



Report of Geotechnical Exploration

Project:

Proposed Residential Structure

7246 Surfview Drive

Pensacola, Florida

GeoCon Project No. DL 2737-21

Prepared For:

Ms. Elizabeth Bertucci

5925 Patton Street

New Orleans, Louisiana 70115

Date: May 11, 2021

Prepared By:

GeoCon Engineering & Materials Testing, Inc.

22885 McAuliffe Drive

Robertsdale, Alabama 36567

GeoCon

Engineering & Materials Testing, Inc.

May 11, 2021

Ms. Elizabeth Bertucci
5925 Patton Street
New Orleans, Louisiana 70115

RE: **Report of Geotechnical Exploration**
Proposed Residential Structure
7246 Surfview Drive
Pensacola, Florida
GeoCon Project No. DL 2737-21

Dear Ms. Bertucci:

GeoCon Engineering & Materials Testing, Inc. is pleased to submit this report of geotechnical exploration for the above referenced project. Included in this report is a summary of our understanding of the project, results of the field exploration, and our recommendations for site preparation and pile foundation design. This testing has been performed in general accordance with our signed proposal.

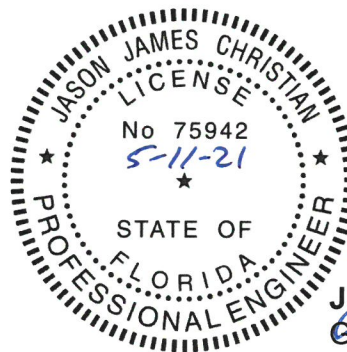
Enclosed please find our report with evaluations and recommendations followed by an Appendix which includes a Site Location Map, Test Location Plan, graphical logs of the soundings, important notes about your Geotechnical Report and the Terms & Conditions that govern our work.

We appreciate the opportunity to have provided you with our geotechnical engineering services. If you have any questions concerning this report, or if we can be of any further assistance, please contact our office.

Sincerely,

GeoCon, Inc.


David R. McKee, P.E.
Geotechnical Engineer




Jason J. Christian, P.E.
Geotechnical Engineer

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1.0 Project Description

The project subject to this report is the construction of a new residential structure (house) located at 7246 Surfview Drive in Pensacola, Florida. The site is shown on the attached Site Location Map (Figure 1). During our April 2021 field exploration, the site was clear and open with coastal vegetation. Ground elevations in the proposed construction area appeared to be relatively flat.

Based on the provided information, the new house will be a two-story structure that will include wood frame construction. We understand the proposed house will be supported on precast-prestressed (PCPS) concrete piles and that the finished first floor elevation of the house will be about 10 feet above the final subgrade surface. A non-structural concrete slab will also be placed below the house for vehicle parking and storage area and be partially enclosed. It is our understanding that a swimming pool will also be constructed on the site and will also be supported on precast-prestressed (PCPS) concrete piles.

Note: If our understanding of the above project information differs from the actual project plans and specifications or if revisions to the project plans are made after this report, we should be contacted for analysis and comment as needed.

2.0 Geotechnical Exploration

Soil conditions were investigated by pushing two (2) Cone Penetration Test (CPT) soundings to depths of about 19 to 33 feet below the existing ground surface in the proposed house area. One (1) CPT sounding to a depth of 20 feet was also performed in the proposed pool area. The soundings were located in the field by GeoCon personnel who used the provided site plan and existing site features as reference. The approximate sounding locations are shown on the attached Test Location Plan (Figure 2).

CPT testing was performed in accordance with ASTM D-5778 using a Vertek S4 electronic CPT rig. CPT testing includes pushing an electronic cone on a series of rods into the ground at a constant rate. The electronic cone collects continuous measurements of the resistance to penetration of the cone tip and side friction sleeve. Correlations between Cone Resistance values and Standard Penetration Test (SPT) "N" values were performed using methods developed by Robertson, Campanella and Wightman. The CPT logs attached in the appendix shows the cone tip friction, sleeve friction, pore pressure, correlated "N" value and the soil behavior type (SBT).

3.0 Soil Conditions Encountered

The soundings penetrated sand soils from the ground surface to sounding termination at depths of about 19 to 33 feet below the existing ground surface. Based on the cone tip friction and correlated N-values, the sand soils penetrated across the soil profile were generally in a firm to very dense condition. The soil conditions penetrated are described in more detail on the CPT Logs attached in the Appendix.

4.0 Ground Water Conditions Encountered

Ground water was encountered at depths of about 8 to 9½ feet below the existing ground surface at the sounding locations at the time of the field exploration. Ground water conditions are subject to seasonal variations and are expected to fluctuate in response to tidal movements, local variations in precipitation and drainage conditions. Considering the relatively short time frame of the field exploration, ground water levels may not have had sufficient time to stabilize. Therefore, actual depths to ground water may vary.

