

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**OF**

**YOUNG FARMS AND GANTT PROPERTIES  
U. S. HIGHWAY 641 NORTH  
MURRAY, KENTUCKY**

**Submitted By:**

**Geotech Engineering & Testing, Inc.**



March 6, 2007

Mr. Mark Manning  
Murray Calloway County Economic Development Corp.  
P. O. Box 1911  
Murray, Kentucky 42071

**Re: Phase I Environmental Site Assessment  
Young Farms and Gantt Properties  
U. S. Highway 641 North  
Murray, Kentucky**

Dear Mr. Manning:

Geotech Engineering & Testing, Inc. (GEOTECH) is pleased to submit our report describing the findings of the Phase I Environmental Site Assessment of the Young Farms and Gant properties located off of U. S. Highway 641 North in Murray, Kentucky.

This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practices for Environmental Site Assessments: Phase I ESA Process (ASTM Designation: E 1527-05).

The purpose of the Phase I ESA was to gather sufficient information to render an independent professional opinion about the environmental condition of the subject property. The assessment included a site reconnaissance, as well as research and interviews with representatives of the public, property ownership, and regulatory agencies.

We appreciate the opportunity to serve you and look forward to future association with you on this and other projects. If you have questions concerning this report or require further clarification of the report findings, please call our office at (270) 443-1995.

Sincerely,

GEOTECH Engineering & Testing, Inc.

A handwritten signature in black ink, appearing to read 'Christopher N. Farmer', is written over a large, stylized cursive flourish.

Christopher N. Farmer, P.E.  
Principal Engineer

Attachments: Phase I Environmental Site Assessment Report

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**YOUNG FARMS AND GANTT PROPERTIES  
U. S. HIGHWAY 641  
MURRAY, KENTUCKY**

**Prepared For:**

**Mr. Mark Manning  
Murray Calloway County Economic Development Corp.  
P. O. Box 1911  
Murray, Kentucky 42071**

**Prepared By:**

**GEOTECH Engineering & Testing, Inc.  
500 South 17th Street  
Paducah, Kentucky 42003**

**March 6, 2007**

## Table of Contents

1.0	Executive Summary.....	1
2.0	Introduction.....	3
2.1	Purpose.....	3
2.2	Detailed Scope-of-Services.....	3
2.3	Significant Assumptions.....	4
2.4	Limitations and Exceptions.....	4
2.5	Special Terms and Conditions.....	5
2.6	User Reliance.....	5
3.0	Site Description.....	5
3.1	Location and Legal Description.....	5
3.2	Site and Vicinity General Characteristics.....	5
3.3	Current Use of the Property.....	6
3.4	Descriptions of On-Site Structures / Improvements.....	6
3.5	Current Uses of the Adjoining Properties.....	6
4.0	User Provided Information.....	7
4.1	Title Records.....	7
4.2	Environmental Liens and Activity and Use Limitations.....	7
4.3	Specialized Knowledge.....	7
4.4	Commonly Known or Reasonable Ascertainable Information.....	8
4.5	Valuation Reduction for Environmental Issues.....	8
4.6	Owner, Property Manager and Occupant Information.....	8
4.7	Reason for Performing Phase I Environmental Site Assessment.....	8
5.0	Records Review.....	8
5.1	Standard Environmental Records Sources.....	9
5.1.1	Federal Governmental Databases.....	9
5.1.2	State Government Databases.....	11
5.1.3	Additional Environmental Records Sources.....	13
5.2	Physical Setting Source(s).....	16
5.2.1	Mandatory Standard Physical Setting Source.....	16
5.2.2	Discretionary and Non-Standard Physical Setting Sources.....	16
5.3	Historical Use Information on the Subject Property.....	16
5.3.1	Standard Historical Sources.....	17
5.3.1.1	Aerial Photographs.....	17
5.3.1.2	Fire Insurance Maps.....	17
5.3.1.3	Property Tax Files / Maps.....	17
5.3.1.4	USGS Topographic Maps.....	17
5.3.1.5	Local Street Directories.....	17
5.3.1.6	Building Department Records.....	17
5.3.1.7	Zoning / Land Use Records.....	17
5.4	Historical Use Information on the Adjoining Properties.....	18
5.4.1	Standard Historical Sources.....	18
5.4.1.1	Aerial Photographs.....	18
5.4.1.2	USGS topographic Maps.....	18
5.4.1.3	Local Street Directories.....	18

