCK, WILLIAM L
3625	OCCUPANT UNKNOWN,
3630	MCGINNIS, JOHN D
3635	SEYMOUR, DONALD W
3653	MERRICK CINDY DVM MERRICK, JOHN M
3670	MITCHELL, STANLEY E
3686	PRIME SOUTHERN CONTRACTORS
3695	DIXON, EUGENE M
3696	LEDGER, JOHNNY D
3704	JAB SERVICES & CONTAINERS KING, JESSICA J
3717	BUTLER, LORI A

**PIONEER TRL 2000**

3011 OCCUPANT UNKNOWN,  
3031 SAGE, ROBERT  
3049 LENZ, WILLIAM D  
3051 JONES, GENE  
3298 GULF ATLANTIC VEHICLES INC  
NOLAND SALES INC  
NOLAND, JAMES  
3390 OCCUPANT UNKNOWN,  
3454 THOMPSON, CHARLES  
3508 OCCUPANT UNKNOWN,  
3511 THAYER, E  
3531 CARLTON, B A  
3541 PLETERSKI, ANTON L  
3549 PLETERSKI MARY E CAP CUNSELING  
PLETERSKI, JACK  
3561 JONTES FARMS  
JONTES, ROBERT M  
3585 OCCUPANT UNKNOWN,  
3593 JONTES, STEVE  
3606 GARLAND, LAURIE  
3625 JONTES, ROBERT M  
3630 MCGINNIS, DOUGLAS  
3635 SEYMOUR, DONALD W  
3653 MERRICK CINDY DVM  
MERRICK, JOHN M  
3670 AMARAL, JOHN G  
3686 MITCHELL, SYLVIA  
3695 DIXON, EUGENE M  
3696 LEDGER, JOHNNY  
3704 OCCUPANT UNKNOWN,  
3713 OCCUPANT UNKNOWN,  
3717 BUTLER, LORI A  
3718 HUNT, RON  
3728 WARD, THOMAS  
3790 OCCUPANT UNKNOWN,  
3791 PLETERSKI, JOHN R



**PIONEER TRL 1995**

2990	BROWN, THOMAS R
3011	HUNT, RONALD
3031	CASTAGNE, ALFRED
3051	JONES, GENE
3298	GULF ATLANTIC VEHICLES INC
3454	THOMPSON, CHARLES
3508	MARSH, DONNA
3511	OCCUPANT UNKNOWNN
3531	HARVEY, ANGELA
3541	PLETERSKI, ANTON L SR
3549	PLETERSKI, JACK
3561	JONTES FARMS
3585	JONTES, STEVE A
3593	OCCUPANT UNKNOWNN
3606	GARLAND, LAURIE
3625	JONTES, ROBERT M JR
3653	SIMMONS, PHILLIP W
3670	AMARAL, JOHN G
3686	MITCHELL, SYLVIA
3689	OCCUPANT UNKNOWNN
3696	LEDGER, JOHNNY
3704	HOPKINS, AL R
3717	MORRIS, TOM
3718	LAPOSI, ERICA
	NEELEY, P
3728	WARD, THOMAS JR
3777	OCCUPANT UNKNOWNN

**PIONEER TRL 1992**

2988	EYLES, WILLIAM R
3001	BEADLE, GEORGE A
3051	JONES, GENE
3298	GULF ATLANTIC VEHICLES INC
3454	THOMPSON, CHARLES
3531	HARVEY, ANGELA
3549	PLETERSKI, JACK
3561	JONTES FARMS
	JONTES, ROBERT M
3606	GARLAND, LAURIE
3625	JONTES, ROBERT M JR
3653	SIRK, C
3670	AMARAL, JOHN G
3686	MITCHELL, SYLVIA
3696	LEDGER, JOHNNY
3704	HOPKINS, AL R
3728	PAINT IMPROVEMENT
	WARD, THOMAS JR
3777	CARLTON, B A
3791	PLETERSKI, JOHN R

**PIONEER TRL 1988**

**PIONEER TRAIL-Contd**

- 235 Cinbattari
- 236 Willee
- L237 Gibson Paul S ©  
427-0531
- 238 Shaw Marion Mrs ©  
427-4238
- 239 No Return
- 240★Pascucci Jos ©
- 241 Scobie George © 427-2227
- 242★Surgens Richd ©  
423-9545
- 243 Almodovar Joseph A ©  
427-5505

2568 Weaver Construction Inc  
427-3214  
N GLENCOE RD INTERSECTS

17

**PLAZA LA (EDGEWATER)  
FROM 236 HUBBELL ST  
EAST 1 NORTH OF  
LAMONT ST**

ZIP CODE 32032  
122 Vacant  
128 Kistner Lewis A © 428-5354  
131 Egeland Margt R Mrs ©  
427-7122  
N RIVERSIDE DR  
INTERSECTS

17

**PIONEER TRAIL RT 2  
(GLENCOE)-A  
CONTINUATION OF  
PIONEER TRAIL (MISSION  
CITY) WEST FROM  
WILLIAMS RD**

- ZIP CODE 32069  
NUMBERS IRREGULAR
- 2220★Powell Ted ©
  - 2230 Heil Raymond W ©  
427-2184
  - 2260 Pioneer Nursery plants  
427-5454  
Swoyer Fredk E © 427-5454
  - 2320 Adkins Paul © 427-2794
  - 2330 Tumblin Edith Mrs ©  
427-2224
  - 2340★Pruitt Isham G 423-7327
  - 2397 Roberts B J © 427-5589
  - 2379★Whitlock Greg ©
  - 2418 Smith Geo D © 428-4652
  - 2406 Brown Walter J © 428-6276
  - 2372★Waston Bill 423-7479
  - 2392 Smith Pauline K Mrs ©
  - 2407 Wise Thomas L © 423-9619
  - 2413★Warden Todd ©
  - 2449 Lange Steven C © 427-7726
  - 2419 Catalo Eug © 428-9931
  - 2426 Wofford C E ©
  - 2429 Ledbetter David 423-1489  
★Miles Thordis K ©  
428-2146
  - 2450 No Return
  - 2463 Hall Thos L © 428-8742
  - 2480 Absher Clarence © 428-9483
  - 2476 Mc Farland Harvey ©  
423-5257
  - 2503 Pittsley E L © 428-6629

21

**PLEASANT ST  
(EDGEWATER)-FROM  
OAKRIDGE AV NORTH 1  
WEST OF RIDGEWOOD AV**

ZIP CODE 32032  
340 Sauermann Arth O ©  
428-8654  
342★Ford Chas ©
- 344 Beaulieu Adelina Mrs ©  
427-3737  
HIGHLAND AV BEGINS
- 348 Vacant
- 350 Young Arlington F ©  
428-6035  
WILDWOOD AV BEGINS

4

**PLUM AV -FROM 131 PARK  
BLVD EAST 1 SOUTH OF  
DOWNING ST**

ZIP CODE 32069  
822 Vacant  
824 Woodruff Everett E 427-5902  
831 Vacant  
837★Lewis Angel P © 427-7206

19-A

**POINCIANA RD RT 2 -FROM  
CANAL RD EAST 1 SOUTH  
OF HIBISCUS ST**

ZIP CODE 32032  
117 No Return  
125 Martin Jas W © 427-9536  
126 Holenstein Tony ©

51 Guava Drive

Edgewater, FL (32032)



600 N. Ridgewood Ave.

Edgewater, Florida (32032)

# **APPENDIX F**

## **EDR Certified Sanborn Map Report**

I-95 At Pioneer Trail  
3156 County Road 4118  
New Smyrna Beach, FL 32168

Inquiry Number: 5605613.3

March 29, 2019

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# Certified Sanborn® Map Report

03/29/19

**Site Name:**

I-95 At Pioneer Trail  
3156 County Road 4118  
New Smyrna Beach, FL 32168  
EDR Inquiry # 5605613.3

**Client Name:**

Geotechnical & Env. Cons., Inc  
919 Lake Baldwin Lane  
Orlando, FL 32814-0000  
Contact: Jose R Benitez Jr



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Geotechnical & Env. Cons., Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** 7A6A-4B0E-88BE  
**PO #** J4162E  
**Project** I-95 at Pioneer Trail

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 7A6A-4B0E-88BE

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others 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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# **APPENDIX G**

## **EDR Radius Map Report**

**I-95 At Pioneer Trail**

3156 County Road 4118  
New Smyrna Beach, FL 32168

Inquiry Number: 5605613.2s  
March 29, 2019

# EDR Summary Radius Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## 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 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

3156 COUNTY ROAD 4118  
NEW SMYRNA BEACH, FL 32168

#### COORDINATES

Latitude (North): 29.0476000 - 29° 2' 51.36"  
Longitude (West): 81.0071380 - 81° 0' 25.69"  
Universal Transverse Mercator: Zone 17  
UTM X (Meters): 499305.1  
UTM Y (Meters): 3213083.2  
Elevation: 24 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: TP  
Source: U.S. Geological Survey

Target Property: E  
Source: U.S. Geological Survey

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20151112  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
3156 COUNTY ROAD 4118  
NEW SMYRNA BEACH, FL 32168

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>	PIONEER TRAIL DEBRIS	3085 PIONEER TRAIL	SWF/LF	Higher	1460, 0.277, SE

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## 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.

SWF/LF: A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

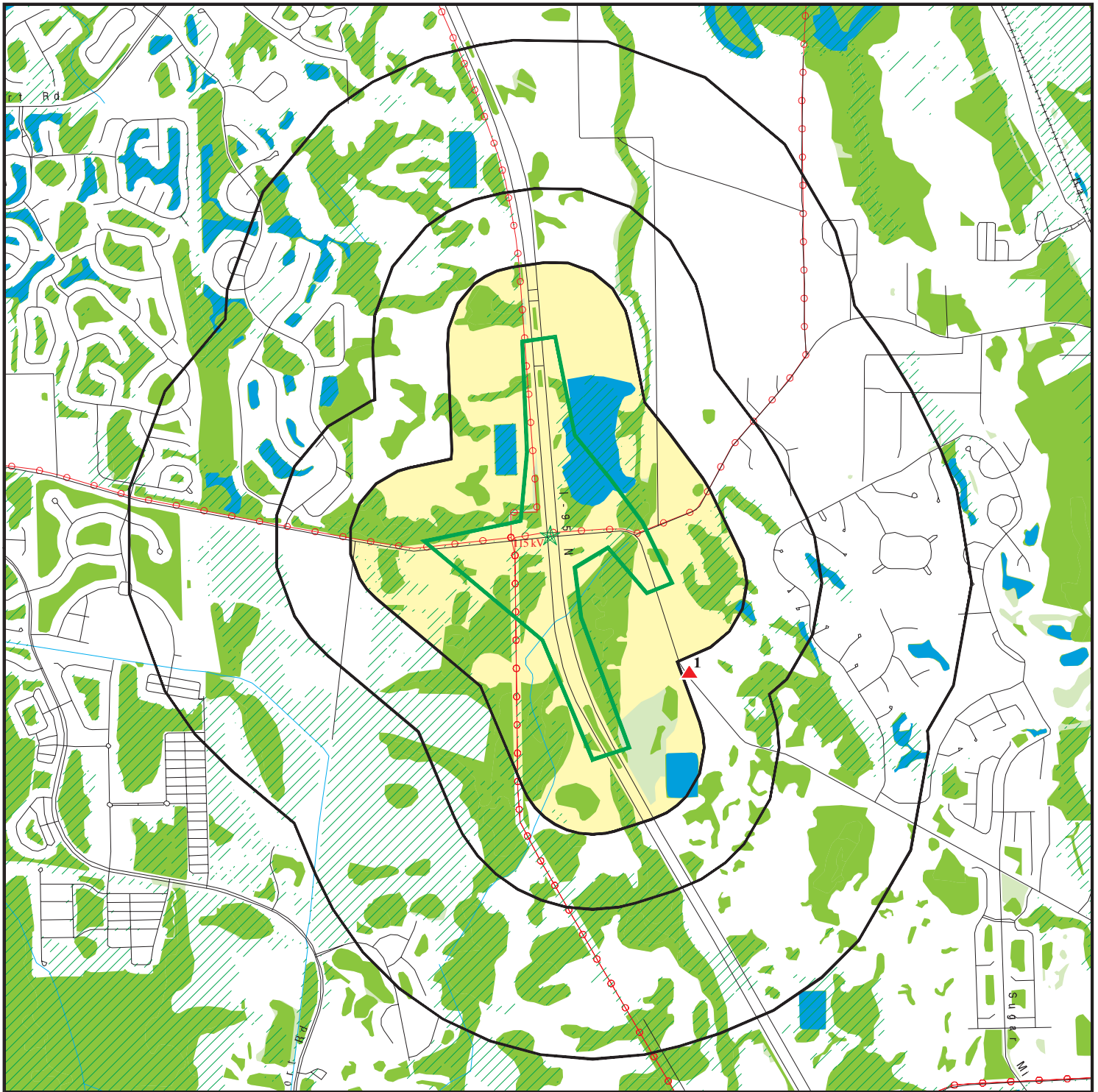
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PIONEER TRAIL DEBRIS Database: SWF/LF, Date of Government Version: 01/14/2019 Facility-Site Id: 103158 Class Status: INACTIVE (I)	3085 PIONEER TRAIL	SE 1/4 - 1/2 (0.277 mi.)	1	8