5.0 House Pad Preparation

We recommend that areas beneath and 5 feet beyond the footprint of the house and pool be designated as the "house pad". The initial phase of construction should include the removal of surface vegetation, organic topsoil, old foundation systems, utilities, buried debris, etc. from within the house pad.

We anticipate that no more than 24 inches of fill will be placed in the house pad area to achieve final subgrade elevations. If more than 24 inches of fill needs to be placed in the house pad area, GeoCon should be contacted for further evaluation. The additional weight of more than 24 inches of fill height could create additional "down-drag" on the piles that have NOT been accounted for in the below compressive capacity.

Structural fill (if any) should be placed in 8-inch loose lifts and compacted to at least 95% ASTM D-1557 modified compaction at moisture contents within +/- 3% of the material's optimal moisture content. Once the surface of each lift of structural fill is ready for the next lift, the exposed soil should be maintained at the placed moisture content until the next lift of fill is placed. Structural fill required from an off-site borrow source should meet the city or county color requirements and also the following minimum requirements:

- 1) Exhibit SP or SP-SM classification according to the Unified Soil Classification System
- 2) Have a maximum of 10% soil fines passing the No. 200 sieve
- 3) Have a maximum Liquid Limit (LL) of 20%
- 4) Have a Plasticity Index (PI) of 0% (Non-Plastic)
- 5) Have a minimum modified Proctor (ASTM D-1557) maximum dry density of 98 pcf

6.0 Recommendations for Pile Foundation

We understand that concrete piles will be used to support the proposed structures. Recommendations for the design and installation of concrete piles are provided below.

6.1 Compressive Capacities of Square Concrete Piles

An allowable single pile compression capacity was estimated using conventional static analysis for driven precast-prestressed (PCPS) concrete piles and includes a factor of safety of 2.0 against failure at the pile/soil interface. The AllPile computer software was also utilized

to help determine embedment depths and compression capacities. Tabulated below in Table 1 are the recommended allowable capacities for single piles in compression:

Table: 1

<i>Allowable Single Concrete Pile Capacity</i>	
Pile Size (in.)	Minimum Pile Tip Embedment Depth (ft) 18
12	25 tons
14	35 tons

Important Note - Pile tip embedment is based on depths from existing grades at the time of our April 19, 2021 field exploration. If fill is added to the house pad or grades are adjusted prior to pile installation, total pile lengths should be adjusted to account for the added fill height or change in ground elevation. Piles that do not tip into the very dense sand strata at a depth of 18 feet will not exhibit the design capacities provided in Table 1. We recommend that the home builder or pile contractor determine the ground elevations prior to construction and establish the pile tip elevation required for each pile. Also, the theoretical pile capacities provided in Table 1 should be verified either by pile driving resistance analysis or by load testing. We provide comments regarding pile driving resistance analysis and load testing in the following sections of this report.

6.2 Pile Installation

Again, surface vegetation, organic topsoil, old foundation systems, utilities, buried debris, etc encountered should be completely removed so that they do not affect pile installation. It is recommended that the piles be installed to the recommended minimum depth indicated to achieve the desired capacity, and that no attempt be made to adjust length to accommodate changes in soil conditions or driving resistance without consulting with GeoCon.

Piles should normally be installed no closer than 3 pile widths on center. Piles can be pre-drilled or jetted to no closer than 3 feet of tip elevation and after a 12 hour minimum setting period, driven to the required tip elevation. The jetted or pre-drilled holes should not be larger than the pile width. After piles are pre-drilled or jetted in-place and before driving, clean sand soils displaced from the jetting process or off-site clean coarse sand fill should be replaced around the piles. Replacing sand soils following pre-drilling or jetting and prior to driving is very important to help the piles create the skin friction calculated for the provided pile capacity. Improper pile installation can drastically decrease a pile's axial, uplift and lateral loading capacity.

Note: We recommend that one pile be set and driven to help determine the suitable “pre-setting depth” and appropriate driving distance based on the jetting method, driving method and hammer size. The test data indicated that the soils along the driving strata are in a very dense condition and will require a hammer that will provide sufficient energy to drive the piles to the required depths. Proper pile installation and achieving proper pile tip depth without damaging the piles are the responsibility of the pile contractor.

We recommend that a pile driving hammer be used to install the piles so that the pile driving resistance can be recorded (blows required to drive the pile) and the recommended design capacity of each pile verified. Provided that the piles are driven to the proper tip elevation and the driving resistance along with installation conditions are recorded by GeoCon to confirm the design pile capacity, a pile load test is not required. GeoCon should be retained to observe the installation of the piles and perform a pile driving analysis. Soils are not uniform by nature and due to the potential for inconsistent driving resistance, we recommend that a contingency be established to add additional pile(s) if pile driving resistance indicates that a pile(s) achieves a calculated capacity less than the individual pile’s design load.