6.0	Site Reconnaissance .....	18
6.1	Methodology and Limiting Conditions .....	18
6.2	General Site Setting.....	18
6.3	Exterior Observations .....	19
6.4	Interior Observations.....	20
7.0	Interviews.....	21
7.1	Interview with Owner.....	21
7.2	Interview with Site Managers .....	22
7.3	Interviews with Occupants .....	22
7.4	Interviews with Local Government Officials .....	22
8.0	Findings and Opinions .....	22
8.1	Current Recognized Environmental Conditions .....	22
8.2	Historic Recognized Environmental Conditions .....	23
9.0	Conclusions .....	23
10.0	Deviations From ASTM Standard E 1527.....	24
11.0	Additional Services .....	24
12.0	References .....	25
14.0	Signatures of Environmental Professional.....	26
15.0	Qualifications of Environmental Professional.....	27
	Environmental Professional.....	27
	Education .....	27
	Licensure.....	27
	Professional Experience.....	27
	Appendix .....	27

## 1.0 Executive Summary

Geotech Engineering & Testing, Inc. was retained by the Murray Calloway County Economic Development Corporation to conduct a Phase I Environmental Site Assessment of the Young Farms and Gant properties that include a total of approximately 133.6 acres of farmland, wooded and residential property, located off of the U. S. Highway 641 North in Murray, Kentucky (hereinafter referred to as the subject property or site). The assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practices for Environmental Site Assessments: Phase I ESA Process (ASTM Designation: E 1527-05)

The purpose of the Phase I ESA was to identify any potential sources of environmental risk or liability regarding recognized environmental conditions associated with the subject property. This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property owners, and regulatory agencies.

- The project site is located just north of Murray, Kentucky on U. S. Highway 641. The project site is comprised of three contiguous properties including a 109.8 acres parcel, a 0.93 acre parcel and 22.8 acre parcel for a total of approximately 133.6 total acres. The parcels consist of mainly farmland, wooded and residential areas.
- Three residential structures were located near the eastern boundary of the site. Given the age of the residential structures, it is possible that asbestos containing materials (ACMs) or lead based paints may be present within the structure. A well and at least 2 cisterns were observed on site.
- Two small areas along the northern boundary of the site were observed to be flagged as potential wetland areas.
- A masonry block business was formerly located on the Gantt property near the northeastern corner of the site. The masonry company was started in 1948 and was closed in 1966. The masonry products were produced with cement, sand and waterproofing mixtures. Reportedly no large quantities of chemicals or hazardous materials were ever stored on site. An underground storage tank (UST) was reportedly install on site in about 1950. The UST was used for gasoline for use by the company delivery trucks. The UST was reportedly last used in 1966 but remained in the ground. A fill pipe was observed during the site walkover activities.
- Environmental Data Resources, Inc., of Southport, Connecticut (EDR), was contracted to conduct a search of federal, state, and local databases with respect to the site in order to identify any environmentally adverse facilities within a one-mile radius of the site. No facilities within a one-mile radius of the site were listed on any environmental or government database for hazardous chemical or waste activities.

- Based on the findings of this Phase I Environmental Site Assessment, no **current recognized environmental conditions** were identified on the subject property. It is advised that the prior to any demolition of the residential structures that they be inspected by a certified asbestos abatement contractor for ACMs or lead-based paint. If such materials are identified, they should be removed by a licensed abatement contractor.
- Based on the findings of this Phase I Environmental Site Assessment one **historic recognized environmental condition** was identified on the subject property concerning the former UST still located on site.

It is recommended that the UST be properly closed per Kentucky UST Branch guidelines by a certified UST remover. The UST may be closing in place by filling with inert material or removed. It is recommended that soil samples be collected from the UST tank pit and analyzed by laboratory method for any petroleum hydrocarbons. Given the age of the tank, the State is not generally required to be notified of removal activities if petroleum hydrocarbon impacts are not encountered. However, if the user of this report requires a No Further Action Letter (Clean Closure Letter) from the Kentucky UST Branch then the necessary paperwork from the licensed remover with laboratory results indicating petroleum hydrocarbon levels below allowable concentrations will need to be submitted.

## 2.0 Introduction

This report presents the results of a Phase I Environmental Audit and Site Assessment conducted by Geotech Engineering & Testing, Inc. (Geotech) of three contiguous parcels that include of farmland, wooded areas and residential properties and contain approximately **133.6 acres** located on the west side of U. S. Highway 641 in Murray, Calloway County, Kentucky. (herein referred to as “**the subject site or subject property**”).

