



GOLDEN GATE GOLF COURSE

LIMITED SHALLOW GROUNDWATER ASSESSMENT

NAPLES, FLORIDA 34116
SECTION 27, TOWNSHIP 49, RANGE 26E

Prepared For:



Collier County Government
2800 Horseshoe Drive N
Naples, Florida 34104



American Government Services
3812 W Linebaugh Avenue
Tampa, FL 33618



Commonwealth Land Title Insurance Company
601 Riverside Avenue
Jacksonville, FL 32204



Davidson Engineering, Inc.
4365 Radio Road, Suite 201
Naples, FL 34104

Prepared By:



Earth Tech Environmental, LLC
10600 Jolea Avenue
Bonita Springs, FL 34135

June 10, 2019

Davidson Engineering, Inc.
c/o Mr. Josh Fruth
4365 Radio Road, Suite 201
Naples, FL 34104

RE: Golden Gate Golf Course

Dear Mr. Fruth,

Earth Tech Environmental (ETE) is pleased to submit this Limited Shallow Groundwater Assessment (LSGA) report for the referenced property. As requested, this report investigates the potential impacts to shallow groundwater following a Limited Phase II Environmental Site Assessment in which two (2) shallow soil sample locations exceeded the Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTLs) for potential leachability to groundwater criteria for lead and/or dieldrin. This LSGA was conducted in material compliance with the scope and limitations of the American Society of Testing and Materials (ASTM) E1903-97.

Please feel free to contact us if you have any questions.

A handwritten signature in blue ink, appearing to read "Andrew McAuley".

Andrew McAuley, Environmental Scientist
Earth Tech Environmental, LLC.

TABLE OF CONTENTS

1.0 INTRODUCTION	4
1.1 EXECUTIVE SUMMARY	4
1.2 LIMITATIONS AND EXCEPTIONS	5
2.0 SITE DESCRIPTION & LOCATION	5
2.1 PREVIOUS ASSESSMENT REPORTS	7
3.0 LOCAL ENVIRONMENTAL SETTING	7
3.1 LOCAL GEOLOGY & SOIL DESCRIPTION	7
3.2 HYDROGEOLOGIC SETTING	8
4.0 METHODOLOGY	8
4.1 SHALLOW GROUNDWATER SAMPLING	8
5.0 SHALLOW GROUNDWATER SAMPLING RESULTS	9
5.1 FIELD RESULTS	10
5.2 LABORATORY RESULTS	11
5.3 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)	12
6.0 CONCLUSIONS AND RECOMMENDATIONS	12
7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT	13
8.0 REFERENCES	14

APPENDICES

Appendix A:	Benchmark EnviroAnalytical, Inc. Laboratory Test Reports
Appendix B:	State of Florida Well Completion Report
Appendix C:	Historical Documentation for USTs
Appendix D:	Record of Communication Documents
Appendix E:	Staff Qualifications

1.0 INTRODUCTION

ETE has conducted a Limited Shallow Groundwater Assessment (LSGA) on the Golden Gate Golf Course (Subject Property), located in Naples, Collier County, Florida 34116 on behalf of Collier County, American Government Services, Commonwealth Land Title Insurance Company, and Davidson Engineering, Inc. This LSGA was conducted on May 3, 2019, by ETE's staff Environmental Scientist, Mr. Andrew McAuley. The Subject Property location can be seen in Figures 1 and 2 below.

1.1 EXECUTIVE SUMMARY

The laboratory results from the LSGA are below the GCTLs and/or PQLs established by the FDEP for lead and dieldrin. The minor detection of dieldrin in the GW-2 sample appears to be isolated. In conversation with a representative from the FDEP via phone conversation on June 4, 2019, it was indicated that in many cases the FDEP has adopted the PQLs as the standard for comparing results over the CTLs. No potable water supply wells were noted directly down gradient of the sampling area. Based on this information no further groundwater assessment is recommended.

The soil sample obtained from the bottom of the rotary auger drill bit was below the SCTL Commercial/Industrial criteria, however was above the SCTL for leachability to groundwater criteria. Based on the historical documentation reviewed and the refusal encountered by PDS during the drilling activities it is likely that the USTs are still present. It is unsure if the sample obtained was from within one of the USTs or adjacent to them. ETE recommends that ground-penetrating radar (GPR) be utilized to determine the presence and extent of the UST locations. If the USTs are present ETE recommends that they be excavated and properly disposed of. The soils surrounding the USTs should be verified for the potential presence or absence of contamination. A formal closure assessment report should be conducted.

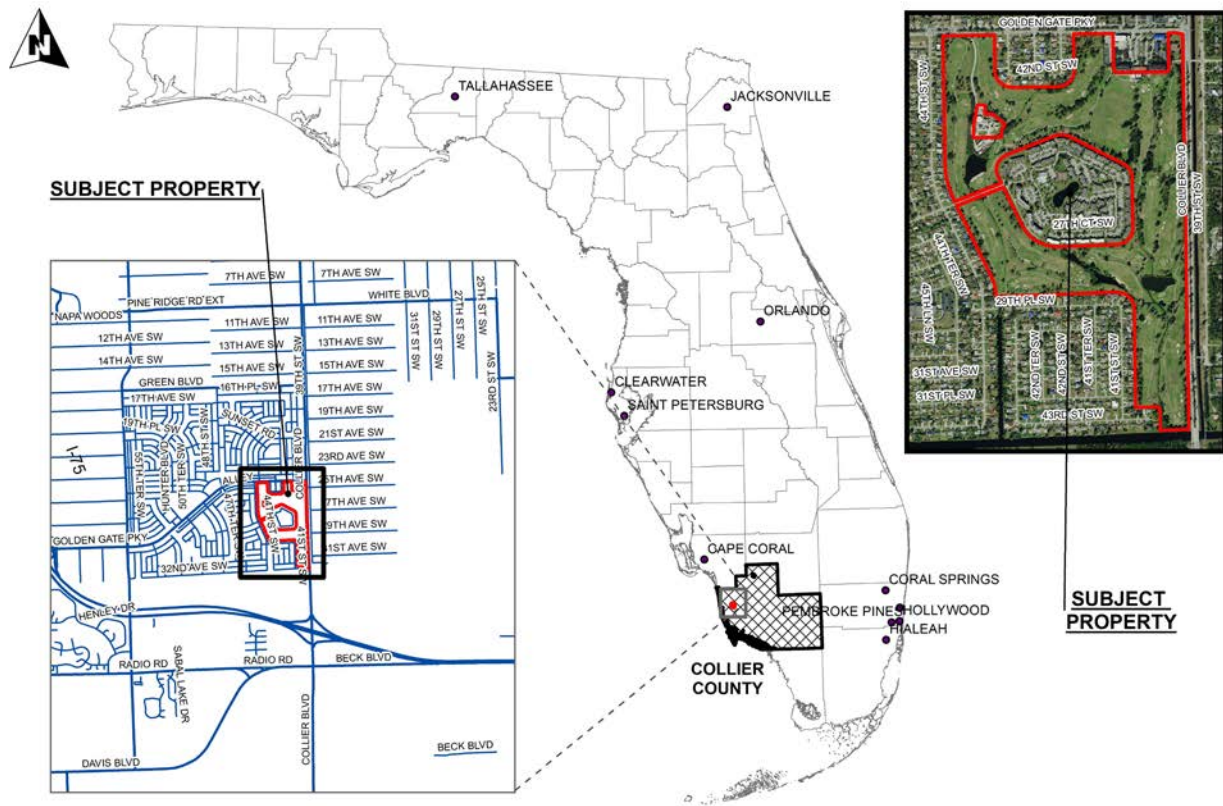


Figure 1. Location Map

1.2 LIMITATIONS AND EXCEPTIONS

This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

ETE warrants that the findings contained in this report have been prepared in general conformance with accepted professional practices at the time of report preparation as applied by similar professionals. Future changes in standards, practices, or regulations cannot be anticipated and have not been addressed. The observations and recommendations presented in this report are time dependent and the findings presented in this report apply solely to site conditions existing at the time when the assessment was performed.

2.0 SITE DESCRIPTION & LOCATION

The Subject Property for this report consists of a single parcel (Folio # 36560040008). The Subject Property is located on the southwest corner of the intersection of Collier Boulevard and Golden Gate Parkway (Figures 1 & 2) in Collier County. According to the Collier County Property Appraiser's website, the Subject Property totals approximately 167.44 acres. The Subject Property is currently developed as an 18-hole golf course, which based on historical aerial review appears to have originally been developed between 1963 and 1973.

Common amongst golf courses, the Subject Property contains a series of cart paths, sand bunkers, rest/bathroom buildings, and lakes scattered throughout the property. A maintenance area containing multiple structures, equipment, and stockpile areas of sand and green sand is located in the northeast portion of the Subject Property, immediately south of a water treatment facility. A swimming pool, tennis courts, and restaurant/bar is located along the northern boundary associated with a hotel (Quality Inn & Suites Golf Resort), which adjoins the Subject Property to the north. See Figure 2 below for an Aerial Map of the Subject Property.



Figure 2. Aerial Site Map

2.1 PREVIOUS ASSESSMENT REPORTS

This section summarizes the previous assessments conducted by ETE on the Subject Property.

Phase I ESA

A Phase I ESA was conducted by ETE in February 2019, in which no direct Recognized Environmental Concerns (RECs) associated with the Subject Property were noted. ETE concluded that based on the historical land usage of the Subject Property as a golf course, and the potential former and current usage of regulated pesticides/herbicides on site, there may be a potential subsurface impact. Historically, the presence of diesel fuel, unleaded gasoline, and various waste oils and lubricants associated with equipment maintenance were noted in the maintenance area. ETE recommended a limited soil sampling assessment to be conducted in the maintenance area to address these potential concerns. ETE also recommended a limited soil sampling assessment on the golf course in depressional areas around known herbicide/fertilizer/pesticide treatment areas (fairways and greens) to determine the subsurface conditions associated with surface water runoff.

Limited Phase II ESA

A Limited Phase II ESA was conducted by ETE in February 2019 to address the conclusions noted in the Phase I ESA above. ETE collected eleven (11) shallow soil samples, roughly 0-2 feet below grade surface (bgs) throughout the Subject Property in general conformance with the FDEP Standard Operating Procedures (SOPs). Five (5) soil samples were obtained from depressional areas throughout the golf course and analyzed for RCRA 8 metals, herbicides, pesticides, and fertilizers. Six (6) soil samples were obtained from the maintenance area and analyzed for RCRA 8 metals, herbicides, pesticides, fertilizers, and total petroleum hydrocarbons. The soils samples were analyzed by Benchmark EnviroAnalytical, Inc. (NELAC Certification #E84167). None of the soil samples analyzed were detected above the FDEPs SCTLs for Commercial/Industrial criteria. Dieldrin was detected in two (2) samples in the maintenance area exceeding the FDEPs SCTL potential leachability criteria to groundwater. Lead was also detected in one of these samples exceeding the FDEPs SCTL potential leachability criteria to groundwater. ETE concluded that a shallow groundwater investigation should be conducted in the maintenance area to determine the potential impact to groundwater from lead and dieldrin based on the leachability criteria.

3.0 LOCAL ENVIRONMENTAL SETTING

This section describes the local geological and hydrogeological characteristics surrounding the Subject Property.

3.1 LOCAL GEOLOGY & SOIL DESCRIPTION

National Resource Conservation Service (NRCS) maps for Collier County were reviewed to determine subsurface soil characteristics beneath the Subject Property.

According to NRCS, the sampling area contains the following historical soil types:

Urban Land-Holopaw-Basinger complex (33)

This soil group underlays portions of the perimeter of the Subject Property. These areas of Urban Land and nearly level, poorly drained soils are in urban areas. Individual areas are blocky to irregular in shape, and they range from 20 to 500 acres in size. Typically, Urban Land consists of commercial buildings, houses, parking lots, streets, sidewalks, recreational areas, shopping centers, and other urban structures where the soil cannot be observed. Typically, the Holopaw soils has a surface layer of dark gray fine sand

about 5 inches thick. The subsurface layer is fine sand to a depth of about 52 inches. The upper part of the subsurface layer is light gray, and the lower part is light brownish gray. The subsoil extends to a depth of about 62 inches. The upper part of the subsoil is dark grayish brown fine sand, and the lower part is dark grayish brown fine sandy loam. The substratum is gray loamy fine sand to a depth of about 80 inches. Typically, the Basinger soil has a surface layer of grayish brown fine sand about 3 inches thick. The subsurface layer is light gray fine sand to a depth of about 25 inches. The subsoil is brown fine sand to a depth of about 44 inches. The substratum is brown fine sand to a depth of about 80 inches.

Udorthents, shaped (36)

This soil group underlays a majority of the Subject Property. These nearly level to undulating, somewhat poorly drained to moderately well drained soils are on golf courses and in adjacent areas where the soil material has been mechanically altered and shaped. Individual areas are elongated and irregular in shape, and they range from 40 to 640 acres in size. The slope is 1 to 6 percent. No single pedon represents Udorthents, but a common profile has a surface layer of mixed grayish brown and pale brown fine sandy loam to a depth of 18 inches. The next layer is gray gravelly fine sand to a depth of about 37 inches. The subsoil is light brownish gray fine sandy loam to a depth of about 47 inches. Limestone bedrock is at a depth of about 47 inches.

3.2 HYDROGEOLOGIC SETTING

The Subject Property is relatively flat with minor undulations in surface topography. Based on the review of the USGS Quadrangle Map Belle Meade NW/26081-B6 (Published 1958, Photo revised 1987) the Subject Property is approximately 11 feet above mean sea level (msl). According to the South Florida Water Management District (SFWMD) and the Florida Geological Survey (FGS) there are two major fresh water aquifers in Collier County, the surficial aquifer system (water table aquifer and lower Tamiami aquifer) and the intermediate/sandstone aquifer system. The water table aquifer and the lower Tamiami aquifer are separated by low permeability, poorly indurated limestones, dolosilts and calcareous sandy clays of the Tamiami confining beds. The water table aquifer is comprised of fine to medium grained, well sorted, quartz sands with some shell and organics (undifferentiated deposits) and sandy biogenic limestones (Tamiami Formation). Typically, the top of the water table aquifer is found approximately three (3) to four (4) feet below grade surface (bgs).

4.0 METHODOLOGY

This section describes the methodology utilized to obtain the groundwater samples.

4.1 SHALLOW GROUNDWATER SAMPLING

Shallow groundwater sampling was conducted by ETE on May 3, 2019, in general conformance with the Florida Department of Environmental Protection's Groundwater Sampling SOPs. Three (3) temporary well locations were selected based on the soil data obtained during the Phase II ESA limited soil sampling event (see Figure 3).

Preferred Drilling Solutions, Inc. (PDS) was subcontracted by ETE (permit #PRW12019041697301) to install, develop, and remove three (3) temporary wells in the maintenance area. Prior to drilling, each location was hand cleared utilizing a hand-auger to approximately five (5) feet bgs. The wells were installed utilizing a Geoprobe direct-push drill rig to a depth of approximately twelve (12) feet bgs. One-inch diameter Schedule 40 PVC containing ten (10) feet of slotted screen and a two (2) feet of riser were

placed in the boring hole and the annular space was filled with silica fine sand. Upon completion of the well install PDS began developing the well utilizing polyethylene tubing and a low-flow peristaltic pump. Groundwater readings were monitored by ETE utilizing an electronic water-level indicator to establish the pump rate so as to not have any drawn-down interference.

The volume of water in each well was calculated in order to establish a single well case volume for purging. Typical purging activities require a minimum of three (3) well case volumes. Field parameters (temperature, pH, specific conductance, dissolve oxygen, and turbidity) are typically obtained following each case volume of water purged from the well. ETE calibrated all equipment prior to the well installation that morning. During the purging activities at temporary monitoring well (TMW) 1 the pH meter was non-responsive, and the dissolved oxygen meter became non-responsive after the third volume casing at TMW-2. The remaining parameters (turbidity, specific conductance, and temperature) were monitored through a minimum of five (5) well casing volumes. Due to the monitoring equipment failure ETE purged each well for approximately one (1) hour to ensure representative shallow groundwater samples and attempt to reduce turbidity. When the available field parameters stabilized and were within the acceptable ranges specified in the FDEP Groundwater Sampling SOPs, the groundwater samples were obtained from each temporary monitoring well. The table below shows the final available field parameter measurements obtained prior to sampling each well location.

FINAL FIELD PARAMETER MEASUREMENTS					
Well Location	Turbidity (NTUs)	Dissolved Oxygen (%)	Specific Conductance (uS)	pH	Temperature (°F)
TMW-1	295	21.6	618	-	78.7
TMW-2	300	-	582	-	79.1
TMW-3	408	-	579	-	79.0

The samples were placed in laboratory-provided jars, sealed, and labeled. All sample containers were placed on ice in a laboratory-provided cooler and transported by courier to Benchmark EnviroAnalytical, Inc. (NELAC Certification #E84167) to be analyzed. The samples were analyzed for lead (EPA Method SM3113B) and dieldrin (EPA Method 8081). ETE provided a chain of custody documentation to the lab.

Following the completion of shallow groundwater sampling the temporary monitoring well locations were marked utilizing a Trimble Geo7x then PDS removed the temporary well and backfilled the boring.

5.0 SHALLOW GROUNDWATER SAMPLING RESULTS

This section presents the results obtained from the LGSA in the field and laboratory analysis. Figure 3 below shows the temporary sampling well locations.



Figure 3. Temporary Monitoring Well Locations Map

5.1 FIELD RESULTS

The groundwater elevation average beneath the maintenance area was approximately four (4) feet bgs. Based on the groundwater elevations the shallow groundwater flow direction appears to be southeast. The surface topography in the maintenance area appears to pitch slightly to the southwest towards the water body south of the maintenance area.

During the initial attempt to install TMW-1 (see Figure 3 above) PDS hit refusal at approximately seven (7) feet bgs. PDS switched their drilling equipment to a rotary drill in order to attempt to advance the boring further and hit refusal at eight (8) feet bgs. Upon retrieval of the rotary drill PDS stated that the drill bit

had broken due to something very hard such as “thick metal”. The driller for PDS indicated that the drill bit being utilized is capable of drilling through concrete, tree stumps, and into limestone bedrock. Upon inspecting the soils at the bottom of the rotary drill a petroleum odor was noted. A grab sample was obtained in mason jar, placed in a cooler with ice, and sent to the Benchmark EnviroAnalytical, Inc. to be analyzed for Total Petroleum Hydrocarbons (TPH) via FI-Pro method. ETE provided a chain of custody documentation to the lab. The location of TMW-1 was moved roughly 20 feet to the east of the anticipated location.

5.2 LABORATORY RESULTS

A table summarizing the results of the shallow groundwater sampling can be seen below. The shallow groundwater results were compared to the Chapter 62-777, F.A.C., Groundwater Cleanup Target Levels (GCTLs) and the FDEP Practical Quantitation Limits (PQLs). Although the GCTL for Dieldrin is listed as 0.002 ug/L the FDEP has compiled a Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits document referencing chapter 62-777, F.A.C., in which they provide target PQLs for selected analytes where the laboratory’s Minimum Detection Levels (MDLs) are frequently found to be higher than CTLs utilizing the most current technology. As per this document the target PQL for Dieldrin is 0.1 ug/L and the laboratory PQL for this analyte achieved 0.05 ug/L. Complete laboratory results can be found in Appendix A.

SHALLOW GROUNDWATER SAMPLING RESULTS (ug/L)								
Parameter	Test Method	GCTL	PQL	GW-1	GW-1D	GW-2	GW-3	EB-1
Lead	SM3113B	15	-	1.41 I	1.63 I	1.79 I	1.22 I	0.716 I
Dieldrin	8081	0.002	0.05	0.017 UC6	0.017 U	0.020 IC7	0.017 U	0.017 U

I = Reported value is between the laboratory MDL and the PQL

U = Analyte analyzed but not detected at the value indicated.

C6 = Precision between duplicate matrix spikes of the same sample was outside the acceptance limits.

C7 = Confirmation result exceeds 40% RPD, lower result reported due to interference.

Lead was detected at low concentrations and below the GCTL. Dieldrin was detected between the laboratory MDL and PQL in one sample (GW-2), all other samples were below the GCTL and/or PQL.

A table summarizing the results of the soil sample obtained from the base of the drill bit can be seen below. The soil sample result was compared to the Chapter 62-777, F.A.C., Soil Cleanup Target Level (SCTL) Commercial/Industrial criteria and the SCTL for leachability potential based on groundwater criteria. Any exceedances to the SCTLs are bolded and highlighted in yellow. Complete laboratory results can be found in Appendix A.

SOIL SAMPLING RESULTS (mg/kg)				
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL (Leachability to Groundwater)	SS-12
Lead	FI-Pro	2,700	340	620

Based on the table above, the soil sample obtained from the bottom of the rotary auger bit is below the SCTL for Commercial/Industrial standard but above the SCTL for leachability to groundwater criteria.

5.3 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

QA/QC samples were obtained during this LSGA including a duplicate sample (GW-1D) obtained from TMW-1. An equipment blank (EB-1) sample was obtained utilizing a powder-free nitrile glove that was used to collect the sample. A slight detection of lead was noted in the sample, however does not appear to have affected the sample results. No issues were noted in the QA/QC data collected during the LSGA.

6.0 CONCLUSIONS AND RECOMMENDATIONS

ETE has conducted a LSGA on the Golden Gate Golf Course (Subject Property), located in Naples, Collier County, Florida 34116 on behalf of Collier County, American Government Services, Commonwealth Land Title Insurance Company, and Davidson Engineering, Inc. This LSGA was conducted on June 3, 2019 and included field sampling and laboratory analysis three (3) temporary monitoring well locations including two (2) QA/QC samples for lead and dieldrin. A soil sample was obtained from the bottom of a rotary auger drill bit that contained a petroleum odor and analyzed for Total Petroleum Hydrocarbons.

Following the LSGA sampling activities ETE conducted a further search into the potential for USTs on the Subject Property. No information regarding USTs on the Subject Property was noted in the EDM report utilized in the Phase I ESA. In the EDM report the Facility ID number associated with the Subject Property is 8733269 and the recent discovery of documentation lists the Facility ID number as 118733269. ETE believes that this is perhaps why this historical documentation did not show up in the original EDM Report. Copies of the historical documentation recently reviewed can be found in Appendix C. A summary of the historical documentation recently reviewed is as follows:

- A Florida Department of Environmental Regulation (FDER), now the FDEP, Stationary Tank Registration/Notification form dated November 27, 1984, indicating the presence of two (2) 550-gallon USTs, one containing diesel fuel and the other containing unleaded gasoline. The tank disposal method listed on the tank checklist is "B" which indicates "removal" for both USTs, however it is crossed out on the document.
- A FDER Stationary Tank Registration/Notification form dated November 25, 1987, indicating the presence of two (2) 550-gallon USTs, one containing diesel fuel and the other containing unleaded gasoline. The tank checklist indicates that both USTs have manually sampled wells for a monitoring system and are both filled.
- A FDER letter dated May 13, 1988, indicating that the FDER will be conducting inspections for registered stationary storage tank facilities to determine compliance. The letter indicates an inspection will be conducted on the week of May 23, 1988.
- A Stationary Tank Facility Compliance Inspection checklist dated May 27, 1988 indicating that no violations were found. In the tank registration data form the two (2) USTs are listed as active with overfill protection and no reported piping and monitoring system. In the notes portion the inspector indicates that there are no signs of gross contamination but that some diesel had been spilled on the concrete and asphalt at the pump.
- A FDER Pollutant Storage Tank System Inspection Report Form dated April 12, 1991 indicating a closure assessment was conducted by Law Environmental. The form indicates the locations of the USTs and that all samples to three (3) feet were less than 3ppm. The form also notes that they were not able to penetrate the rock and will need to get a drill rig to sample groundwater. No analytical data was noted in the file.

The laboratory results from the LSGA are below the GCTLs and/or PQLs established by the FDEP for lead and dieldrin. The minor detection of dieldrin in the GW-2 sample appears to be isolated. In conversation with a representative from the FDEP via phone conversation on June 4, 2019, they indicated that in many cases the FDEP has adopted the PQLs as the standard for comparing results over the CTLs. No potable water supply wells were noted directly down gradient of the sampling area. Based on this information no further groundwater assessment is recommended.

The soil sample obtained from the bottom of the rotary auger drill bit was below the SCTL Commercial/Industrial criteria, however was above the SCTL for leachability to groundwater criteria. Based on the historical documentation reviewed and the refusal encountered by PDS during the drilling activities it is likely that the USTs are still present. It is unsure if the sample obtained was from within one of the USTs or adjacent to them. ETE recommends that ground-penetrating radar (GPR) be utilized to determine the presence and extent of the UST locations. If the USTs are present ETE recommends that they be excavated and properly disposed of. The soils surrounding the USTs should be verified for the potential presence or absence of contamination. A formal closure assessment report should be conducted.

7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR part 312. I have the specific qualifications of education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.



Andrew McAuley, Environmental Scientist
Earth Tech Environmental, LLC.
June 10, 2019

8.0 REFERENCES

Collier County Property Appraiser, 2019. <http://www.collierappraiser.com>

FDEP Information Portal, 2019. <http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents>

FDEP Map Direct, 2019. <http://castg.dep.state.fl.us/mapdirect/>

NRCS Soil Survey of Collier County, 1998.

FDEP SOP 001/01 FS 2200 Groundwater Sampling, Revised January 2017.

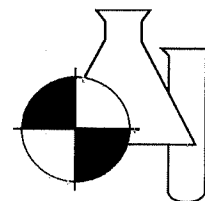
FDEP Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C., February 2005.

FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits – Document Referenced in Chapters 62-770, 62-777, 62-780, 62-782, and 62-785, F.A.C, October 2004.