A pile load test would be required to confirm the recommended single pile axial capacities if the piles are not hammered (driven) to final tip embedment and the driving resistance recorded by GeoCon. If load testing is to be conducted, it can be performed in accordance with the provisions of ASTM D-1143, quick test option. This office can provide assistance in planning a load testing program upon request. Please note that GeoCon cannot give a written opinion about the pile installation or anticipated performance of the piles if we are not retained for pile installation monitoring. Again, correct pile installation is critical in the performance of the pile foundation system.

The owner and contractor should be aware that installing piles can potentially cause settlements of nearby structures due to vibrations during the driving process. Nearby structures should be inspected for structural damage or cracks prior to pile installation and should also be monitored during pile installation. Pile driving should stop immediately if any damage to existing structures occurs and GeoCon should be contacted for evaluation and comment.

6.3 Settlement and Uplift

A better evaluation of potential settlements could be made once actual individual pile loads are established and provided to GeoCon. The uplift capacity (tension) of the piles driven to the target depth may be taken as 15% of the capacity indicated in Table 1, plus the dead weight of the pile. The structural capacity of the individual piles that extend above grade to support design loads is beyond the scope of our services and should be verified by the project Structural Engineer.

6.4 Soil Parameters for Lateral Deflection Analysis

A lateral pile analysis was not included in our geotechnical services. Lateral load capacity for driven piles can be analyzed by the project Structural Engineer using the estimated soil properties in Table 2 below:

Table: 2

Soil Type	Layer Elevation (ft.)	Soil Modulus (pci)	Effective Unit Weight (pci)	Cohesion (psi)	Friction Angle (deg)
Sand	0 to 9.5	50	0.060	0	30
Sand	9.5 to 12	40	0.025	0	30
Sand	12 to 18	60	0.033	0	34

Note: The effects of potential scour should be included in lateral load capacities.

7.0 Concrete Slab Subgrade Preparation

We understand that the house will be elevated above the existing ground surface and will have a concrete slab supported on finished subgrade soils to serve as parking area. Subgrade soils supporting concrete slabs, driveways, sidewalks, etc. should be scarified, moisture conditioned and compacted to at least 95% ASTM D-1557 modified density prior to placement of concrete slabs (following pile installation).

8.0 Closure and Limitations

This report has been prepared for the exclusive use of Ms. Elizabeth Bertucci and her project design professionals for specific application to the above referenced project in accordance with generally accepted current standards of geotechnical engineering practices common to the local area.

The comments and recommendations of this report provide manageable and reasonable solutions to the advancement of the project based on the collected test data and the provided design information. Significant changes in site conditions or project design may result in alternative solutions to the design required or may permit more manageable and economical construction techniques. Should such significant changes occur, we will be available to offer supplemental comment.

The comments and recommendations of this report are based upon our interpretation of the information supplied by the client, the data collected at the three (3) CPT soundings and the site conditions observed at the time of testing. A significant amount of interpolation was necessary. Because it is not possible to know or predict detailed conditions hidden beneath the ground surface, our comments and recommendations are presented as opinions and judgements, as opposed to statements of fact.

Improper site preparation, extremes in climatic conditions, significant changes in grade, time, etc., can affect the ground water, surface and subsurface conditions. If conditions are encountered as the construction advances which vary significantly from those described by this report, we should be contacted for additional comment. Again, we recommend that GeoCon be retained to provide pile installation monitoring for this project so that proper pile installation can be verified.

APPENDIX

- A-1 Site Location Map
- A-2 Test Location Plan
- A-3 Graphical Logs of the Soundings
- A-4 Important Notes About Your Geotechnical Report
- A-5 Terms & Conditions Sheet



Figure 1

NOT TO SCALE
SITE LOCATION MAP
Proposed Residential Structure
7246 Surfview Drive
Pensacola, FL
DL 2737-21