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

# OVERVIEW MAP - 5605613.2S



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

Indian Reservations BIA

Power transmission lines

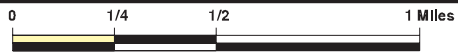
100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

FL Brownfield

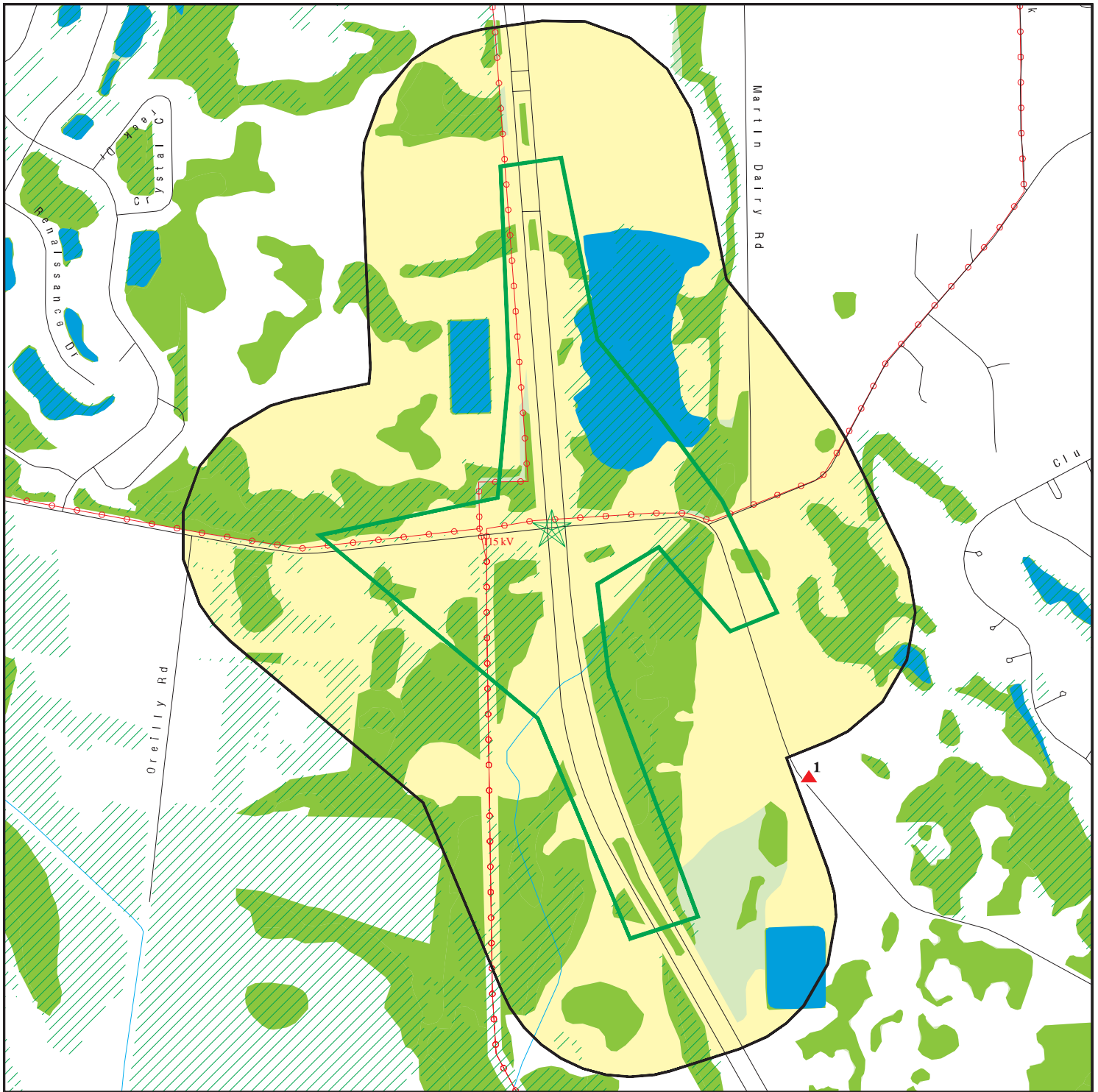
















This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: I-95 At Pioneer Trail  
 ADDRESS: 3156 County Road 4118  
 New Smyrna Beach FL 32168  
 LAT/LONG: 29.0476 / 81.007138

CLIENT: Geotechnical & Env. Cons., Inc  
 CONTACT: Jose R Benitez Jr  
 INQUIRY #: 5605613.2s  
 DATE: March 29, 2019 4:31 pm

# DETAIL MAP - 5605613.2S



-  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
-  Power transmission lines
-  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: I-95 At Pioneer Trail  
 ADDRESS: 3156 County Road 4118  
 New Smyrna Beach FL 32168  
 LAT/LONG: 29.0476 / 81.007138

CLIENT: Geotechnical & Env. Cons., Inc  
 CONTACT: Jose R Benitez Jr  
 INQUIRY #: 5605613.2s  
 DATE: March 29, 2019 4:32 pm

## 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	1	NR	NR	1
<b><i>State and tribal leaking storage tank lists</i></b>								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0



## 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
FF TANKS	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST TANKS	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
FI Sites	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0

## 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
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
CLEANUP SITES	0.001		0	NR	NR	NR	NR	0
DEDB	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		0	0	0	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
RESP PARTY	0.500		0	0	0	NR	NR	0
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
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## 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
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	0	1	0	0	1

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

1  
SE  
1/4-1/2  
0.277 mi.  
1460 ft.

**PIONEER TRAIL DEBRIS MANAGEMENT SITE**  
**3085 PIONEER TRAIL**  
**NEW SMYRNA BEACH, FL 32168**

**SWF/LF S119088930**  
**N/A**

Relative:  
Higher

[Click here for full text details](#)

**SWF/LF**

Facility-Site Id: 103158  
Class Status: INACTIVE (I)

[Click here for Florida Oculus](#)

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
FL	AIRS	Permitted Facilities Listing	Department of Environmental Protection	01/28/2019	01/29/2019	03/11/2019
FL	ASBESTOS	Asbestos Notification Listing	Department of Environmental Protection	02/13/2019	02/19/2019	03/11/2019
FL	AST	Storage Tank Facility Information	Department of Environmental Protection	01/10/2019	01/29/2019	03/13/2019
FL	BROWNFIELDS	Brownfields Sites Database	Department of Environmental Protection	11/28/2018	01/02/2019	01/10/2019
FL	BROWNFIELDS AREAS	Brownfields Areas Database	Department of Environmental Protection	11/27/2018	01/02/2019	01/10/2019
FL	BSRA	Brownfield Site Rehabilitation Agreements Listing	Department of Environmental Protection	08/23/2018	10/02/2018	12/19/2018
FL	CLEANUP SITES	DEP Cleanup Sites - Contamination Locator Map Listing	Department of Environmental Protection	11/26/2018	11/28/2018	01/10/2019
FL	DEDB	Ethylene Dibromide Database Results	Department of Environmental Protection	01/14/2019	01/15/2019	03/11/2019
FL	DRYCLEANERS	Drycleaning Facilities	Department of Environmental Protection	01/08/2019	01/23/2019	03/11/2019
FL	DWM CONTAM	DWM CONTAMINATED SITES	Department of Environmental Protection	01/28/2019	01/29/2019	03/28/2019
FL	ENG CONTROLS	Institutional Controls Registry	Department of Environmental Protection	10/01/2018	10/02/2018	10/29/2018
FL	FF TANKS	Federal Facilities Listing	Department of Environmental Protection	12/19/2018	12/20/2018	01/11/2019
FL	FL Cattle Dip. Vats	Cattle Dipping Vats	Department of Environmental Protection	01/19/2017	01/09/2018	01/19/2018
FL	FL SITES	Sites List	Department of Environmental Protection	12/31/1989	05/09/1994	08/04/1994
FL	Financial Assurance 1	Financial Assurance Information Listing	Department of Environmental Protection	01/28/2019	01/29/2019	03/13/2019
FL	Financial Assurance 2	Financial Assurance Information Listing	Department of Environmental Protection	01/28/2019	01/29/2019	03/11/2019
FL	Financial Assurance 3	Financial Assurance Information Listing	Department of Environmental Protection	01/10/2019	01/29/2019	03/13/2019
FL	Inst Control	Institutional Controls Registry	Department of Environmental Protection	10/01/2018	10/02/2018	10/29/2018
FL	LAST	Leaking Aboveground Storage Tank Listing	Department of Environmental Protection	02/22/2019	02/22/2019	03/12/2019
FL	LUST	Petroleum Contamination Detail Report	Department of Environmental Protection	11/14/2018	02/01/2019	03/13/2019
FL	PRIORITYCLEANERS	Priority Ranking List	Department of Environmental Protection	01/04/2019	02/13/2019	03/15/2019
FL	RESP PARTY	Responsible Party Sites Listing	Department of Environmental Protection	12/29/2018	01/02/2019	01/11/2019
FL	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Environmental Protection		07/01/2013	12/30/2013
FL	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Environmental Protection		07/01/2013	01/10/2014
FL	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environmental Protection		07/01/2013	12/30/2013
FL	SHWS	Florida's State-Funded Action Sites	Department of Environmental Protection	12/06/2018	02/20/2019	03/12/2019
FL	SITE INV SITES	Site Investigation Section Sites Listing	Department of Environmental Protection	02/19/2019	02/20/2019	03/20/2019
FL	SPILLS	Oil and Hazardous Materials Incidents	Department of Environmental Protection	01/10/2019	01/11/2019	03/15/2019
FL	SPILLS 80	SPILLS80 data from FirstSearch	FirstSearch	09/01/2001	01/03/2013	03/06/2013
FL	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	12/10/2012	01/03/2013	03/04/2013
FL	SWF/LF	Solid Waste Facility Database	Department of Environmental Protection	01/14/2019	01/15/2019	03/13/2019
FL	SWRCY	Recycling Centers	Department of Environmental Protection	12/03/2018	01/15/2019	03/14/2019
FL	TANKS	Storage Tank Facility List	Department of Environmental Protection	01/10/2019	01/29/2019	03/13/2019
FL	TIER 2	Tier 2 Facility Listing	Department of Environmental Protection	12/31/2017	07/24/2018	08/22/2018
FL	UIC	Underground Injection Wells Database Listing	Department of Environmental Protection	01/18/2019	01/23/2019	03/15/2019
FL	UST	Storage Tank Facility Information	Department of Environmental Protection	01/10/2019	01/29/2019	03/13/2019
FL	VCP	Voluntary Cleanup Sites	Department of Environmental Protection	11/26/2018	12/04/2018	01/11/2019
FL	WASTEWATER	Wastewater Facility Regulation Database	Department of Environmental Protection	02/01/2019	02/05/2019	03/14/2019
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2018	09/11/2018	09/14/2018
US	BRS	Biennial Reporting System	EPANTIS	12/31/2015	02/22/2017	09/28/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2018	02/11/2019	03/21/2019
US	CORRACTS	Corrective Action Report	EPA	03/01/2018	03/28/2018	06/22/2018
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transportation, Office of Pipeli	12/03/2018	01/29/2019	03/21/2019
US	Delisted NPL	National Priority List Deletions	EPA	02/06/2019	02/15/2019	03/15/2019
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/02/2018	09/05/2018	09/14/2018
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	02/04/2019	02/08/2019	03/08/2019
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/07/2016	01/05/2017	04/07/2017
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017
US	FINDS	Facility Index System/Facility Registry System	EPA	02/15/2019	03/05/2019	03/15/2019
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/22/2018	08/22/2018	10/05/2018
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	02/08/2019	02/08/2019	03/21/2019
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Services, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/10/2018	05/18/2018	07/20/2018
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/10/2018	05/18/2018	07/20/2018
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	03/11/2019	03/14/2019	03/21/2019
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	03/11/2019	03/14/2019	03/21/2019
US	LUCIS	Land Use Control Information System	Department of the Navy	10/17/2018	10/25/2018	12/07/2018