## 2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is to identify, to the extent feasible pursuant to the processes prescribed herein, *recognized environmental conditions* in connection with the property in an effort to comply with the “innocent landowner defense” of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) as amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA).

The term *recognized environmental conditions* means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

## 2.2 Detailed Scope-of-Services

Geotech Engineering & Testing, Inc. (ASTM defined - “environmental professional”) was retained by Murray Calloway County Economic Development Corporation (ASTM defined - “user”) to conduct this Phase I Environmental Site Assessment for the subject site as described in Section 3.0 of this report.

The scope of work for the assessment was conducted in accordance with the American Society for Testing and Materials (ASTM) publication titled “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-05).

The detailed scope of services used for the assessment included but not limited to the following tasks:

- A review of recorded deeds to identify owners or lessees of the property who possibly used or stored potentially hazardous materials



- A review of available aerial photographs, topographic maps, and adjacent properties to identify evidence of dumping or storage of hazardous materials and to establish the historic usage of the site.
- A review of federal, state, and local agency records of hazardous sites to identify environmental concerns regarding the subject site or nearby properties. The review included the CERCLIS list, state investigated sites, Emergency Planning and Community Right-to-Know Act records, and other appropriate records.
- Interviews with the current owners, neighbors, and employees, as available, to obtain information regarding the site's history, utilities, operations, waste management practices, and other environmental considerations.
- Visual inspection of the site and structures thereon to identify indications of existing and potential contaminant sources such as aboveground and underground storage tanks, stained areas, distressed vegetation, filled areas, indiscriminate dumping, and surficial soil characteristics.
- Inventory of transformers and other electrical equipment on the site and bordering properties with the potential for containing polychlorinated biphenyls (PCBs). This activity also included a determination of ownership, condition, and established testing schedule of the equipment inventoried.
- A driving tour of the vicinity of the site to identify any nearby environmental risks which may affect the environmental condition of the site.
- Review of all relevant agency records to determine if the site may contain any wetlands, as appropriate.

### 2.3 Significant Assumptions

While this report provides an overview of potential environmental concerns, both past and present, the environmental assessment is limited by the availability of information at the time of the assessment. In addition portions of the database research were conducted by third party sources (EDR Radius Map) and are assumed complete and accurate. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the property may have occurred which could not be identified.

### 2.4 Limitations and Exceptions

The site assessment has been conducted according to generally accepted practices and procedures in an effort to comply with the "Appropriate Inquiry" section of CERCLA. Current practice does not require an exhaustive search for existing or potential sources of contamination; rather, the ASTM standard requires a search of readily accessible information within a reasonable time at a reasonable cost. No environmental site assessment can entirely eliminate uncertainty regarding the potential for contamination of a property. Performance of this assessment is intended to reduce, but not eliminate the uncertainty regarding the

potential or continuation of a property. There is a point at which the cost of information obtained and the time required to gather it outweighs the usefulness of the information and may be detrimental to the orderly completion of real estate transactions.

## **2.5 Special Terms and Conditions**

This Phase I Environmental Site Assessment was conducted in accordance with ASTM E 1527. No special terms or conditions were used for the generation of this report.

## **2.6 User Reliance**

This assessment was performed at the request of the user utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent the best professional judgment of the Environmental Professional based on the conditions that existed and the information and data available to Geotech during the course of this assignment. Factual information, regarding operations, conditions, and test data provided by the user, owner, or their representatives have been assumed to be correct and complete.

Geotech Engineering & Testing, Inc. acknowledges that the client ("User") and lender may rely upon the information, findings, opinion and conclusions set forth in this report, subject to the conditions and limitations contained in this report. The report provides information on the property only as specified in the scope of work and is based on subject property conditions at the time of the study. Any reliance on this report by any other party shall be at such party's sole risk unless that party has written authorization from Geotech and the original User.

## **3.0 Site Description**

### **3.1 Location and Legal Description**

The project site is located just north of Murray, Kentucky on U. S. Highway 641. The project site is comprised of three contiguous properties including a 109.8 acres parcel, a 0.93 acre parcel and 22.8 acre parcel for a total of approximately 133.6 total acres. The parcels consist of mainly farmland, wooded and residential areas. According to the current deeds and Property Valuation records, the site is made up of three tracts. The legal description for three tracts are listed as: Young Farms and Rental Property, Inc in Deed Book 501, page 056, Vernon W. Gantt and James D. Gantt in Deed Book 545, page 34 and Will recorded in Deed Book 196, page 540 and Deed Book 127, page 210 and Deed Book 127, page 206 in the Murray Calloway County Courthouse.