GEOCON, INC.
22885 McAuliffe Drive
Robertsdale, Alabama 36567

Date
4/24/2021

7246 SURFVIEW DRIVE

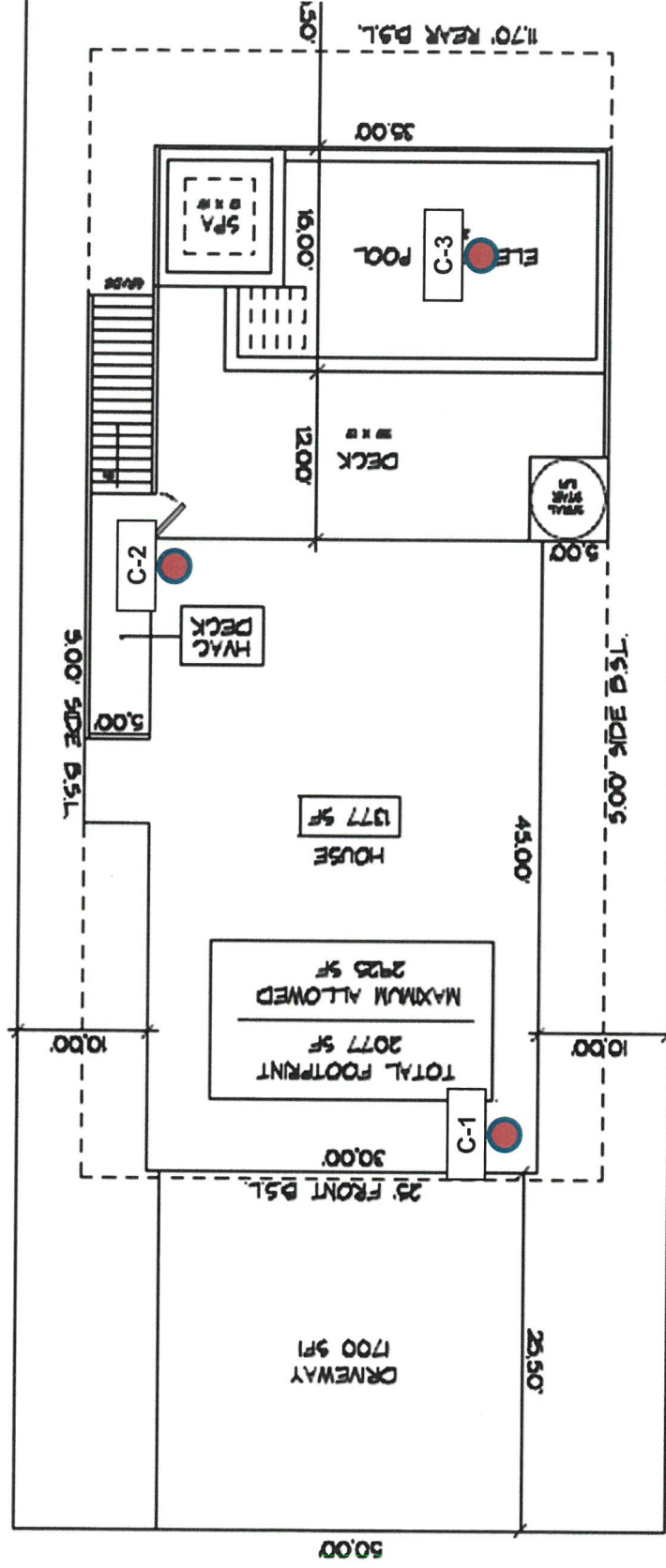


Figure 2

Date
4/24/2021

NOT TO SCALE
TEST LOCATION PLAN

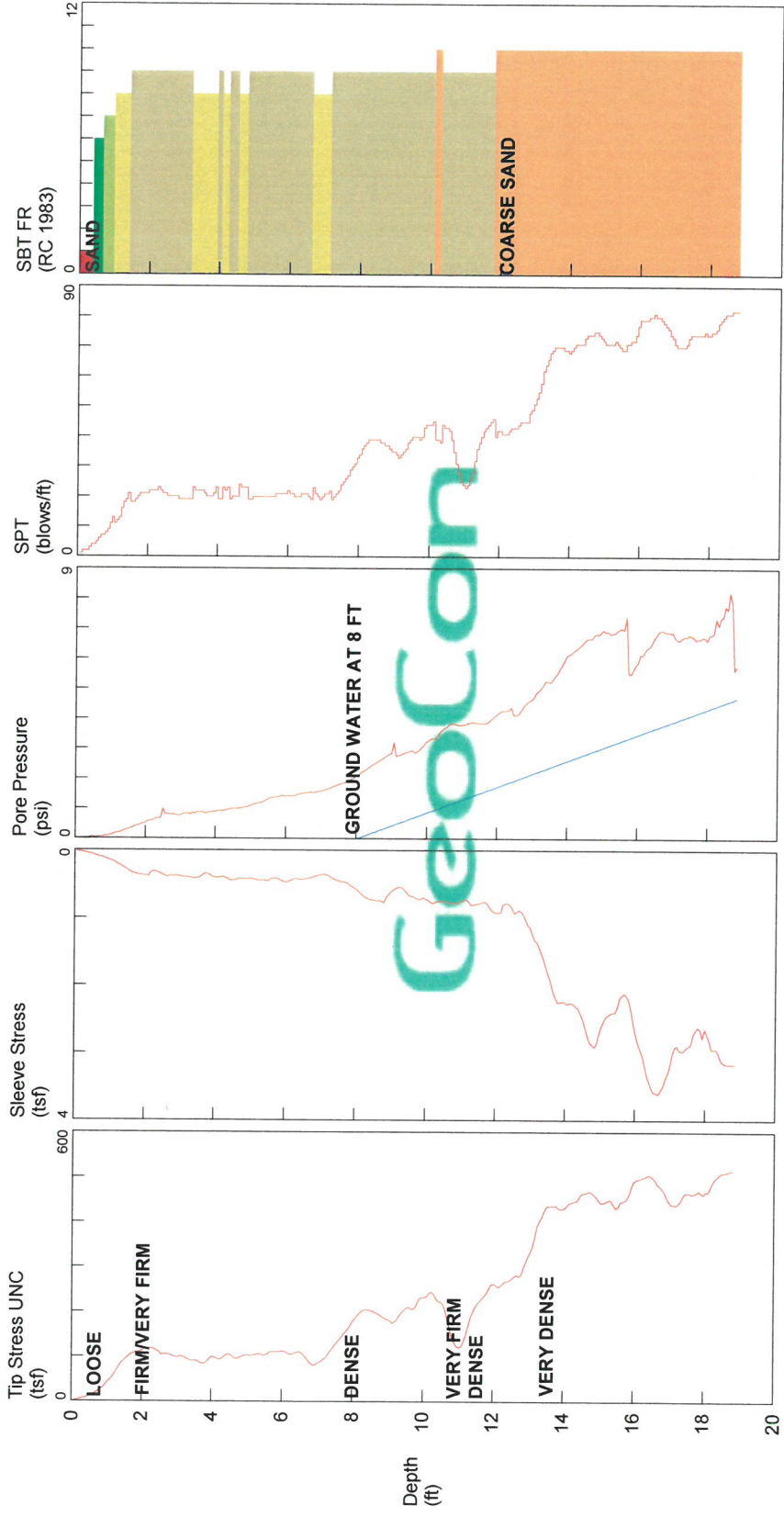
Proposed Residential Structure
7246 Surfview Drive
Pensacola, FL
DL 2737-21