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	NPL	National Priority List	EPA	02/06/2019	02/15/2019	03/15/2019
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	09/14/2018	10/11/2018	12/07/2018
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
US	PRP	Potentially Responsible Parties	EPA	08/13/2018	10/04/2018	11/09/2018
US	Proposed NPL	Proposed National Priority List Sites	EPA	02/06/2019	02/15/2019	03/15/2019
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	01/02/2019	01/03/2019	03/15/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RMP	Risk Management Plans	Environmental Protection Agency	02/01/2019	02/14/2019	03/21/2019
US	ROD	Records Of Decision	EPA	12/12/2018	12/28/2018	01/11/2019
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	02/06/2019	02/15/2019	03/15/2019
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	02/06/2019	02/15/2019	03/15/2019
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/17/2018	12/18/2018	01/11/2019
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	09/21/2018	09/21/2018	11/09/2018
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	09/21/2018	09/21/2018	11/09/2018
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/01/2018	08/29/2018	10/05/2018
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	09/30/2017	06/19/2018	09/14/2018

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	02/11/2019	02/12/2019	03/04/2019
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2017	07/13/2018	08/01/2018
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	01/30/2019	02/14/2019
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2017	10/23/2018	11/27/2018
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2017	02/23/2018	04/09/2018
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2017	06/15/2018	07/09/2018
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
FL	Daycare Centers	Sensitive Receptor: Department of Children & Families	Provider Information			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
FL	State Wetlands	Wetlands Inventory	Department of Environmental Protection			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		PennWell Corporation			
US	Electric Power Transmission Line Data		PennWell Corporation			

### STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

I-95 AT PIONEER TRAIL  
3156 COUNTY ROAD 4118  
NEW SMYRNA BEACH, FL 32168

### TARGET PROPERTY COORDINATES

Latitude (North):	29.0476 - 29° 2' 51.36"
Longitude (West):	81.007138 - 81° 0' 25.70"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	499305.1
UTM Y (Meters):	3213083.2
Elevation:	24 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5651714 SAMSULA, FL
Version Date:	2012
East Map:	5651937 NEW SMYRNA BEACH, FL
Version Date:	2012

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 principle 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

## 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**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
12127C0517J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
12127C0540H	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
SAMSULA	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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
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: Holocene  
Code: Qh (decoded above as Era, System & Series)

### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified 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).

## 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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: POMONA

Soil Surface Texture: fine sand

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 6.00 Min: 3.60
2	5 inches	26 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 6.00 Min: 3.60
3	26 inches	39 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 0.60	Max: 6.00 Min: 3.60
4	39 inches	51 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 2.00	Max: 6.00 Min: 3.60
5	51 inches	72 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 2.00 Min: 0.20	Max: 6.00 Min: 3.60

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: mucky - fine sand

Surficial Soil Types: mucky - fine sand

Shallow Soil Types: fine sand

Deeper Soil Types: sand  
sandy loam  
loamy fine sand

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## 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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

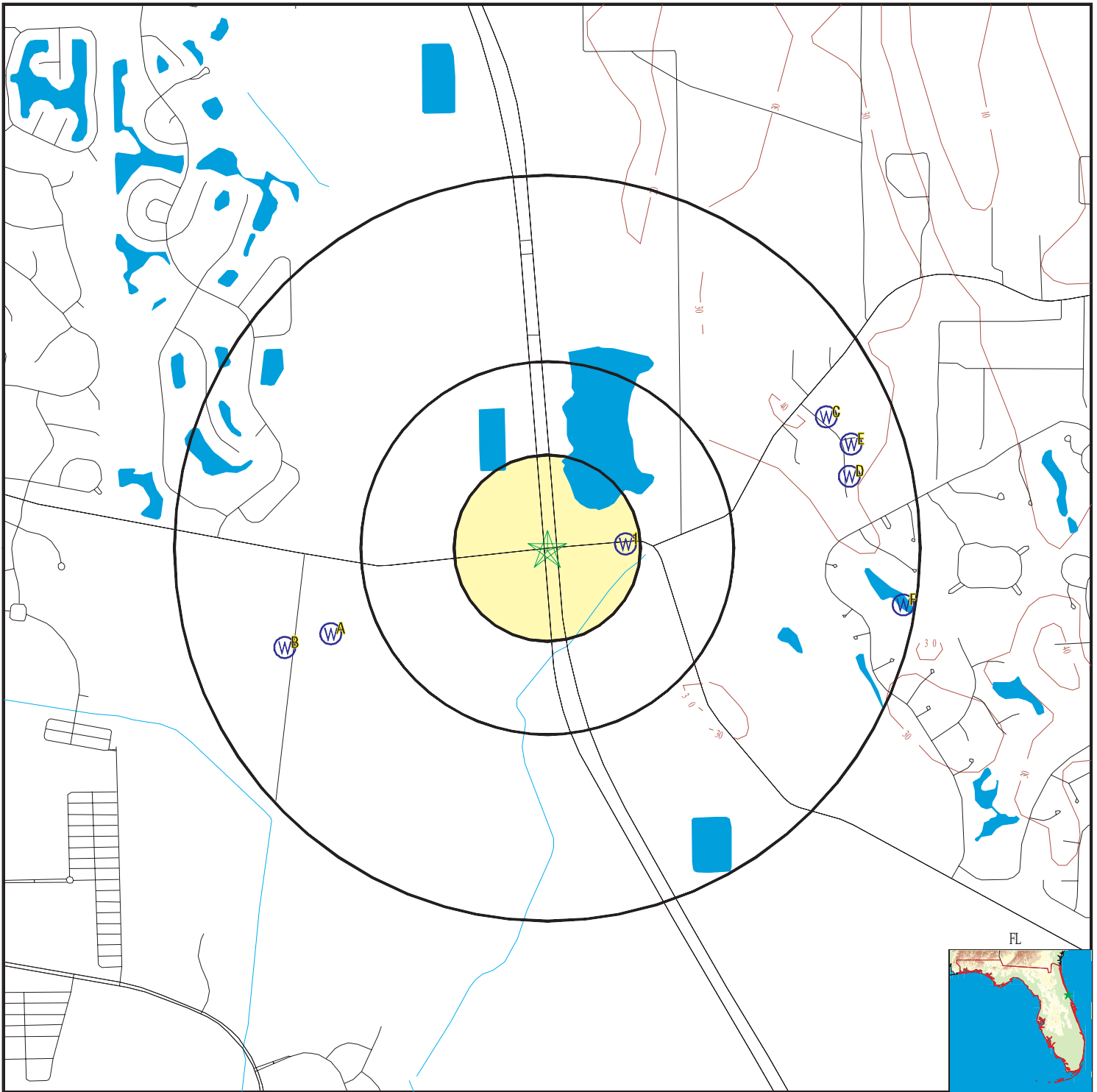
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	FLDGW6000000439	1/8 - 1/4 Mile East
A2	FLSJ11000044748	1/2 - 1 Mile WSW
A3	FLSJ11000012275	1/2 - 1 Mile WSW
A4	FLSJ11000054529	1/2 - 1 Mile WSW
A5	FLSJ11000053059	1/2 - 1 Mile WSW
B6	FLSJ11000027023	1/2 - 1 Mile WSW
B7	FLSJ11000001776	1/2 - 1 Mile WSW
B8	FLSJ11000054441	1/2 - 1 Mile WSW
B9	FLSJ11000035991	1/2 - 1 Mile WSW
C10	FLSJ11000030060	1/2 - 1 Mile ENE
C11	FLSJ11000045514	1/2 - 1 Mile ENE
C12	FLSJ11000060217	1/2 - 1 Mile ENE
D13	FLSJ11000018344	1/2 - 1 Mile ENE
D14	FLSJ11000028537	1/2 - 1 Mile ENE
D15	FLSJ11000048796	1/2 - 1 Mile ENE
D16	FLSJ11000031990	1/2 - 1 Mile ENE
D17	FLSJ11000046553	1/2 - 1 Mile ENE
E18	FLSJ11000012858	1/2 - 1 Mile ENE
E19	FLSJ11000034567	1/2 - 1 Mile ENE
E20	FLSJ11000038736	1/2 - 1 Mile ENE

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
F21	FLSJ11000025704	1/2 - 1 Mile East
F22	FLSJ11000025773	1/2 - 1 Mile East
F23	FLSJ11000058691	1/2 - 1 Mile East
F24	FLSJ11000014298	1/2 - 1 Mile East
F25	FLSJ11000025703	1/2 - 1 Mile East
F26	FLSJ11000020507	1/2 - 1 Mile East
F27	FLSJ11000003579	1/2 - 1 Mile East
F28	FLSJ11000047003	1/2 - 1 Mile East
F29	FLSJ11000058387	1/2 - 1 Mile East
F30	FLSJ11000053769	1/2 - 1 Mile East
F31	FLSJ11000030179	1/2 - 1 Mile East
F32	FLSJ11000025573	1/2 - 1 Mile East
F33	FLSJ11000005706	1/2 - 1 Mile East
F34	FLSJ11000058692	1/2 - 1 Mile East
F35	FLSJ11000049347	1/2 - 1 Mile East
F36	FLSJ11000043328	1/2 - 1 Mile East
F37	FLSJ11000035729	1/2 - 1 Mile East
F38	FLSJ11000027238	1/2 - 1 Mile East
F39	FLSJ11000026997	1/2 - 1 Mile East
F40	FLSJ11000058388	1/2 - 1 Mile East
F41	FLSJ11000055071	1/2 - 1 Mile East
F42	FLSJ11000050022	1/2 - 1 Mile East

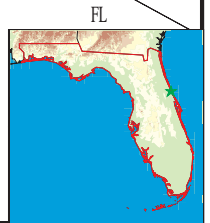
# PHYSICAL SETTING SOURCE MAP - 5605613.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Sink holes
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: I-95 At Pioneer Trail  
 ADDRESS: 3156 County Road 4118  
 New Smyrna Beach FL 32168  
 LAT/LONG: 29.0476 / 81.007138