APPENDIX A
BENCHMARK ENVIROANALYTICAL, INC. LABORATORY TEST REPORTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19050279

Earth Tech Environmental
10600 Jolea Ave.
Bonita Springs, FL 34135

Project Name : GOLDEN GATE GOLF COURSE

Date Received : 05/06/2019

Time Received : 1410

Jennifer Bobka

Submission Number: 19050279

Sample Number: 001

Sample Description: GW-1

Sample Date: 05/03/2019

Sample Time: 1250

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
DIELDRLN	0.017 UC6	UG/L	0.017	0.050	8081	05/13/2019 13:30	E83182
LEAD	1.41 I	UG/L	0.670	2.680	SM3113B	05/07/2019 10:44	CF/BLB

Submission Number: 19050279

Sample Number: 002

Sample Description: GW-1D

Sample Date: 05/03/2019

Sample Time: 1230

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
DIELDRLN	0.017 U	UG/L	0.017	0.050	8081	05/13/2019 19:48	E83182
LEAD	1.63 I	UG/L	0.670	2.680	SM3113B	05/07/2019 10:49	CF/BLB

Submission Number: 19050279

Sample Number: 003

Sample Description: GW-2

Sample Date: 05/03/2019

Sample Time: 1405

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
DIELDRLN	0.020 IC7	UG/L	0.017	0.050	8081	05/13/2019 20:00	E83182
LEAD	1.79 I	UG/L	0.670	2.680	SM3113B	05/07/2019 10:55	CF/BLB

Submission Number: 19050279

Sample Number: 004

Sample Description: GW-3

Sample Date: 05/03/2019

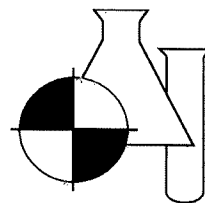
Sample Time: 1500

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
-----------	--------	-------	-----	-----	-----------	--------------------	---------

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DIELDRIN	0.017 U	UG/L	0.017	0.050	8081	05/13/2019 20:12	E83182
LEAD	1.22 I	UG/L	0.670	2.680	SM3113B	05/07/2019 11:00	CF/BLB

Submission Number: 19050279

Sample Date: 05/03/2019

Sample Number: 005

Sample Time: 1530

Sample Description: EB-1

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
DIELDRIN	0.017 U	UG/L	0.017	0.050	8081	05/13/2019 20:24	E83182
LEAD	0.716 I	UG/L	0.670	2.680	SM3113B	05/07/2019 11:06	CF/BLB

05/15/2019

Dale D. Dixon / Laboratory Director

Date

Tülay Tanrisever / Kara Peterson - QC/QA Officers

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Estimated value. Surrogate recovery limits exceeded.

J2 = Estimated value. No quality control criteria exists for component.

J3 = Estimated value. Quality control criteria for precision or accuracy not met.

J4 = Estimated value. Sample matrix interference suspected.

J5 = Estimated value. Data questionable due to improper lab or field protocols.

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported.

N = Presumptive evidence of presence of material.

O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* = Not reported due to interference.

Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

NOTES:

MBAS calculated as LAS; molecular weight = 340.

PQL = 4xMDL.

ND = Not detected at or above the adjusted reporting limit.

X = Value exceeds MCL.

G1 = Accuracy standard does not meet method control limits, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.

COMMENTS:

C6 = Precision between duplicate matrix spikes of the same sample was outside acceptance limits.

C7 = Confirmation result exceeds 40% RPD, lower result reported due to interference

For questions or comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL 34221
 941-723-9986
 941-723-6061

7 Day TAT

Client Name: Earth Tech Environmental, LLC
 10600 Jolea Ave.
 Bonita Springs FL 34135
 Andrew McAuley 516-647-9699 / office: 239-304-0030
andrew@eteflorida.com

Project Name: Golden Gate Golf Course
Sample Type¹: Grab **Sample Matrix²:** GW

Laboratory Submission # : 190 50279		Laboratory Sample #
Station ID	Parameters, Preservative ⁴ , Container Type ³	
Lead SM3113	Dieldrin 8081	
1 x 1 Quart Plastic	1 x 950mL Amber Glass	
1:4 HNO ₃	Na ₂ SO ₃ + HCl	
GW-1	Date & Time: 5/3/19 @ 12:50	1
GW-1D	Date & Time: 11 @ 12:30	2
GW-2	Date & Time: 11 @ 14:05	3
GW-3	Date & Time: 11 @ 15:00	4
EB-1	Date & Time: 11 @ 15:30	5
	Date & Time:	

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 "Preservative" is used to indicate whether the sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

- Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
- The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
- All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
- The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

1	Collector: <i>R. J. [Signature]</i>	Date: 5/3/19	Time: 16:16	Received By: C N	Date: 5/6/19	Time: 8:30
2	Relinquished By: C N	Date: 5/6/19	Time: 1136	Received By: <i>[Signature]</i>	Date: 5/6/19	Time: 1136
3	Relinquished By: <i>[Signature]</i>	Date: 5/6/19	Time: 12:00	Received By: 15. <i>[Signature]</i>	Date: 5/6/19	Time: 12:00
4	Relinquished By: 15. <i>[Signature]</i>	Date: 5/6/19	Time: 1410	Received By: <i>[Signature]</i>	Date: 5-6-19	Time: 1410

Laboratory Sample Acceptability
 pH < 2 ☒ Temperature: 0 60C



ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Post Dr.
Orlando, FL 32824
(407) 850-6945
(407) 828-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-8089
(904) 286-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3050 Fax (919) 467-3515

Page _____ of _____

[illegible]

Page 4 of 4

QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 9E10009 - EPA 3510C

Blank (9E10009-BLK1)

Prepared: 05/10/2019 08:50 Analyzed: 05/13/2019 12:05

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.017	U	0.050	ug/L							
2,4,5,6-TCMX	0.48			ug/L	1.00		48	38-142			
Decachlorobiphenyl	0.26			ug/L	1.00		26	34-159			

LCS (9E10009-BS1)

Prepared: 05/10/2019 08:50 Analyzed: 05/13/2019 12:54

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.90		0.050	ug/L	1.00		90	46-127			
2,4,5,6-TCMX	0.85			ug/L	1.00		85	38-142			
Decachlorobiphenyl	0.96			ug/L	1.00		96	34-159			

Matrix Spike (9E10009-MS1)

Prepared: 05/10/2019 08:50 Analyzed: 05/13/2019 13:06

Source: AC03456-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.93		0.050	ug/L	1.00	0.017 U	93	46-127			
2,4,5,6-TCMX	0.74			ug/L	1.00		74	38-142			
Decachlorobiphenyl	0.59			ug/L	1.00		59	34-159			

Matrix Spike Dup (9E10009-MSD1)

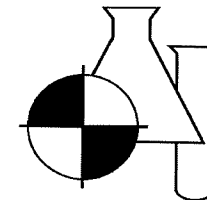
Prepared: 05/10/2019 08:50 Analyzed: 05/13/2019 13:18

Source: AC03456-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.72		0.050	ug/L	1.00	0.017 U	72	46-127	25	21	QM-11
2,4,5,6-TCMX	0.62			ug/L	1.00		62	38-142			
Decachlorobiphenyl	0.49			ug/L	1.00		49	34-159			

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

Submission Number: 19050279

Project Name: GOLDEN GATE GOLF COURSE

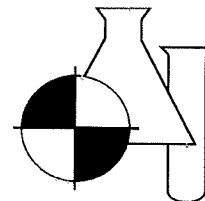
QC REPORT

SUBMISSION NUMBER	SAMPLE NUMBER	METHOD	ANALYTE	ANALYSIS DATE/TIME	QC FLAG	QC VALUE	SAMPLE RESULT	LR RESULT	LR %RSD	SPK RESULT	STD-SPK %REC
		SM3113B	LEAD	05/07/2019 11:14	LCS MID	20.00	19.800				99.0
		SM3113B	LEAD	05/07/2019 11:39	LCS MID	20.00	21.500				107.5
		SM3113B	LEAD	05/07/2019 09:42	MB	0.00	0.535				
		SM3113B	LEAD	05/07/2019 11:11	MB	0.00	0.626				
		SM3113B	LEAD	05/07/2019 11:36	MB	0.00	0.495				
19050273 - 001	514260	SM3113B	LEAD	05/07/2019 11:25	MS	20.00	0.673			18.200	87.6
19050274 - 001	514261	SM3113B	LEAD	05/07/2019 10:10	MS	20.00	0.696			17.900	86.0
19050273 - 001	514260	SM3113B	LEAD	05/07/2019 11:31	MSD		18.200	17.900	1.79		
19050274 - 001	514261	SM3113B	LEAD	05/07/2019 10:16	MSD		17.900	19.100	6.37		
		SM3113B	LEAD	05/07/2019 09:45	QCS	20.00	21.600				108.0

Comments:

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19050347

Earth Tech Environmental
10600 Jolea Ave.
Bonita Springs, FL 34135

Project Name : GOLDEN GATE GOLF COURSE
Date Received : 05/07/2019
Time Received : 1520

Jennifer Bobka

Submission Number: 19050347

Sample Number: 001

Sample Description: SS-12

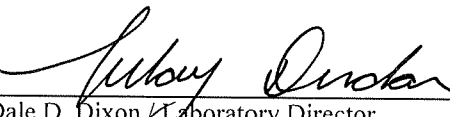
Sample Date: 05/03/2019

Sample Time: 1030

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
PETROLEUM RANGE ORGANICS	620	MG/KG	20	FL-PRO	05/13/2019 22:52	E83182

All values reported in UG/KG, MG/KG #/GRAM and MPN/GRAM are on a dry weight basis


Dale D. Dixon / Laboratory Director

05/16/2019

Date

Tülay Tanrisever / Kara Peterson - QC/QA Officers

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.
J2 = Estimated value. No control criteria exists for this component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
L = Off-scale high. Value is known to be > the value reported.
Q = Sample held beyond accepted hold time.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES:

PQL = 4xMDL.
X = Value exceeds MCL.
2: SOUR calculations are based on Total Solids.
J2: Per client request, analysis conducted without method blank.

For questions and comments regarding these results, please
contact us at (941) 723-9986.

Results relate only to the samples.

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL. 34221
 941-723-9986
 941-723-6061

Client Name:

Earth Tech Environmental, LLC
 10600 Jolea Ave.
 Bonita Springs FL 34135
 Andrew McAuley 516-647-9699 / office: 239-304-0030
andrew@eteflorida.com, Jennifer Bobka
jenniferb@eteflorida.com

7 Day TAT (sub-contract 6 day)

Project Name: **GOLDEN GATE GOLF COURSE**

Laboratory Submission # : 190 50347	
Station ID SS-12	Sample Type ¹
	Sample Matrix ²
	Parameters, Preservative ⁴ , Container Type ³
	Date & Time:
	Soil
	G
	TPH/FL-PRO
	1 x 12 Oz. Glass
	Plain
	5/3/19 @ 10:30
	1

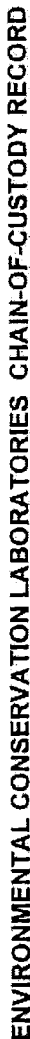
1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

- Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
- The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
- All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
- The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Collector: <i>[Signature]</i>	Date: 5/6/19	Time: 15:00	Received By: <i>[Signature]</i>	Date: 5/7/19	Time: 09:35
Relinquished By: <i>[Signature]</i>	Date: 5/7/19	Time: 12:00	Received By: <i>[Signature]</i>	Date: 5-7-19	Time: 1:30 pm
Relinquished By: <i>[Signature]</i>	Date: 5-7-19	Time: 15:20	Received By: <i>[Signature]</i>	Date: 5-7-19	Time: 1:52:0
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Laboratory Sample Acceptability
 pH < 7 Temperature: 0.6°C



4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

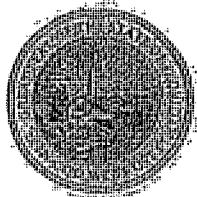
102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3580 Fax (919) 467-3551

Page | of |

[illegible]

Note: All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist.

APPENDIX B
STATE OF FLORIDA WELL COMPLETION REPORT



STATE OF FLORIDA WELL COMPLETION REPORT

- ☐ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(*Denotes Required Fields Where Applicable)

☒ Delegated Authority (If Applicable) Collier

Date Stamp

Official Use Only

PRW12019041647301

1.*Permit Number _____ *CUP/WUP Number _____ *DID Number _____ 62-524 Delineation No. _____

2.*Number of permitted wells constructed, repaired, or abandoned 3 *Number of permitted wells not constructed, repaired, or abandoned 1

3.*Owner's Name Robert & Mario Vocisano 4.*Completion Date 5-3-19 5. Florida Unique ID _____

6. 4100 Golden Gate Parkway, Naples FL 34116
*Well Location - Address, Road Name or Number, City, ZIP

7.*County Collier *Section 27 Land Grant _____ *Township 49 *Range 26

8. Latitude _____ Longitude _____

9. Data Obtained From: GPS ☒ Map Survey Datum: NAD 27 NAD 83 WGS 84

10.*Type of Work: ☒ Construction ☐ Repair ☐ Modification ☐ Abandonment

11.*Specify Intended Use(s) of Well(s):
☐ Domestic ☐ Landscape Irrigation ☐ Agricultural Irrigation ☐ Site Investigation
☐ Bottled Water Supply ☐ Recreation Area Irrigation ☐ Livestock ☐ Monitoring
☐ Public Water Supply (Limited Use/DOH) ☐ Nursery Irrigation ☐ Test
☐ Public Water Supply (Community or Non-Community/DEP) ☐ Commercial/Industrial ☐ Earth-Coupled Geothermal
☐ Class I Injection ☐ Golf Course Irrigation ☐ HVAC Supply
☐ HVAC Return
Class V Injection: ☐ Recharge ☐ Commercial/Industrial Disposal ☐ Aquifer Storage and Recovery ☐ Drainage
Remediation: ☐ Recovery ☐ Air Sparge ☒ Other (Describe) Temp wells with GW Sample
Other (Describe) _____

12.*Drill Method: ☐ Auger ☐ Cable Tool ☐ Rotary ☐ Combination (Two or More Methods) ☐ Jetted ☐ Sonic
☐ Horizontal Drilling ☒ Hydraulic Point (Direct Push) ☐ Other _____

13.*Measured Static Water Level 3.8 ft. Measured Pumping Water Level _____ ft. After _____ Hours at _____ GPM

14.*Measuring Point (Describe) _____ Which is _____ ft. Above _____ Below Land Surface *Flowing: ☐ Yes ☒ No

15.*Casing Material: ☐ Black Steel ☐ Galvanized ☒ PVC ☐ Stainless Steel ☐ Not Cased ☐ Other _____

16.*Total Well Depth 12 ft. Cased Depth _____ ft. *Open Hole: From _____ To _____ ft. *Screen: From _____ To _____ ft. Slot Size _____

17.*Abandonment: ☐ Other (Explain) _____
From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

18.*Surface Casing Diameter and Depth:
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

19.*Primary Casing Diameter and Depth:
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

20.*Liner Casing Diameter and Depth:
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

21.*Telescope Casing Diameter and Depth:
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____
Dia _____ in. From _____ ft. To _____ ft. No. of Bags _____ Seal Material (Check One): ☐ Neat Cement ☐ Bentonite ☐ Other _____

22. Pump Type (If Known):
☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine
Horsepower _____ Pump Capacity (GPM) _____
Pump Depth _____ ft. Intake Depth _____ ft.

23. Chemical Analysis (When Required):
Iron _____ ppm Sulfate _____ ppm Chloride _____ ppm
☐ Laboratory Test ☐ Field Test Kit

24. Water Well Contractor:
*Contractor Name Gregory Campbell *License Number 2613 E-mail Address greg@pds-florida.com
*Contractor's Signature Greg Campbell *Driller's Name (Print or Type) Ti Williams
(I certify that the information provided in this report is accurate and true.)

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
2379 BROAD STREET, BROOKSVILLE, FL 34604-6899
PHONE: (352) 796-7211 or (800) 423-1476
WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
4049 REID STREET, PALATKA, FL 32178-1429
PHONE: (386) 329-4500
WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)
PHONE: (850) 539-5999
WWW.NWFWMD.STATE.FL.US

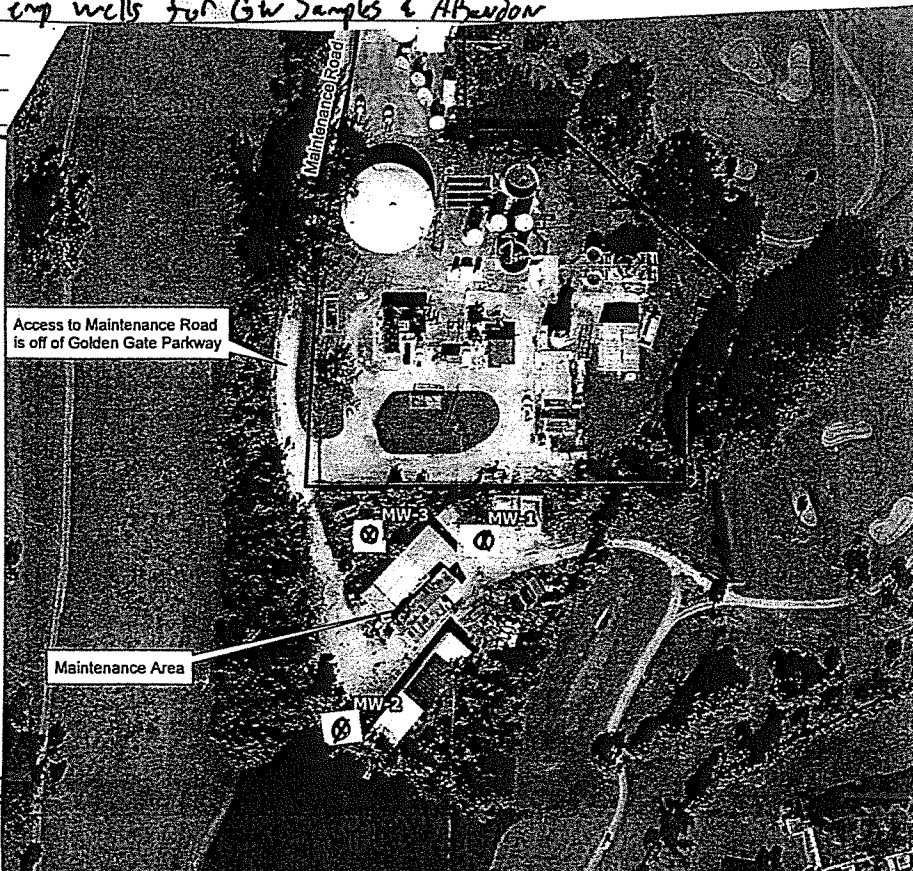
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX 24680
3301 GUN CLUB ROAD
WEST PALM BEACH, FL 33416-4680
PHONE: (561) 686-8800
WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
9225 CR 49
LIVE OAK, FL 32060
PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)
WWW.MYSUWANNEERIVER.COM

*DRILL CUTTINGS LOG (Examine cuttings every 20 ft. or at formation changes. Note cavities and depth to producing zone. Grain Size: F=Fine, M=Medium, and C=Coarse)

[illegible]

Comments: 3- 1" x 12' Temp wells for Gw Samples & Abandon



APPENDIX C HISTORICAL DOCUMENTATION FOR USTs

BEST AVAILABLE COPY

Department of Environmental Regulation

Stationary Tank Registration/Notification Form

DATA ENTERED

Form 17-1.218(2)

JUL 14 1987

GOLDEN GATE INN&COUNTRY CLUB
4100 GOLDEN GATE PKY
NAPLES

FL 33999

FACILITY LOCATION

ADDRESS: 4100 GOLDEN GATE PKY
CITY: NAPLES

FL 33999

Use this form to comply with the following requirements of the
Stationary Tank Rule Chapter 17-61, Florida Administrative Code:

- Each owner or operator shall register the following with the department:
 - All existing facilities by December 31, 1984 (Questions 1-19)
 - All new storage systems or facilities at least 10 days prior to the start of installation of tanks except in the cases of emergency replacement (Questions 1-19)
 - All non-pollutant containing installation which is to be converted to a facility, at least 10 days prior to the placement of pollutants in such a facility (Questions 1-19)
- Each owner or operator shall notify the department of the following:
 - All storage systems within 10 days of abandonment (Questions 1-12, 16, 20)
 - Facility sale within 10 days of sale. Notice shall be made by the seller. (Answer questions 1-7, and 11. Question 7 about the new owner.)
 - Retrofitting within 10 days of completion (Questions 1-19)
- You may notify the department of a change of operator (Questions 1-6)

30563 Agency Use Only

SIC799200000

11

PLEASE PRINT OR TYPE

- Facility number (DER will provide this number) 118733219
- Federal Employment Identification (number used to file IRS forms) 59-1551223
- County Code (see enclosed letter) 11
- Operator of facility Bob PEREZ (SUPER) SAL FORIANI (MANAGER)
Effective date (only for change of operator) _____ Telephone number 1813 455-1010 (2489)
- Company/Person owning tanks and piping GOLDEN GATE INN & COUNTRY CLUB
Address 4100 GOLDEN GATE PKY
Contact person Bob PEREZ OR SAL FORIANI Telephone number 1813 455-2489 (1010)
Effective date (only for change of owner) _____
- How many tanks at this location have an individual storage capacity of greater than 550 gallons and store vehicular fuel made from petroleum?
2 Underground _____ Aboveground _____
- Facility location: Latitude _____ Longitude _____ Section 27 Township NAPLES Range 26E
This information is listed on property deeds, and in the offices of the property appraiser and tax assessor.
49S
- Sketch the facility on a separate page showing the APPROXIMATE location of buildings, tanks, and dispensers.
 - Draw a line from tank to dispenser to show which are connected by piping.
 - Label each tank as Tank 1, Tank 2, etc.
 - Write the date and your facility number, if known, or name and address exactly as it appears above.
 - Keep a copy of your sketch.

REFER TO TANKS BY THESE LABELS IN ANY COMMUNICATION WITH THE DEPARTMENT
DESCRIBE PIPING BY THE NUMBER OF THE TANK IT IS ATTACHED TO

11 TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL INFORMATION SUBMITTED ON THIS FORM IS TRUE, ACCURATE, AND COMPLETE

Name of owner, operator or authorized representative

Signature of owner, operator or authorized representative

KEEP A COPY OF THIS FORM FOR YOUR RECORDS

MAIL TO: DER Stationary Tank Registration
2600 Blair Stone Road
Room 603
Tallahassee, Florida 32301

SOLID WASTE
SUBSECTION

[illegible]

BEST AVAILABLE COPY

Und-GRD FORM

RECEIVED
D.E.R.

Department of Environmental Regulation
FEDERAL/STATE STORAGE TANK NOTIFICATION FORM
Form 17-61.090(3)

NOV 25 PM 1:09

PLEASE PRINT OR TYPE

(1) DER facility number (if known) 1187 33269
(2) County code 11
(3) This information is: original data revision

(4) Facility type (see code list (4) on back) M. DEC 2 1987

(5) Facility name GOLDEN GATE INN
Street address/city/state/zip 4100 GOLDEN GATE PARKWAY, NAPLES, FL. 33999

(6) Operator CRAIG NORVELL Telephone # (813) 455-1010
Mailing address/city/state/zip 4100 GOLDEN GATE PARKWAY, NAPLES, FL. 33999
New Operator date (only for change of Operator) / /

(7) Company/Person owning tank(s) and piping GOLDEN GATE INN
Company address/city/state/zip 4100 GOLDEN GATE PARKWAY, NAPLES, FL. 33999
Contact Person CRAIG NORVELL Telephone # (813) 455-1010
New Owner date (only for change of Owner) / /

(8) Location (optional): Latitude ° ' " Longitude ° ' "
Section Township Range

(9) Do you have any DER non-registered aboveground tanks holding any of these substances at your facility? Yes No X

PLEASE FILL OUT ONE LINE FOR EACH TANK WITH CODES LISTED ON BACK

Fill out columns (10) through (17) for tanks in use, and (10) through (19) for tanks out of use

(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
	500 gal								
x	500 gal								
		B							
		M							
				D					
						B			
							A		
					X				

To the best of my knowledge and belief all information submitted on this form is true, accurate and complete.

CRAIG NORVELL

Print name and title of owner, operator or authorized person

Craig Norvell
Signature

11/23/87

Date

NOTE: PUT X IF ANSWER IS UNKNOWN. This form may be reproduced. For each tank, whether in use or out of use, use one row across. Use more than one letter per column, if applicable. When a mixture of several hazardous substances is stored in one tank, enter the name of the substance of greatest quantity. Provide a sketch of tank location in reference to a stationary structure. The tank number on the sketch must agree with the number on the form. Attach extra pages if necessary and write your facility number, if known, or name and address, exactly as it appears on the form.

INFORMATION CODE LIST

List (4)	List (10)	List (11)	List (12)	List (13)	List (14)
Facility Type	Tank Number	Tank Size Gallons.	Tank Content	Tank Installation Date. Month/Year	Underground Tanks
A. service station.			A. loaded gasoline.		A. has overfill protection.
B. residence.			→ B. unleaded gasoline.		B. is interior lined.
C. business.			C. unleaded gasohol.		C. is painted/asphalted steel
D. bulk petroleum storage.			D. vehicular diesel.		→ D. is of unknown type.
E. industrial plant.			E. aviation fuel.		E. is fiberglass type.
F. federal government (give GSA#).			F. aviation gas.		F. is fiberglass clad steel.
G. state government.			G. jet fuel.		G. is sacrificial anode type.
H. local government.			H. concrete.		H. is impressed current type.
I. collection station.			I. sand.		I. is double walled.
K. bulk chemical storage.			J. empty.		J. is concrete.
L. chemical user facility.			K. kerosene.		K. in secondary containment.
→ M. agricultural facility.			L. used (waste) oil.		L. is other type (specify).
N. facility on Indian land.			→ M. diesel (boilers & generators)		
S. small user facility.			N. loaded gasohol.		
			O. new oil.		
			V. hazardous substance (write in name or chemical abstract service (CAS) number.		
			W. water.		
			Z. other (specify).		

List (15) *

Integral Piping System has:

A. no parts in contact with the soil.

Parts contacting the soil which are:

- B. unprotected metal.
- C. built of corrosion resistant materials.
- D. corrosion resistant coated.
- E. cathodically protected.
- F. double walled.
- G. within a secondary containment.
- H. interior lined.

List (16)

Monitoring System is:

- A. automatically sampled well(s).
- B. manually sampled well(s).
- C. groundwater monitoring plan.
- D. SPCC plan.
- E. well/detector in secondary containment.
- F. inground detector.
- G. within walls of doublewalled tank.
- H. continuous in piping.
- I. not required.