GEOCON, INC.
22885 McAuliffe Drive
Robertsdale, AL 36567

C-1

CPT Testing Done By: GeoCon
 Proposed: Residential Structure
 CUSTOMER: Elizabeth Bertucci
 LOCATION: Pensacola, FL
 HOLE NUMBER: C-1

JOB NUMBER: DL 2737-21
 TEST DATE: 4/19/2021
 OPERATOR: Chris Rea

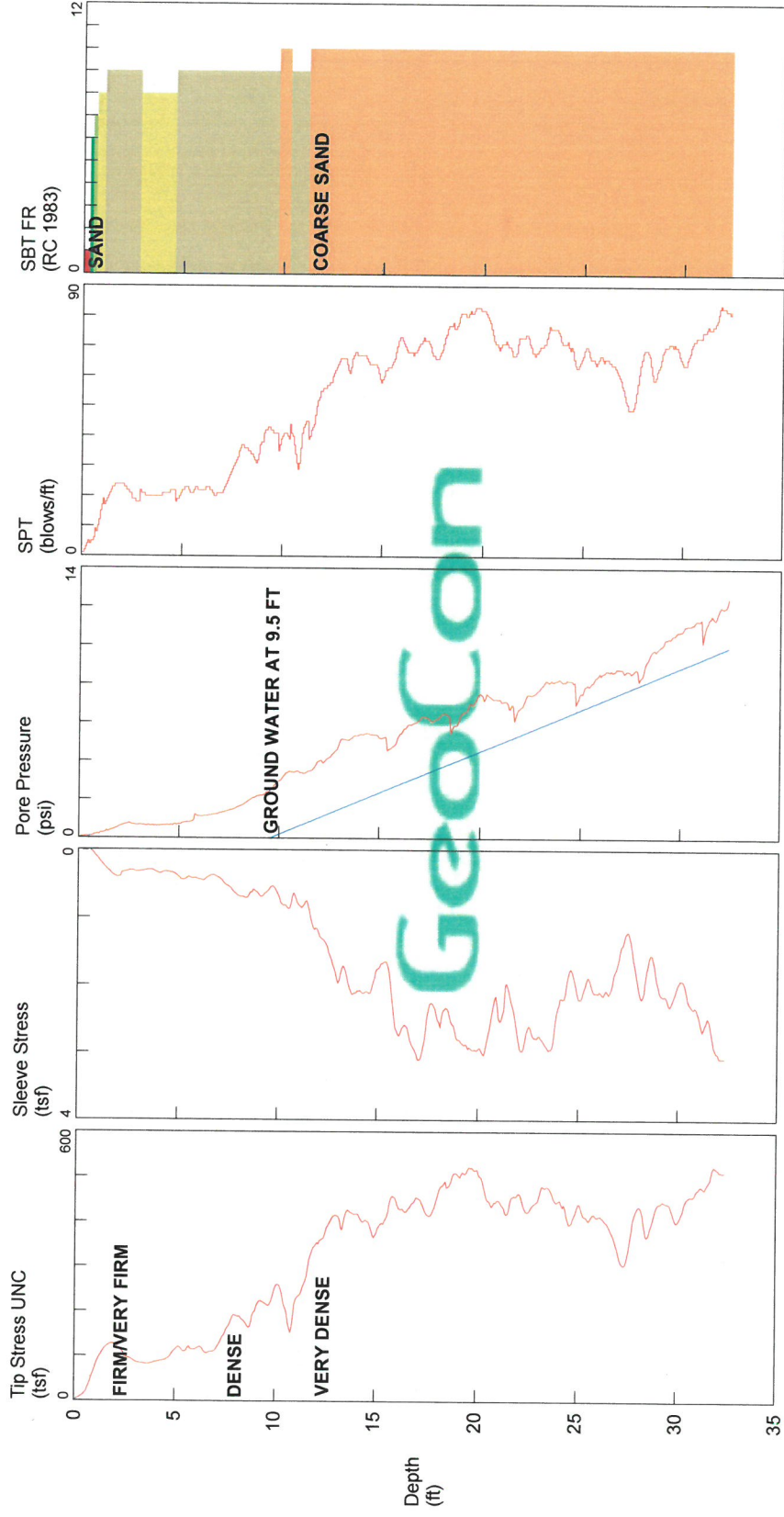


- | | | |
|--------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 9 sand | 12 sand to clayey sand (*) |
- *SBT/SPT CORRELATION: UBC-1983

C-2

CPT Testing Done By: GeoCon