CLIENT: Geotechnical & Env. Cons., Inc  
 CONTACT: Jose R Benitez Jr  
 INQUIRY #: 5605613.2s  
 DATE: March 29, 2019 4:32 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
1	East	1/8 - 1/4 Mile	Higher	FL WELLS	FLDGW6000000439
		<a href="#">Click here for full text details</a>			
A2	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000044748
		<a href="#">Click here for full text details</a>			
A3	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000012275
		<a href="#">Click here for full text details</a>			
A4	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000054529
		<a href="#">Click here for full text details</a>			
A5	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000053059
		<a href="#">Click here for full text details</a>			
B6	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000027023
		<a href="#">Click here for full text details</a>			
B7	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000001776
		<a href="#">Click here for full text details</a>			
B8	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000054441
		<a href="#">Click here for full text details</a>			

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
B9	WSW	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000035991
			<a href="#">Click here for full text details</a>		
C10	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000030060
			<a href="#">Click here for full text details</a>		
C11	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000045514
			<a href="#">Click here for full text details</a>		
C12	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000060217
			<a href="#">Click here for full text details</a>		
D13	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000018344
			<a href="#">Click here for full text details</a>		
D14	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000028537
			<a href="#">Click here for full text details</a>		
D15	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000048796
			<a href="#">Click here for full text details</a>		
D16	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000031990
			<a href="#">Click here for full text details</a>		
D17	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000046553
			<a href="#">Click here for full text details</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
E18	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000012858
		<a href="#">Click here for full text details</a>			
E19	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000034567
		<a href="#">Click here for full text details</a>			
E20	ENE	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000038736
		<a href="#">Click here for full text details</a>			
F21	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000025704
		<a href="#">Click here for full text details</a>			
F22	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000025773
		<a href="#">Click here for full text details</a>			
F23	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000058691
		<a href="#">Click here for full text details</a>			
F24	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000014298
		<a href="#">Click here for full text details</a>			
F25	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000025703
		<a href="#">Click here for full text details</a>			
F26	East	1/2 - 1 Mile	Higher	FL WELLS	FLSJ11000020507
		<a href="#">Click here for full text details</a>			



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F27 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000003579
F28 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000047003
F29 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000058387
F30 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000053769
F31 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000030179
F32 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000025573
F33 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000005706
F34 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000058692
F35 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000049347

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F36 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000043328
F37 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000035729
F38 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000027238
F39 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000026997
F40 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000058388
F41 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000055071
F42 East 1/2 - 1 Mile Higher	<a href="#">Click here for full text details</a>	FL WELLS	FLSJ11000050022

# 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
32168	13	0.0	Certified Residential Database
32168	43	2.3	Mandatory Non-Residential Database

Federal EPA Radon Zone for VOLUSIA 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 VOLUSIA COUNTY, FL

Number of sites tested: 64

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.540 pCi/L	100%	0%	0%
Basement	0.830 pCi/L	100%	0%	0%

# 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.

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 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<sup>R</sup> 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 Service (NRCS)

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 Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, 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

#### 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

#### DEP GWIS - Generalized Water Information System Well Data

Source: Department of Environmental Protection

Telephone: 850-245-8507

Data collected for the Watershed 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.

#### Permitted Well Location Database

Source: South Florida Water Management District

Telephone: 561-682-6877

#### Super Act Program Well Data

Source: Department of Health

Telephone: 850-245-4250

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, investigations of drinking water contamination complaints and education of the public.

#### Water Well Location Information

Source: Suwannee River Water Management District

Telephone: 386-796-7211

#### Water Well Permit Database

Source: Southwest Water Management District

Telephone: 352-796-7211



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## OTHER STATE DATABASE INFORMATION

### Oil and Gas Permit Database

Source: Department of Environmental Protection

Telephone: 850-245-3194

Locations of all permitted wells in the state of Florida.

### Florida Sinkholes

Source: Department of Environmental Protection, Geological Survey

Telephone:

The sinkhole data was gathered by the Florida Sinkhole Research Institute, University 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

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

## STREET AND ADDRESS INFORMATION

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# **APPENDIX H**

## **FDEP Database List**

The FDEP databases used for this study and their common abbreviations are listed below.

- Florida's State Funded Action Sites (SHWS),
- Florida Sites List – (FL Sites),
- State Brownfield Sites Listing (Brownfields),
- Cattle Dip Vats (CDV),
- Ethylene Di-Bromide Database (EDB),
- Dry Cleaners (DRYCLEANERS),
- Priority Cleaners (PRIORITY CLEANERS),
- Dry Cleaning Solvent Program Cleanup Sites (SCRD DRYCLEANERS),
- State & Federal Institutional Controls Registry (ENG CONTROLS),
- State & Federal Institutional Controls Registry (INST CONTROLS),
- Voluntary Cleanup Priority Listing (INDIAN VCP),
- Voluntary Cleanup Sites (VCP),
- Historical Dry Cleaners (EDR HIST CLEANERS),
- Leaking Aboveground Storage Tank Listing (LAST),
- Leaking Underground Storage Tank Listing (LUST),
- Leaking Underground Storage Tanks on Indian Land (INDIAN LUST),
- Underground Storage Tanks on Indian Land (INDIAN UST),
- National Pollution Discharge Elimination System Facilities (NPDES),
- Oil and Hazardous Materials Incidents (SPILLS, SPILLS 80, SPILLS 90),
- Solid Waste Facilities (SWF),
- Underground Storage Tanks (UST),
- Aboveground Storage Tanks (AST),
- Underground Injection Control Wells (UIC),
- Voluntary Cleanup Sites (VCS), and
- NPL and State Funded Waste Cleanup Sites (NPL).

Information regarding the date the databases were last updated are included within the EDR Radius Map Report provided in **Appendix G**. Descriptions of the above-listed Florida databases and information sources are also provided in the EDR report.

# **APPENDIX I**

## **Federal Database List**

Federal databases have been compiled for identifying potential sources of hazardous materials contamination. The databases used for this evaluation include:

- Aerometric Information Retrieval System I Air Facility Subsystem (AIRS),
- Clandestine Drug Laboratory Locations (CDL),
- National Clandestine Laboratory Register (HIST CDL),
- Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS),
- Delisted National Priorities List (DELISTED NPL),
- Comprehensive Environmental Response, Compensation & Liability Information System No Further Remedial Action Planned (CERC-NFRAP),
- Comprehensive Environmental Response, Compensation & Liability Information System Lien Information (LIENS 2),
- Superfund (CERCLA) Consent Decrees (CONSENT),
- Corrective Action Report (CORRACTS),
- Incident and Accident Data (DOT OPS),
- Engineering Controls Site List (US ENG Controls),
- Sites with Institutional Controls (US INST Controls),
- Land Use Control Information System (LUCIS),
- Federal Facility Site Information Listing (Federal Facility),
- Emergency Response Notification System Facility Registry System (ERNS),
- Hazardous Materials Incident Reporting System (HMIRS),
- Open Dump Inventory (ODI),
- Recycling Centers (SWRCY),
- Government Archives LUST (RGA LUST),
- DWM Contaminated Sites (DWM CONTAM),
- Resource Conservation & Recovery Act- Large Quantity Generators (RCRA - LQG),
- Resource Conservation & Recovery Act- Small Quantity Generators (RCRA - SQG),
- Resource Conservation & Recovery Act- Generator Conditionally Exempt Small Quantity Generator Facilities (RCRA-CESQG),
- Resource Conservation & Recovery Act- Non- Generator Facilities (RCRA Non Gen),
- Resource Conservation & Recovery Act- Treatment, Storage & Disposal Facilities (RCRA-TSDF),
- Toxic Substance Control Act Inventory (TSCA),
- Open Dump Inventory On Tribal Lands (INDIAN ODI),
- Indian Reservations (INDIAN RESERV),
- Department Of Defense Sites (DOD),
- Formerly Used Defense Sites (FUDES),
- National Priorities List (NPL),



- Proposed National Priorities List (Proposed NPL),
- National Priorities List Liens (NPL Liens),
- Delisted National Priorities List (Delisted NPL),
- Resource Conservation & Recovery Act-Corrective Action Facilities (CORRACTS), and
- Record of Decision System (ROD).

Information regarding the date the databases were last updated are included within the EDR Radius Map Report provided in **Appendix G**. Descriptions of the above-listed federal databases and information sources are also provided in the EDR report.

# **APPENDIX J**

## **FDEP OCULUS, Map Direct, and Nexus Portal Information**

**SITE 1**  
**Tornelli Property**

Altkey: 3698932  
TORNELLI VINCENT C

Parcel ID: 730900000130  
3160 PIONEER TR , NEW SMYRNA BEACH

**Parcel**

Short Parcel Id 730900000130  
Property Location 3160 PIONEER TR, NEW SMYRNA BEACH, 32168  
PC Code 6800 - DAIRIES/FEED LOTS  
Total Bldgs 1  
Neighborhood 4024 - GOLF VILLAGE AT TB  
Business Name

**Primary Owner**

Owner TORNELLI VINCENT C  
In Care Of  
Mailing Address P O BOX 880  
EDGEWATER FL 32132

**All Owners**

#	Owner 1	Owner 2	Owner %	Owner Type(s)
0	TORNELLI VINCENT C		100	O - O

**Legal**

Millage Group 600-UNINCORPORATED - SOUTHEAST  
Legal Description 9 17 33 W 1/2 N & W OF A/L 100 FT E OF DRAINAGE  
DITCH & S OF OLD ST RD 40 (PIONEER TRAIL )& E OF I-  
95 EXC IRREG PARCEL PER OR 4399 PG 1094 & EXC  
PROPOSED NEW ROW PARCEL FOR PIONEER TRAIL  
MEAS 126.78 FT ON E/L & MEAS 425.87 FT ON S/L  
Map TWP-RNG-SEC 17 - 33 - 09  
Subdivision-Block-Lot 00 - 00 - 0130  
Date Created 31-DEC-81  
Year Annexed

**Special Assessment**

Project #	Description	Units	Rate	Amount
-----------	-------------	-------	------	--------

5030

VOLUSIA COUNTY STORMWATER

1.00

\$72.00

\$23.04

**Sales**

Book/Page	Instr Type	Inst #	Sale Date	V/I	Sale Price
4399 / 1094	WD-WARRANTY DEED	<a href="#">1999028820</a>	02/15/1999	V	\$90,000
2060 / 1515	WD-WARRANTY DEED		03/15/1979	V	\$32,000
1988 / 0636	WD-WARRANTY DEED		06/15/1978	V	\$32,000

**County Links**

**Property Tax Bill** [CLICK HERE](#)  
**Link to Permits** [CLICK HERE](#)

**Other Links**

**Google Street Address** [CLICK HERE](#)  
**Bing Maps** [CLICK HERE](#)



**SITE 2**  
**Sampling Station**  
**#27080084**



Map Direct Search Results

Sun May 05 2019 14:18:59 GMT-0400 (Eastern Daylight Time)

---

**Search Made:**

Search Box 125 feet wide at  
29.04753201 x -81.00301926  
29°2'51.1153" x -81°0'10.8693"

---

**Search Results: 2**

---

 STORET Stations

---

 Unnamed Ditch @ Pioneer Trail Bridge  
STATION NAME

 152000000005390  
STATION KEY

 5390  
STATION NBR

 21FLCEN  
ORGANIZATION ID

 27010084  
STATION ID

 2679  
WATERBODY ID

 <http://prodenv.dep.state.fl.us/DearSpa/public/searchStoretStations?selectedStationIDs=27010084&selectedOrgIDs=21FLCEN>  
REPORTS