List (17)

Tank Status

- A. filled.
- B. removed.
- C. retrofitted.
- F. abandoned.
- Hazardous Substance Tanks:
- P. permanently out of use.
- T. temporarily out of use.
- V. brought into use after 5/8/86.

List (18)

Gallons Left

List (19)

Date of Last Use.
Month/Year

MAIL TO: DER Stationary Tank Registration
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

KEEP A COPY OF THIS FORM AND SKETCH FOR YOUR FILES

Facility Detail

Facility ID: 8733269	Facility Status: OPEN	Date: 15-JUL-1987
County: 11 COLLIER	District: SD	Name Update: 29-FEB-2000
Name: GOLDEN GATE INN & CNTRY CLUB		Addr Update: 29-FEB-2000
Address: 4100 GOLDEN GATE PKWY		
Address2:		Account Status:
City: NAPLES	FL 33999-6522	
Onsite Mgr: VINGSON, JONATHAN	Phone: 813-455-2489	ASTC: 0 USTC: 0
Facility Type: C - Fuel user/Non-retail		DEP Contract Owned?: N
Financial Resp:		
Insurance Comp:	Coverage Period:	-
Cleanup Status: -		Effective:
Owner Name: GOLDEN GATE INN & COUNTRY CLUB		Primary Role: ACCT OWN
Address: 4100 GOLDEN GATE PKY		Owner ID#: 8567
City/St/Zip: NAPLES, FL 33999-6522		Begin Date: 15-JUL-1987
Last Updated: 01-MAR-1997	Phone: 813-455-1010	Bad Address?: N
Contact: CRAIG NORVELL		

Facility status.
Count: *1

<List><Replace>

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA DISTRICT

2269 BAY STREET
FORT MYERS, FLORIDA 33901-2896
(813)332-2667



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
PHILIP R. EDWARDS
DISTRICT MANAGER

May 13, 1988

Craig Norvell
Golden Gate Inn & Country Club
4100 Golden Gate Parkway
Naples, Florida 33999

Re: Collier County-STK
Golden Gate Inn &
Country Club
DER Facility No. 118733269

Dear Mr. Norvell:

The Department of Environmental Regulation is currently inspecting registered stationary storage tank facilities in the South Florida District. The purpose of our inspection is to determine if the facilities are in compliance with Chapter 17-61, Florida Administrative Code, Stationary Tanks. Enclosed is an example of the checklist which will be utilized by our inspectors. Not all 24 items, however, may be applicable to your facility.

In order that we may conduct the inspection in a timely manner, you are required to have the following items available at your facility:

1. All records associated with the tanks, e.g., inventory, monitoring, repairs, etc. for the past two (2) years;
2. If monitoring wells have been installed at the facility and are locked, keys should be available in order to allow an inspection.

Our inspectors will provide appropriate identification at the time of the inspection. Please advise your employees of our intended visit the week of May 23, 1988 to avoid any potential confusion. Should you have any questions concerning this compliance inspection, please call Jeff Gould at 813/332-2667.

Sincerely,

Jeffrey G. Gould
Environmental Specialist
Storage Tanks Program

JGG
Enclosure(s)
cc: Bob Perez, Operator

STATIONARY TANK FACILITY COMPLIANCE INSPECTION CHECKLIST

Facility ID: 118733269	Time Spent: HH:MM 6:15	Facility Alternate:
Facility Name: Golden Gate Inn + Country Club		
Street Address: 4100 Golden Gate Parkway		
City: Naples	State: Florida	Zip: 33999
Date Inspection Completed: 5/27/88	Inspector's Initials: JEG	Project Number:

#	RULE CITATION	APPLIES TO*	REQUIREMENT	#	A N/A	B NO VIOLATIONS FOUND	C IN VIOLATION
1	17-61.05(4)(a)1.	U V	Inventory records	1	✓		
2	17-61.05(4)(a)2.	U V	Monitoring system records	2	✓		
3	17-61.05(4)(a)3.	U V H	Retrofitting records	3	✓		
4	17-61.05(4)(a)4.	U V H	Maintenance examination records	4	✓		
5	17-61.05(4)(a)5.	V	Interior examination records	5	✓		
6	17-61.05(4)(a)8.	U V H	Repair records	6	✓		
7	17-61.05(4)(c)2.	U V	Inventory reconciliation	7	✓		
8	17-61.05(4)(c)3.	U V	Investigation of significant loss/gain	8	✓		
9	17-61.05(4)(a)6.	U	NFPA 329 Test	9	✓		
10	17-61.05(4)(a)7.	U V H	Pipe test records	10	✓		
11	17-61.05(1)(b)4.	U V	Notification of failed test	11	✓		
12	17-61.05(1)(b)5.	U V H	Notification of surface discharge	12	✓		
13	17-61.05(1)(b)6.	U V H	Notification of monitor system detect	13	✓		
14	17-61.05(1)(a)1.	U V H	Registration of existing facility	14	✓		
15	17-61.05(1)(a)2.	U V H	Registration of new facility	15	✓		
16	17-61.05(1)(a)3.	U V H	Registration of converted facility	16	✓		
17	17-61.05(1)(b)1.	U V H	Notification of abandoned tank	17	✓		
18	17-61.05(3)(c)	U V H	Disposal of abandoned tank	18	✓		
19	17-61.05(1)(b)2.	U V H	Facility sale	19	✓		
20	17-61.05(1)(b)3.	U V H	Notification of retrofitting	20	✓		
21	17-61.06	U V H	Retrofitting	21	✓		
22	17-61.06	U V H	Improper new construction	22	✓		
23	17-61.05(2)	U V H	Overfill protection	23	✓		
24	17-2.650(1)(b)1.	N B	Volatile Organic Compound Controls	24	✓		

* Citation applies to types of tanks as follows: V=Aboveground Vertical; H=Elevated Horizontal; U=Underground; B=Bulk Plant in Non-Attainment Areas Only; N=Vehicular Fuel Dispensing Facilities in Non-Attainment Areas Only

EXPLAIN NON-COMPLIANCE HERE: Note: the purpose of this inspection was
not an effort to inspect all registered and non-
registered facilities located near potable wells. Although
the stationary tank rule does not apply to your
tanks, due to their capacity (550 gallons), it is
required that they remain registered. This was a
provision in Senate Bill 410 which recently was
adopted.

"OTHER"
PUBLIC WELL

[illegible]

Owner: Golden Gate^{Inn +} Country Club
4100 Golden Gate Parkway
Naples, FL. 33989
(813) 455-1010

OPERATOR: Bob Perez
(813) 455-1010

ADJACENT TO FLORIDA CITIES WATER PLANT
NO SIGNS OF GROSS CONTAMINATION SOME DIESEL
HAS BEEN SPILLED ON CONCRETE + ASPHALT at pump.

37364



State of Florida
Department of Environmental Regulation

RECEIVED

JUL 19 1991

D.E.R. SOUTH DISTRICT

Pollutant Storage Tank System Inspection Report Form

Facility ID No.: 118733269 County: Collier
 Facility Name: Golden Gate Inn and Country Club
 Facility Location: 4100 Golden Gate Parkway
 Operator: _____ Phone: _____
 Owner: _____ Phone: _____
 Latitude _____° _____' _____" Longitude _____° _____' _____" Section _____ Township _____ Range _____

Tank #	Size	Contents	Installation Date	U/A or In-Contact	Tank Construction	Integral Piping	Monitoring System	Tank Status
1	550	D	01/78	✓				B
2	550	A	01/78	✓				B

Comments: 1187

Closure assessment 4-12-91 1187 550 550

Low Environmental

Johnathan Sink All sand to be removed

Not able to penetrate rock - will get a drill to see if

ground water

Inspection Type: <input type="checkbox"/> Complaint Response <input type="checkbox"/> Initial <input type="checkbox"/> EDI <input type="checkbox"/> Public Well Field <input type="checkbox"/> Reinspection <input type="checkbox"/> Installation <input type="checkbox"/> Tank Removal <input type="checkbox"/> Unregistered	Facility Information: <input checked="" type="checkbox"/> Abandoned <input type="checkbox"/> Aboveground <input type="checkbox"/> Govt. Federal <input type="checkbox"/> Govt. Other <input checked="" type="checkbox"/> Non-retail <input type="checkbox"/> Retail <input type="checkbox"/> Retrofit (M. or O.) <input type="checkbox"/> Retrofit (L. or R.)
--	--

DER District: _____ Local Program: CCFED

Inspector's Signature & Date: Jim Hatcher 4-12-91 Facility Contact's Signature & Date: _____

Violations must be corrected by: next routine inspection ☐ or by: ☐ mo / ☐ day / ☐ yr

APPENDIX D
RECORD OF COMMUNICATION DOCUMENTS

From: [Dale Dixon](#)
To: [Andrew McAuley](#)
Cc: [Tulay Dindar Tanrisever](#)
Subject: RE: Earth Tech Env - Golden Gate - 19050279 AC03456 ENCO Report and Invoice
Date: Wednesday, June 5, 2019 11:59:58 AM

Hi Andrew,

I previously wrote the email below for inclusion with the report for your client. I believe the DEP contact was referring to a letter like this. It can be simplified for more general application to address future reports.

Dale

Dale D. Dixon, Ph.D.
Laboratory Director
Benchmark EA

1711 12th St East
Palmetto, FL 34221

Office: (941)723-9986
Fax: (941)723-6061

Email: Dale.Dixon@BenchmarkEA.net
Web: www.benchmarkea.com

From: Dale Dixon
Sent: Friday, May 17, 2019 11:17 AM
To: Andrew McAuley <andrewm@eteflorida.com>
Cc: Tulay Dindar Tanrisever <tulay.Tanrisever@benchmarkea.net>
Subject: FW: Earth Tech Env - Golden Gate - 19050279 AC03456 ENCO Report and Invoice

Andrew,

MCLS , as in the case for Dieldrin, are based on toxicological data. In many cases, particularly organics, the best available analytical capabilities (mdl & pql) cannot reach the mcl low levels. In recognition of analytical methods limitations, FDEP has developed F.A.C. 62-4.246 (4) "Guidance for the Selection of Analytical Methods and for the Evaluation of MDLS and PQLS". This document is undergoing revision and can be accessed with the link in the email below. The reported method for Dieldrin does meet DEP pql limits as noted below.

Dale D. Dixon, Ph.D.
Laboratory Director
Benchmark EA

1711 12th St East
Palmetto, FL 34221

Office: (941)723-9986

Fax: (941)723-6061

Email: Dale.Dixon@BenchmarkEA.net

Web: www.benchmarkea.com

From: Ryya Kumm <rkumm@encolabs.com>

Sent: Thursday, May 16, 2019 4:38 PM

To: Tulay Dindar Tanrisever <tulay.Tanrisever@benchmarkea.net>

Subject: FW: Earth Tech Env - Golden Gate - 19050279 AC03456 ENCO Report and Invoice

Good afternoon Tulay,

Unfortunately, we do not meet the GCTL for dieldrin. We do however meet the FDEP specified "Practical Quantitation Limits" of 0.1 ug/L. Document reference found here.

http://publicfiles.dep.state.fl.us/dear/labs/sas/library/docs/62_777final.pdf

This is the acceptable limit set by FDEP, for real working labs/samples.

I hope this helps. Please let us know if you have any questions or concerns.

Ryya Kumm

Project Manager

Environmental Conservation Laboratories, Inc.

10775 Central Port Drive

Orlando, FL 32824

(407) 826-5314 ph

(407) 850-6945 fax

rkumm@encolabs.com

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

 ENCO is an eco-friendly lab offering paperless service options, please contact me anytime with questions.

From: Ryya Kumm [<mailto:rkumm@encolabs.com>]

Sent: Wednesday, May 15, 2019 1:59 PM

To: 'Bettina Beilfuss'; 'Invoicing'; 'Katharine Dixon'; 'Kara Peterson'

Subject: Earth Tech Env - Golden Gate - 19050279 AC03456 ENCO Report and Invoice

Good afternoon,

I have attached the report and invoice to the following project. Please feel free to contact me with any questions or concerns.

Thank you and have a good day.

Ryya Kumm

Project Manager

Environmental Conservation Laboratories, Inc.

10775 Central Port Drive

Orlando, FL 32824

(407) 826-5314 ph

(407) 850-6945 fax

rkumm@encolabs.com

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.



ENCO is an eco-friendly lab offering paperless service options, please contact me anytime with questions.

RECORD OF COMMUNICATION				
Person Contacted:	Brian Dougherty			
Title and Affiliation:	FDEP – Division of Waste Management			
Location/Address:				
Telephone Number:	850-245-7503			
Communication Via:	<input checked="" type="checkbox"/>	Telephone	<input type="checkbox"/>	Email
			<input type="checkbox"/>	Personal Interview
Communicator:	Andrew McAuley			
Date and Time:	June 4, 2019 @ 5:19 pm			
Subject:	PQL discussion			
<p>Summary of Communication:</p> <p>I reached out to Brian for clarification on the PQL development and how it is used. He indicated that the PQLs are established for analytes in which current modern laboratory technology Minimum Detection Levels (MDLs) can not meet the Cleanup Target Levels (CTLs). He stated that most labs today are able to achieve a PQL of 0.02 ug/L for dieldrin. I relayed that Benchmark EnviroAnalytical, Inc. was able to achieve a PQL of 0.05 ug/L in which he said was “ok” because it was half of the documented PQL by the FDEP of 0.1 ug/L. I asked if comparing results obtained from lab analysis to CTLs versus PQLs can be used and he indicated that there have been many cases in which the FDEP has accepted the PQLs over the CTLs.</p>				
<p>Comments:</p>				

APPENDIX E STAFF QUALIFICATIONS

Andrew McAuley

Environmental Scientist

andrewm@eteflorida.com

516.647.9699

Years' Experience

9 years

Education/Training

B.S. Geology
Hofstra University (2006)

Lamont-Doherty Earth
Observatory Intern (2004)

Professional Affiliations

Florida Association of
Environmental Professionals (FAEP)

Mr. McAuley joined Earth Tech Environmental, LLC (ETE) in 2017 and brings with him 8 years of experience working as a Hydrogeologist II and Environmental Consultant in New York State prior to moving to Florida. Since joining ETE he has been able to apply his past experience from New York on a variety of projects as well as become extensively familiar with Ecological based assessments.

Relevant Experience

Andrew graduated from Hofstra University with a Bachelor of Science Degree in Geology. His extensive background includes Phase I ESAs, Phase II and Phase III remedial activities, AST/UST removal, Groundwater/Soil/Indoor Air Quality sampling and reporting, Mold/Lead/Asbestos sampling and remedial protocol preparation. Mr. McAuley has overseen various projects including Brownfields sites, Landfill Gas Extraction System Installation, Monitoring Well/Remediation System Installation and Maintenance, and multiple Chemical/Petroleum/Bio-Hazard Waste Cleanup projects.

Andrew's work experience includes:

Phase I Environmental Site Assessments
Phase II ESA Sampling/Reporting
Phase III ESA Oversight/Reporting
Chemical/Petroleum/Bio-Hazard Cleanup
Monitoring Well Installation/Maintenance
Air-Sparge/Soil Vapor Extraction Systems
Groundwater Assessments
Indoor Air Quality Assessments
Contaminated Soil Assessments
Waste Classification Management
Turbidity Monitoring
Remedial Activity Oversight
Mold/Lead/Asbestos Assessments
AST/UST Removal
Project Management/Coordination

Wetland Jurisdictional Delineations
Wetland Flagging/Mapping
Vegetation Monitoring
Protected Species Surveys
Bonnated Bat Surveys
Gopher Tortoise Surveys
GIS Mapping
Bald Eagle Monitoring
Environmental Assessments
Environmental Resource Permitting
Exotic Plant Treatment/Removal
Mangrove Monitoring/Reporting
SFWMD & ACOE Permitting
Submerged Resource Surveys
Seagrass Surveys

Relevant Certifications/Credentials

SDI Open Water SCUBA Diver, SCUBAdventures, 2018
Nitrox Certified Diver, SCUBAdventures, 2018



GOLDEN GATE GOLF COURSE

Limited Phase II Environmental Site Assessment (ESA)

NAPLES, FLORIDA 34116

SECTION 27, TOWNSHIP 49, RANGE 26E

Prepared For:



Collier County Government
2800 Horseshoe Drive N
Naples, Florida 34104



American Government Services
3812 W Linebaugh Avenue
Tampa, FL 33618



Commonwealth Land Title Insurance Company
601 Riverside Avenue
Jacksonville, FL 32204



Davidson Engineering, Inc.
4365 Radio Road, Suite 201
Naples, FL 34104

Prepared By:



Earth Tech Environmental, LLC
10600 Jolea Avenue
Bonita Springs, FL 34135

April 8, 2019

Davidson Engineering, Inc.
c/o Mr. Josh Fruth
4365 Radio Road, Suite 201
Naples, FL 34104

RE: Golden Gate Golf Course

Dear Mr. Fruth,

Earth Tech Environmental (ETE) is pleased to submit this Limited Phase II Environmental Site Assessment (ESA) report for the referenced property. As requested, this report investigates the potential Recognized Environmental Concerns (RECs) noted by ETE in their Phase I ESA conducted at this facility in February 2019. This Phase II ESA was conducted in material compliance with the scope and limitations of the American Society of Testing and Materials (ASTM) E1903-97.

Please feel free to contact us if you have any questions.

A handwritten signature in blue ink, appearing to read "Andrew McAuley".

Andrew McAuley, Environmental Scientist
Earth Tech Environmental, LLC.

TABLE OF CONTENTS

1.0 INTRODUCTION.....	4
1.1 Limitations and Exceptions.....	5
2.0 SITE DESCRIPTION & LOCATION.....	5
3.0 LOCAL GEOLOGY & SOIL DESCRIPTION.....	7
4.0 METHODOLOGY.....	7
4.1 Soil Sampling.....	7
5.0 SOIL SAMPLING RESULTS.....	8
5.1 Field Results.....	10
5.2 Laboratory Results.....	10
6.0 CONCLUSIONS AND RECOMMENDATIONS.....	11
7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT.....	12

APPENDICES

- Appendix A: Summary Table of Laboratory Data
- Appendix B: Benchmark EnviroAnalytical, Inc. Laboratory Test Report
- Appendix C: Staff Qualifications

1.0 INTRODUCTION

ETE has conducted a Limited Phase II ESA on the Golden Gate Golf Course (Subject Property), located in Naples, Collier County, Florida 34116 on behalf of Collier County, American Government Services, Commonwealth Land Title Insurance Company, and Davidson Engineering, Inc. This Limited Phase II ESA was conducted on February 25, 2019, by ETE's staff Environmental Scientist, Mr. Andrew McAuley. The Subject Property location can be seen in Figures 1 and 2 below.

The purpose of this Limited Phase II ESA is to address the potential Recognized Environmental Concerns (RECs) identified during the recent Phase I ESA conducted on the Subject Property by ETE in February 2019. During the Phase I ESA, ETE concluded that:

"This assessment has revealed no direct Recognized Environmental Concerns (RECs) associated with the Subject Property. However, based on the historical land usage of the Subject Property as a golf course, and the potential former and current usage of regulated pesticides/herbicides on site, there may be a potential subsurface impact. Historically, the presence of diesel fuel, unleaded gasoline, and various waste oils and lubricants associated with equipment maintenance were noted in the maintenance area. ETE recommends a limited soil sampling assessment to be conducted in the maintenance area to address these potential concerns. ETE also recommends a limited soil sampling assessment on the golf course in depression areas around known herbicide/fertilizer/pesticide treatment areas (fairways and greens) to determine the subsurface conditions associated with surface water runoff."

This Limited Phase II ESA has concluded that none of the soil samples analyzed were detected above the SCTL for industrial/commercial properties. Dieldrin was detected in two samples, SS-2 and SS-5, within the maintenance area exceeding the SCTL potential leachability criteria to groundwater. Lead was also detected in SS-5 exceeding the SCTL potential leachability criteria to groundwater. ETE recommends groundwater sampling in the maintenance area to determine if dieldrin or lead have impacted the groundwater beneath the Subject Property in the maintenance area.

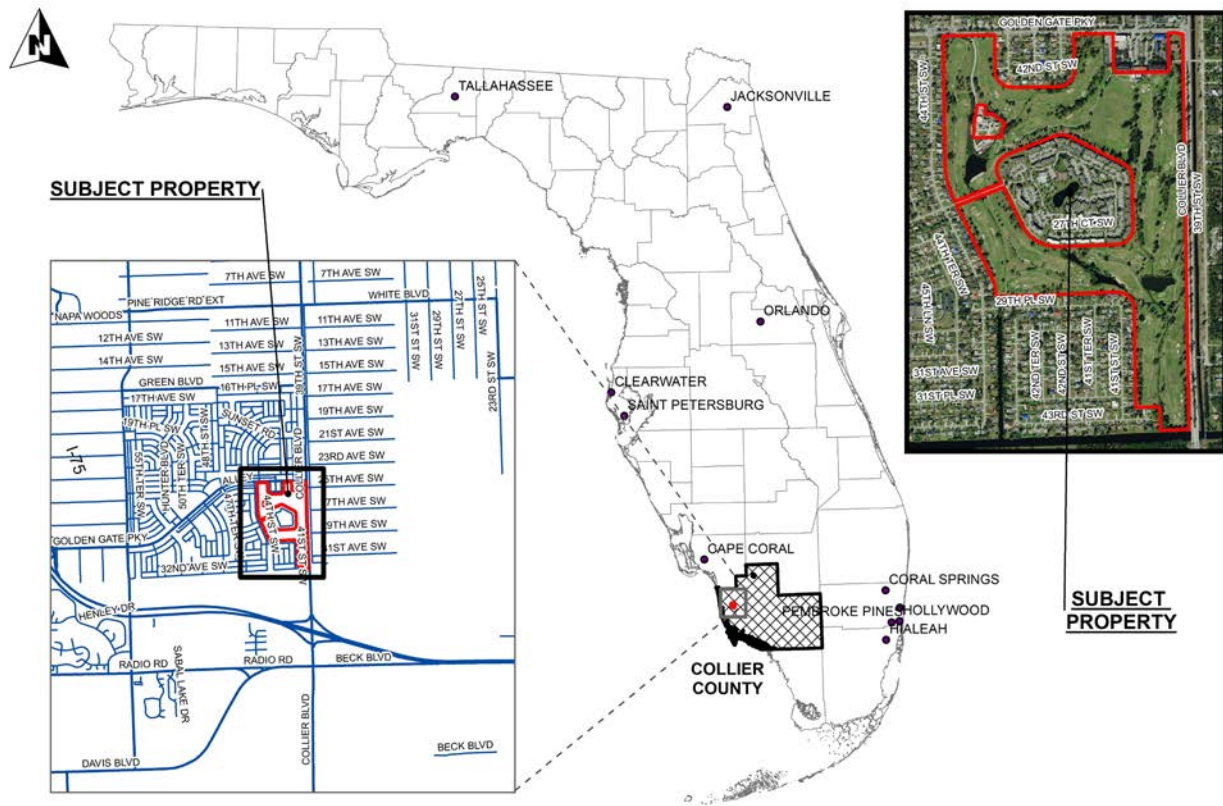


Figure 1. Location Map

1.1 Limitations and Exceptions

This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

ETE warrants that the findings contained in this report have been prepared in general conformance with accepted professional practices at the time of report preparation as applied by similar professionals. Future changes in standards, practices, or regulations cannot be anticipated and have not been addressed. The observations and recommendations presented in this report are time dependent and the findings presented in this report apply solely to site conditions existing at the time when the assessment was performed.

2.0 SITE DESCRIPTION & LOCATION

The Subject Property for this report consists of a single parcel (Folio # 36560040008). The Subject Property is located on the southwest corner of the intersection of Collier Boulevard and Golden Gate Parkway (Figures 1 & 2) in Collier County. According to the Collier County Property Appraiser's website, the Subject Property totals approximately 167.44 acres. The Subject Property is currently developed as an 18-hole golf course, which based on historical aerial review appears to have originally been developed between 1963 and 1973.

Common amongst golf courses, the Subject Property contains a series of cart paths, sand bunkers, rest/bathroom buildings, and lakes scattered throughout the property. A maintenance area containing multiple structures, equipment, and stockpile areas of sand and green sand is located in the northeast portion of the Subject Property, immediately south of a water treatment facility. A swimming pool, tennis courts, and restaurant/bar is located along the northern boundary associated with a hotel (Quality Inn & Suites Golf Resort), which adjoins the Subject Property to the north. See Figure 2 below for an Aerial Map of the Subject Property.



Figure 2. Aerial Site Map

3.0 LOCAL GEOLOGY & SOIL DESCRIPTION

National Resource Conservation Service (NRCS) maps for Collier County were reviewed to determine subsurface soil characteristics beneath the Subject Property.

According to NRCS, the sampling area contains the following historical soil types:

Urban Land-Holopaw-Basinger complex (33)

This soil group underlays portions of the perimeter of the Subject Property. These areas of Urban Land and nearly level, poorly drained soils are in urban areas. Individual areas are blocky to irregular in shape, and they range from 20 to 500 acres in size. Typically, Urban Land consists of commercial buildings, houses, parking lots, streets, sidewalks, recreational areas, shopping centers, and other urban structures where the soil cannot be observed. Typically, the Holopaw soils has a surface layer of dark gray fine sand about 5 inches thick. The subsurface layer is fine sand to a depth of about 52 inches. The upper part of the subsurface layer is light gray, and the lower part is light brownish gray. The subsoil extends to a depth of about 62 inches. The upper part of the subsoil is dark grayish brown fine sand, and the lower part is dark grayish brown fine sandy loam. The substratum is gray loamy fine sand to a depth of about 80 inches. Typically, the Basinger soil has a surface layer of grayish brown fine sand about 3 inches thick. The subsurface layer is light gray fine sand to a depth of about 25 inches. The subsoil is brown fine sand to a depth of about 44 inches. The substratum is brown fine sand to a depth of about 80 inches.