 Proposed: Residential Structure
 CUSTOMER: Elizabeth Bertucci
 LOCATION: Pensacola, FL
 HOLE NUMBER: C-2

JOB NUMBER: DL 2712-21
 TEST DATE: 4/19/2021
 OPERATOR: Chris Rea

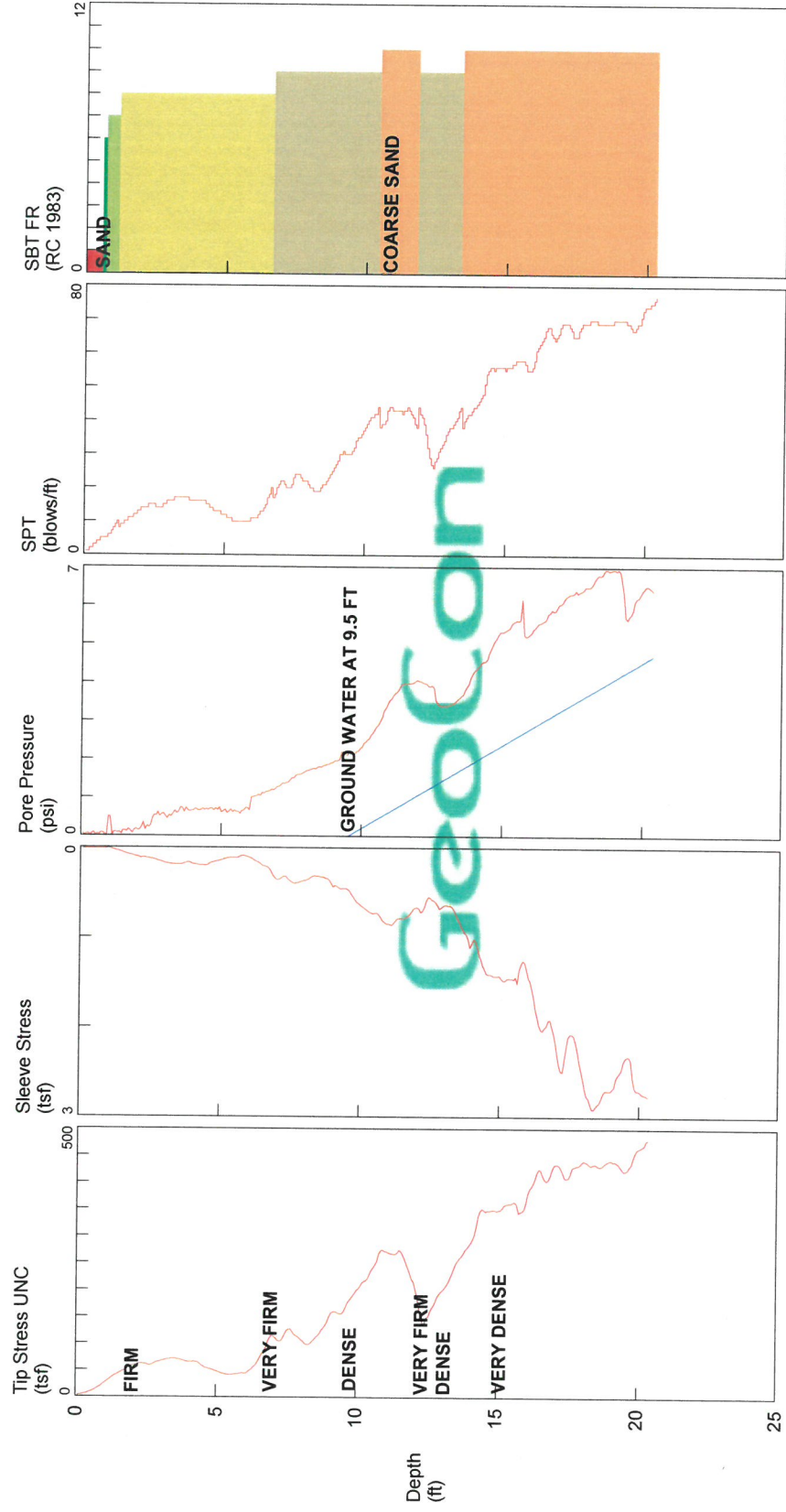


- | | | |
|--------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 7 silty sand to sandy silt | 10 gravelly sand to sand |
| 2 organic material | 8 sand to silty sand | 11 very stiff fine grained (*) |
| 3 clay | 9 sand | 12 sand to clayey sand (*) |
- *SBT/SPT CORRELATION: UBC-1983