 WAKULLA County  
COUNTY NAME

 AGPS  
COORDINATE METHOD ID

 03080201  
HYDROLOGIC UNIT ID

 Canal  
PRIMARY TYPE


 Irrigation  
SECONDARY TYPE

 Latitude: 29° 2' 51.22"  
Longitude: 81° 0' 10.78"  
Datum: NAD83

---

\* Impaired Waters Rule (IWR) Stations


---

 Unnamed Ditch @ Pioneer Trail Bridge

STATION NAME

 21FLCEN 27010084

STATION ID

 2679

WATERBODY ID

 2010

END DATE

 1


WATER QUALITY STATION

 2005

BEGIN DATE

 185

RESULT COUNT

 J Hand 3/9/2006 COMMENTS

 Latitude: 29.04756°

Longitude: -81.00299°

---

***No Results Found in:***

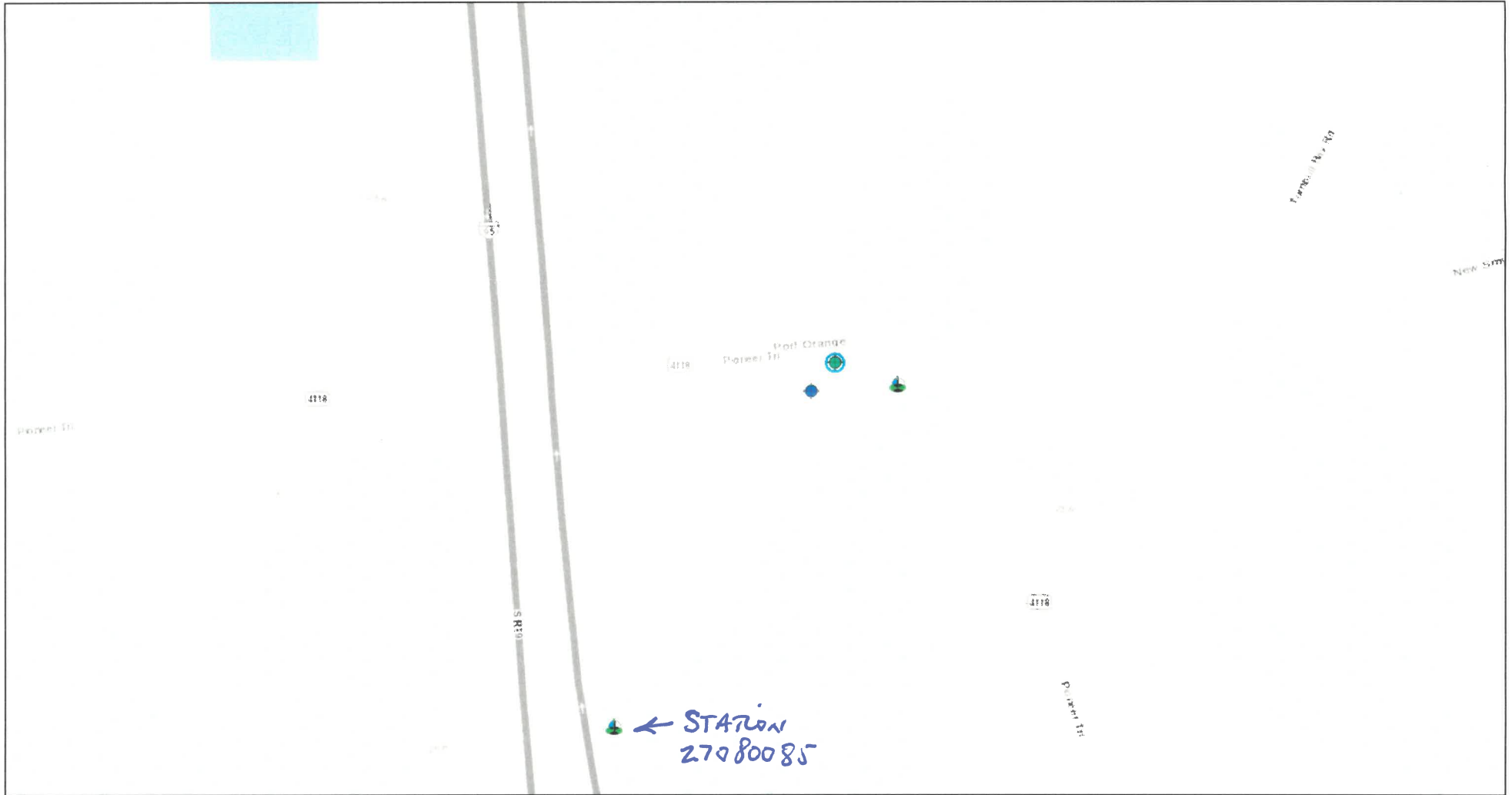
- Watershed Information Network (WIN) Monitoring Locations
  - Watershed Information Network (WIN) Monitoring Locations with Results
  - Permitted Oil and Gas Wells
  - Florida Geological Survey (FGS) Wells - Geophysical Logs
  - Private Wells from Generalized Well Information System (GWIS)
  - Florida Geological Survey (FGS) Wells
  - Upper Floridan Aquifer Wells
  - Confined Aquifer Wells - Well List Frame
  - Unconfined Aquifer Wells - Well List Frame
  - USGS Geochemical and Mineralogical data for soils - Florida
- 

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**SITE 3**  
**Sampling Station**  
**#27080085**



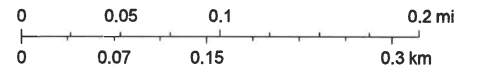
# Standard Map



May 5, 2019

1:4,514

- |   |  |                             |                       |              |
|---|--|-----------------------------|-----------------------|--------------|
| USGS Geochemical and Mineralogical data for soils - Florida | Confined Aquifer Wells - Well List Frame | Permitted Oil and Gas Wells | Junked                | Facility     |
| Impaired Waters Rule (IWR) Stations                         | Upper Floridan Aquifer Wells             | Injection                   | Never Drilled         | Lake         |
| Water Quality Only  | FGS Wells                                | Producer                    | Temporarily Abandoned | Ocean        |
| Water Quality and Biology                                   | HRS Private Wells from WMS               | Saltwater Disposal          | STORET Stations       | River/Stream |
| Biology Only  | FGS Wells Geophysical Log                | Plugged & Abandoned         | Canal                 | Spring       |
| Unconfined Aquifer Wells - Well List Frame                  |  | Dry Hole                    | Estuary               |              |



FDEP, DEAR, DEAR, FDEP, DEAR, WMS, FDEP, DWM, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, FDEP/MMP, FGS Staff,

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## Map Direct Search Results

Sun May 05 2019 14:18:42 GMT-0400 (Eastern Daylight Time)

---

### ***Search Made:***

Search Box 125 feet wide at  
29.04434299 x -81.00610916  
29°2'39.6348" x -81°0'21.9930"

---

### ***Search Results: 2***

---

#### STORET Stations

---

 Unnamed Ditch @ I-95  
STATION NAME

 152000000005391  
STATION KEY

 5391  
STATION NBR

 21FLCEN  
ORGANIZATION ID

 27010085  
STATION ID

 2679  
WATERBODY ID

 <http://prodenv.dep.state.fl.us/DearSpa/public/searchStoretStations?selectedStationIDs=27010085&selectedOrgIDs=21FLCEN>  
REPORTS


 WAKULLA County  
COUNTY NAME

 AGPS  
COORDINATE METHOD ID

 03080201  
HYDROLOGIC UNIT ID

 Canal  
PRIMARY TYPE

 Irrigation  
SECONDARY TYPE

 Latitude: 29° 2' 39.56"  
Longitude: 81° 0' 21.81"  
Datum: NAD83


---

\* Impaired Waters Rule (IWR) Stations

---

 Unnamed Ditch @ I-95  
STATION NAME

 21FLCEN 27010085  
STATION ID


 2679  
WATERBODY ID


 2005  
END DATE

 1  
WATER QUALITY STATION

 2005  
BEGIN DATE

 41  
RESULT COUNT

 J Hand 3/9/2006 COMMENTS

 Latitude: 29.04432°  
Longitude: -81.00606°

---

***No Results Found in:***

- Watershed Information Network (WIN) Monitoring Locations
- Watershed Information Network (WIN) Monitoring Locations with Results
- Permitted Oil and Gas Wells
- Florida Geological Survey (FGS) Wells - Geophysical Logs
- Private Wells from Generalized Well Information System (GWIS)
- Florida Geological Survey (FGS) Wells
- Upper Floridan Aquifer Wells
- Confined Aquifer Wells - Well List Frame
- Unconfined Aquifer Wells - Well List Frame
- USGS Geochemical and Mineralogical data for soils - Florida

---

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**SITE 4**  
**USGS Site 1**

# USGS Site I

Logs Run by: USGS

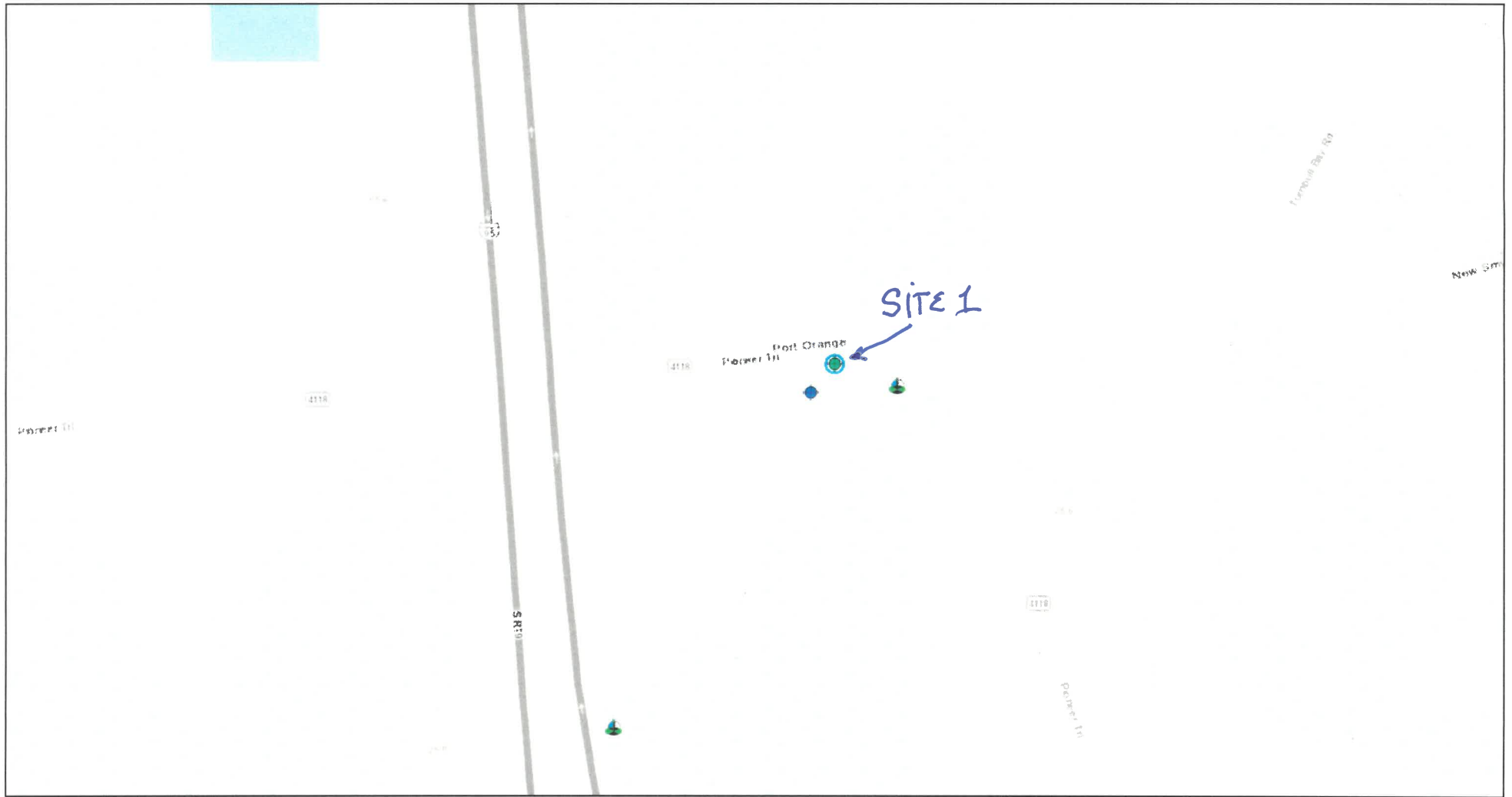
## LIST OF GEOPHYSICAL LOG DOCUMENTS

GPL Number	Description	Date	Depth Range	File
VO-035	Electric Log	12/7/1965	320 - 696 ft	<a href="#">VO35E.tif</a>
VO-035	Caliper	12/7/1965	300 - 686 ft	<a href="#">VO35C.tif</a>