Udorthents, shaped (36)

This soil group underlays a majority of the Subject Property. These nearly level to undulating, somewhat poorly drained to moderately well drained soils are on golf courses and in adjacent areas where the soil material has been mechanically altered and shaped. Individual areas are elongated and irregular in shape, and they range from 40 to 640 acres in size. The slope is 1 to 6 percent. No single pedon represents Udorthents, but a common profile has a surface layer of mixed grayish brown and pale brown fine sandy loam to a depth of 18 inches. The next layer is gray gravelly fine sand to a depth of about 37 inches. The subsoil is light brownish gray fine sandy loam to a depth of about 47 inches. Limestone bedrock is at a depth of about 47 inches.

As part of the Limited Phase II ESA, limited site-specific geology was also defined during this assessment. However, hand augured borings were only advanced to a depth of roughly 2-feet below grade surface (bgs) where applicable, therefore site-specific geology is limited. Depths varied in each boring, roughly the upper 8-12 inches of soil was tan medium-to-fine sand and the lower portion (12-24 inches bgs) was brown medium-to-fine sand with occasional gravel and shell material. Refusal to advance the hand auger varied between 14 and 24 inches below surface level in the borings.

4.0 METHODOLOGY

This section describes the methodology utilized to obtain the soil samples.

4.1 Soil Sampling

Soil sampling was conducted by ETE on February 25, 2019, in general conformance with the Florida Department of Environmental Protection's Standard Operating Procedures. Five (5) soil sample locations were chosen in depressional areas throughout the golf course to determine the subsurface conditions where herbicides/pesticides/fertilizers would collect from surface water runoff. Six (6) samples were obtained from the maintenance area (see Figures 3 & 4).

Soil samples were obtained by advancing a decontaminated 4-inch diameter, stainless-steel hand auger into the soil at each sampling location. At each boring location the soils were classified, and the samples

were inspected for visual and olfactory signs of contamination. The samples were then placed in laboratory-provided jars, sealed, and labeled. All sample containers were placed on ice in a laboratory-provided cooler and transported by courier to Benchmark EnviroAnalytical, Inc. (NELAC Certification #E84167) to be analyzed. Samples were analyzed for Resource Conservation Recovery Act (RCRA) 8 metals via EPA Method 6010, Fertilizer Metals EPA Method 6010, Fertilizers, Herbicides via EPA Method 8151A, Pesticides via EPA Method 8081 & 8270, and Synthetic Precipitation Leaching Procedure (SPLP) laboratory extraction via EPA Method 1312 for arsenic and lead to determine the site-specific leachability standard. The samples obtained from the maintenance area (SS-1 through SS-6) were also analyzed for Total Petroleum Hydrocarbons (TPH) via FI Pro Method. ETE provided a chain of custody documentation to the lab.

5.0 SOIL SAMPLING RESULTS

This section presents the results obtained from the limited soil sampling assessment in the field and laboratory analysis. Figures 3 & 4 below shows the soil sample locations.



Figure 3. Soil Sampling Locations Map

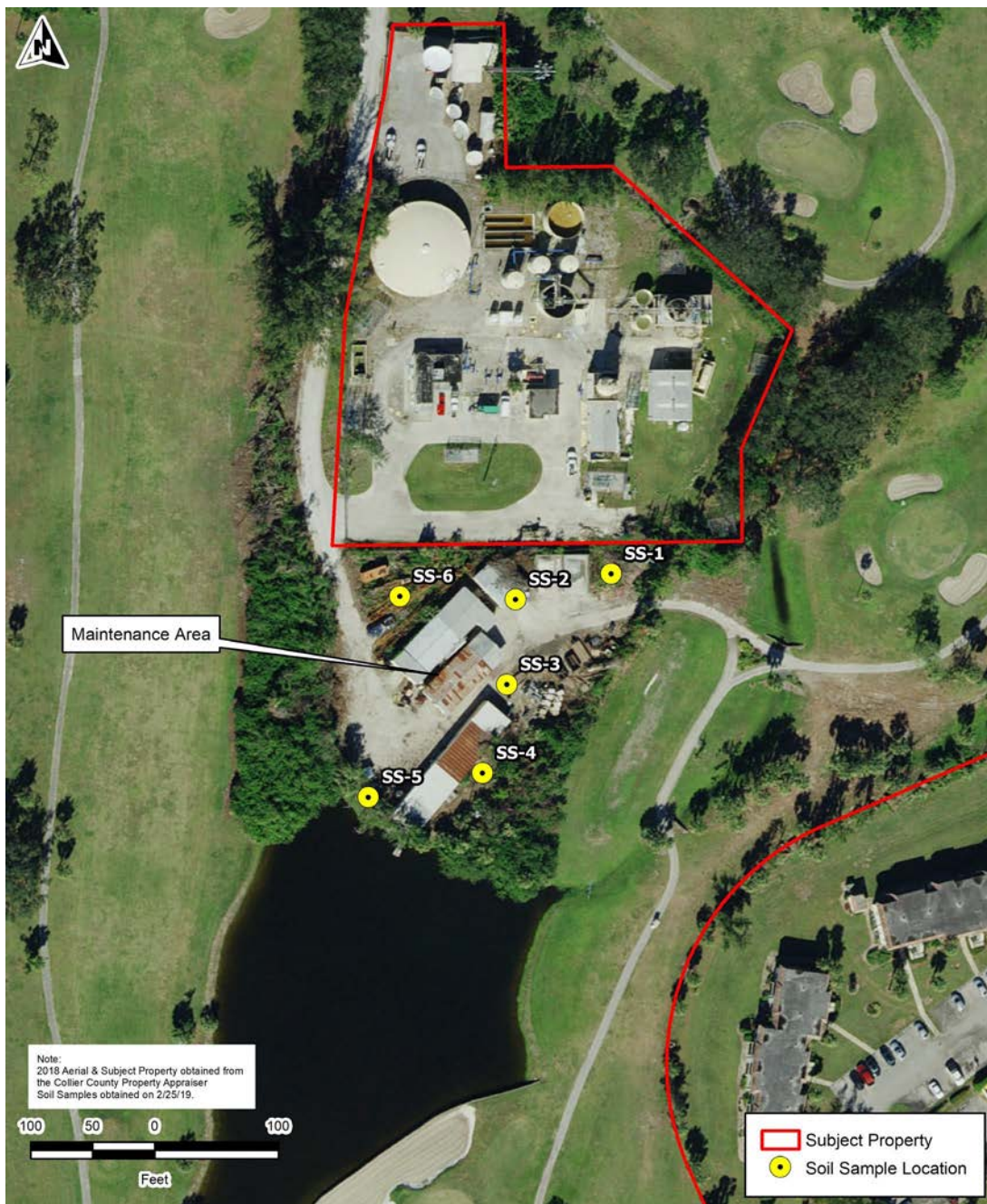


Figure 4. Soil Sampling Locations Map (Maintenance Area)

5.1 Field Results

No visual/olfactory indicators of contamination were noted in any of the samples obtained.

5.2 Laboratory Results

A table summarizing the results that were detected above the laboratories Minimum Detection Levels (MDLs) can be found in Appendix A of this report. These results were compared to the Chapter 62-777, F.A.C., Soil Cleanup Target Levels (SCTL) for Commercial/Industrial properties as well as the potential Leachability Based on Groundwater Criteria, any exceedances to the SCTLs are bolded and highlighted yellow. Complete laboratory results for the soil samples can be found in Appendix B.

No herbicides were detected above the laboratory MDLs in any of the samples. Detections were noted in several of the samples above the laboratories MDLs, however all of the analytes detected were below the SCTLs for Commercial/Industrial use properties. Dieldrin was detected in two of the samples obtained in the maintenance area, SS-2 (0.028 mg/kg) and SS-5 (0.13 mg/kg), above the SCTL potential leachability criteria for groundwater (0.002 mg/kg). Lead was detected in SS-5 (458 mg/kg) above the site specific SCTL potential leachability criteria for groundwater (139.3 mg/kg).

6.0 CONCLUSIONS AND RECOMMENDATIONS

ETE has conducted a Limited Phase II ESA on the Golden Gate Golf Course (Subject Property), located in Naples, Collier County, Florida 34117 on behalf of Collier County, American Government Services, Commonwealth Land Title Insurance Company, and Davidson Engineering, Inc. This Limited Phase II ESA was conducted on February 25, 2019 and included field sampling and laboratory analysis at eleven (11) locations, five (5) throughout the golf course and six (6) in the maintenance area. Soil samples were sent to Benchmark EnviroAnalytical, Inc. and analyzed for:

- RCRA 8 Metals (EPA Method 6010)
- Fertilizer Metals (K, Ca, Mg, S, Cu, Fe, Mn, Mo, Zn)
- Fertilizers (TKN, NO₃ – NO₂, TP, TN)
- Herbicides (EPA Method 8151A)
- Pesticides (EPA Method 8081 & 8270)
- Total Petroleum Hydrocarbons (FI Pro Method) – Maintenance area only
- SPLP (EPA Method 1312) – Arsenic and Lead

This Limited Phase II ESA has concluded that none of the soil samples analyzed were detected above the SCTL for industrial/commercial properties. Dieldrin was detected in two samples, SS-2 and SS-5, within the maintenance area exceeding the SCTL potential leachability criteria to groundwater. Lead was also detected in SS-5 exceeding the SCTL potential leachability criteria to groundwater. ETE recommends groundwater sampling in the maintenance area to determine if dieldrin or lead have impacted the groundwater beneath the Subject Property in the maintenance area.

7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR part 312. I have the specific qualifications of education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

A handwritten signature in blue ink, appearing to read "A McAuley", is positioned above the printed name.

Andrew McAuley, Environmental Scientist
Earth Tech Environmental, LLC.
April 8, 2019

APPENDIX A SUMMARY TABLE OF LABORATORY DATA

RCRA 8 Metals (mg/kg)														
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
Arsenic	6010	12	34.4*	2.15	5.05	2.10	3.72	8.59	0.303 U	4.68	1.53	2.39	0.302 U	1.76
Barium	6010	130,000	1,600	7.83	2.81	1.76	11.7	9.61	1.20	2.18	2.55	1.25	1.36	6.41
Cadmium	6010	1,700	7.5	0.123 U	0.146 I	0.113 U	0.166	0.876	0.101 U	0.095 U	0.166 U	0.100 U	0.100 U	0.101 U
Chromium	6010	470	38	23.7	5.50	4.45	6.83	12.8	4.48	5.99	4.11	4.87	2.03	19.4
Lead	6010	1,400	139.3*	3.20	1.62	1.62	17.9	458	1.71	1.60	1.56	1.07	1.21	2.62
Selenium	6010	11,000	5	0.031 U	0.029 U	0.028 U	0.027 U	1.27 U	0.112	0.024 U	0.029 U	0.025 U	0.462	0.025 U
Silver	6010	8,200	17	0.073 U	0.492	0.066 U	0.063 U	1.28 U	0.059 U	0.056 U	0.069 U	0.059 U	0.059 U	0.059 U
Mercury	7471	17	2.1	0.017 U	0.023 U	0.020 I	0.024 U	0.389	0.025 U	0.028	0.018 U	0.018 I	0.028 I	0.017 U
Fertilizer Metals (mg/kg)														
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
Boron	6010	430,000	-	1.19	0.989 I	0.620 U	0.589 U	0.952 I	0.554 U	0.945 I	0.751 I	0.550 U	0.553 U	0.977 I
Calcium	6010	-	-	3,276	50,679	2,811	3,572	27,722	2,408	870	19,462	332	3,400	2,684
Copper	6010	89,000	-	0.885 I	1.21	1.41	2.51	22.0	1.04	1.14	1.01	0.350 I	0.623 I	0.725 I
Iron	6010	-	-	4,197	901	1,858	3,487	3,790	1,358	1,515	3,152	1,788	651	3,438
Magnesium	6010	-	-	479	1,506	95.5	153	566	103	102	99.9	51.5	77.6	392
Manganese	6010	43,000	-	8.38	10.8	15.9	720	103	6.29	14.9	8.94	4.64	4.78	6.87
Molybdenum	6010	11,000	-	0.123 U	0.117 U	0.113 U	0.107 U	0.084 U	0.101 U	0.309 I	0.210 I	0.100 U	0.100 U	0.101 U
Sulfur	6010B	-	-	29.8 U	63.0	23.1 I	44.1 I	117	31.1 I	31.5 I	68.8	27.7 I	47.7 I	44.9 I
Zinc	6010	630,000	-	3.6	4.85	6.12	41.7	67.9	2.74	4.37	2.81	0.855	1.54	2.95
Pesticides (mg/kg)														
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
4'-DDE	8081	15	18	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.015	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Dieldrin	8081	0.3	0.002	0.00097 U	0.028	0.00096 U	0.00094 U	0.13	0.00097 U	0.0010 U	0.00094 U	0.00094 U	0.00096 U	0.00096 U
Fertilizers (% Dry Weight)														
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
Total Kjeldahl Nitrogen (TKN)	351.2	-	-	0.008	0.013	0.014	0.030	0.040	0.016	0.018	0.045	0.015	0.025	0.032
Nitrate + Nitrite (as N)	353 + 351	-	-	0.00004	0.00005	0.00006	0.00014	0.00022	0.00005	0.00008	0.0001	0.00008	0.0001	0.0001
Total Phosphorus	353.2	-	-	0.004	0.005	0.005	0.014	0.039	0.005	0.003 I	0.005	0.001 I	0.006	0.004
Total Nitrogen	365.3	-	-	0.008	0.013	0.014	0.03	0.040	0.016	0.018	0.045	0.015	0.025	0.32
Potassium	6010	-	-	0.015	0.007	0.002 I	0.002 I	0.006	0.001	0.006	0.003 I	0.002 I	0.001 U	0.012
Total Petroleum Hydrocarbons (TPH) (mg/kg)														
Parameter	Test	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
Petroleum Range Organics	Fl Pro	2,700	340	3.7 U	3.6 U	3.6 U	22	330 R-01	3.7 U	NA	NA	NA	NA	NA
Total Solids, Method SM2540G (% Dry Weight)														
Parameter	Test Method	SCTL (Commercial/Industrial)	SCTL Leachability	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
Total Solids	SM2540G	-	-	90.4	96.0	93.4	96.2	96.5	92.5	87.0	95.4	96.2	93.9	93.7

 = Exceeds SCTL Commercial/Industrial Value and/or SCTL Leachability Value

U = Analyte analyzed but not detected at the value indicated

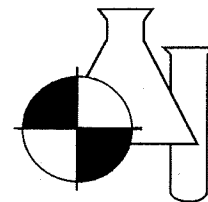
I = Reported value is between the laboratory MDL and the PQL

R-01 = The Reporting Limit for this analyte has been raised to account for matrix interference

* = SCTL for potential leachability to groundwater was calculated for site specific conditions utilizing Synthetic Precipitation Leaching Procedure (SPLP) laboratory extraction via EPA Method 1312

NA = Not Analyzed

APPENDIX B
BENCHMARK ENVIROANALYTICAL, INC. LABORATORY TEST REPORT



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19021195

Earth Tech Environmental
10600 Jolea Ave.
Bonita Springs, FL 34135

Project Name : GOLDEN GATE GOLF COURSE
Date Received : 02/26/2019
Time Received : 1450

Jennifer Bobka

Submission Number: 19021195

Sample Date: 02/25/2019

Sample Number: 001

Sample Time: 1200

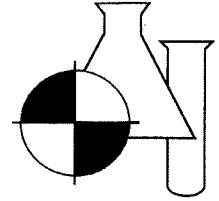
Sample Description: SS-1

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.008	% DRY WT	0.001	351.2	03/04/2019 14:51	PN
TOTAL NITROGEN	0.008	% DRY WT	0.001	353+351	03/04/2019 14:51	PN/JW
NITRATE+NITRITE AS N	0.00004	% DRY WT	0.000002	353.2	02/28/2019 13:52	JW
TOTAL PHOSPHORUS AS P	0.004	% DRY WT	0.0008	365.3	02/28/2019 12:18	CE
ARSENIC	2.15	MG/KG	0.370	6010	02/28/2019 12:27	CF
BARIUM	7.83	MG/KG	0.055	6010	02/28/2019 12:27	CF
BORON	1.19	MG/KG	0.676	6010	02/28/2019 12:27	CF
CADMIUM	0.123 U	MG/KG	0.123	6010	02/28/2019 12:27	CF
CALCIUM	3276	MG/KG	1.84	6010	02/28/2019 12:27	CF
CHROMIUM	23.7	MG/KG	0.246	6010	02/28/2019 12:27	CF
COPPER	0.885 I	MG/KG	0.246	6010	02/28/2019 12:27	CF
IRON	4197	MG/KG	1.782	6010	02/28/2019 12:27	CF
LEAD	3.20	MG/KG	0.184	6010	02/28/2019 12:27	CF
MAGNESIUM	479	MG/KG	0.369	6010	02/28/2019 12:27	CF
MANGANESE	8.38	MG/KG	0.123	6010	02/28/2019 12:27	CF
MOLYBDENUM	0.123 U	MG/KG	0.123	6010	02/28/2019 12:27	CF
POTASSIUM	0.015	% DRY WT	0.001	6010	02/28/2019 12:27	CF
SELENIUM	0.031 U	MG/KG	0.031	6010	02/28/2019 12:27	CF
SILVER	0.073 U	MG/KG	0.073	6010	02/28/2019 12:27	CF
SULFUR	29.8 U	MG/KG	29.8	6010	03/22/2019 18:03	E83079
ZINC	3.60	MG/KG	0.246	6010	02/28/2019 12:27	CF
ARSENIC	0.360 I	MG/KG	0.120	6010/1312	03/30/2019 14:11	CF
LEAD	0.080 I	MG/KG	0.060	6010/1312	03/30/2019 14:11	CF
MERCURY	0.017 U	MG/KG	0.017	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 15:43	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 15:43	E83182

BENCHMARK

EnviroAnalytical Inc.



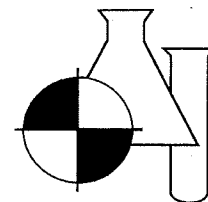
NELAC Certification #E84167

4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019	15:43	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019	15:43	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019	15:43	E83182
BETA-BHC	0.0026 U	MG/KG	0.0026	8081	03/06/2019	15:43	E83182
CHLORDANE (TECH)	0.016 U	MG/KG	0.016	8081	03/06/2019	15:43	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:43	E83182
DIELDRIN	0.00097 U	MG/KG	0.00097	8081	03/06/2019	15:43	E83182
ENDOSULFAN I	0.00087 U	MG/KG	0.00087	8081	03/06/2019	15:43	E83182
ENDOSULFAN II	0.0019 U	MG/KG	0.0019	8081	03/06/2019	15:43	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:43	E83182
ENDRIN	0.0016 U	MG/KG	0.0016	8081	03/06/2019	15:43	E83182
ENDRIN ALDEHYDE	0.0030 U	MG/KG	0.0030	8081	03/06/2019	15:43	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:43	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:43	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019	15:43	E83182
HEPTACHLOR EPOXIDE	0.0016 U	MG/KG	0.0016	8081	03/06/2019	15:43	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019	15:43	E83182
2,4,5-T	0.0028 UC4	MG/KG	0.0028	8151	03/06/2019	10:45	E83182
2,4,5-TP (SILVEX)	0.0051 U	MG/KG	0.0051	8151	03/06/2019	10:45	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019	10:45	E83182
2,4-DB	0.011 U	MG/KG	0.011	8151	03/06/2019	10:45	E83182
3,5-DCBA	0.0052 U	MG/KG	0.0052	8151	03/06/2019	10:45	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019	10:45	E83182
ACIFLUORFEN	0.0077 U	MG/KG	0.0077	8151	03/06/2019	10:45	E83182
BENTAZON	0.0049 U	MG/KG	0.0049	8151	03/06/2019	10:45	E83182
CHLORAMBEN	0.0042 UC6	MG/KG	0.0042	8151	03/06/2019	10:45	E83182
DACTHAL	0.0026 U	MG/KG	0.0026	8151	03/06/2019	10:45	E83182
DICAMBA	0.0045 U	MG/KG	0.0045	8151	03/06/2019	10:45	E83182
DICHLORPROP	0.0037 UC6	MG/KG	0.0037	8151	03/06/2019	10:45	E83182
MCPA	0.81 UC3C4C8	MG/KG	0.81	8151	03/06/2019	10:45	E83182
MCPP	0.83 UC4	MG/KG	0.83	8151	03/06/2019	10:45	E83182
PENTACHLOROPHENOL	0.0027 U	MG/KG	0.0027	8151	03/06/2019	10:45	E83182
PICLORAM	0.0028 U	MG/KG	0.0028	8151	03/06/2019	10:45	E83182
AZINPHOS-METHYL	0.061 U	MG/KG	0.061	8270	03/05/2019	12:03	E83182
BOLSTAR	0.065 U	MG/KG	0.065	8270	03/05/2019	12:03	E83182
CHLORPYRIFOS	0.043 U	MG/KG	0.043	8270	03/05/2019	12:03	E83182
COUMAPHOS	0.056 UC3C4C8	MG/KG	0.056	8270	03/05/2019	12:03	E83182
DEMETON	0.048 U	MG/KG	0.048	8270	03/05/2019	12:03	E83182
DIAZINON	0.048 U	MG/KG	0.048	8270	03/05/2019	12:03	E83182
DICHLORVOS	0.061 U	MG/KG	0.061	8270	03/05/2019	12:03	E83182
DIMETHOATE	0.048 UC6	MG/KG	0.048	8270	03/05/2019	12:03	E83182
DISULFOTON	0.048 U	MG/KG	0.048	8270	03/05/2019	12:03	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ETHION	0.048 U	MG/KG	0.048	8270	03/05/2019 12:03	E83182
ETHOPROP	0.043 U	MG/KG	0.043	8270	03/05/2019 12:03	E83182
ETHYL PARATHION	0.043 U	MG/KG	0.043	8270	03/05/2019 12:03	E83182
MALATHION	0.048 UC6	MG/KG	0.048	8270	03/05/2019 12:03	E83182
METHYL PARATHION	0.048 U	MG/KG	0.048	8270	03/05/2019 12:03	E83182
PHORATE	0.043 U	MG/KG	0.043	8270	03/05/2019 12:03	E83182
RONNEL	0.043 UC3 C4C5C6	MG/KG	0.043	8270	03/05/2019 12:03	E83182
STIROPHOS	0.052 UC3C4C5	MG/KG	0.052	8270	03/05/2019 12:03	E83182
SULFOTEP	0.035 UC6	MG/KG	0.035	8270	03/05/2019 12:03	E83182
PETROLEUM RANGE ORGANICS	3.7 U	MG/KG	3.7	FL-PRO	03/04/2019 20:47	E83182
TOTAL SOLIDS	90.4	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021195

Sample Date: 02/25/2019

Sample Number: 002

Sample Time: 1220

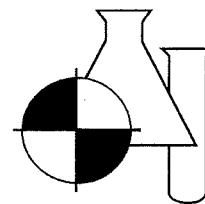
Sample Description: SS-2

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.013	% DRY WT	0.001	351.2	03/04/2019 14:52	PN
TOTAL NITROGEN	0.013	% DRY WT	0.001	353+351	03/04/2019 14:52	PN/JW
NITRATE+NITRITE AS N	0.00005	% DRY WT	0.000002	353.2	02/28/2019 13:59	JW
TOTAL PHOSPHORUS AS P	0.005	% DRY WT	0.0008	365.3	02/28/2019 12:19	CE
ARSENIC	5.05	MG/KG	0.352	6010	02/28/2019 12:31	CF
BARIUM	2.81	MG/KG	0.053	6010	02/28/2019 12:31	CF
BORON	0.989 I	MG/KG	0.644	6010	02/28/2019 12:31	CF
CADMIUM	0.146 I	MG/KG	0.117	6010	02/28/2019 12:31	CF
CALCIUM	50679	MG/KG	1.76	6010	02/28/2019 12:31	CF
CHROMIUM	5.50	MG/KG	0.234	6010	02/28/2019 12:31	CF
COPPER	1.21	MG/KG	0.234	6010	02/28/2019 12:31	CF
IRON	901	MG/KG	901	6010	02/28/2019 12:31	CF
LEAD	1.62	MG/KG	0.176	6010	02/28/2019 12:31	CF
MAGNESIUM	1506	MG/KG	0.351	6010	02/28/2019 12:31	CF
MANGANESE	10.8	MG/KG	0.117	6010	02/28/2019 12:31	CF
MOLYBDENUM	0.117 U	MG/KG	0.117	6010	02/28/2019 12:31	CF
POTASSIUM	0.007	% DRY WT	0.001	6010	02/28/2019 12:31	CF
SELENIUM	0.029 U	MG/KG	0.029	6010	02/28/2019 12:31	CF
SILVER	0.492	MG/KG	0.069	6010	02/28/2019 12:31	CF
SULFUR	63.0	MG/KG	25.0	6010	03/22/2019 18:06	E83079
ZINC	4.85	MG/KG	0.234	6010	02/28/2019 12:31	CF
ARSENIC	0.340 I	MG/KG	0.120	6010/1312	03/30/2019 14:15	CF
LEAD	0.200 I	MG/KG	0.060	6010/1312	03/30/2019 14:15	CF
MERCURY	0.023 U	MG/KG	0.023	7471	03/02/2019 13:34	CF

BENCHMARK

EnviroAnalytical Inc.