C-3

CPT Testing Done By: GeoCon
 Proposed: Residential Structure
 CUSTOMER: Elizabeth Bertucci
 LOCATION: Pensacola, FL
 HOLE NUMBER: C-3

JOB NUMBER: DL 2712-21
 TEST DATE: 4/19/2021
 OPERATOR: Chris Rea



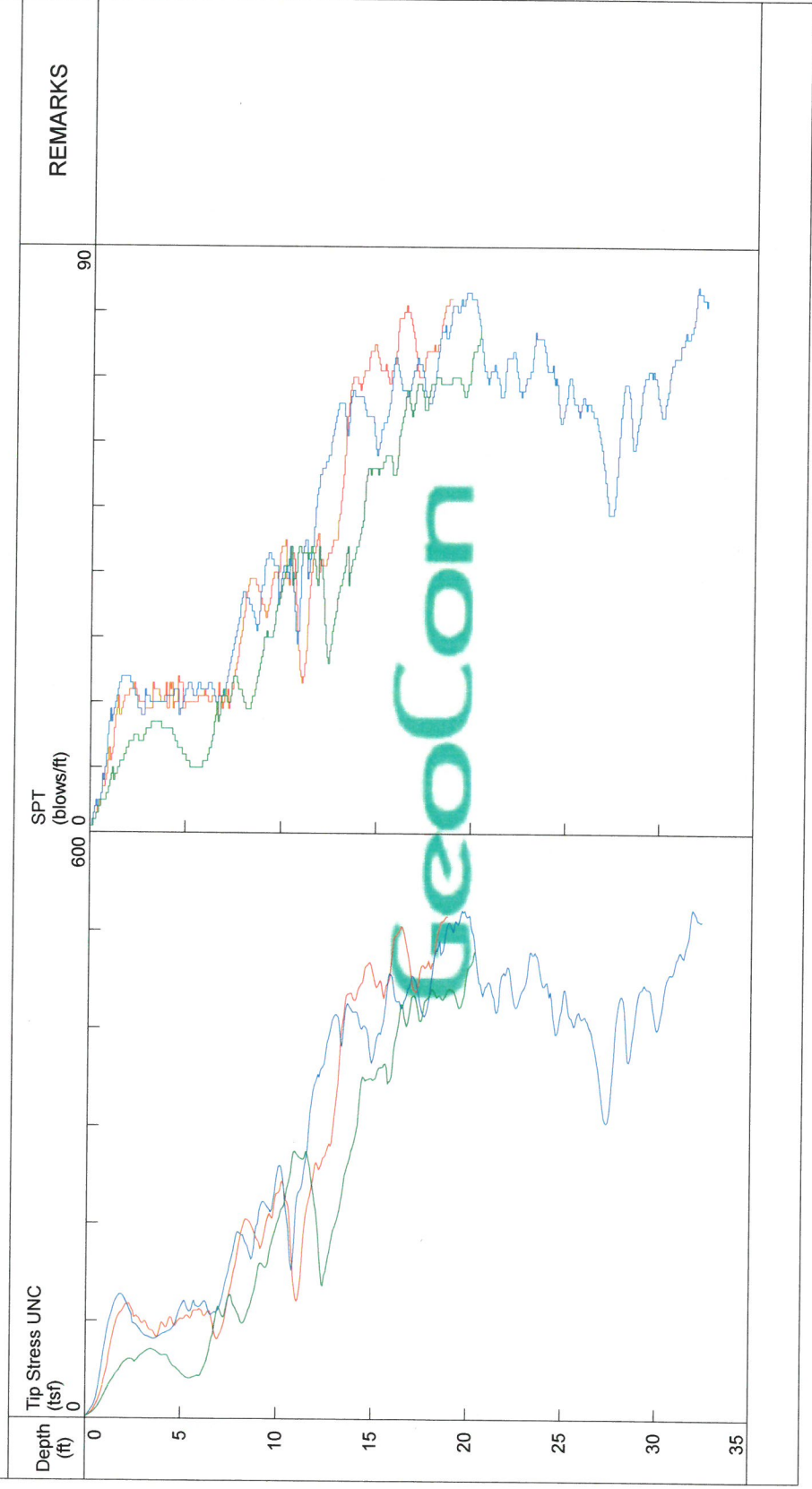
- 1 sensitive fine grained
- 2 organic material
- 3 clay
- 4 silty clay to clay
- 5 clayey silt to silty clay
- 6 sandy silt to clayey silt
- 7 silty sand to sandy silt
- 8 sand to silty sand
- 9 sand
- 10 gravelly sand to sand
- 11 very stiff fine grained (*)
- 12 sand to clayey sand (*)