---

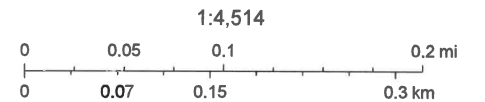


# Standard Map



May 5, 2019

- |   |  |                             |                       |              |
|---|--|-----------------------------|-----------------------|--------------|
| USGS Geochemical and Mineralogical data for soils - Florida | Confined Aquifer Wells - Well List Frame | Permitted Oil and Gas Wells | Junked                | Facility     |
| Impaired Waters Rule (IWR) Stations                         | Upper Floridan Aquifer Wells             | Injection                   | Never Drilled         | Lake         |
| Water Quality Only  | FGS Wells                                | Producer                    | Temporarily Abandoned | Ocean        |
| Water Quality and Biology                                   | HRS Private Wells from WMS               | Saltwater Disposal          | STORET Stations       | River/Stream |
| Biology Only  | FGS Wells Geophysical Log                | Plugged & Abandoned         | Canal                 | Spring       |
| Unconfined Aquifer Wells - Well List Frame                  |  | Dry Hole                    | Estuary               |              |



FDEP, DEAR, DEAR, FDEP, DEAR, WMS, FDEP, DWM, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, FDEP/MMP, FGS Staff,

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**Search Made:**

Search Box 125 feet wide at  
29.04777588 x -81.00364153  
29°2'51.9932" x -81°0'13.1095"

---

**Search Results: 2**

---

 Florida Geological Survey (FGS) Wells - Geophysical Logs

---

 USGS Site I  
*Well Name*

 USGS Site I  
*Well Name*

 8427  
*Queue Id*

 8427  
*Q ID*

 [http://fldeploc.dep.state.fl.us/geodb\\_query/GPLInfoResults.asp?searchNum=VO-035](http://fldeploc.dep.state.fl.us/geodb_query/GPLInfoResults.asp?searchNum=VO-035)  
*URL*

 Township 17, Range 33, Section 9

 VOLUSIA County  
*County*

 Volusia County  
*County*

 (SJRWMD) St. Johns River Water Management District  
*Water Management District*


 GPL\_NUMBER VO-035  
*Comments*

 Unknown  
*Elevation Datum*

 M. Meneses  
*Entered By*

 VO-035  
*Geophysical Log Number*

 WGS 1984  
*GPS Datum*

 C.W. Boyd

*Modified By*

 ABA


*Quarters*

 E

*Range Direction*

 S

*Township Direction*

 10/15/2014

*Entry Date*

 10/23/2015

*Modify Date*

 USGS

*Agency*

 0

*Drillers Log*

 0

*FGS Litholog*

 0

*field litho*

 0


*Hydrogeology Log*

 0


*Drilled by FGS*

 0

*Is Offshore*

 29

*Latitude Degrees*

 2

*Latitude Minutes*

 81

*Longitude Degrees*

 0

*Longitude Minutes*

 0

*Missing*


 0


*Paleontology Log*

 26

*Documented Elevation*


51.95

 Latitude Seconds


 13.211  
Longitude Seconds

 700  
Total Depth


 GPLN\_VO-035 alt dsn


 Latitude: 29.047764°  
Longitude: -81.00367°

---

 Florida Geological Survey (FGS) Wells - Geophysical Logs

---

 USGS "700ft" New Smyrna  
Well Name

 USGS - "700ft" New Smyrna  
Well Name

 8438  
Queue Id

 8438  
Q ID

 [http://fldeploc.dep.state.fl.us/geodb\\_query/GPLInfoResults.asp?searchNum=VO-046](http://fldeploc.dep.state.fl.us/geodb_query/GPLInfoResults.asp?searchNum=VO-046)  
URL

 Township 17, Range 33, Section 9

 VOLUSIA County  
County

 Volusia County  
County

 (SJRWMD) St. Johns River Water Management District  
Water Management District


 T.D.?  
Comments

 GPL\_NUMBER VO-046  
Comments

 Unknown  
Elevation Datum

 M. Meneses  
Entered By

VO-046

 Geophysical Log Number

 WGS 1984  
*GPS Datum*

 C.W. Boyd  
*Modified By*

 BA  
*Quarters*

 E  
*Range Direction*

 S  
*Township Direction*

 10/17/2014  
*Entry Date*

 10/26/2015  
*Modify Date*


 SJRWMD  
*Agency*

 USGS  
*Owner*

 0  
*Drillers Log*


 0  
*FGS Litholog*


 0  
*field litho*

 0  
*Hydrogeology Log*

 0  
*Drilled by FGS*

 0  
*Is Offshore*

 29  
*Latitude Degrees*

 2  
*Latitude Minutes*

 81  
*Longitude Degrees*

 0  
*Longitude Minutes*

0





Missing



0

Paleontology Log



25

Documented Elevation



51.95

Latitude Seconds



13.211

Longitude Seconds



697

Total Depth



GPLN\_VO-046 | alt dsn



Latitude: 29.047764°

Longitude: -81.00367°

---

### ***No Results Found in:***

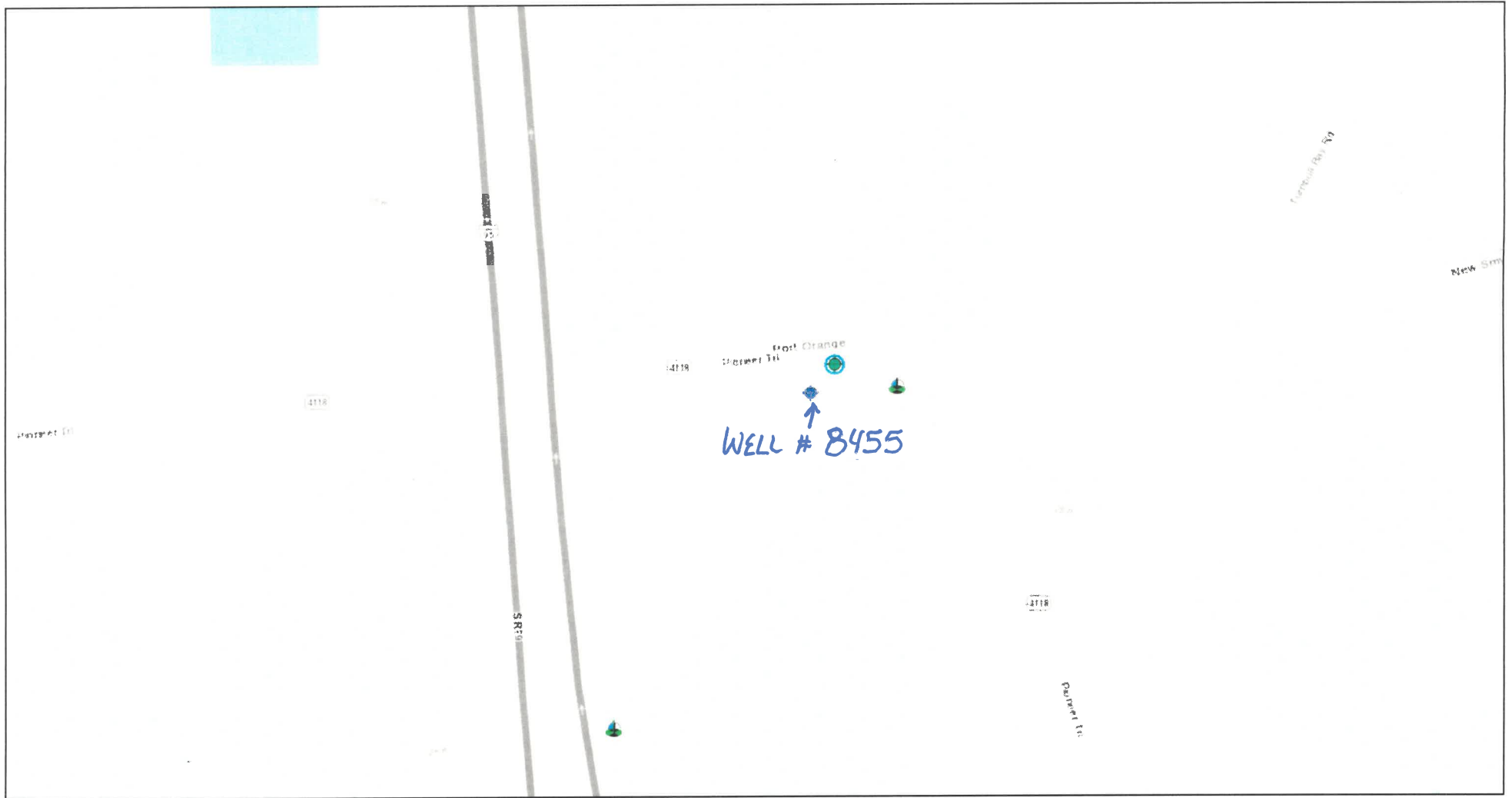
- Watershed Information Network (WIN) Monitoring Locations
- Watershed Information Network (WIN) Monitoring Locations with Results
- STORET Stations
- Permitted Oil and Gas Wells
- Private Wells from Generalized Well Information System (GWIS)
- Florida Geological Survey (FGS) Wells
- Upper Floridan Aquifer Wells
- Confined Aquifer Wells - Well List Frame
- Unconfined Aquifer Wells - Well List Frame
- Impaired Waters Rule (IWR) Stations
- USGS Geochemical and Mineralogical data for soils - Florida

---

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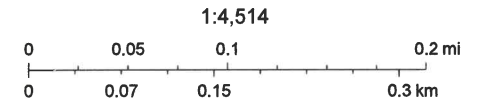
**SITE 5**  
**USGS Well #8455**

# Standard Map



May 5, 2019

- |   |  |                             |                       |              |
|---|--|-----------------------------|-----------------------|--------------|
| USGS Geochemical and Mineralogical data for soils - Florida | Confined Aquifer Wells - Well List Frame | Permitted Oil and Gas Wells | Junked                | Facility     |
| Impaired Waters Rule (IWR) Stations                         | Upper Floridan Aquifer Wells             | Injection                   | Never Drilled         | Lake         |
| Water Quality Only  | FGS Wells                                | Producer                    | Temporarily Abandoned | Ocean        |
| Water Quality and Biology                                   | HRS Private Wells from WMS               | Saltwater Disposal          | STORET Stations       | River/Stream |
| Biology Only  | FGS Wells Geophysical Log                | Plugged & Abandoned         | Canal                 | Spring       |
| Unconfined Aquifer Wells - Well List Frame                  |  | Dry Hole                    | Estuary               |              |



FDEP, DEAR, DEAR, FDEP, DEAR, WMS, FDEP, DWM, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, FDEP/MMP, FGS Staff,

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# Well Summary

## W#8455: USGS - W of New Smyrna Bch. (Well L)

**County:** Volusia (VO)

**Location:** T.17S R.33E S.9

**Latitude:** 29° 2' 50.97"; Longitude: 81° 0' 14.15" (Datum: NAD 1927)

**USGS 24k Quad:** SAMSULA

**Elevation:** 25.73' (DEM: 25')

**Drilled:** 1/1/1965 by SOUTHERN DRILLING CO. LLC

**Well Location Verified:** 11/6/2012

**Well Data Last Modified:** 11/21/2016

---

### LIST OF DESCRIPTIONS AVAILABLE

Year	Geologist	Samples/Intervals Described
<a href="#">2013</a>	WILL L. EVANS	14 from 0 to 320 ft

---

### LIST OF ARCHIVED DESCRIPTIONS

These descriptions have not been validated yet. Please contact the appropriate [District Geologist](#) for further information.