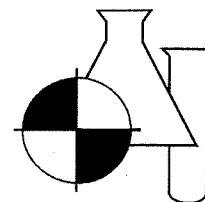
NELAC Certification #E84167

4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019	15:55	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019	15:55	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019	15:55	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019	15:55	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019	15:55	E83182
BETA-BHC	0.0025 U	MG/KG	0.0025	8081	03/06/2019	15:55	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019	15:55	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:55	E83182
DIELDRIN	0.028	MG/KG	0.00094	8081	03/06/2019	15:55	E83182
ENDOSULFAN I	0.00084 U	MG/KG	0.00084	8081	03/06/2019	15:55	E83182
ENDOSULFAN II	0.0018 U	MG/KG	0.0018	8081	03/06/2019	15:55	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:55	E83182
ENDRIN	0.0015 U	MG/KG	0.0015	8081	03/06/2019	15:55	E83182
ENDRIN ALDEHYDE	0.0029 U	MG/KG	0.0029	8081	03/06/2019	15:55	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:55	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	15:55	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019	15:55	E83182
HEPTACHLOR EPOXIDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019	15:55	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019	15:55	E83182
2,4,5-T	0.0027 UC4	MG/KG	0.0027	8151	03/06/2019	11:10	E83182
2,4,5-TP (SILVEX)	0.0049 U	MG/KG	0.0049	8151	03/06/2019	11:10	E83182
2,4-D	0.010 U	MG/KG	0.010	8151	03/06/2019	11:10	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019	11:10	E83182
3,5-DCBA	0.0050 U	MG/KG	0.0050	8151	03/06/2019	11:10	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019	11:10	E83182
ACIFLUORFEN	0.0074 U	MG/KG	0.0074	8151	03/06/2019	11:10	E83182
BENTAZON	0.0047 U	MG/KG	0.0047	8151	03/06/2019	11:10	E83182
CHLORAMBEN	0.0041 U	MG/KG	0.0041	8151	03/06/2019	11:10	E83182
DACTHAL	0.0025 U	MG/KG	0.0025	8151	03/06/2019	11:10	E83182
DICAMBA	0.0044 U	MG/KG	0.0044	8151	03/06/2019	11:10	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019	11:10	E83182
MCPA	0.79 UC3C4	MG/KG	0.79	8151	03/06/2019	11:10	E83182
MCPP	0.81 UC4	MG/KG	0.81	8151	03/06/2019	11:10	E83182
PENTACHLOROPHENOL	0.0026 U	MG/KG	0.0026	8151	03/06/2019	11:10	E83182
PICLORAM	0.0027 U	MG/KG	0.0027	8151	03/06/2019	11:10	E83182
AZINPHOS-METHYL	0.059 U	MG/KG	0.059	8270	03/05/2019	12:36	E83182
BOLSTAR	0.063 U	MG/KG	0.063	8270	03/05/2019	12:36	E83182
CHLORPYRIFOS	0.042 U	MG/KG	0.042	8270	03/05/2019	12:36	E83182
COUMAPHOS	0.054 UC3C4	MG/KG	0.054	8270	03/05/2019	12:36	E83182
DEMETON	0.046 U	MG/KG	0.046	8270	03/05/2019	12:36	E83182
DIAZINON	0.046 U	MG/KG	0.046	8270	03/05/2019	12:36	E83182
DICHLORVOS	0.059 U	MG/KG	0.059	8270	03/05/2019	12:36	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DIMETHOATE	0.046 U	MG/KG	0.046	8270	03/05/2019 12:36	E83182
DISULFOTON	0.046 U	MG/KG	0.046	8270	03/05/2019 12:36	E83182
ETHION	0.046 U	MG/KG	0.046	8270	03/05/2019 12:36	E83182
ETHOPROP	0.042 U	MG/KG	0.042	8270	03/05/2019 12:36	E83182
ETHYL PARATHION	0.041 U	MG/KG	0.041	8270	03/05/2019 12:36	E83182
MALATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 12:36	E83182
METHYL PARATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 12:36	E83182
PHORATE	0.042 U	MG/KG	0.042	8270	03/05/2019 12:36	E83182
RONNEL	0.042 UC3C4	MG/KG	0.042	8270	03/05/2019 12:36	E83182
STIROPHOS	0.050 UC3C4	MG/KG	0.050	8270	03/05/2019 12:36	E83182
SULFOTEP	0.034 U	MG/KG	0.034	8270	03/05/2019 12:36	E83182
PETROLEUM RANGE ORGANICS	3.6 U	MG/KG	3.6	FL-PRO	03/04/2019 21:18	E83182
TOTAL SOLIDS	96.0	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021195

Sample Date: 02/25/2019

Sample Number: 003

Sample Time: 1230

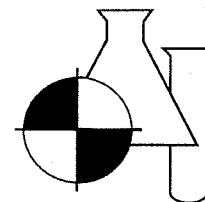
Sample Description: SS-3

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.014	% DRY WT	0.001	351.2	03/04/2019 15:01	PN
TOTAL NITROGEN	0.014	% DRY WT	0.001	353+351	03/04/2019 15:01	PN/JW
NITRATE+NITRITE AS N	0.00006	% DRY WT	0.000002	353.2	02/28/2019 13:48	JW
TOTAL PHOSPHORUS AS P	0.005	% DRY WT	0.0008	365.3	02/28/2019 12:20	CE
ARSENIC	2.10	MG/KG	0.339	6010	02/28/2019 12:35	CF
BARIUM	1.76	MG/KG	0.051	6010	02/28/2019 12:35	CF
BORON	0.620 U	MG/KG	0.620	6010	02/28/2019 12:35	CF
CADMIUM	0.113 U	MG/KG	0.113	6010	02/28/2019 12:35	CF
CALCIUM	2811	MG/KG	1.69	6010	02/28/2019 12:35	CF
CHROMIUM	4.45	MG/KG	0.225	6010	02/28/2019 12:35	CF
COPPER	1.41	MG/KG	0.225	6010	02/28/2019 12:35	CF
IRON	1858	MG/KG	1.63	6010	02/28/2019 12:35	CF
LEAD	1.62	MG/KG	0.169	6010	02/28/2019 12:35	CF
MAGNESIUM	95.5	MG/KG	0.338	6010	02/28/2019 12:35	CF
MANGANESE	15.9	MG/KG	0.113	6010	02/28/2019 12:35	CF
MOLYBDENUM	0.113 U	MG/KG	0.113	6010	02/28/2019 12:35	CF
POTASSIUM	0.002 I	% DRY WT	0.001	6010	02/28/2019 12:35	CF
SELENIUM	0.028 U	MG/KG	0.028	6010	02/28/2019 12:35	CF
SILVER	0.066 U	MG/KG	0.066	6010	02/28/2019 12:35	CF
SULFUR	23.1 I	MG/KG	22.7	6010	03/22/2019 18:09	E83079
ZINC	6.12	MG/KG	0.225	6010	02/28/2019 12:35	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 14:18	CF

BENCHMARK

EnviroAnalytical Inc.



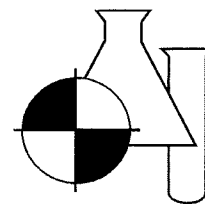
NELAC Certification #E84167

LEAD	0.160 I	MG/KG	0.060	6010/1312	03/30/2019	14:18	CF
MERCURY	0.020 I	MG/KG	0.015	7471	03/02/2019	13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019	16:08	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019	16:08	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019	16:08	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019	16:08	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019	18:08	E83182
BETA-BHC	0.0026 U	MG/KG	0.0026	8081	03/06/2019	16:08	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019	16:08	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	16:08	E83182
DIELDRIN	0.00096 U	MG/KG	0.00096	8081	03/06/2019	16:08	E83182
ENDOSULFAN I	0.00085 U	MG/KG	0.00085	8081	03/06/2019	16:08	E83182
ENDOSULFAN II	0.0019 U	MG/KG	0.0019	8081	03/06/2019	16:08	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	16:08	E83182
ENDRIN	0.0016 U	MG/KG	0.0016	8081	03/06/2019	16:08	E83182
ENDRIN ALDEHYDE	0.0030 U	MG/KG	0.0030	8081	03/06/2019	16:08	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019	16:08	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019	16:08	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019	16:08	E83182
HEPTACHLOR EPOXIDE	0.0016 U	MG/KG	0.0016	8081	03/06/2019	16:08	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019	18:08	E83182
2,4,5-T	0.0028 UC4	MG/KG	0.0028	8151	03/06/2019	11:36	E83182
2,4,5-TP (SILVEX)	0.0050 U	MG/KG	0.0050	8151	03/06/2019	11:36	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019	11:38	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019	11:36	E83182
3,5-DCBA	0.0051 U	MG/KG	0.0051	8151	03/06/2019	11:36	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019	11:36	E83182
ACIFLUORFEN	0.0076 U	MG/KG	0.0076	8151	03/06/2019	11:36	E83182
BENTAZON	0.0048 U	MG/KG	0.0048	8151	03/06/2019	11:36	E83182
CHLORAMBEN	0.0042 U	MG/KG	0.0042	8151	03/06/2019	11:36	E83182
DACTHAL	0.0026 U	MG/KG	0.0026	8151	03/06/2019	11:36	E83182
DICAMBA	0.0045 U	MG/KG	0.0045	8151	03/06/2019	11:36	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019	11:36	E83182
MCPA	0.80 UC3C4	MG/KG	0.80	8151	03/06/2019	11:36	E83182
MCPP	0.82 UC4	MG/KG	0.82	8151	03/06/2019	11:36	E83182
PENTACHLOROPHENOL	0.0027 U	MG/KG	0.0027	8151	03/06/2019	11:36	E83182
PICLORAM	0.0028 U	MG/KG	0.0028	8151	03/06/2019	11:36	E83182
AZINPHOS-METHYL	0.060 U	MG/KG	0.080	8270	03/05/2019	13:11	E83182
BOLSTAR	0.064 U	MG/KG	0.064	8270	03/05/2019	13:11	E83182
CHLORPYRIFOS	0.043 U	MG/KG	0.043	8270	03/05/2019	13:11	E83182
COUMAPHOS	0.055 UC3C4	MG/KG	0.055	8270	03/05/2019	13:11	E83182
DEMETON	0.047 U	MG/KG	0.047	8270	03/05/2019	13:11	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DIAZINON	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
DICHLORVOS	0.060 U	MG/KG	0.060	8270	03/05/2019 13:11	E83182
DIMETHOATE	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
DISULFOTON	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
ETHION	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
ETHOPROP	0.043 U	MG/KG	0.043	8270	03/05/2019 13:11	E83182
ETHYL PARATHION	0.042 U	MG/KG	0.042	8270	03/05/2019 13:11	E83182
MALATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
METHYL PARATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 13:11	E83182
PHORATE	0.043 U	MG/KG	0.043	8270	03/05/2019 13:11	E83182
RONNEL	0.043 UC3C4	MG/KG	0.043	8270	03/05/2019 13:11	E83182
STIROPHOS	0.051 UC3C4	MG/KG	0.051	8270	03/05/2019 13:11	E83182
SULFOTEP	0.035 U	MG/KG	0.035	8270	03/05/2019 13:11	E83182
PETROLEUM RANGE ORGANICS	3.6 U	MG/KG	3.6	FL-PRO	03/04/2019 21:48	E83182
TOTAL SOLIDS	93.4	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021195

Sample Date: 02/25/2019

Sample Number: 004

Sample Time: 1242

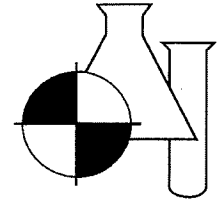
Sample Description: SS-4

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.030	% DRY WT	0.001	351.2	03/04/2019 15:02	PN
TOTAL NITROGEN	0.030	% DRY WT	0.001	353+351	03/04/2019 15:02	PN/JW
NITRATE+NITRITE AS N	0.00014	% DRY WT	0.000002	353.2	02/28/2019 14:02	JW
TOTAL PHOSPHORUS AS P	0.014	% DRY WT	0.0008	365.3	02/28/2019 12:20	CE
ARSENIC	3.72	MG/KG	0.323	6010	02/28/2019 12:40	CF
BARIUM	11.7	MG/KG	0.048	6010	02/28/2019 12:40	CF
BORON	0.589 U	MG/KG	0.589	6010	02/28/2019 12:40	CF
CADMIUM	0.166	MG/KG	0.107	6010	02/28/2019 12:40	CF
CALCIUM	3572	MG/KG	1.61	6010	02/28/2019 12:40	CF
CHROMIUM	6.83	MG/KG	0.214	6010	02/28/2019 12:40	CF
COPPER	2.51	MG/KG	0.214	6010	02/28/2019 12:40	CF
IRON	3487	MG/KG	1.55	6010	02/28/2019 12:40	CF
LEAD	17.9	MG/KG	0.214	6010	02/28/2019 12:40	CF
MAGNESIUM	153	MG/KG	0.321	6010	02/28/2019 12:40	CF
MANGANESE	720	MG/KG	0.107	6010	02/28/2019 12:40	CF
MOLYBDENUM	0.107 U	MG/KG	0.107	6010	02/28/2019 12:40	CF
POTASSIUM	0.002 I	% DRY WT	0.001	6010	02/28/2019 12:40	CF
SELENIUM	0.027 U	MG/KG	0.027	6010	02/28/2019 12:40	CF
SILVER	0.063 U	MG/KG	0.063	6010	02/28/2019 12:40	CF
SULFUR	44.1 I	MG/KG	32.2	6010	03/22/2019 18:12	E83079

BENCHMARK

EnviroAnalytical Inc.



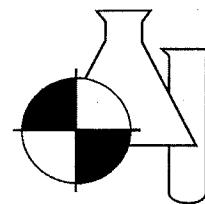
NELAC Certification #E84167

ZINC	41.7	MG/KG	0.214	6010	02/28/2019 12:40	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 14:22	CF
LEAD	0.340	MG/KG	0.060	6010/1312	03/30/2019 14:22	CF
MERCURY	0.024 U	MG/KG	0.024	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 16:20	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:20	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:20	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 16:20	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:20	E83182
BETA-BHC	0.0025 U	MG/KG	0.0025	8081	03/06/2019 16:20	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 16:20	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:20	E83182
DIELDRIN	0.00094 U	MG/KG	0.00094	8081	03/06/2019 16:20	E83182
ENDOSULFAN I	0.00084 U	MG/KG	0.00084	8081	03/06/2019 16:20	E83182
ENDOSULFAN II	0.0018 U	MG/KG	0.0018	8081	03/06/2019 16:20	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:20	E83182
ENDRIN	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:20	E83182
ENDRIN ALDEHYDE	0.0029 U	MG/KG	0.0029	8081	03/06/2019 16:20	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:20	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:20	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:20	E83182
HEPTACHLOR EPOXIDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:20	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 16:20	E83182
2,4,5-T	0.0027 UC4	MG/KG	0.0027	8151	03/06/2019 12:01	E83182
2,4,5-TP (SILVEX)	0.0049 U	MG/KG	0.0049	8151	03/06/2019 12:01	E83182
2,4-D	0.010 U	MG/KG	0.010	8151	03/06/2019 12:01	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 12:01	E83182
3,5-DCBA	0.0050 U	MG/KG	0.0050	8151	03/06/2019 12:01	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 12:01	E83182
ACIFLUORFEN	0.0074 U	MG/KG	0.0074	8151	03/06/2019 12:01	E83182
BENTAZON	0.0047 U	MG/KG	0.0047	8151	03/06/2019 12:01	E83182
CHLORAMBEN	0.0041 U	MG/KG	0.0041	8151	03/06/2019 12:01	E83182
DACTHAL	0.0025 U	MG/KG	0.0025	8151	03/06/2019 12:01	E83182
DICAMBA	0.0044 U	MG/KG	0.0044	8151	03/06/2019 12:01	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019 12:01	E83182
MCPA	0.78 UC3C4	MG/KG	0.78	8151	03/06/2019 12:01	E83182
MCPP	0.80 UC4	MG/KG	0.80	8151	03/06/2019 12:01	E83182
PENTACHLOROPHENOL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 12:01	E83182
PICLORAM	0.0027 U	MG/KG	0.0027	8151	03/06/2019 12:01	E83182
AZINPHOS-METHYL	0.059 U	MG/KG	0.059	8270	03/05/2019 13:44	E83182
BOLSTAR	0.063 U	MG/KG	0.063	8270	03/05/2019 13:44	E83182
CHLORPYRIFOS	0.042 U	MG/KG	0.042	8270	03/05/2019 13:44	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

COUMAPHOS	0.054 UC3C4	MG/KG	0.054	8270	03/05/2019 13:44	E83182
DEMETON	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
DIAZINON	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
DICHLORVOS	0.059 U	MG/KG	0.059	8270	03/05/2019 13:44	E83182
DIMETHOATE	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
DISULFOTON	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
ETHION	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
ETHOPROP	0.042 U	MG/KG	0.042	8270	03/05/2019 13:44	E83182
ETHYL PARATHION	0.041 U	MG/KG	0.041	8270	03/05/2019 13:44	E83182
MALATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
METHYL PARATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 13:44	E83182
PHORATE	0.042 U	MG/KG	0.042	8270	03/05/2019 13:44	E83182
RONNEL	0.042 UC3C4	MG/KG	0.042	8270	03/05/2019 13:44	E83182
STIROPHOS	0.050 UC3C4	MG/KG	0.050	8270	03/05/2019 13:44	E83182
SULFOTEP	0.034 U	MG/KG	0.034	8270	03/05/2019 13:44	E83182
PETROLEUM RANGE ORGANICS	22	MG/KG	3.6	FL-PRO	03/04/2019 22:19	E83182
TOTAL SOLIDS	96.2	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021195
Sample Number: 005
Sample Description: SS-5

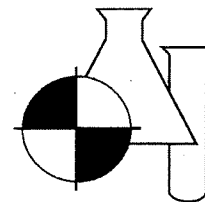
Sample Date: 02/25/2019
Sample Time: 1300
Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.040	% DRY WT	0.001	351.2	03/04/2019 15:03	PN
TOTAL NITROGEN	0.040	% DRY WT	0.001	353+351	03/04/2019 15:03	PN/JW
NITRATE+NITRITE AS N	0.00022	% DRY WT	0.000002	353.2	02/28/2019 14:03	JW
TOTAL PHOSPHORUS AS P	0.039	% DRY WT	0.0008	365.3	02/28/2019 12:21	CE
ARSENIC	8.59	MG/KG	0.254	6010	02/28/2019 12:44	CF
BARIUM	9.61	MG/KG	0.038	6010	02/28/2019 12:44	CF
BORON	0.952	MG/KG	0.463	6010	02/28/2019 12:44	CF
CADMIUM	0.876	MG/KG	0.084	6010	02/28/2019 12:44	CF
CALCIUM	27722	MG/KG	1.26	6010	02/28/2019 12:44	CF
CHROMIUM	12.8	MG/KG	0.168	6010	02/28/2019 12:44	CF
COPPER	22.0	MG/KG	0.168	6010	02/28/2019 12:44	CF
IRON	3790	MG/KG	1.22	6010	02/28/2019 12:44	CF
LEAD	458	MG/KG	0.126	6010	02/28/2019 12:44	CF
MAGNESIUM	566	MG/KG	0.253	6010	02/28/2019 12:44	CF
MANGANESE	103	MG/KG	0.084	6010	02/28/2019 12:44	CF
MOLYBDENUM	0.084 U	MG/KG	0.084	6010	02/28/2019 12:44	CF
POTASSIUM	0.006	% DRY WT	0.001	6010	02/28/2019 12:44	CF
SELENIUM	1.27 U	MG/KG	1.27	6010	02/28/2019 12:44	CF

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



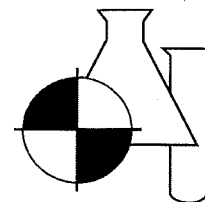
NELAC Certification #E84167

SILVER	1.28 U	MG/KG	1.28	6010	02/28/2019 12:44	CF
SULFUR	117	MG/KG	27.2	6010	03/22/2019 18:20	E83079
ZINC	67.9	MG/KG	0.338	6010	02/28/2019 12:44	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 14:26	CF
LEAD	0.700	MG/KG	0.060	6010/1312	03/30/2019 14:26	CF
MERCURY	0.389	MG/KG	0.023	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 16:32	E83182
4,4'-DDE	0.015	MG/KG	0.0013	8081	03/06/2019 16:32	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:32	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 16:32	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:32	E83182
BETA-BHC	0.0025 U	MG/KG	0.0025	8081	03/06/2019 16:32	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 16:32	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:32	E83182
DIELDRIN	0.13	MG/KG	0.00093	8081	03/06/2019 16:32	E83182
ENDOSULFAN I	0.00083 U	MG/KG	0.00083	8081	03/06/2019 16:32	E83182
ENDOSULFAN II	0.0018 U	MG/KG	0.0018	8081	03/06/2019 16:32	E83182
ENDOSULFAN SULFATE	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:32	E83182
ENDRIN	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:32	E83182
ENDRIN ALDEHYDE	0.0029 U	MG/KG	0.0029	8081	03/06/2019 16:32	E83182
ENDRIN KETONE	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:32	E83182
GAMMA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:32	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:32	E83182
HEPTACHLOR EPOXIDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:32	E83182
METHOXYCHLOR	0.0019 U	MG/KG	0.0019	8081	03/06/2019 16:32	E83182
2,4,5-T	0.0027 UC4	MG/KG	0.0027	8151	03/06/2019 12:26	E83182
2,4,5-TP (SILVEX)	0.0049 U	MG/KG	0.0049	8151	03/06/2019 12:26	E83182
2,4-D	0.010 U	MG/KG	0.010	8151	03/06/2019 12:26	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 12:26	E83182
3,5-DCBA	0.0050 U	MG/KG	0.0050	8151	03/06/2019 12:26	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 12:26	E83182
ACIFLUORFEN	0.0073 U	MG/KG	0.0073	8151	03/06/2019 12:26	E83182
BENTAZON	0.0047 U	MG/KG	0.0047	8151	03/06/2019 12:26	E83182
CHLORAMBEN	0.0040 U	MG/KG	0.0040	8151	03/06/2019 12:26	E83182
DACTHAL	0.0025 U	MG/KG	0.0025	8151	03/06/2019 12:26	E83182
DICAMBA	0.0043 U	MG/KG	0.0043	8151	03/06/2019 12:26	E83182
DICHLORPROP	0.0035 U	MG/KG	0.0035	8151	03/06/2019 12:26	E83182
MCPA	0.78 UC3C4	MG/KG	0.78	8151	03/06/2019 12:26	E83182
MCPD	0.80 UC4	MG/KG	0.80	8151	03/06/2019 12:26	E83182
PENTACHLOROPHENOL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 12:26	E83182
PICLORAM	0.0027 U	MG/KG	0.0027	8151	03/06/2019 12:26	E83182
AZINPHOS-METHYL	0.14 UR-01	MG/KG	0.14	8270	03/05/2019 17:37	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

BOLSTAR	0.16 UR-01	MG/KG	0.16	8270	03/05/2019 17:37	E83182
CHLORPYRIFOS	0.10 UR-01	MG/KG	0.10	8270	03/05/2019 17:37	E83182
COUMAPHOS	0.13 UR-01 C3C4	MG/KG	0.13	8270	03/05/2019 17:37	E83182
DEMETON	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
DIAZINON	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
DICHLORVOS	0.14 UR-01	MG/KG	0.14	8270	03/05/2019 17:37	E83182
DIMETHOATE	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
DISULFOTON	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
ETHION	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
ETHOPROP	0.10 UR-01	MG/KG	0.10	8270	03/05/2019 17:37	E83182
ETHYL PARATHION	0.10 UR-01	MG/KG	0.10	8270	03/05/2019 17:37	E83182
MALATHION	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
METHYL PARATHION	0.11 UR-01	MG/KG	0.11	8270	03/05/2019 17:37	E83182
PHORATE	0.10 UR-01	MG/KG	0.10	8270	03/05/2019 17:37	E83182
RONNEL	0.10 UR-01 C3C4	MG/KG	0.10	8270	03/05/2019 17:37	E83182
STIROPHOS	0.12 UR-01 C3C4	MG/KG	0.12	8270	03/05/2019 17:37	E83182
SULFOTEP	0.084 UR-01	MG/KG	0.084	8270	03/05/2019 17:37	E83182
PETROLEUM RANGE ORGANICS	330 R-01	MG/KG	18	FL-PRO	03/05/2019 03:25	E83182
TOTAL SOLIDS	96.5	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021195

Sample Date: 02/25/2019

Sample Number: 006

Sample Time: 1315

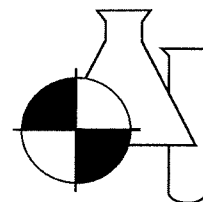
Sample Description: SS-6

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.016	% DRY WT	0.001	351.2	03/04/2019 15:04	PN
TOTAL NITROGEN	0.016	% DRY WT	0.001	353+351	03/04/2019 15:04	PN/JW
NITRATE+NITRITE AS N	0.00005	% DRY WT	0.000002	353.2	02/28/2019 14:04	JW
TOTAL PHOSPHORUS AS P	0.005	% DRY WT	0.0008	365.3	02/28/2019 12:22	CE
ARSENIC	0.303 U	MG/KG	0.303	6010	02/28/2019 12:49	CF
BARIUM	1.20	MG/KG	0.045	6010	02/28/2019 12:49	CF
BORON	0.554 U	MG/KG	0.554	6010	02/28/2019 12:49	CF
CADMIUM	0.101 U	MG/KG	0.101	6010	02/28/2019 12:49	CF
CALCIUM	2408	MG/KG	1.510	6010	02/28/2019 12:49	CF
CHROMIUM	4.48	MG/KG	0.201	6010	02/28/2019 12:49	CF
COPPER	1.04	MG/KG	0.201	6010	02/28/2019 12:49	CF
IRON	1358	MG/KG	1.46	6010	02/28/2019 12:49	CF
LEAD	1.71	MG/KG	0.151	6010	02/28/2019 12:49	CF
MAGNESIUM	103	MG/KG	0.302	6010	02/28/2019 12:49	CF
MANGANESE	6.29	MG/KG	0.101	6010	02/28/2019 12:49	CF
MOLYBDENUM	0.101 U	MG/KG	0.101	6010	02/28/2019 12:49	CF

BENCHMARK

EnviroAnalytical Inc.