### **3.2 Site and Vicinity General Characteristics**

A large portion of the Young Farms property consists mainly of recently cultivated farmland and wooded areas near the center and western portions of the property. An existing barn and former residential structure are located near the west-central portion of the property.

The eastern portion of the Young Farms property (along U. S. Highway 641) contains a residential structure and small barn. The Gantt property contains two residential structures along the eastern portion of the site near U. S. Highway 641 and farmland and wooded areas on the center and western portion of the property. A municipal water tower parcel is located on the eastern side of the Gantt property.

The site can be directly access from U. S. Highway 641. The subject site is a mixture of rolling farmland and moderately hilly wooded areas. There are two unnamed blue-line streams that extend west to east. One is located near the northern property boundary and the other is located near the southern boundary. The site has a general topographic elevation range of elevation of approximately 480 to 540 feet above sea level. According to the FEMA online database, community panel number 210313 0001 A, dated December 2, 1977, the site lies outside the 500 year floodplain.

### **3.3 Current Use of the Property**

The majority of site (all parcels as a whole) consists of farmland, undeveloped wooded areas and residential areas (near U. S. Highway 641). A municipal water tower is located near the eastern-central portion of the site and is owned by the City of Murray. The tower is within a chain link fence lined lot (approx 75' x 75')

### **3.4 Descriptions of On-Site Structures / Improvements**

Currently, there are three residential structures located on subject property along the eastern side of the site near U. S. Highway 641. The three structures are brick clad single story residences. Two of the structures are on the Gantt property and the remaining is on the Young Farms property. One of the residences (Young Farm Property) had a well house near the front of the structure. An existing concrete cistern was located near the rear of the one of the residences on the Gantt property. A small wood clad barn was located near the rear of the Young residence with a small man-made pond located nearby. Two small outbuildings were located near the rear of Gantt residences. A gravel road runs east to west near the middle of the property and extends near the west central portion of the site to an existing corrugated metal clad barn. Two additional man-made farm ponds are located near the west central portions of the site. The remaining portions of the site as a whole is used as farmland and as undeveloped wooded areas.

### **3.5 Current Uses of the Adjoining Properties**

The site is bordered to the north and south by additional farmland, undeveloped wooded areas and residential land. The site is border to the west by undeveloped wooded areas and farmland. The site is bordered to the east by U. S. Highway 641 and the Murray Industrial Park complex lying beyond.

---

## 4.0 User Provided Information

### 4.1 Title Records

Geotech Engineering & Testing, Inc, located at 500 South 17<sup>th</sup> Street in Paducah, Kentucky conducted a review of the chain of ownership, as requested by the client as part of the assessment. The review of previous ownership records was conducted to determine if any of the previous property owners might be suspected of conducting environmentally adverse activities. The chain of ownership review conducted for this assessment does not constitute necessary title research used for clear title assessments.

According to the current Property Valuation Administration Records and recorded Grantor/Grantee Deeds, the site consists of three separate tracts. The first two tracts contains 109.809 and 0.933 acres and are currently owned by Young Farms and Rental Property, Inc as recorded Deed Book 501, page 056. The remaining tract contains 22.875 acres and is currently owned by Vernon W. Gantt and James D. Gantt as recorded in Deed Book 545, page 34 and Will recorded in Deed Book 196, page 540 and Deed Book 127, page 210 and Deed Book 127, page 206 in the Murray Calloway County Courthouse.

From the review of previous ownership, it was determined that the past property owners consisted of individuals. No Historic Recognized Environmental Conditions (HRECs) were identified for the site during the chain of title review.

### 4.2 Environmental Liens and Activity and Use Limitations

An environmental lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property. An activity or use limitation is a legal or physical restriction or limitation on the use of, or access to, a site or facility. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and/or petroleum products in the soils or groundwater on the property.

Neither the user of this report nor the current property owner reported any knowledge of environmental liens or activity and use limitations for the subject property.

### 4.3 Specialized Knowledge

Neither the user of this report nor the current property owner indicated any specialized knowledge or experience that is material to any recognized environmental conditions in connection with the property.

#### 4.4 Commonly Known or Reasonable Ascertainable Information

Neither the user of this report nor the current property owner indicated any other commonly known or reasonably ascertainable information that is material to any recognized environmental conditions in connection with the property.

#### 4.5 Valuation Reduction for Environmental Issues

In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price which does not reasonable reflect fair market value if the property were not contaminated.