Year	Geologist	Samples/Intervals Described
1979	B.A. REIK	31 from 0 to 700 ft

---

### LIST OF SAMPLES

Sample Type	Range	Available
Cuttings	0-700'	Yes

---

### LIST OF GEOPHYSICAL LOG DOCUMENTS

GPL Number	Description	File
------------	-------------	------

---

## Map Direct Search Results

Sun May 05 2019 14:19:59 GMT-0400 (Eastern Daylight Time)

---

### ***Search Made:***

Search Box 125 feet wide at  
29.04749450 x -81.00394194  
29°2'50.9802" x -81°0'14.1910"

---

### ***Search Results: 1***

---

#### Florida Geological Survey (FGS) Wells

---

 USGS - W of New Smyrna Bch. (Well L)  
*Well Name*

 [http://fldeploc.dep.state.fl.us/geodb\\_query/WellInfoResults.asp?searchNum=8455](http://fldeploc.dep.state.fl.us/geodb_query/WellInfoResults.asp?searchNum=8455)  
*URL*

 5 miles West of New Smyrna Beach, Fla., FL  
*Address*

 Township 17, Range 33, Section 9

 Volusia County  
*County*

 (SJRWMD) St. Johns River Water Management District  
*Water Management District*

 0  
*Drillers Log*

 NGVD29  
*Elevation Datum*

 UK  
*Elevation Reference*

 Database Pjt  
*Entered By*

 1  
*FGS Litholog*

 0  
*Field Litholog*

 NAD 1927  
*GPS Datum*

 0  
*Hydrogeology Log*

0  
Drilled by FGS

0  
Is Offshore

C.W. Boyd  
Modified By

0  
Paleontology Log

E  
Range Direction

S  
Township Direction

DCGPS  
VERIFICATION ACCURACY

UNKNWN  
Verification Method

L. Hannon  
Verified By

WTRS  
Well Type

Unknown  
Well Use

11/06/2012  
Verify Date

01/01/1965  
Drill Date

02/24/2012  
Entry Date

11/21/2016  
Modify Date

United States Geological Survey  
Owner

SOUTHERN DRILLING CO. LLC  
Drilling Company


29  
Latitude Degrees


2  
Latitude Minutes

81  
Longitude Degrees

0




 Longitude Minutes


 8455  
Well Number

 25  
DEM Elevation

 25.73  
Documented Elevation


 1965  
Drill Year

 50.97  
Latitude Seconds


 14.15  
Longitude Seconds

 700  
Total Depth

 8455  
WI GP WID



	Driller
	Purpose
SAMSULA	Quadrangle 24K
	Stickup Height
	Verification Notes

 Latitude: 29.047492°  
Longitude: -81.003931°

---

***No Results Found in:***

- Watershed Information Network (WIN) Monitoring Locations
- Watershed Information Network (WIN) Monitoring Locations with Results
- STORET Stations
- Permitted Oil and Gas Wells
- Florida Geological Survey (FGS) Wells - Geophysical Logs
- Private Wells from Generalized Well Information System (GWIS)
- Upper Floridan Aquifer Wells
- Confined Aquifer Wells - Well List Frame
- Unconfined Aquifer Wells - Well List Frame
- Impaired Waters Rule (IWR) Stations
- USGS Geochemical and Mineralogical data for soils - Florida

---

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# **APPENDIX K**

## **Interview Documentation**

## Richard P. McCormick

---

**From:** Lasley, William <William.Lasley@dep.state.fl.us>  
**Sent:** Tuesday, May 07, 2019 11:10 AM  
**To:** Richard P. McCormick  
**Cc:** ODonnell, Kevin; Tyler, David; Espy, Julie; Hinton, Eric  
**Subject:** RE: Sampling Station Questions s #00095377 SF Reference: ref:\_00DG0i115.\_5004A1f8Ne1:ref  
**Attachments:** Biology Station MRTNDRYDRN Data.xlsx; Map.pdf; Water Quality Stations - Raw Data.xlsx; WBID 2679 Impairment History.xlsx

Richard,

Please see attached documents for more detailed information regarding your inquiry.

The area in question is part of Waterbody ID 2679 (Unnamed Drain) which has never been Verified Impaired for any parameter. This WBID is a class 3 freshwater stream and is assessed during Group 5 within the Upper East Coast basin.

Dissolved Oxygen was placed on the 303(d) List in category 4d (No causative pollutant) in cycle 1 but was removed from the 303(d) List into category 4c (Natural Condition) in Cycle 2. Most recently, Dissolved Oxygen was assessed as category 2 (Not Impaired) in Cycle 3. We are currently working on our cycle 4 assessments.

The two water quality stations (**21FLCEN 27010085 and 21FLCEN 27010084**) are FDEP Central District stations that were most recently sampled in 2005 and 2010.

The biological station (**MRTNDRYDN**) was sampled in 1999 for a Biorecon which passed as healthy and a Habitat Assessment was performed there 5/10/2005 with a total score of 121 (Optimal/passing).

Let me know if you have any more questions.



**William Allen Lasley**

Florida Department of Environmental Protection  
DEAR – Water Quality Assessment Program  
Environmental Specialist II  
William.Lasley@dep.state.fl.us  
Office: (850) 245-8442

**From:** ODonnell, Kevin  
**Sent:** Tuesday, May 07, 2019 9:08 AM  
**To:** Lasley, William <William.Lasley@dep.state.fl.us>  
**Cc:** Tyler, David <David.Tyler@dep.state.fl.us>  
**Subject:** FW: Sampling Station Questions s #00095377 SF Reference: ref:\_00DG0i115.\_5004A1f8Ne1:ref

Will,

Can you please look into this questions below? Please call him or email, but copy Julie, Eric Hinton and me.

Thanks,  
Kevin

**From:** Espy, Julie  
**Sent:** Thursday, May 02, 2019 1:17 PM  
**To:** ODonnell, Kevin <[Kevin.ODonnell@dep.state.fl.us](mailto:Kevin.ODonnell@dep.state.fl.us)>  
**Subject:** FW: Sampling Station Questions s #00095377 SF Reference: ref:\_00DG0i115.\_5004A1f8Ne1:ref

Kevin,  
Please see at the bottom of this thread. Mr. McCormick is asking about some monitoring stations. Can you or one of your staff take a look at these and give him a call?

Please let me know the outcome, so we can close this out.

Thanks,

Julie

**From:** Hinton, Eric  
**Sent:** Thursday, May 2, 2019 11:29 AM  
**To:** Espy, Julie <[Julie.Espy@dep.state.fl.us](mailto:Julie.Espy@dep.state.fl.us)>  
**Subject:** FW: Sampling Station Questions s #00095377 SF Reference: ref:\_00DG0i115.\_5004A1f8Ne1:ref

Please read through this and see if this is something you can answer.

Eric

**From:** Baino, Melanie  
**Sent:** Thursday, May 2, 2019 11:13 AM  
**To:** Hinton, Eric <[Eric.Hinton@FloridaDEP.gov](mailto:Eric.Hinton@FloridaDEP.gov)>  
**Subject:** FW: Sampling Station Questions s #00095377 SF Reference: ref:\_00DG0i115.\_5004A1f8Ne1:ref

This is for you.

Thank you,

*Melanie Baino*

Assistant to Director Tom Frick  
Division of Environmental Assessment Restoration  
2600 Blair Stone Rd. MS#3000  
Tallahassee, Florida 32399  
Phone: (850) 245-8668  
Email: [Melanie.Baino@dep.state.fl.us](mailto:Melanie.Baino@dep.state.fl.us)

**From:** [noreply@salesforce.com](mailto:noreply@salesforce.com) <[noreply@salesforce.com](mailto:noreply@salesforce.com)> **On Behalf Of** Carrie Lincoln  
**Sent:** Thursday, May 2, 2019 10:32 AM

To: Baino, Melanie <Melanie.Baino@dep.state.fl.us>

Cc: [emailtosalesforce@2bzkzccl43cdbvc1faeca7e7xyq0w23zaz8r11i3jwexhri50.0r-8bb8uai.cs94.le.sandbox.salesforce.com](mailto:emailtosalesforce@2bzkzccl43cdbvc1faeca7e7xyq0w23zaz8r11i3jwexhri50.0r-8bb8uai.cs94.le.sandbox.salesforce.com)

Subject: Sampling Station Questions s #00095377 SF Reference: ref: \_00DG0i115.\_5004A1f8Ne1:ref

---

\*\*\* NEW CASE ASSIGNMENT \*\*\*

Standard Case:

**00095377**

Case Status:

**Open**

Case review for next appropriate action. If case status (above) is "closed" no further response is expected.

**IMPORTANT:** To close this case notify Public Services. If responding to the customer by email leave the case reference number in the subject line (do not delete anything in the subject line) and copy [publicservices@dep.state.fl.us](mailto:publicservices@dep.state.fl.us) .

Signed To:

**MP DEAR**

Case Type:

**Question**

Instructions:

**Case respond**



**ase close once a resolution has been made  
ou cannot close please CC resolution to  
rie.Lincoln@floridadep.gov and I will close**

se Date:

**/2019 5:00 PM**

ntact Name:

**shard McCormick**

ntact email:

[mccormick@g-e-c.com](mailto:mccormick@g-e-c.com)

/:

**ando**

ntact Phone:

**7-898-1818 Ext. 8975**

ganization:

**rotechnical and Environmental Consultants, Inc.**

se Subject:

**mping Station Questions s**

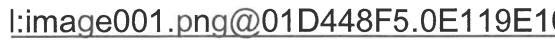
se Description:

**there!**

I've received the PRR below, but after some investigation, it seems that DEAR is better suited to respond. Could you please refer it to them?

Thank you!

Jaren

 [image001.png@01D448F5.0E119E10] <<http://www.dep.state.fl.us/>>

Jaren L. Garcia  
Public Records Request Liaison  
Florida Department of Environmental Protection  
Division of Water Resource Management  
[PublicRecordsRequests\\_Regulatory@dep.state.fl.us](mailto:PublicRecordsRequests_Regulatory@dep.state.fl.us) <[mailto:PublicRecordsRequests\\_Regulatory@dep.state.fl.us](mailto:PublicRecordsRequests_Regulatory@dep.state.fl.us)>  
Phone: 850.245.8391

From: Carr, Zoey  
Sent: Thursday, May 2, 2019 10:24 AM  
To: PublicRecordsRequests\_Regulatory <[PublicRecordsRequests\\_Regulatory@dep.state.fl.us](mailto:PublicRecordsRequests_Regulatory@dep.state.fl.us)>  
Ammon, Pamela <[Pamela.Ammon@dep.state.fl.us](mailto:Pamela.Ammon@dep.state.fl.us)>  
Subject: RE: INCOMING MAIL/FW: Sampling Station Questions - Volusia County - Impaired Waters Rule sit

So, when you go into MapDirect, there is a "STOREIT" layer. If you open that layer and navigate to the station she mentions, you'll see the three stations. Click on those and you'll find water body IDs.