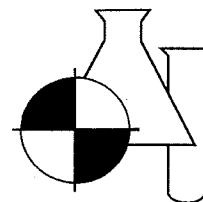
NELAC Certification #E84167

POTASSIUM	0.001	% DRY WT	0.001	6010	02/28/2019 12:49	CF
SELENIUM	0.112	MG/KG	0.025	6010	02/28/2019 12:49	CF
SILVER	0.059 U	MG/KG	0.059	6010	02/28/2019 12:49	CF
SULFUR	31.1 I	MG/KG	27.5	6010	03/22/2019 18:23	E83079
ZINC	2.74	MG/KG	0.201	6010	02/28/2019 12:49	CF
ARSENIC	0.460 I	MG/KG	0.120	6010/1312	03/30/2019 14:58	CF
LEAD	0.060 U	MG/KG	0.060	6010/1312	03/30/2019 14:58	CF
MERCURY	0.025 U	MG/KG	0.025	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 16:44	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:44	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:44	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 16:44	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:44	E83182
BETA-BHC	0.0026 U	MG/KG	0.0026	8081	03/06/2019 16:44	E83182
CHLORDANE (TECH)	0.016 U	MG/KG	0.016	8081	03/06/2019 16:44	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:44	E83182
DIELDRIN	0.00097 U	MG/KG	0.00097	8081	03/06/2019 16:44	E83182
ENDOSULFAN I	0.00086 U	MG/KG	0.00086	8081	03/06/2019 16:44	E83182
ENDOSULFAN II	0.0019 U	MG/KG	0.0019	8081	03/06/2019 16:44	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:44	E83182
ENDRIN	0.0016 U	MG/KG	0.0016	8081	03/06/2019 16:44	E83182
ENDRIN ALDEHYDE	0.0030 U	MG/KG	0.0030	8081	03/06/2019 16:44	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:44	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:44	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:44	E83182
HEPTACHLOR EPOXIDE	0.0016 U	MG/KG	0.0016	8081	03/06/2019 16:44	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 16:44	E83182
2,4,5-T	0.0028 UC4	MG/KG	0.0028	8151	03/06/2019 12:51	E83182
2,4,5-TP (SILVEX)	0.0051 U	MG/KG	0.0051	8151	03/06/2019 12:51	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019 12:51	E83182
2,4-DB	0.011 U	MG/KG	0.011	8151	03/06/2019 12:51	E83182
3,5-DCBA	0.0052 U	MG/KG	0.0052	8151	03/06/2019 12:51	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 12:51	E83182
ACIFLUORFEN	0.0076 U	MG/KG	0.0076	8151	03/06/2019 12:51	E83182
BENTAZON	0.0048 U	MG/KG	0.0048	8151	03/06/2019 12:51	E83182
CHLORAMBEN	0.0042 U	MG/KG	0.0042	8151	03/06/2019 12:51	E83182
DACTHAL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 12:51	E83182
DICAMBA	0.0045 U	MG/KG	0.0045	8151	03/06/2019 12:51	E83182
DICHLORPROP	0.0037 U	MG/KG	0.0037	8151	03/06/2019 12:51	E83182
MCPA	0.81 UC3C4	MG/KG	0.81	8151	03/06/2019 12:51	E83182
MCPP	0.83 UC4	MG/KG	0.83	8151	03/06/2019 12:51	E83182
PENTACHLOROPHENOL	0.0027 U	MG/KG	0.0027	8151	03/06/2019 12:51	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



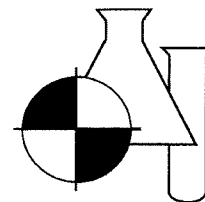
NELAC Certification #E84167

PICLORAM	0.0028 U	MG/KG	0.0028	8151	03/06/2019 12:51	E83182
AZINPHOS-METHYL	0.060 U	MG/KG	0.060	8270	03/05/2019 14:17	E83182
BOLSTAR	0.065 U	MG/KG	0.065	8270	03/05/2019 14:17	E83182
CHLORPYRIFOS	0.043 U	MG/KG	0.043	8270	03/05/2019 14:17	E83182
COUMAPHOS	0.056 UC3C4	MG/KG	0.056	8270	03/05/2019 14:17	E83182
DEMETON	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
DIAZINON	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
DICHLORVOS	0.060 U	MG/KG	0.060	8270	03/05/2019 14:17	E83182
DIMETHOATE	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
DISULFOTON	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
ETHION	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
ETHOPROP	0.043 U	MG/KG	0.043	8270	03/05/2019 14:17	E83182
ETHYL PARATHION	0.043 U	MG/KG	0.043	8270	03/05/2019 14:17	E83182
MALATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
METHYL PARATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 14:17	E83182
PHORATE	0.043 U	MG/KG	0.043	8270	03/05/2019 14:17	E83182
RONNEL	0.043 UC3C4	MG/KG	0.043	8270	03/05/2019 14:17	E83182
STIROPHOS	0.052 UC3C4	MG/KG	0.052	8270	03/05/2019 14:17	E83182
SULFOTEP	0.035 U	MG/KG	0.035	8270	03/05/2019 14:17	E83182
PETROLEUM RANGE ORGANICS	3.7 U	MG/KG	3.7	FL-PRO	03/04/2019 22:50	E83182
TOTAL SOLIDS	92.5	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

Dale B. Dixon / Laboratory Director

04/02/2019

Date

Tülay Tanrisever / Kara Peterson - QC/QA Officers

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.
J2 = Estimated value. No control criteria exists for this component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
L = Off-scale high. Value is known to be > the value reported.
Q = Sample held beyond accepted hold time.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

For questions and comments regarding these results, please
contact us at (941) 723-9986.

Results relate only to the samples.

NOTES:

PQL = 4xMDL.
X = Value exceeds MCL.
2: SOUR calculations are based on Total Solids.
J2: Per client request, analysis conducted without method blank.
SPLP Arsenic and Lead added per client request.

C3 = The associated laboratory control sample exhibited high bias;
since the result is ND, there is no impact.
C4 = The associated continuing calibration verification standard
exhibited high bias; since the result is ND, there is no impact.
C5 = The spike recovery was outside acceptance limits for the MS and
/or MSD. The batch was accepted based on acceptable LCS recovery.
C6 = Precision between duplicate matrix spikes of the same sample
was outside acceptance limits.
C8 = The spike recovery was outside acceptance limits for the MS and
/or MSD.
R-01 = The Reporting Limit for this analyte has been raised to account
for matrix interference.

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL. 34221
 941-723-9986
 941-723-6061

Client Name: Earth Tech Environmental, LLC
 10600 Jolea Ave.
 Bonita Springs FL 34135
 Andrew McAuley 516-647-9699 / office: 239-304-0030
 andrew@eteflorida.com, Jennifer Bobka
 jenniferb@eteflorida.com

Project Name: Golden Gate Golf Course
 Sample Type¹: Grab Sample Matrix²: Soil

Laboratory Submission # : 19021195		Laboratory Sample #	
Station ID	* JLP - As Pb	Parameters, Preservative ¹ , Container Type ³	Laboratory Sample #
SS-1	RCRA 8 Metals: (As Ba Cd Cr Pb Hg Se Ag)	Fertilizers: TKN NO ₃ -NO ₂ TP TN	Herbicides (8151A) Pesticides (8081 & 8270) Total Petroleum Hydrocarbons (FL-PRO)
	Fertilizer Metals: (K Ca Mg Sulfur B Cu Fe Mn Mo Zn) %TS (SM2540G)		
	1 x 950mL Amber Glass	1 x 125mL Amber Glass	1 x 950mL Amber Glass
	Plain	Plain	Plain
SS-2	2/25/19 @ 12:00		1
SS-3	" @ 12:20		2
SS-4	" @ 12:30		3
SS-5	" @ 12:42		4
SS-6	" @ 13:00		5
SS-7	" @ 13:15		6

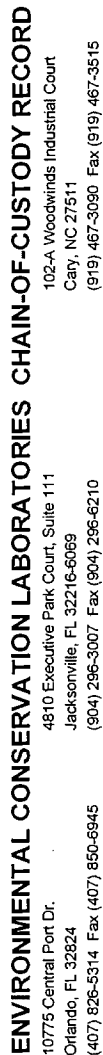
1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4. Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Instructions:
 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability	
pH < 7	Temperature: 2.0°C

Collector: CBT/My	Date: 2/25/19	Time: 17:00	Received By: [Signature]	Date: 2/25/19	Time: 09:30
Relinquished By: [Signature]	Date: 2/25/19	Time: 17:55	Received By: [Signature]	Date: 2/26/19	Time: 11:53
Relinquished By: [Signature]	Date: 2/26/19	Time:	Received By: [Signature]	Date: 2/26/19	Time: 14:50
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

* Added per client request.



ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3511

Page _____ of _____

[illegible]

16 of 17

INTERLABORATORY SAMPLE TRANSMITTAL FORM

Benchmark EnviroAnalytical, Inc.
1711 12th Street East
Palmetto, FL 34221
(941) 723-9986
(941) 723-6061 fax

WO#: 35454418



Office QC Check: _____
Bottle Check: _____

Date:	03/12/19	
# of Samples:	6	Total # of Bottles: 6
Method of Shipment:	Hand Delivery	
Subcontract Laboratory:	E83079 - Pace Analytical Service Inc; 8 East Tower Circle; Ormond Beach, FL 32175 Daniel Barrett; 1-800-966-5668	
Page:	1	of 1

Laboratory Submission #	Collection		Sample Matrix*	Collection Method**	Preservative	Container		Parameters	Comments
	Date	Time				Qty	Capacity		
19021195-1	02/25/19	1200	Soil	Grab	Plain	1	250mL	Sulfur (6010)	
19021195-2	02/25/19	1220	Soil	Grab	Plain	1	250mL	Sulfur (6010)	
19021195-3	02/25/19	1230	Soil	Grab	Plain	1	250mL	Sulfur (6010)	
19021195-4	02/25/19	1224	Soil	Grab	Plain	1	250mL	Sulfur (6010)	
19021195-5	02/25/19	1300	Soil	Grab	Plain	1	250mL	Sulfur (6010)	
19021195-6	02/25/19	1315	Soil	Grab	Plain	1	250mL	Sulfur (6010)	

Checked against COC & Method Requirements: Dale Dixon Lab. Director

* Sample Matrix abbreviations: Groundwater (GW), Surface Water (SW), Saline Surface Water (SSW), Fresh Surface Water (FSW), Drinking Water (DW), Sludge (Sludge), Solid (Sol), Soil (Soil), Domestic Effluent (Dom Eff), Industrial Effluent (Ind Eff).
** Sample Method abbreviations: Grab (G), Composite (C), 24 Hour Composite (24HR Comp).
*** Container Type abbreviations: Plastic (P), Glass (G)

Relinquished By: (Benchmark)	Sign Name: <i>[Signature]</i>	Date: 03/15/19	Received By: <i>[Signature]</i>	Date: 03/15/19
	Print Name:annah Jensen (Benchmark EA)	Time: 1252		Time: 1252
Relinquished By:	Sign Name: <i>[Signature]</i>	Date: 03/15/19	Received By: <i>[Signature]</i>	Date: 3-15-19
	Print Name:	Time: 1430		Time: 1430

T203 21.2

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33

Blank (9C01019-BLK1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 09:50

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Azinphos-methyl	0.014	U	0.017	mg/kg wet							
Bolstar	0.015	U	0.017	mg/kg wet							
Chlorpyrifos	0.010	U	0.017	mg/kg wet							
Coumaphos	0.013	U	0.017	mg/kg wet							
Demeton	0.011	U	0.017	mg/kg wet							
Diazinon	0.011	U	0.017	mg/kg wet							
Dichlorvos	0.014	U	0.017	mg/kg wet							
Dimethoate	0.011	U	0.017	mg/kg wet							
Disulfoton	0.011	U	0.017	mg/kg wet							
Ethion	0.011	U	0.017	mg/kg wet							
Ethoprop	0.010	U	0.017	mg/kg wet							
Ethyl Parathion	0.0099	U	0.017	mg/kg wet							
Malathion	0.011	U	0.017	mg/kg wet							
Methyl parathion	0.011	U	0.017	mg/kg wet							
Monocrotophos	0.016	U	0.017	mg/kg wet							
Phorate	0.010	U	0.017	mg/kg wet							
Ronnel	0.010	U	0.017	mg/kg wet							
Stirophos (Tetrachlorvinphos)	0.012	U	0.017	mg/kg wet							
Sulfotep	0.0081	U	0.017	mg/kg wet							
Tributyl Phosphate	0.049			mg/kg wet	0.0670		73	33-127			
Triphenyl phosphate	0.10			mg/kg wet	0.0670		156	34-158			

LCS (9C01019-BS1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 10:23

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.068		0.017	mg/kg wet	0.0667		103	46-122			
Dimethoate	0.058		0.017	mg/kg wet	0.0667		87	38-130			
Malathion	0.062		0.017	mg/kg wet	0.0667		93	44-126			
Monocrotophos	0.029		0.017	mg/kg wet	0.0667		44	16-136			
Sulfotep	0.056		0.017	mg/kg wet	0.0667		85	40-127			
Tributyl Phosphate	0.054			mg/kg wet	0.0670		80	33-127			
Triphenyl phosphate	0.10			mg/kg wet	0.0670		156	34-158			

Matrix Spike (9C01019-MS1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 10:57

Source: AC01437-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.071	I	0.074	mg/kg dry	0.0724	0.043 U	98	46-122			
Dimethoate	0.062	I	0.074	mg/kg dry	0.0724	0.048 U	85	38-130			
Malathion	0.065	I	0.074	mg/kg dry	0.0724	0.048 U	90	44-126			
Monocrotophos	0.033	I	0.074	mg/kg dry	0.0724	0.0 U	45	16-136			
Sulfotep	0.058	I	0.074	mg/kg dry	0.0724	0.035 U	80	40-127			
Tributyl Phosphate	0.055	I		mg/kg dry	0.0727		76	33-127			
Triphenyl phosphate	0.11			mg/kg dry	0.0727		153	34-158			

Matrix Spike Dup (9C01019-MSD1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 11:30

Source: AC01437-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33 - Continued

Matrix Spike Dup (9C01019-MSD1) Continued

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 11:30

Source: AC01437-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.063	I	0.074	mg/kg dry	0.0721	0.043 U	87	46-122	12	13	
Dimethoate	0.053	I	0.074	mg/kg dry	0.0721	0.048 U	73	38-130	16	15	QM-11
Malathion	0.056	I	0.074	mg/kg dry	0.0721	0.048 U	78	44-126	15	14	QM-11
Monocrotophos	0.029	I	0.074	mg/kg dry	0.0721	0.0 U	41	16-136		20	
Sulfotep	0.050	I	0.074	mg/kg dry	0.0721	0.035 U	69	40-127	15	14	QM-11
Tributyl Phosphate	0.051	I		mg/kg dry	0.0725		70	33-127			
Triphenyl phosphate	0.11			mg/kg dry	0.0725		147	34-158			

Tentatively Identified Compounds by Semivolatile GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33

Blank (9C01019-BLK1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 09:50

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tentatively Identified Compounds	0.0			mg/kg wet							

Organochlorine Pesticides by GC - Quality Control

Batch 9B28041 - SOP EXSV-33

Blank (9B28041-BLK1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00080	U	0.0017	mg/kg wet							
4,4'-DDE	0.00065	U	0.0017	mg/kg wet							
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0012	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0072	U	0.033	mg/kg wet							
Chlordane-alpha	0.00066	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00077	U	0.0017	mg/kg wet							
delta-BHC	0.00062	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00040	U	0.0017	mg/kg wet							
Endosulfan II	0.00087	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00060	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.0014	U	0.0017	mg/kg wet							
Endrin ketone	0.00060	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00066	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00074	U	0.0017	mg/kg wet							
Methoxychlor	0.00094	U	0.0017	mg/kg wet							
2,4,5,6-TCMX	0.066			mg/kg wet	0.0667		99	20-137			
Decachlorobiphenyl	0.042			mg/kg wet	0.0667		63	13-183			

QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 9B28041 - SOP EXSV-33 - Continued

LCS (9B28041-BS1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:26

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.025		0.0017	mg/kg wet	0.0333		74	37-125			
Dieldrin	0.033		0.0017	mg/kg wet	0.0333		98	46-127			
Endrin	0.029		0.0017	mg/kg wet	0.0333		87	28-143			
2,4,5,6-TCMX	0.037			mg/kg wet	0.0333		112	20-137			
Decachlorobiphenyl	0.020			mg/kg wet	0.0333		61	13-183			

Matrix Spike (9B28041-MS1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:38

Source: AC01302-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.027		0.0036	mg/kg dry	0.0361	0.0014 U	76	37-125			
Dieldrin	0.037		0.0036	mg/kg dry	0.0361	0.00096 U	104	46-127			
Endrin	0.035		0.0036	mg/kg dry	0.0361	0.0016 U	96	28-143			
2,4,5,6-TCMX	0.053			mg/kg dry	0.0361		146	20-137			
Decachlorobiphenyl	0.039			mg/kg dry	0.0361		108	13-183			

Matrix Spike Dup (9B28041-MSD1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:51

Source: AC01302-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.027		0.0036	mg/kg dry	0.0362	0.0014 U	74	37-125	2	24	
Dieldrin	0.038		0.0036	mg/kg dry	0.0362	0.00096 U	106	46-127	2	21	
Endrin	0.035		0.0036	mg/kg dry	0.0362	0.0016 U	96	28-143	0.3	22	
2,4,5,6-TCMX	0.052			mg/kg dry	0.0362		144	20-137			
Decachlorobiphenyl	0.038			mg/kg dry	0.0362		106	13-183			

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA 8151A

Blank (9C04050-BLK1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:04

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0026	U	0.010	mg/kg wet							
2,4,5-T	0.0026	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0098	U	0.010	mg/kg wet							
2,4-DB	0.0098	U	0.010	mg/kg wet							
3,5-DCBA	0.0048	U	0.010	mg/kg wet							
3,5-DCBA	0.0048	U	0.010	mg/kg wet							
4-Nitrophenol	0.0097	U	0.010	mg/kg wet							
4-Nitrophenol	0.0097	U	0.010	mg/kg wet							
Acifluorfen	0.0071	U	0.010	mg/kg wet							
Acifluorfen	0.0071	U	0.010	mg/kg wet							
Bentazon	0.0045	U	0.010	mg/kg wet							
Bentazon/Picloram	0.0			mg/kg wet							
Chloramben	0.0039	U	0.010	mg/kg wet							

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA 8151A - Continued

Blank (9C04050-BLK1) Continued

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloramben	0.0039	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0042	U	0.010	mg/kg wet							
Dicamba	0.0042	U	0.010	mg/kg wet							
Dichlorprop	0.0034	U	0.010	mg/kg wet							
Dichlorprop	0.0034	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
MCPA	0.75	U	1.0	mg/kg wet							
MCPA	0.75	U	1.0	mg/kg wet							
MCPP	0.77	U	1.0	mg/kg wet							
MCPP	0.77	U	1.0	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Picloram	0.0026	U	0.010	mg/kg wet							
2,4-DCAA	0.034			mg/kg wet	0.0400		84	16-169			
2,4-DCAA [2C]	0.032			mg/kg wet	0.0400		80	16-169			

LCS (9C04050-BS1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.035		0.010	mg/kg wet	0.0400		87	26-147			
2,4-D	0.034		0.010	mg/kg wet	0.0400		84	28-145			
2,4-DB	0.040		0.010	mg/kg wet	0.0400		100	10-179			
Bentazon	0.031		0.010	mg/kg wet	0.0400		76	10-145			
Dalapon	0.020		0.010	mg/kg wet	0.0400		51	15-148			
Dicamba	0.035		0.010	mg/kg wet	0.0400		88	29-147			
Picloram	0.023		0.010	mg/kg wet	0.0400		57	13-119			
2,4-DCAA	0.030			mg/kg wet	0.0400		75	16-169			

Matrix Spike (9C04050-MS1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:55

Source: AC01437-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.029		0.011	mg/kg dry	0.0437	0.0051 U	66	26-147			
2,4-D	0.032		0.011	mg/kg dry	0.0437	0.011 U	74	28-145			
2,4-DB	0.036		0.011	mg/kg dry	0.0437	0.011 U	83	10-179			
Bentazon	0.025		0.011	mg/kg dry	0.0437	0.0049 U	57	10-145			
Dalapon	0.020		0.011	mg/kg dry	0.0437	0.0054 U	46	15-148			
Dicamba	0.031		0.011	mg/kg dry	0.0437	0.0045 U	70	29-147			
Picloram	0.019		0.011	mg/kg dry	0.0437	0.0028 U	43	13-119			
2,4-DCAA	0.044			mg/kg dry	0.0437		100	16-169			

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA 8151A - Continued

Matrix Spike Dup (9C04050-MSD1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 10:20

Source: AC01437-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.035		0.011	mg/kg dry	0.0435	0.0051 U	80	26-147	18	20	
2,4-D	0.031		0.011	mg/kg dry	0.0435	0.011 U	72	28-145	3	20	
2,4-DB	0.038		0.011	mg/kg dry	0.0435	0.011 U	88	10-179	5	28	
Bentazon	0.030		0.011	mg/kg dry	0.0435	0.0049 U	68	10-145	17	23	
Dalapon	0.022		0.011	mg/kg dry	0.0435	0.0054 U	50	15-148	9	22	
Dicamba	0.031		0.011	mg/kg dry	0.0435	0.0045 U	72	29-147	2	20	
Picloram	0.022		0.011	mg/kg dry	0.0435	0.0028 U	50	13-119	14	18	
2,4-DCAA	0.028			mg/kg dry	0.0435		65	16-169			

FL Petroleum Range Organics - Quality Control

Batch 9B28042 - SOP EXSV-33

Blank (9B28042-BLK1)

Prepared: 03/01/2019 09:00 Analyzed: 03/04/2019 15:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	3.4	U	5.7	mg/kg wet							
n-Pentatriacontane	2.8			mg/kg wet	3.33		85	36-132			
o-Terphenyl	1.5			mg/kg wet	1.67		92	66-136			

LCS (9B28042-BS1)

Prepared: 03/01/2019 09:00 Analyzed: 03/04/2019 15:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	49		5.7	mg/kg wet	56.7		86	65-119			
n-Pentatriacontane	3.1			mg/kg wet	3.33		94	36-132			
o-Terphenyl	1.6			mg/kg wet	1.67		95	66-136			

Matrix Spike (9B28042-MS1)

Prepared: 03/01/2019 09:00 Analyzed: 03/04/2019 23:51

Source: AC01325-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	420		37	mg/kg dry	75.3	280	180	39-181			R-01
n-Pentatriacontane	4.1			mg/kg dry	4.43		92	36-132			R-01
o-Terphenyl	1.8	I		mg/kg dry	2.22		80	66-136			R-01

Matrix Spike Dup (9B28042-MSD1)

Prepared: 03/01/2019 09:00 Analyzed: 03/05/2019 00:22

Source: AC01325-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	420		37	mg/kg dry	74.3	280	183	39-181	0.1	25	QM-07, R-01
n-Pentatriacontane	3.9			mg/kg dry	4.37		90	36-132			R-01
o-Terphenyl	1.8	I		mg/kg dry	2.19		84	66-136			R-01

QUALITY CONTROL DATA

Project: 19021195
Pace Project No.: 35454418

QC Batch: 524529 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET Solid
Associated Lab Samples: 35454418001, 35454418002, 35454418003, 35454418004, 35454418005, 35454418006

METHOD BLANK: 2835305 Matrix: Solid
Associated Lab Samples: 35454418001, 35454418002, 35454418003, 35454418004, 35454418005, 35454418006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfur	mg/kg	31.1 U	62.2	31.1	03/22/19 12:53	

LABORATORY CONTROL SAMPLE: 2835306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfur	mg/kg	151	126	83	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2835307 2835308

Parameter	Units	35454484002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sulfur	mg/kg	5050	335	394	5450	5990	120	239	75-125	9 20	J(M1), L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 19021195
Pace Project No.: 35454418

QC Batch: 525178 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 35454418006

SAMPLE DUPLICATE: 2840091

Parameter	Units	35453937001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	35.1	31.8	10	10	

SAMPLE DUPLICATE: 2840092

Parameter	Units	35454978019 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	9.9	10	10	

SAMPLE DUPLICATE: 2840093

Parameter	Units	35455131011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.8	4.4	43	10	J(D6)

SAMPLE DUPLICATE: 2840094

Parameter	Units	35455431009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.8	8.9	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 19021195

Pace Project No.: 35454418

QC Batch: 525781 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 35454418001, 35454418002, 35454418003, 35454418004, 35454418005

SAMPLE DUPLICATE: 2843308

Parameter	Units	35454418001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.2	5.6	9	10	

SAMPLE DUPLICATE: 2843309

Parameter	Units	35454978024 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.5	4.6	4	10	

SAMPLE DUPLICATE: 2843310

Parameter	Units	35455751013 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.4	17.5	1	10	

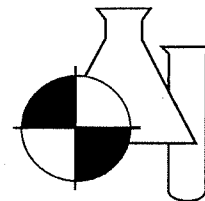
SAMPLE DUPLICATE: 2843311

Parameter	Units	35456141007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.8	24.5	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL TEST REPORT
THESE RESULTS MEET NELAC STANDARDS

Submission Number : 19021194

Earth Tech Environmental
10600 Jolea Ave.
Bonita Springs, FL 34135

Project Name : GOLDEN GATE GOLF COURSE
Date Received : 02/26/2019
Time Received : 1450

Jennifer Bobka

Submission Number: 19021194
Sample Number: 001
Sample Description: SS-7

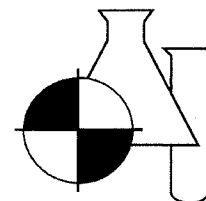
Sample Date: 02/25/2019
Sample Time: 1345
Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.018	% DRY WT	0.001	351.2	03/04/2019 14:42	PN
TOTAL NITROGEN	0.018	% DRY WT	0.001	353+351	03/04/2019 14:42	PN/JW
NITRATE+NITRITE AS N	0.00008	% DRY WT	0.000002	353.2	02/28/2019 13:45	JW
TOTAL PHOSPHORUS AS P	0.003 I	% DRY WT	0.0009	365.3	03/01/2019 13:42	CE
ARSENIC	4.68	MG/KG	0.286	6010	02/28/2019 12:03	CF
BARIUM	2.18	MG/KG	0.043	6010	02/28/2019 12:03	CF
BORON	0.945 I	MG/KG	0.522	6010	02/28/2019 12:03	CF
CADMIUM	0.095 U	MG/KG	0.095	6010	02/28/2019 12:03	CF
CALCIUM	870	MG/KG	1.43	6010	02/28/2019 12:03	CF
CHROMIUM	5.99	MG/KG	0.190	6010	02/28/2019 12:03	CF
COPPER	1.14	MG/KG	0.190	6010	02/28/2019 12:03	CF
IRON	1515	MG/KG	1.38	6010	02/28/2019 12:03	CF
LEAD	1.60	MG/KG	0.142	6010	02/28/2019 12:03	CF
MAGNESIUM	102	MG/KG	0.285	6010	02/28/2019 12:03	CF
MANGANESE	14.9	MG/KG	0.095	6010	02/28/2019 12:03	CF
MOLYBDENUM	0.309 I	MG/KG	0.309	6010	02/28/2019 12:03	CF
POTASSIUM	0.006	% DRY WT	0.001	6010	02/28/2019 12:03	CF
SELENIUM	0.024 U	MG/KG	0.024	6010	02/28/2019 12:03	CF
SILVER	0.056 U	MG/KG	0.056	6010	02/28/2019 12:03	CF
SULFUR	31.5 I	MG/KG	25.2	6010	03/22/2019 18:26	E83079
ZINC	4.37	MG/KG	0.190	6010	02/28/2019 12:03	CF
ARSENIC	0.380 I	MG/KG	0.120	6010/1312	03/30/2019 13:51	CF
LEAD	0.080 I	MG/KG	0.060	6010/1312	03/30/2019 13:51	CF
MERCURY	0.028	MG/KG	0.021	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0018 U	MG/KG	0.0018	8081	03/06/2019 16:56	E83182
4,4'-DDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:56	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