Neither the user of this report nor the current property managers indicated any knowledge of whether or not the purchase price of the property is less than the purchase price of comparable properties.

#### 4.6 Owner, Property Manager and Occupant Information

The site is comprised of the Young Farms property and the Gantt property. Currently, the residential structure on the Young Farm property is being occupied and one of the two residential structures on the Gantt property is being occupied.

#### 4.7 Reason for Performing Phase I Environmental Site Assessment

The reasons for the Phase I Environmental Site Assessment include the following:

- The need to understand potential environmental conditions that could materially impact the commercial property.
- To satisfy the requirements of the Landowner Liability Protections including the "all appropriate inquiry" of the "innocent landowner defense" to the CERCLA liability. To determine environmental liabilities that may devalue the property or preclude or restrict the intended use.

#### 5.0 Records Review

The section includes Federal, State and local environmental / regulatory agency inquiries, database and records research, and reviews. The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the subject site.

## 5.1 Standard Environmental Records Sources

### 5.1.1 Federal Governmental Databases

**NPL:** National Priorities List (Superfund):

*Source:* United States Environmental Protection Agency (USEPA)

The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. The NPL database is released by the federal government on a semi-annual basis. Minimum required search distance is 1.0 mile.

No NPL sites were found on the database for the subject property or within the 1-mile search distance.

**DELISTED NPL:** Delisted National Priorities List (Superfund):

*Source:* USEPA

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete site for the NPL in accordance with 40 CFR3000.425(e), sites may be deleted from the NPL where no further response is appropriate. The delisted NPL database is released by the federal government on a quarterly basis. Minimum required search distance is 0.5 mile

No Delisted NPL sites were found on the database for the subject property of within the 0.5-mile search distance

**CERCLIS:** Comprehensive Environmental Response, Compensation and Liability Information System:

*Source:* USEPA.

The Federal CERCLIS list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of CERCLIS. CERCLIS contains sites which are either proposed to or on the federal NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL. The CERCLIS database is released by the federal government on a semi-annual bases. Minimum required search distance is 0.5 mile.

No Federal CERCLIS List sites were found on the database for the subject property within the 0.5-mile search distance.

**CERCLIS LIST- NFRAP:** CERCLIS No Further Remedial Action Planned List

*Source:* USEPA.

As of February 1995, CERCLIS sites designated "NO Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly

without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. The CERCLIS List – NFRAP is released by the federal government quarterly. Minimum required search distance is 0.5 mile.

No CERCLIS List – NFRAP sites were found on the database for the subject property within the 0.5-mile search distance.

#### **CORRACTS FACILITIES LIST: Corrective Action Report**

*Source:* USEPA,

CORRACTS identifies hazardous waste handlers with RCRA corrective action activities. The database is release by the federal government on varied schedule. The minimum required search distance is 1.0 mile

No CORRACTS listed sites were found on the database for the subject property or within the 1.0 mile search distance.

#### **RCRIS: Resource Conservation and Recovery Information System**

*Source:* USEPA,

RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). The database released dates are varied. The minimum required search distance includes the subject property and adjoining properties. RCRA defines the generators in the following categories (defined below): *CESQG, SQG, LQG, Transporters, and TSDF.*

*CESQG*- Conditionally exempt small quantity generators: generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Neither the subject site nor the adjoining properties were listed as CESQG facilities.

*SQG*- Small Quantity generators: generate between 100kg and 1,000 kg of hazardous waste per month.

Neither the subject site nor the adjoining properties were listed as SQG facilities.

*LQG*- Large quantity generators: generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Neither the subject site nor the adjacent properties were listed as LQG facilities.

*TSDFs*- Treatment, Storage or Dispose Facilities: facilities that treat, store or dispose of hazardous waste

Neither the subject site nor the adjacent properties were listed as a TSD facility.

---

**State Equivalent CERCLIS - State Hazardous Waste Sites**

*Source:* KYDEP.

**State Hazardous Waste Sites.** State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority site planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Minimum required search distance is 0.5-mile.

No facilities were identified within the required search distance.

**State Landfill and/or Solid Waste Disposal Site List**

*Source:* KYDEP

State landfill /Solid Waste Disposal Site type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites. The database is updated semi-annually. The minimum required search distance is 0.5-mile.

No facilities were identified within the required search distance.

**State Registered Storage Tank List**

*Source:* KYDEP (Underground Storage Tank Branch)

Underground Storage Tanks (USTs) are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. The database is updated quarterly. The minimum required search distance is for the subject site and the adjoining properties.

No facilities were identified within the required search distance.