Then, if you do a google search for "fdep impaired waters" there will be an assessment list link for open and closed impaired waters that you can use to search for the water body IDs. If they aren't there, they aren't there and we can't give any additional information.

If you want to go the extra mile, there will also be a link to a geodata map for a verified list of waterbodies in Florida and if you go to the "data" tab, you can navigate to those IDs and check what names are associated with them and then do a search for those names within the open and closed water lists as well, just in case some kind of typo happened in data entry.


Basically just do a bunch of googling to find this information by the way. I'll always recommend googling stuff if you don't know what it is! Usually you'll end up with the information you needed or at least a starting point.

Thanks!

Zoey Carr  
Operations Analyst II  
Central District  
Florida Department of Environmental Protection  
19 Maguire Blvd, Suite 232  
Tampa, Florida 32803-3767  
Phone: 813-897-2933  
[zoey.carr@dep.state.fl.us](mailto:zoey.carr@dep.state.fl.us) <<mailto:zoey.carr@dep.state.fl.us>>

**From:** PublicRecordsRequests Regulatory  
**Sent:** Thursday, May 02, 2019 9:30 AM  
**To:** DEP\_CD <DEP\_CD@dep.state.fl.us<mailto:DEP\_CD@dep.state.fl.us>>; Carr, Zoey  
zoey.Carr@FloridaDEP.gov<mailto:Zoey.Carr@FloridaDEP.gov>>  
**From:** Ammon, Pamela <Pamela.Ammon@dep.state.fl.us<mailto:Pamela.Ammon@dep.state.fl.us>>  
**Subject:** RE: INCOMING MAIL/FW: Sampling Station Questions - Volusia County - Impaired Waters Rule sites

Thanks! Again, I'm not sure how/where I can find this info. Any advice is appreciated. 😊

 [image001.png@01D448F5.0E119E10]<<http://www.dep.state.fl.us/>>

Jaren L. Garcia  
Public Records Request Liaison  
Florida Department of Environmental Protection  
Division of Water Resource Management  
PublicRecordsRequests\_Regulatory@dep.state.fl.us<mailto:PublicRecordsRequests\_Regulatory@dep.state.fl.us>  
Phone: 850.245.8391

**From:** Bloomer, Allen On Behalf Of DEP\_CD  
**Sent:** Thursday, May 2, 2019 9:27 AM  
**To:** PublicRecordsRequests Regulatory  
PublicRecordsRequests\_Regulatory@dep.state.fl.us<mailto:PublicRecordsRequests\_Regulatory@dep.state.fl.us>  
**From:** Ammon, Pamela <Pamela.Ammon@dep.state.fl.us<mailto:Pamela.Ammon@dep.state.fl.us>>  
**Subject:** INCOMING MAIL/FW: Sampling Station Questions - Volusia County - Impaired Waters Rule sites

Could you please contact the customer below who is inquiring about .....

Allen Bloomer  
Operations Analyst I  
Central District  
Florida Department of Environmental Protection  
19 Maguire Blvd, Suite 232  
Gainesville, Florida 32603-3767  
P\_CD@dep.state.fl.us<mailto:DEP\_CD@dep.state.fl.us>

**PLEASE NOTE:** Florida has a very broad public records law. Electronic communications regarding state business are public records available upon request. Your e-mail communications may therefore be subject to public disclosure

**From:** Richard P. McCormick <rpmccormick@g-e-c.com<mailto:rpmccormick@g-e-c.com>>  
**Sent:** Wednesday, May 01, 2019 9:26 PM  
**To:** DEP\_CD <DEP\_CD@dep.state.fl.us<mailto:DEP\_CD@dep.state.fl.us>>  
**Subject:** Sampling Station Questions - Volusia County - Impaired Waters Rule sites

Caution Possible Malware: Please use caution with links and attachments.  
Hello,

Can you help me with some information? I'm performing a contamination review for FDOT at the I-95 and Pioneer Trail crossing in Volusia County and have been asked to investigate the following.

Map Direct identified two STORET/Impaired Waters Rule sites at this location:

Unnamed Ditch @ I-95  
Station ID 27010085  
Impaired Waters Rule Station ID 21FLCEN 27010085

Unnamed Ditch @ Pioneer Trail  
Station ID 27010084  
Impaired Waters Rule Station ID 21FLCEN 27010084

A Biological Station was also identified at this location on Map Direct:

Station ID TNDRYDN  
STORET ID 27010540

We are hoping to determine the purpose of the sampling stations are; if they are permanent stations; what was sampled; and what the sampling results are.

Thanks for any help you can provide.

Sincerely,

Richard P. McCormick, P.G.  
Senior Geologist  
[image001.jpg@01D26667.EBBA5E90]  
Geotechnical and Environmental Consultants, Inc.  
386-21-352-8975  
386-07-267-7314

GEC is proud to serve our community as Geotechnical Engineering Consultant on these Central Florida Transportation Legacy Projects: SunRail Phases I and II, Wekiva Parkway, I-4 Ultimate P3 Design Oversight and OIA South Terminal Airside and Landside Infrastructure. GEC is now offering RoadScan GPR for collecting continuous pavement layer thickness data at highway speed. GEC is a certified Small Business Enterprise (SBE) with FDOT.

Map Customer Survey Link: [http://survey.dep.state.fl.us/?refemail=PublicRecordsRequests\\_Regulatory@dep.state.fl.us](http://survey.dep.state.fl.us/?refemail=PublicRecordsRequests_Regulatory@dep.state.fl.us)

Survey Link:

Attachments:

**If responding on behalf of the Secretary** please have appropriate leadership review per your local procedures. The signature is at the discretion of your Division/District/Office Director.

**If responding on behalf of the Governor** the signature must be by the Division/District/Office Director/Bureau Chief or above.

If the assignment cannot be completed within the allotted time, please contact Carrie Lincoln to request an extension.

If you are not able to meet the deadline, please contact the correspondent and let them know that their issue is under review and a response is being prepared.

Update Salesforce by email or advise Carrie Lincoln of all actions taken.

If you have questions about this case or how to respond please contact the person who assigned it to you (below):

**signed by:**

**Carrie Lincoln**

**Internal Case Source:**

*Note that all cases may not require a direct response to the customer but all correspondence should be reviewed by relevant subject matter experts.*

\_\_00DG0i115.\_5004A1f8Ne1:ref

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[www.dep.state.fl.us](http://www.dep.state.fl.us)



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Total Control Panel

[Login](#)

To: [rpmccormick@g-e-c.com](mailto:rpmccormick@g-e-c.com)

Message Score: 1

High (60): Pass

From: [william.lasley@dep.state.fl.us](mailto:william.lasley@dep.state.fl.us)

My Spam Blocking Level: Medium

Medium (75): Pass

Low (90): Pass

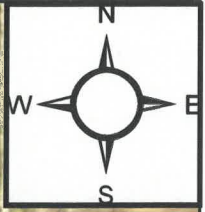
[Block this sender](#)

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*This message was delivered because the content filter score did not exceed your filter level.*



**WBID 2679**



**Legend**

-  Biology Stream Sample
-  IWR Assigned Station Run56



Cycle	Group	Group Name	Planning Unit Name	WBID	Water Segment Name	Waterbody Type	Waterbody Class	Parameters Assessed Using the Impaired Surface Waters Rule (IWR)	TN, TP, BOD Median Values (mg/L) 2	Criterion Concentration or Threshold Not Met	Previous Cycle(s) Summary Assessment Category	Current Cycle Assessment Category	Integrated Report Category Summary Assessment	Summary Assessment Status	Planning Period Assessment Data	Verified Period Assessment Data	Comments
1	5	Upper East Coast	Halifax River Unit	2679	Unnamed Drain	Stream	3F	Dissolved Oxygen					4d	No Causative Pollutant			PP - 1/1 VP - 26/34 DO met verification threshold of IWR, but need to identify causative pollutant. TN, TP, and BOD medians are all below the thresholds for streams. PP median TN = 1.11 mg/L (n=1); no TP or BOD data. VP median TN = 1.121 mg/L (n=14); median TP = 0.05 mg/L (n=13); median BOD = 2 mg/L (n=24). This waterbody will be included on the 303(d) list.
2	5	Upper East Coast	Halifax River Unit	2679	Unnamed Drain	Stream	3F	Dissolved Oxygen	TN = 0.972 (n=33) TP = 0.051 (n=33) BOD = 0.97 (n=43)	≥ 5.0 mg/L	4d	4c	4c	Natural Condition	27/35	32/47	This parameter is impaired for this waterbody based on the number of exceedances for the sample size but is being placed in category 4c because it has been determined that the impairment is due to natural conditions. This parameter was placed in category 4d in Cycle 1 and added to the 303(d) list. Based on this more recent assessment, it should be removed from the 303(d) list. Median total nitrogen, total phosphorus, and biochemical oxygen demand values were not elevated relative to comparable reference waters, and good bioassessment results indicate the low dissolved oxygen is not affecting the biological community. The period of record assessment, which uses all available data regardless of age, indicated potential impairment. However, data older than the verified period were excluded from the final assessment based on the availability of more recent data, and the final assessment was based on the recent data.
2	5	Upper East Coast	Halifax River Unit	2679	Unnamed Drain	Stream	3F	Dissolved Oxygen (Percent Saturation)		≥ 38 %	4c	2	2	Not Impaired	17/47	1/13	This waterbody is not impaired for this parameter based on the number of exceedances for the sample size. Dissolved oxygen grab samples used in this analysis were assessed against a time of day adjustment as described in 62-303.420(9), F.A.C.

## Richard P. McCormick

---

**From:** Richard P. McCormick  
**Sent:** Monday, April 22, 2019 2:18 PM  
**To:** denise.miller@dep.state.fl.us  
**Cc:** Richard P. McCormick  
**Subject:** STORET Site/Sampling Station Question

Hi Denise,

Can help me with some information? I'm performing a contamination review for FDOT at the I-95 and Pioneer Trail crossing in Volusia County and have been asked to investigate the following.

Map Direct identified two STORET/Impaired Waters Rule sites at this location:

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Impaired Waters Rule Station ID 21FLCEN 27010085

and

Unnamed Ditch @ Pioneer Trail  
Station ID 27010084  
Impaired Waters Rule Station ID 21FLCEN 27010084

A Biological Station was also identified at this location on Map Direct:

MRTNDRYDN  
STORET ID 27010540

We are hoping to determine the purpose of the sampling stations are; if they are permanent stations; what was sampled; and what the sampling results are.

Thanks for any help you can provide.

Kindly,

Richard P. McCormick, P.G.  
Senior Geologist



Geotechnical and Environmental Consultants, Inc.  
P 321-352-8975  
C 407-267-7314

GEC is proud to serve our community as Geotechnical Engineering Consultant on these Central Florida Transportation Legacy Projects: SunRail Phases I and II, Wekiva Parkway, I-4 Ultimate P3 Design Oversight and OIA South Terminal

Airside and Landside Infrastructure. GEC is now offering **RoadScan GPR** for collecting continuous pavement layer thickness data at highway speed. **GEC is a certified Small Business Enterprise (SBE) with FDOT.**

**Richard P. McCormick**

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**From:** Richard P. McCormick  
**Sent:** Wednesday, May 01, 2019 9:26 PM  
**To:** 'DEP\_CD@DEP.state.fl.us'  
**Subject:** Sampling Station Questions - Volusia County - Impaired Waters Rule sites

Hello,

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