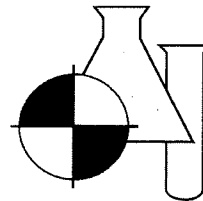
NELAC Certification #E84167

4,4'-DDT	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:56	E83182
ALDRIN	0.0012 U	MG/KG	0.0012	8081	03/06/2019 16:56	E83182
ALPHA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 16:56	E83182
BETA-BHC	0.0028 U	MG/KG	0.0028	8081	03/06/2019 16:56	E83182
CHLORDANE (TECH)	0.017 U	MG/KG	0.017	8081	03/06/2019 16:56	E83182
DELTA-BHC	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:56	E83182
DIELDRIN	0.0010 U	MG/KG	0.0010	8081	03/06/2019 16:56	E83182
ENDOSULFAN I	0.00092 U	MG/KG	0.00092	8081	03/06/2019 16:56	E83182
ENDOSULFAN II	0.0020 U	MG/KG	0.0020	8081	03/06/2019 16:56	E83182
ENDOSULFAN SULFATE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:56	E83182
ENDRIN	0.0017 U	MG/KG	0.0017	8081	03/06/2019 16:56	E83182
ENDRIN ALDEHYDE	0.0032 U	MG/KG	0.0032	8081	03/06/2019 16:56	E83182
ENDRIN KETONE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:56	E83182
GAMMA-BHC	0.0014 U	MG/KG	0.0014	8081	03/06/2019 16:56	E83182
HEPTACHLOR	0.0015 U	MG/KG	0.0015	8081	03/06/2019 16:56	E83182
HEPTACHLOR EPOXIDE	0.0017 U	MG/KG	0.0017	8081	03/06/2019 16:56	E83182
METHOXYCHLOR	0.0022 U	MG/KG	0.0022	8081	03/06/2019 16:56	E83182
2,4,5-T	0.0030 UC4	MG/KG	0.0030	8151	03/06/2019 13:17	E83182
2,4,5-TP (SILVEX)	0.0054 U	MG/KG	0.0054	8151	03/06/2019 13:17	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019 13:17	E83182
2,4-DB	0.011 U	MG/KG	0.011	8151	03/06/2019 13:17	E83182
3,5-DCBA	0.0055 U	MG/KG	0.0055	8151	03/06/2019 13:17	E83182
4-NITROPHENOL	0.011 U	MG/KG	0.011	8151	03/06/2019 13:17	E83182
ACIFLUORFEN	0.0082 U	MG/KG	0.0082	8151	03/06/2019 13:17	E83182
BENTAZON	0.0052 U	MG/KG	0.0052	8151	03/06/2019 13:17	E83182
CHLORAMBEN	0.0045 U	MG/KG	0.0045	8151	03/06/2019 13:17	E83182
DACTHAL	0.0028 U	MG/KG	0.0028	8151	03/06/2019 13:17	E83182
DICAMBA	0.0048 U	MG/KG	0.0048	8151	03/06/2019 13:17	E83182
DICHLORPROP	0.0039 U	MG/KG	0.0039	8151	03/06/2019 13:17	E83182
MCPA	0.86 UC3C4	MG/KG	0.86	8151	03/06/2019 13:17	E83182
MCPP	0.89 UC4	MG/KG	0.89	8151	03/06/2019 13:17	E83182
PENTACHLOROPHENOL	0.0029 U	MG/KG	0.0029	8151	03/06/2019 13:17	E83182
PICLORAM	0.0030 U	MG/KG	0.0030	8151	03/06/2019 13:17	E83182
AZINPHOS-METHYL	0.064 U	MG/KG	0.064	8270	03/05/2019 14:50	E83182
BOLSTAR	0.069 U	MG/KG	0.069	8270	03/05/2019 14:50	E83182
CHLORPYRIFOS	0.046 U	MG/KG	0.046	8270	03/05/2019 14:50	E83182
COUMAPHOS	0.060 UC3C4	MG/KG	0.060	8270	03/05/2019 14:50	E83182
DEMETON	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
DIAZINON	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
DICHLORVOS	0.064 U	MG/KG	0.064	8270	03/05/2019 14:50	E83182
DIMETHOATE	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
DISULFOTON	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ETHION	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
ETHOPROP	0.046 U	MG/KG	0.046	8270	03/05/2019 14:50	E83182
ETHYL PARATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 14:50	E83182
MALATHION	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
METHYL PARATHION	0.051 U	MG/KG	0.051	8270	03/05/2019 14:50	E83182
PHORATE	0.046 U	MG/KG	0.046	8270	03/05/2019 14:50	E83182
RONNEL	0.046 UC3C4	MG/KG	0.046	8270	03/05/2019 14:50	E83182
STIROPHOS	0.055 UC3C4	MG/KG	0.055	8270	03/05/2019 14:50	E83182
SULFOTEP	0.037 U	MG/KG	0.037	8270	03/05/2019 14:50	E83182
TOTAL SOLIDS	87.0	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021194

Sample Date: 02/25/2019

Sample Number: 002

Sample Time: 1400

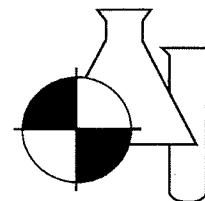
Sample Description: SS-8

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.045	% DRY WT	0.001	351.2	03/04/2019 14:46	PN
TOTAL NITROGEN	0.045	% DRY WT	0.001	353+351	03/04/2019 14:46	PN/JW
NITRATE+NITRITE AS N	0.0001	% DRY WT	0.000002	353.2	02/28/2019 13:47	JW
TOTAL PHOSPHORUS AS P	0.005	% DRY WT	0.0008	365.3	03/01/2019 13:43	CE
ARSENIC	1.53	MG/KG	0.351	6010	02/28/2019 12:09	CF
BARIUM	2.55	MG/KG	0.052	6010	02/28/2019 12:09	CF
BORON	0.751 I	MG/KG	0.641	6010	02/28/2019 12:09	CF
CADMIUM	0.116 U	MG/KG	0.116	6010	02/28/2019 12:09	CF
CALCIUM	19462	MG/KG	1.75	6010	02/28/2019 12:09	CF
CHROMIUM	4.11	MG/KG	0.233	6010	02/28/2019 12:09	CF
COPPER	1.01	MG/KG	0.233	6010	02/28/2019 12:09	CF
IRON	3152	MG/KG	1.69	6010	02/28/2019 12:09	CF
LEAD	1.56	MG/KG	0.175	6010	02/28/2019 12:09	CF
MAGNESIUM	99.9	MG/KG	0.349	6010	02/28/2019 12:09	CF
MANGANESE	8.94	MG/KG	0.116	6010	02/28/2019 12:09	CF
MOLYBDENUM	0.210 I	MG/KG	0.116	6010	02/28/2019 12:09	CF
POTASSIUM	0.003 I	% DRY WT	0.001	6010	02/28/2019 12:09	CF
SELENIUM	0.029 U	MG/KG	0.029	6010	02/28/2019 12:09	CF
SILVER	0.069 U	MG/KG	0.069	6010	02/28/2019 12:09	CF
SULFUR	68.8	MG/KG	28.9	6010	03/22/2019 18:29	E83079
ZINC	2.81	MG/KG	0.338	6010	02/28/2019 12:09	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 13:55	CF
LEAD	0.060 U	MG/KG	0.060	6010/1312	03/30/2019 13:55	CF
MERCURY	0.018 U	MG/KG	0.018	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 17:09	E83182

BENCHMARK

EnviroAnalytical Inc.



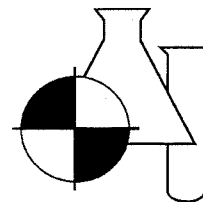
NELAC Certification #E84167

4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:09	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:09	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 17:09	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:09	E83182
BETA-BHC	0.0025 U	MG/KG	0.0025	8081	03/06/2019 17:09	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 17:09	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:09	E83182
DIELDRIN	0.00094 U	MG/KG	0.00094	8081	03/06/2019 17:09	E83182
ENDOSULFAN I	0.00084 U	MG/KG	0.00084	8081	03/06/2019 17:09	E83182
ENDOSULFAN II	0.0018 U	MG/KG	0.0018	8081	03/06/2019 17:09	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:09	E83182
ENDRIN	0.0015 U	MG/KG	0.0015	8081	03/06/2019 17:09	E83182
ENDRIN ALDEHYDE	0.0029 U	MG/KG	0.0029	8081	03/06/2019 17:09	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:09	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:09	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:09	E83182
HEPTACHLOR EPOXIDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019 17:09	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 17:09	E83182
2,4,5-T	0.0027 UC4	MG/KG	0.0027	8151	03/06/2019 13:42	E83182
2,4,5-TP (SILVEX)	0.0049 U	MG/KG	0.0049	8151	03/06/2019 13:42	E83182
2,4-D	0.010 U	MG/KG	0.010	8151	03/06/2019 13:42	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 13:42	E83182
3,5-DCBA	0.0050 U	MG/KG	0.0050	8151	03/06/2019 13:42	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 13:42	E83182
ACIFLUORFEN	0.0074 U	MG/KG	0.0074	8151	03/06/2019 13:42	E83182
BENTAZON	0.0047 U	MG/KG	0.0047	8151	03/06/2019 13:42	E83182
CHLORAMBEN	0.0041 U	MG/KG	0.0041	8151	03/06/2019 13:42	E83182
DACTHAL	0.0025 U	MG/KG	0.0025	8151	03/06/2019 13:42	E83182
DICAMBA	0.0044 U	MG/KG	0.0044	8151	03/06/2019 13:42	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019 13:42	E83182
MCPA	0.78 UC3C4	MG/KG	0.78	8151	03/06/2019 13:42	E83182
MCPP	0.81 UC4	MG/KG	0.81	8151	03/06/2019 13:42	E83182
PENTACHLOROPHENOL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 13:42	E83182
PICLORAM	0.0027 U	MG/KG	0.0027	8151	03/06/2019 13:42	E83182
AZINPHOS-METHYL	0.059 U	MG/KG	0.059	8270	03/05/2019 15:24	E83182
BOLSTAR	0.063 U	MG/KG	0.063	8270	03/05/2019 15:24	E83182
CHLORPYRIFOS	0.042 U	MG/KG	0.042	8270	03/05/2019 15:24	E83182
COUMAPHOS	0.054 UC3C4	MG/KG	0.054	8270	03/05/2019 15:24	E83182
DEMETON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
DIAZINON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
DICHLORVOS	0.059 U	MG/KG	0.059	8270	03/05/2019 15:24	E83182
DIMETHOATE	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DISULFOTON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
ETHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
ETHOPROP	0.042 U	MG/KG	0.042	8270	03/05/2019 15:24	E83182
ETHYL PARATHION	0.041 U	MG/KG	0.041	8270	03/05/2019 15:24	E83182
MALATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
METHYL PARATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:24	E83182
PHORATE	0.042 U	MG/KG	0.042	8270	03/05/2019 15:24	E83182
RONNEL	0.042 UC3C4	MG/KG	0.042	8270	03/05/2019 15:24	E83182
STIROPHOS	0.050 UC3C4	MG/KG	0.050	8270	03/05/2019 15:24	E83182
SULFOTEP	0.034 U	MG/KG	0.034	8270	03/05/2019 15:24	E83182
TOTAL SOLIDS	95.4	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

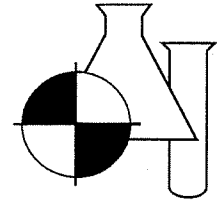
Submission Number: 19021194
Sample Number: 003
Sample Description: SS-9

Sample Date: 02/25/2019
Sample Time: 1420
Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.015	% DRY WT	0.001	351.2	03/04/2019 14:47	PN
TOTAL NITROGEN	0.015	% DRY WT	0.001	353+351	03/04/2019 14:47	PN/JW
NITRATE+NITRITE AS N	0.00008	% DRY WT	0.000002	353.2	02/28/2019 13:48	JW
TOTAL PHOSPHORUS AS P	0.001 I	% DRY WT	0.0008	365.3	03/01/2019 13:44	CE
ARSENIC	2.39	MG/KG	0.301	6010	02/28/2019 12:13	CF
BARIUM	1.25	MG/KG	0.045	6010	02/28/2019 12:13	CF
BORON	0.550 U	MG/KG	0.550	6010	02/28/2019 12:13	CF
CADMIUM	0.100 U	MG/KG	0.100	6010	02/28/2019 12:13	CF
CALCIUM	332	MG/KG	1.50	6010	02/28/2019 12:13	CF
CHROMIUM	4.87	MG/KG	4.87	6010	02/28/2019 12:13	CF
COPPER	0.350 I	MG/KG	0.200	6010	02/28/2019 12:13	CF
IRON	1788	MG/KG	1.45	6010	02/28/2019 12:13	CF
LEAD	1.07	MG/KG	0.150	6010	02/28/2019 12:13	CF
MAGNESIUM	51.5	MG/KG	0.300	6010	02/28/2019 12:13	CF
MANGANESE	4.64	MG/KG	0.100	6010	02/28/2019 12:13	CF
MOLYBDENUM	0.100 U	MG/KG	0.100	6010	02/28/2019 12:13	CF
POTASSIUM	0.002 I	% DRY WT	0.001	6010	02/28/2019 12:13	CF
SELENIUM	0.025 U	MG/KG	0.025	6010	02/28/2019 12:13	CF
SILVER	0.059 U	MG/KG	0.059	6010	02/28/2019 12:13	CF
SULFUR	27.7 U	MG/KG	27.7	6010	03/22/2019 18:31	E83079
ZINC	0.855	MG/KG	0.200	6010	02/28/2019 12:13	CF
ARSENIC	0.700	MG/KG	0.120	6010/1312	03/30/2019 13:59	CF
LEAD	0.100 I	MG/KG	0.080	6010/1312	03/30/2019 13:59	CF
MERCURY	0.018 I	MG/KG	0.017	7471	03/02/2019 13:34	CF

BENCHMARK

EnviroAnalytical Inc.



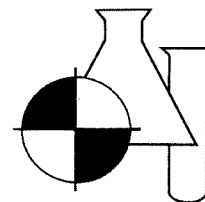
NELAC Certification #E84167

4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 17:21	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:21	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:21	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 17:21	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:21	E83182
BETA-BHC	0.0025 U	MG/KG	0.0025	8081	03/06/2019 17:21	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 17:21	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:21	E83182
DIELDRIN	0.00094 U	MG/KG	0.00094	8081	03/06/2019 17:21	E83182
ENDOSULFAN I	0.00083 U	MG/KG	0.00083	8081	03/06/2019 17:21	E83182
ENDOSULFAN II	0.0018 U	MG/KG	0.0018	8081	03/06/2019 17:21	E83182
ENDOSULFAN SULFATE	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:21	E83182
ENDRIN	0.0015 U	MG/KG	0.0015	8081	03/06/2019 17:21	E83182
ENDRIN ALDEHYDE	0.0029 U	MG/KG	0.0029	8081	03/06/2019 17:21	E83182
ENDRIN KETONE	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:21	E83182
GAMMA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:21	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:21	E83182
HEPTACHLOR EPOXIDE	0.0015 U	MG/KG	0.0015	8081	03/06/2019 17:21	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 17:21	E83182
2,4,5-T	0.0027 UC4	MG/KG	0.0027	8151	03/06/2019 14:07	E83182
2,4,5-TP (SILVEX)	0.0049 U	MG/KG	0.0049	8151	03/06/2019 14:07	E83182
2,4-D	0.010 U	MG/KG	0.010	8151	03/06/2019 14:07	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 14:07	E83182
3,5-DCBA	0.0050 U	MG/KG	0.0050	8151	03/06/2019 14:07	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 14:07	E83182
ACIFLUORFEN	0.0074 U	MG/KG	0.0074	8151	03/06/2019 14:07	E83182
BENTAZON	0.0047 U	MG/KG	0.0047	8151	03/06/2019 14:07	E83182
CHLORAMBEN	0.0041 U	MG/KG	0.0041	8151	03/06/2019 14:07	E83182
DACTHAL	0.0025 U	MG/KG	0.0025	8151	03/06/2019 14:07	E83182
DICAMBA	0.0044 U	MG/KG	0.0044	8151	03/06/2019 14:07	E83182
DICHLORPROP	0.0035 U	MG/KG	0.0035	8151	03/06/2019 14:07	E83182
MCPA	0.78 UC3C4	MG/KG	0.78	8151	03/06/2019 14:07	E83182
MCPP	0.80 UC4	MG/KG	0.80	8151	03/06/2019 14:07	E83182
PENTACHLOROPHENOL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 14:07	E83182
PICLORAM	0.0027 U	MG/KG	0.0027	8151	03/06/2019 14:07	E83182
AZINPHOS-METHYL	0.058 U	MG/KG	0.058	8270	03/05/2019 15:57	E83182
BOLSTAR	0.062 U	MG/KG	0.062	8270	03/05/2019 15:57	E83182
CHLORPYRIFOS	0.042 U	MG/KG	0.042	8270	03/05/2019 15:57	E83182
COUMAPHOS	0.054 UC3C4	MG/KG	0.054	8270	03/05/2019 15:57	E83182
DEMETON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
DIAZINON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
DICHLORVOS	0.058 U	MG/KG	0.058	8270	03/05/2019 15:57	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DIMETHOATE	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
DISULFOTON	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
ETHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
ETHOPROP	0.042 U	MG/KG	0.042	8270	03/05/2019 15:57	E83182
ETHYL PARATHION	0.041 U	MG/KG	0.041	8270	03/05/2019 15:57	E83182
MALATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
METHYL PARATHION	0.046 U	MG/KG	0.046	8270	03/05/2019 15:57	E83182
PHORATE	0.042 U	MG/KG	0.042	8270	03/05/2019 15:57	E83182
RONNEL	0.042 UC3C4	MG/KG	0.042	8270	03/05/2019 15:57	E83182
STIROPHOS	0.050 UC3C4	MG/KG	0.050	8270	03/05/2019 15:57	E83182
SULFOTEP	0.034 U	MG/KG	0.034	8270	03/05/2019 15:57	E83182
TOTAL SOLIDS	96.2	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

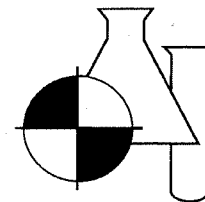
Submission Number: 19021194
Sample Number: 004
Sample Description: SS-10

Sample Date: 02/25/2019
Sample Time: 1430
Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.025	% DRY WT	0.001	351.2	03/04/2019 14:48	PN
TOTAL NITROGEN	0.025	% DRY WT	0.001	353+351	03/04/2019 14:48	PN/JW
NITRATE+NITRITE AS N	0.0001	% DRY WT	0.000002	353.2	02/28/2019 13:49	JW
TOTAL PHOSPHORUS AS P	0.006	% DRY WT	0.0008	365.3	03/01/2019 13:45	CE
ARSENIC	0.302 U	MG/KG	0.302	6010	02/28/2019 12:18	CF
BARIUM	1.36	MG/KG	0.045	6010	02/28/2019 12:18	CF
BORON	0.553 U	MG/KG	0.553	6010	02/28/2019 12:18	CF
CADMIUM	0.100 U	MG/KG	0.100	6010	02/28/2019 12:18	CF
CALCIUM	3400	MG/KG	1.51	6010	02/28/2019 12:18	CF
CHROMIUM	2.03	MG/KG	0.201	6010	02/28/2019 12:18	CF
COPPER	0.623 I	MG/KG	0.201	6010	02/28/2019 12:18	CF
IRON	651	MG/KG	1.46	6010	02/28/2019 12:18	CF
LEAD	1.21	MG/KG	0.151	6010	02/28/2019 12:18	CF
MAGNESIUM	77.6	MG/KG	0.301	6010	02/28/2019 12:18	CF
MANGANESE	4.78	MG/KG	0.100	6010	02/28/2019 12:18	CF
MOLYBDENUM	0.100 U	MG/KG	0.100	6010	02/28/2019 12:18	CF
POTASSIUM	0.001 U	% DRY WT	0.001	6010	02/28/2019 12:18	CF
SELENIUM	0.462	MG/KG	0.462	6010	02/28/2019 12:18	CF
SILVER	0.059 U	MG/KG	0.059	6010	02/28/2019 12:18	CF
SULFUR	47.7 I	MG/KG	28.4	6010	03/22/2019 18:34	E83079
ZINC	1.54	MG/KG	0.201	6010	02/28/2019 12:18	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 14:03	CF
LEAD	0.080 I	MG/KG	0.060	6010/1312	03/30/2019 14:03	CF

BENCHMARK

EnviroAnalytical Inc.



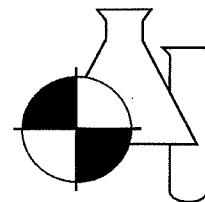
NELAC Certification #E84167

MERCURY	0.028 I	MG/KG	0.023	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 17:33	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:33	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:33	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 17:33	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:33	E83182
BETA-BHC	0.0026 U	MG/KG	0.0026	8081	03/06/2019 17:33	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 17:33	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:33	E83182
DIELDRIN	0.00096 U	MG/KG	0.00096	8081	03/06/2019 17:33	E83182
ENDOSULFAN I	0.00085 U	MG/KG	0.00085	8081	03/06/2019 17:33	E83182
ENDOSULFAN II	0.0019 U	MG/KG	0.0019	8081	03/06/2019 17:33	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:33	E83182
ENDRIN	0.0016 U	MG/KG	0.0016	8081	03/06/2019 17:33	E83182
ENDRIN ALDEHYDE	0.0030 U	MG/KG	0.0030	8081	03/06/2019 17:33	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:33	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:33	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:33	E83182
HEPTACHLOR EPOXIDE	0.0016 U	MG/KG	0.0016	8081	03/06/2019 17:33	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 17:33	E83182
2,4,5-T	0.0028 UC4	MG/KG	0.0028	8151	03/06/2019 14:32	E83182
2,4,5-TP (SILVEX)	0.0050 U	MG/KG	0.0050	8151	03/06/2019 14:32	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019 14:32	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 14:32	E83182
3,5-DCBA	0.0051 U	MG/KG	0.0051	8151	03/06/2019 14:32	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 14:32	E83182
ACIFLUORFEN	0.0076 U	MG/KG	0.0076	8151	03/06/2019 14:32	E83182
BENTAZON	0.0048 U	MG/KG	0.0048	8151	03/06/2019 14:32	E83182
CHLORAMBEN	0.0042 U	MG/KG	0.0042	8151	03/06/2019 14:32	E83182
DACTHAL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 14:32	E83182
DICAMBA	0.0045 U	MG/KG	0.0045	8151	03/06/2019 14:32	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019 14:32	E83182
MCPA	0.80 UC3C4	MG/KG	0.80	8151	03/06/2019 14:32	E83182
MCPP	0.82 UC4	MG/KG	0.82	8151	03/06/2019 14:32	E83182
PENTACHLOROPHENOL	0.0027 U	MG/KG	0.0027	8151	03/06/2019 14:32	E83182
PICLORAM	0.0028 U	MG/KG	0.0028	8151	03/06/2019 14:32	E83182
AZINPHOS-METHYL	0.060 U	MG/KG	0.060	8270	03/05/2019 16:30	E83182
BOLSTAR	0.064 U	MG/KG	0.064	8270	03/05/2019 16:30	E83182
CHLORPYRIFOS	0.043 U	MG/KG	0.043	8270	03/05/2019 16:30	E83182
COUMAPHOS	0.055 UC3C4	MG/KG	0.055	8270	03/05/2019 16:30	E83182
DEMETON	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
DIAZINON	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182

Addended
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

DICHLORVOS	0.060 U	MG/KG	0.060	8270	03/05/2019 16:30	E83182
DIMETHOATE	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
DISULFOTON	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
ETHION	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
ETHOPROP	0.043 U	MG/KG	0.043	8270	03/05/2019 16:30	E83182
ETHYL PARATHION	0.042 U	MG/KG	0.042	8270	03/05/2019 16:30	E83182
MALATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
METHYL PARATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 16:30	E83182
PHORATE	0.043 U	MG/KG	0.043	8270	03/05/2019 16:30	E83182
RONNEL	0.043 UC3C4	MG/KG	0.043	8270	03/05/2019 16:30	E83182
STIROPHOS	0.051 UC3C4	MG/KG	0.051	8270	03/05/2019 16:30	E83182
SULFOTEP	0.034 U	MG/KG	0.034	8270	03/05/2019 16:30	E83182
TOTAL SOLIDS	93.9	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis

Submission Number: 19021194

Sample Date: 02/25/2019

Sample Number: 005

Sample Time: 1450

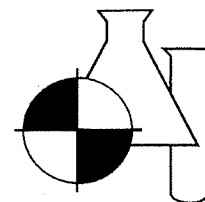
Sample Description: SS-11

Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.032	% DRY WT	0.001	351.2	03/04/2019 14:49	PN
TOTAL NITROGEN	0.032	% DRY WT	0.001	353+351	03/04/2019 14:49	PN/JW
NITRATE+NITRITE AS N	0.0001	% DRY WT	0.000002	353.2	02/28/2019 13:50	JW
TOTAL PHOSPHORUS AS P	0.004	% DRY WT	0.0008	365.3	03/01/2019 13:46	CE
ARSENIC	1.76	MG/KG	0.303	6010	02/28/2019 12:22	CF
BARIUM	6.41	MG/KG	0.045	6010	02/28/2019 12:22	CF
BORON	0.977 l	MG/KG	0.554	6010	02/28/2019 12:22	CF
CADMIUM	0.101 U	MG/KG	0.101	6010	02/28/2019 12:22	CF
CALCIUM	2684	MG/KG	1.510	6010	02/28/2019 12:22	CF
CHROMIUM	19.4	MG/KG	0.201	6010	02/28/2019 12:22	CF
COPPER	0.725 l	MG/KG	0.201	6010	02/28/2019 12:22	CF
IRON	3438	MG/KG	1.46	6010	02/28/2019 12:22	CF
LEAD	2.62	MG/KG	2.62	6010	02/28/2019 12:22	CF
MAGNESIUM	392	MG/KG	0.302	6010	02/28/2019 12:22	CF
MANGANESE	6.67	MG/KG	0.101	6010	02/28/2019 12:22	CF
MOLYBDENUM	0.101 U	MG/KG	0.101	6010	02/28/2019 12:22	CF
POTASSIUM	0.012	% DRY WT	0.001	6010	02/28/2019 12:22	CF
SELENIUM	0.025 U	MG/KG	0.025	6010	02/28/2019 12:22	CF
SILVER	0.059 U	MG/KG	0.059	6010	02/28/2019 12:22	CF
SULFUR	44.9 l	MG/KG	28.2	6010	03/22/2019 18:37	E83079
ZINC	2.95	MG/KG	0.201	6010	02/28/2019 12:22	CF
ARSENIC	0.120 U	MG/KG	0.120	6010/1312	03/30/2019 14:07	CF

BENCHMARK

EnviroAnalytical Inc.