*SBT/SPT CORRELATION: UBC-1983

PROPOSED: RESIDENTIAL STRUCTURE
CUSTOMER: ELIZABETH BERTUCI
JOB NUMBER: DL 2737-21
PENSACOLA, FL

COMBINED SOUNDING PLOT

test #1: C-1.cpt
test #2: C-2.cpt
test #3: C-3.cpt



Important Information about Your Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE THE GEOPROFESSIONAL
BUSINESS ASSOCIATION

8811 Colesville Road/Suite G106, Silver Spring, MD 20910

Telephone: 301/565-2733 Facsimile: 301/589-2017

e-mail: info@asfe.org www.asfe.org

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TERMS AND CONDITIONS

SERVICES TO BE PROVIDED. GeoCon Engineering & Material Testing, Inc. (hereinafter GeoCon) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal.

PAYMENT TERMS. Client agrees to pay our Invoice upon receipt. If payment is not received within 30 days from the invoice date, Client agrees to pay a service charge on the past due amount at a rate of 1.5% per month, and GeoCon reserves the right to suspend all work until payment is received. No deduction shall be made from our invoice on account of liquidated damages or other sums withheld from payments to contractors or others.

TERMINATION. Either party may terminate this Agreement without cause upon 20 days advance notice in writing. In the event Client requests termination prior to completion of the proposed services, Client agrees to pay GeoCon for all costs incurred plus reasonable charges associated with termination of the work.

PROFESSIONAL LIABILITY. Notwithstanding any other provision of this Agreement, the Engineer's and GeoCon's total liability to the Owner for any loss or damages from claims arising out of or in connection with this Agreement from any cause including the Engineer's strict liability, breach of contract, or professional negligence, errors and omissions (whether claimed in tort, contract, strict liability, nuisance, by statute or otherwise) shall not exceed the lesser of the total contract price of this Agreement or the proceeds paid under Engineer's liability insurance in effect at the time such claims are made. The Owner hereby releases the Engineer from any liability exceeding such amount. In no event shall either party to this Agreement be liable to the other for special, indirect, incidental or consequential damages, whether or not such damages were foreseeable at the time of the commencement of the work under this Agreement.

SITE OPERATIONS. Client will arrange for right-of-entry to all applicable properties for the purpose of performing studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

OWNERSHIP AND USE OF PROJECT DOCUMENTS. All documents are instruments of service in respect to the Services, and Engineer shall retain an ownership and proprietary property interest therein (including the right of reuse at the discretion of the Engineer) whether or not the Services are completed. Client may make and retain copies of documents for information and reference in connection with the services by Client. Such documents are not intended or represented to be suitable for reuse by Client or others on extensions of the services or on any other project. Any such reuse or modification without written verification or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Client's sole risk and without liability or legal exposure to Engineer or to Engineer's consultants. Client shall indemnify and hold harmless Engineer and Engineer's consultants from all claims, damages, and expenses including attorneys' fees arising out of or resulting therefrom.

ADDITIONAL SERVICES OF CONSULTANT. If authorized in writing by the Client, GeoCon shall furnish additional services that are not considered as an integral part of the Scope of Services outlined in the Proposal Acceptance Sheet. Under this Agreement, all costs for additional services will be negotiated as to activities and compensation. In addition, it is possible that unforeseen conditions may be encountered that could substantially alter the original scope of services. If this occurs, GeoCon will promptly notify and consult with Client and any additional services will be negotiated.

ASSIGNABILITY. GeoCon shall not assign any interest on this Agreement, and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of the Client; provided, however, that claims for money by GeoCon against Client under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Written notice of any such assignment or transfer shall be promptly furnished to the Client.

SERVICES TO BE CONFIDENTIAL. All services, including opinions, designs, drawings, plans, specifications, reports and other services and information, to be furnished by GeoCon under this Agreement are confidential and shall not be divulged, in whole or in part, to any person, other than to duly authorized representatives of the client, without prior written approval of the Client, except by testimony under oath in a judicial proceeding or as otherwise required by law. GeoCon shall take all necessary steps to ensure that no member of its organization divulges any such information except as may be required by law.

CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation. However, in the event a claim is made that results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in defending the claim, including reasonable attorney's fees. The claim will be considered proven if the judgment obtained and retained through any applicable appeal is at least ten percent greater than the sum offered to resolve the matter prior to the commencement of trial.

SEVERABILITY. It is understood and agreed by the parties hereto, that if any part, term or provision of this Agreement is held by any court of competent jurisdiction to be illegal or in conflict with any applicable law, the validity of the remaining portion or portions of this Agreement shall not be affected and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term or provision held to be invalid.

SURVIVAL. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between Client and GEOCON shall survive the completion of the services and the termination of this Agreement.

INTEGRATION. This Agreement, the attached documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.

GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of Alabama and venue shall be in Baldwin County, Alabama.