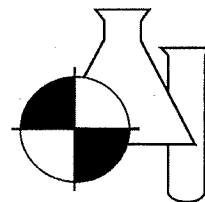
NELAC Certification #E84167

LEAD	0.420	MG/KG	0.060	6010/1312	03/30/2019 14:07	CF
MERCURY	0.017 U	MG/KG	0.017	7471	03/02/2019 13:34	CF
4,4'-DDD	0.0017 U	MG/KG	0.0017	8081	03/06/2019 17:45	E83182
4,4'-DDE	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:45	E83182
4,4'-DDT	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:45	E83182
ALDRIN	0.0011 U	MG/KG	0.0011	8081	03/06/2019 17:45	E83182
ALPHA-BHC	0.0012 U	MG/KG	0.0012	8081	03/06/2019 17:45	E83182
BETA-BHC	0.0026 U	MG/KG	0.0026	8081	03/06/2019 17:45	E83182
CHLORDANE (TECH)	0.015 U	MG/KG	0.015	8081	03/06/2019 17:45	E83182
DELTA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:45	E83182
DIELDRIN	0.00096 U	MG/KG	0.00096	8081	03/06/2019 17:45	E83182
ENDOSULFAN I	0.00085 U	MG/KG	0.00085	8081	03/06/2019 17:45	E83182
ENDOSULFAN II	0.0019 U	MG/KG	0.0019	8081	03/06/2019 17:45	E83182
ENDOSULFAN SULFATE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:45	E83182
ENDRIN	0.0016 U	MG/KG	0.0016	8081	03/06/2019 17:45	E83182
ENDRIN ALDEHYDE	0.0030 U	MG/KG	0.0030	8081	03/06/2019 17:45	E83182
ENDRIN KETONE	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:45	E83182
GAMMA-BHC	0.0013 U	MG/KG	0.0013	8081	03/06/2019 17:45	E83182
HEPTACHLOR	0.0014 U	MG/KG	0.0014	8081	03/06/2019 17:45	E83182
HEPTACHLOR EPOXIDE	0.0016 U	MG/KG	0.0016	8081	03/06/2019 17:45	E83182
METHOXYCHLOR	0.0020 U	MG/KG	0.0020	8081	03/06/2019 17:45	E83182
2,4,5-T	0.0028 UC4	MG/KG	0.0028	8151	03/06/2019 14:58	E83182
2,4,5-TP (SILVEX)	0.0050 U	MG/KG	0.0050	8151	03/06/2019 14:58	E83182
2,4-D	0.011 U	MG/KG	0.011	8151	03/06/2019 14:58	E83182
2,4-DB	0.010 U	MG/KG	0.010	8151	03/06/2019 14:58	E83182
3,5-DCBA	0.0051 U	MG/KG	0.0051	8151	03/06/2019 14:58	E83182
4-NITROPHENOL	0.010 U	MG/KG	0.010	8151	03/06/2019 14:58	E83182
ACIFLUORFEN	0.0076 U	MG/KG	0.0076	8151	03/06/2019 14:58	E83182
BENTAZON	0.0048 U	MG/KG	0.0048	8151	03/06/2019 14:58	E83182
CHLORAMBEN	0.0042 U	MG/KG	0.0042	8151	03/06/2019 14:58	E83182
DACTHAL	0.0026 U	MG/KG	0.0026	8151	03/06/2019 14:58	E83182
DICAMBA	0.0045 U	MG/KG	0.0045	8151	03/06/2019 14:58	E83182
DICHLORPROP	0.0036 U	MG/KG	0.0036	8151	03/06/2019 14:58	E83182
MCPA	0.80 UC3C4	MG/KG	0.80	8151	03/08/2019 14:58	E83182
MCPP	0.82 UC4	MG/KG	0.82	8151	03/06/2019 14:58	E83182
PENTACHLOROPHENOL	0.0027 U	MG/KG	0.0027	8151	03/06/2019 14:58	E83182
PICLORAM	0.0028 U	MG/KG	0.0028	8151	03/06/2019 14:58	E83182
AZINPHOS-METHYL	0.060 U	MG/KG	0.060	8270	03/05/2019 17:04	E83182
BOLSTAR	0.064 U	MG/KG	0.064	8270	03/05/2019 17:04	E83182
CHLORPYRIFOS	0.043 U	MG/KG	0.043	8270	03/05/2019 17:04	E83182
COUMAPHOS	0.056 UC3C4	MG/KG	0.056	8270	03/05/2019 17:04	E83182
DEMETON	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182

Addended
SEE COMMENTS

BENCHMARK

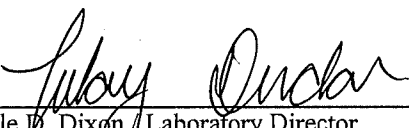
EnviroAnalytical Inc.



NELAC Certification #E84167

DIAZINON	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
DICHLORVOS	0.060 U	MG/KG	0.060	8270	03/05/2019 17:04	E83182
DIMETHOATE	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
DISULFOTON	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
ETHION	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
ETHOPROP	0.043 U	MG/KG	0.043	8270	03/05/2019 17:04	E83182
ETHYL PARATHION	0.042 U	MG/KG	0.042	8270	03/05/2019 17:04	E83182
MALATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
METHYL PARATHION	0.047 U	MG/KG	0.047	8270	03/05/2019 17:04	E83182
PHORATE	0.043 U	MG/KG	0.043	8270	03/05/2019 17:04	E83182
RONNEL	0.043 UC3C4	MG/KG	0.043	8270	03/05/2019 17:04	E83182
STIROPHOS	0.051 UC3C4	MG/KG	0.051	8270	03/05/2019 17:04	E83182
SULFOTEP	0.035 U	MG/KG	0.035	8270	03/05/2019 17:04	E83182
TOTAL SOLIDS	93.7	% DRY WT	0.1	SM2540G	02/27/2019 13:00	CB

All values reported in UG/KG or MG/KG are on a dry weight basis


Dale D. Dixon / Laboratory Director
Tülay Tanrisever / Kara Peterson - QC/QA Officers

04/02/2019

Date

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.
J2 = Estimated value. No control criteria exists for this component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
L = Off-scale high. Value is known to be > the value reported.
Q = Sample held beyond accepted hold time.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

For questions and comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

NOTES:

PQL = 4xMDL.
X = Value exceeds MCL.
2: SOUR calculations are based on Total Solids.
J2: Per client request, analysis conducted without method blank.
SPLP Arsenic and Lead added per client request.

C3 = The associated laboratory control sample exhibited high bias; since the result is ND, there is no impact.
C4 = The associated continuing calibration verification standard exhibited high bias; since the result is ND, there is no impact.

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL 34221
 941-723-9986
 941-723-6061

Client Name: Earth Tech Environmental, LLC
 10600 Jolea Ave.
 Bonita Springs FL 34135
 Andrew McAuley 516-647-9699 / office: 239-304-0030
 andrew@eteflorida.com, Jennifer Bobka
 jenniferb@eteflorida.com

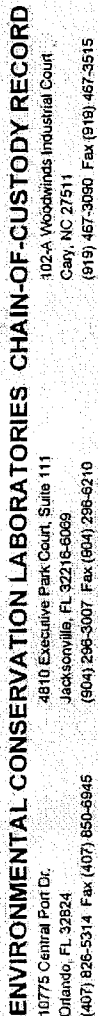
Project Name: Golden Gate Golf Course
Sample Type¹: Grab **Sample Matrix²:** Soil

Laboratory Submission # : 19021194		Laboratory Sample #
Station ID	Parameters, Preservative ⁴ , Container Type ³	
SS-7	SPRP - As, Pb	Herbicides (8151A) Pesticides (8081 & 8270)
SS-8	RCRA 8 Metals: (As Ba Cd Cr Pb Hg Se Ag) Fertilizer Metals: (K Ca Mg Sulfur B Cu Fe Mn Mo Zn) %TS (SM2540G)	Fertilizers: TKN NO ₃ -NO ₂ TP TN
SS-9	1 x 950mL Amber Glass	1 x 950mL Amber Glass
SS-10	Plain	Plain
SS-11	Plain	Plain
Date & Time: 2/25/19 @ 13:45		1
Date & Time: 2/25/19 @ 14:00		2
Date & Time: 2/25/19 @ 14:20		3
Date & Time: 2/25/19 @ 14:30		4
Date & Time: 2/25/19 @ 14:50		5

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), ground water (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4. Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Laboratory Sample Acceptability	
pH < 2	Temperature: 2.0°C
Collector: [Signature]	Received By: [Signature]
Date: 2/25/19	Date: 2/26/19
Time: 17:00	Time: 0930
Relinquished By: [Signature]	Relinquished By: [Signature]
Date: 2/26/19	Date: 2/26/19
Time: 11:55	Time: 11:55
Relinquished By: [Signature]	Relinquished By: [Signature]
Date: 2/26/19	Date: 2/26/19
Time: 14:30	Time: 1430
Relinquished By: [Signature]	Relinquished By: [Signature]
Date: 2/26/19	Date: 2/26/19
Time: 14:30	Time: 1430

* Added per client request. 07/02/19 BB



Surface Water WW-Wastewater A-Air Q-Other (detail in comments) Preservation: HClc H+Clc H-PNO3 S-H2SO4 NO-NaOH Q-Other

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33

Blank (9C01019-BLK1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 09:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Azinphos-methyl	0.014	U	0.017	mg/kg wet							
Bolstar	0.015	U	0.017	mg/kg wet							
Chlorpyrifos	0.010	U	0.017	mg/kg wet							
Coumaphos	0.013	U	0.017	mg/kg wet							
Demeton	0.011	U	0.017	mg/kg wet							
Diazinon	0.011	U	0.017	mg/kg wet							
Dichlorvos	0.014	U	0.017	mg/kg wet							
Dimethoate	0.011	U	0.017	mg/kg wet							
Disulfoton	0.011	U	0.017	mg/kg wet							
Ethion	0.011	U	0.017	mg/kg wet							
Ethoprop	0.010	U	0.017	mg/kg wet							
Ethyl Parathion	0.0099	U	0.017	mg/kg wet							
Malathion	0.011	U	0.017	mg/kg wet							
Methyl parathion	0.011	U	0.017	mg/kg wet							
Monocrotophos	0.016	U	0.017	mg/kg wet							
Phorate	0.010	U	0.017	mg/kg wet							
Ronnel	0.010	U	0.017	mg/kg wet							
Stirophos (Tetrachlorvinphos)	0.012	U	0.017	mg/kg wet							
Sulfotep	0.0081	U	0.017	mg/kg wet							
Tributyl Phosphate	0.049			mg/kg wet	0.0670		73	33-127			
Triphenyl phosphate	0.10			mg/kg wet	0.0670		156	34-158			

LCS (9C01019-BS1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 10:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.068		0.017	mg/kg wet	0.0667		103	46-122			
Dimethoate	0.058		0.017	mg/kg wet	0.0667		87	38-130			
Malathion	0.062		0.017	mg/kg wet	0.0667		93	44-126			
Monocrotophos	0.029		0.017	mg/kg wet	0.0667		44	16-136			
Sulfotep	0.056		0.017	mg/kg wet	0.0667		85	40-127			
Tributyl Phosphate	0.054			mg/kg wet	0.0670		80	33-127			
Triphenyl phosphate	0.10			mg/kg wet	0.0670		156	34-158			

Matrix Spike (9C01019-MS1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 10:57

Source: AC01437-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.071	I	0.074	mg/kg dry	0.0724	0.043 U	98	46-122			
Dimethoate	0.062	I	0.074	mg/kg dry	0.0724	0.048 U	85	38-130			
Malathion	0.065	I	0.074	mg/kg dry	0.0724	0.048 U	90	44-126			
Monocrotophos	0.033	I	0.074	mg/kg dry	0.0724	0.0 U	45	16-136			
Sulfotep	0.058	I	0.074	mg/kg dry	0.0724	0.035 U	80	40-127			
Tributyl Phosphate	0.055	I		mg/kg dry	0.0727		76	33-127			
Triphenyl phosphate	0.11			mg/kg dry	0.0727		153	34-158			

Matrix Spike Dup (9C01019-MSD1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 11:30

Source: AC01437-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33 - Continued

Matrix Spike Dup (9C01019-MSD1) Continued

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 11:30

Source: AC01437-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorpyrifos	0.063	I	0.074	mg/kg dry	0.0721	0.043 U	87	46-122	12	13	
Dimethoate	0.053	I	0.074	mg/kg dry	0.0721	0.048 U	73	38-130	16	15	QM-11
Malathion	0.056	I	0.074	mg/kg dry	0.0721	0.048 U	78	44-126	15	14	QM-11
Monocrotophos	0.029	I	0.074	mg/kg dry	0.0721	0.0 U	41	16-136		20	
Sulfotep	0.050	I	0.074	mg/kg dry	0.0721	0.035 U	69	40-127	15	14	QM-11
Tributyl Phosphate	0.051	I		mg/kg dry	0.0725		70	33-127			
Triphenyl phosphate	0.11			mg/kg dry	0.0725		147	34-158			

Tentatively Identified Compounds by Semivolatile GCMS - Quality Control

Batch 9C01019 - SOP EXSV-33

Blank (9C01019-BLK1)

Prepared: 03/01/2019 11:30 Analyzed: 03/05/2019 09:50

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tentatively Identified Compounds	0.0			mg/kg wet							

Organochlorine Pesticides by GC - Quality Control

Batch 9B28041 - SOP EXSV-33

Blank (9B28041-BLK1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00080	U	0.0017	mg/kg wet							
4,4'-DDE	0.00065	U	0.0017	mg/kg wet							
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0012	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0072	U	0.033	mg/kg wet							
Chlordane-alpha	0.00066	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00077	U	0.0017	mg/kg wet							
delta-BHC	0.00062	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00040	U	0.0017	mg/kg wet							
Endosulfan II	0.00087	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00060	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.0014	U	0.0017	mg/kg wet							
Endrin ketone	0.00060	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00066	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00074	U	0.0017	mg/kg wet							
Methoxychlor	0.00094	U	0.0017	mg/kg wet							
2,4,5,6-TCMX	0.066			mg/kg wet	0.0667		99	20-137			
Decachlorobiphenyl	0.042			mg/kg wet	0.0667		63	13-183			

QUALITY CONTROL DATA
Organochlorine Pesticides by GC - Quality Control

Batch 9B28041 - SOP EXSV-33 - Continued

LCS (9B28041-BS1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:26

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.025		0.0017	mg/kg wet	0.0333		74	37-125			
Dieldrin	0.033		0.0017	mg/kg wet	0.0333		98	46-127			
Endrin	0.029		0.0017	mg/kg wet	0.0333		87	28-143			
2,4,5,6-TCMX	0.037			mg/kg wet	0.0333		112	20-137			
Decachlorobiphenyl	0.020			mg/kg wet	0.0333		61	13-183			

Matrix Spike (9B28041-MS1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:38

Source: AC01302-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.027		0.0036	mg/kg dry	0.0361	0.0014 U	76	37-125			
Dieldrin	0.037		0.0036	mg/kg dry	0.0361	0.00096 U	104	46-127			
Endrin	0.035		0.0036	mg/kg dry	0.0361	0.0016 U	96	28-143			
2,4,5,6-TCMX	0.053			mg/kg dry	0.0361		146	20-137			
Decachlorobiphenyl	0.039			mg/kg dry	0.0361		108	13-183			

Matrix Spike Dup (9B28041-MSD1)

Prepared: 02/28/2019 22:05 Analyzed: 03/06/2019 10:51

Source: AC01302-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.027		0.0036	mg/kg dry	0.0362	0.0014 U	74	37-125	2	24	
Dieldrin	0.038		0.0036	mg/kg dry	0.0362	0.00096 U	106	46-127	2	21	
Endrin	0.035		0.0036	mg/kg dry	0.0362	0.0016 U	96	28-143	0.3	22	
2,4,5,6-TCMX	0.052			mg/kg dry	0.0362		144	20-137			
Decachlorobiphenyl	0.038			mg/kg dry	0.0362		106	13-183			

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA B151A

Blank (9C04050-BLK1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0026	U	0.010	mg/kg wet							
2,4,5-T	0.0026	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0098	U	0.010	mg/kg wet							
2,4-DB	0.0098	U	0.010	mg/kg wet							
3,5-DCBA	0.0048	U	0.010	mg/kg wet							
3,5-DCBA	0.0048	U	0.010	mg/kg wet							
4-Nitrophenol	0.0097	U	0.010	mg/kg wet							
4-Nitrophenol	0.0097	U	0.010	mg/kg wet							
Acifluorfen	0.0071	U	0.010	mg/kg wet							
Acifluorfen	0.0071	U	0.010	mg/kg wet							
Bentazon	0.0045	U	0.010	mg/kg wet							
Bentazon/Picloram	0.0			mg/kg wet							
Chloramben	0.0039	U	0.010	mg/kg wet							

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA 8151A - Continued

Blank (9C04050-BLK1) Continued

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:04

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloramben	0.0039	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0042	U	0.010	mg/kg wet							
Dicamba	0.0042	U	0.010	mg/kg wet							
Dichlorprop	0.0034	U	0.010	mg/kg wet							
Dichlorprop	0.0034	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
MCPA	0.75	U	1.0	mg/kg wet							
MCPA	0.75	U	1.0	mg/kg wet							
MCPA	0.77	U	1.0	mg/kg wet							
MCPA	0.77	U	1.0	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Picloram	0.0026	U	0.010	mg/kg wet							
2,4-DCAA	0.034			mg/kg wet	0.0400		84	16-169			
2,4-DCAA [2C]	0.032			mg/kg wet	0.0400		80	16-169			

LCS (9C04050-B51)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:30

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.035		0.010	mg/kg wet	0.0400		87	26-147			
2,4-D	0.034		0.010	mg/kg wet	0.0400		84	28-145			
2,4-DB	0.040		0.010	mg/kg wet	0.0400		100	10-179			
Bentazon	0.031		0.010	mg/kg wet	0.0400		76	10-145			
Dalapon	0.020		0.010	mg/kg wet	0.0400		51	15-148			
Dicamba	0.035		0.010	mg/kg wet	0.0400		88	29-147			
Picloram	0.023		0.010	mg/kg wet	0.0400		57	13-119			
2,4-DCAA	0.030			mg/kg wet	0.0400		75	16-169			

Matrix Spike (9C04050-MS1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 09:55

Source: AC01437-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.029		0.011	mg/kg dry	0.0437	0.0051 U	66	26-147			
2,4-D	0.032		0.011	mg/kg dry	0.0437	0.011 U	74	28-145			
2,4-DB	0.036		0.011	mg/kg dry	0.0437	0.011 U	83	10-179			
Bentazon	0.025		0.011	mg/kg dry	0.0437	0.0049 U	57	10-145			
Dalapon	0.020		0.011	mg/kg dry	0.0437	0.0054 U	46	15-148			
Dicamba	0.031		0.011	mg/kg dry	0.0437	0.0045 U	70	29-147			
Picloram	0.019		0.011	mg/kg dry	0.0437	0.0028 U	43	13-119			
2,4-DCAA	0.044			mg/kg dry	0.0437		100	16-169			

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 9C04050 - EPA 8151A - Continued

Matrix Spike Dup (9C04050-MSD1)

Prepared: 03/04/2019 22:02 Analyzed: 03/06/2019 10:20

Source: AC01437-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.035		0.011	mg/kg dry	0.0435	0.0051 U	80	26-147	18	20	
2,4-D	0.031		0.011	mg/kg dry	0.0435	0.011 U	72	28-145	3	20	
2,4-DB	0.038		0.011	mg/kg dry	0.0435	0.011 U	88	10-179	5	28	
Bentazon	0.030		0.011	mg/kg dry	0.0435	0.0049 U	68	10-145	17	23	
Dalapon	0.022		0.011	mg/kg dry	0.0435	0.0054 U	50	15-148	9	22	
Dicamba	0.031		0.011	mg/kg dry	0.0435	0.0045 U	72	29-147	2	20	
Picloram	0.022		0.011	mg/kg dry	0.0435	0.0028 U	50	13-119	14	18	
2,4-DCAA	0.028			mg/kg dry	0.0435		65	16-169			

QUALITY CONTROL DATA

Project: 19021194
Pace Project No.: 35454419

QC Batch: 524529 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET Solid
Associated Lab Samples: 35454419001, 35454419002, 35454419003, 35454419004, 35454419005

METHOD BLANK: 2835305 Matrix: Solid
Associated Lab Samples: 35454419001, 35454419002, 35454419003, 35454419004, 35454419005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfur	mg/kg	31.1 U	62.2	31.1	03/22/19 12:53	

LABORATORY CONTROL SAMPLE: 2835306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfur	mg/kg	151	126	83	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2835307 2835308

Parameter	Units	35454484002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sulfur	mg/kg	5050	335	394	5450	5990	120	239	75-125	9 20	J(M1), L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 19021194

Pace Project No.: 35454419

QC Batch: 525178

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 35454419005

SAMPLE DUPLICATE: 2840091

Parameter	Units	35453937001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	35.1	31.8	10	10	

SAMPLE DUPLICATE: 2840092

Parameter	Units	35454978019 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	9.9	10	10	

SAMPLE DUPLICATE: 2840093

Parameter	Units	35455131011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.8	4.4	43	10	J(D6)

SAMPLE DUPLICATE: 2840094

Parameter	Units	35455431009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.8	8.9	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 19021194
Pace Project No.: 35454419

QC Batch: 525781 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 35454419001, 35454419002, 35454419003, 35454419004

SAMPLE DUPLICATE: 2843308

Parameter	Units	35454418001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.2	5.6	9	10	

SAMPLE DUPLICATE: 2843309

Parameter	Units	35454978024 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.5	4.6	4	10	

SAMPLE DUPLICATE: 2843310

Parameter	Units	35455751013 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.4	17.5	1	10	

SAMPLE DUPLICATE: 2843311

Parameter	Units	35456141007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.8	24.5	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

APPENDIX C STAFF QUALIFICATIONS

Andrew McAuley

Environmental Scientist

andrewm@eteflorida.com

516.647.9699

Years' Experience

9 years

Education/Training

B.S. Geology
Hofstra University (2006)

Lamont-Doherty Earth
Observatory Intern (2004)

Professional Affiliations

Florida Association of
Environmental Professionals (FAEP)

Mr. McAuley joined Earth Tech Environmental, LLC (ETE) in 2017 and brings with him 8 years of experience working as a Hydrogeologist II and Environmental Consultant in New York State prior to moving to Florida. Since joining ETE he has been able to apply his past experience from New York on a variety of projects as well as become extensively familiar with Ecological based assessments.

Relevant Experience

Andrew graduated from Hofstra University with a Bachelor of Science Degree in Geology. His extensive background includes Phase I ESAs, Phase II and Phase III remedial activities, AST/UST removal, Groundwater/Soil/Indoor Air Quality sampling and reporting, Mold/Lead/Asbestos sampling and remedial protocol preparation. Mr. McAuley has overseen various projects including Brownfields sites, Landfill Gas Extraction System Installation, Monitoring Well/Remediation System Installation and Maintenance, and multiple Chemical/Petroleum/Bio-Hazard Waste Cleanup projects.

Andrew's work experience includes:

Phase I Environmental Site Assessments
Phase II ESA Sampling/Reporting
Phase III ESA Oversight/Reporting
Chemical/Petroleum/Bio-Hazard Cleanup
Monitoring Well Installation/Maintenance
Air-Sparge/Soil Vapor Extraction Systems
Groundwater Assessments
Indoor Air Quality Assessments
Contaminated Soil Assessments
Waste Classification Management
Turbidity Monitoring
Remedial Activity Oversight
Mold/Lead/Asbestos Assessments
AST/UST Removal
Project Management/Coordination

Wetland Jurisdictional Delineations
Wetland Flagging/Mapping
Vegetation Monitoring
Protected Species Surveys
Bonnated Bat Surveys
Gopher Tortoise Surveys
GIS Mapping
Bald Eagle Monitoring
Environmental Assessments
Environmental Resource Permitting
Exotic Plant Treatment/Removal
Mangrove Monitoring/Reporting
SFWMD & ACOE Permitting
Submerged Resource Surveys
Seagrass Surveys

Relevant Certifications/Credentials

SDI Open Water SCUBA Diver, SCUBAdventures, 2018
Nitrox Certified Diver, SCUBAdventures, 2018