**State Leaking Storage Tank Lists**

*Source:* KYDEP (Underground Storage Tank Branch)

The State of Kentucky does not currently maintain a separate listing for leaking underground storage tanks. All USTs whether active, removed or leaking are included in the Kentucky UST Branch registered tank lists. The registered storage tank list is updated quarterly. The minimum required search distance is 0.5-mile.



### State Institutional Control / Engineering control Registries

Source: KYDEP

The subject site was not listed on any State Institutional Control / Engineering Control Registries

### State Voluntary Cleanup Sites

Source: KYDEP

State Voluntary Cleanup Sites are sites that have been accepted into the Voluntary Cleanup Program or have submitted an application. The subject site was not listed on any state voluntary cleanup site lists

### State Brownfield Sites

Source: KYDEP

The site was not listed as a State Brownfield Site. No facilities within a 0.5-mile radius were listed on the State Brownfield Site List.

## 5.1.3 Additional Environmental Records Sources

### TRIS – Toxics Release Inventory Database

Source: USEPA

Industries which routinely or accidentally release toxic chemicals to the environment are required to report such releases to the EPA under SARA Title III. The TRIS is an inventory of these releases. The required minimum search includes the property only.

The subject property was not listed in the TRIS database.

### FINDS: Facility Index System

Source: USEPA.

The Facility Index System gives the location of facilities, which are known to be regulated by EPA. FINDS indexes data relating to sites or facilities covered in thirteen other site-oriented databases maintained by EPA.

A description of principal databases contained in FINDS follows:

**RCRIS, or RCRA Information System:** lists the names and locations of facilities which are involved in the use, generation, handling, treatment, disposal, or transportation of hazardous wastes;

**PCS (Permit Compliance System):** is a computerized management information system which contains

data on National Pollution Discharge Elimination System (NPDES);

**AIRS (Aerometric Information Retrieval System):** lists facilities that are subject to air quality monitoring or reporting under the Clean Air Act (CAA);

**DOCKET:** the Civil Enforcement Docket database, contains information on civil judicial enforcement cases filed against suspect violators by the Environmental Protection Agency

**NCDB (FTTS):** is the National compliance Database (FIFRA / TSCA Tracking System). FIFRA is the Federal Insecticide Fungicide and Rodenticide Act and TSCA is the Toxic Substances Control Act. NCDB (FTTS) is a database that lists sites subject to inspections, enforcement actions, or settlement undertaken under the authority of FIFRA and TSCA;

**SSTS or Section Seven Tracking System:** tracks the registration of all pesticide-producing establishments and tracks annually the types and amounts of pesticides, active ingredients, and devices that are produced, sold or distributed in each year;

**TRI or Toxic Release Inventory:** contains entries for facilities reporting releases of certain toxic substances regulated by the Superfund Amendments and Reauthorization act of 1986;

**FFIS, the Federal Facility Information System:** contains a listing of facilities that have submitted specific environmental project budget plans;

**CICIS, the Chemicals in Commerce Information System:** contains data on manufactured or imported chemicals, including information on facilities, which submit information to the system;

**PADS or PCB Activity Data System:** identifies PCB generators, storers, transporters, or permitted disposers;

**CUS, or Chemical Update System:** identifies facilities, which manufacture or import specific toxic chemicals in excess of 10,000 pounds per year.

The subject site was not identified within the FINDS database.

**EPA – Superfund (CERCLA) Consent Decrees (CONSENT).**

Source: USEPA

The Superfund Consent Decrees is the system used by EPA to track major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. The subject site was not listed within the CONSENT system.

**EPA – PCB Activity Database System (PADS)**

Source: USEPA

The PCB activity database identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

The subject site was not listed on the PADS database

**EPA – RCRA Administrative Action Tracking System (RAATS)**

Source: USEPA

The RAATS database contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA retains a copy of the database for historical records.

The subject site was not listed on the RAATS database.

**U. S. DOT – Hazardous Materials Incident Report Subsystem (HMIRS) Database**

Source: USDOT

HMIRS is a listing of incidents involving the unintentional release of hazardous materials incidents reported by carriers of hazardous materials.

The subject site was not found in the HMIRS database. No HMIRS incidents were reported within the approximate search distance of 0.25-mile from the subject site.

**EPA – Records of Decision (ROD) Database**

Source: USEPA

ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup

The subject site was not found in the ROD database.

**MLTS – Material License Tracking System / Material License – Radioactive Database.**

Source: NRC

MLTS database lists the NRC's licenses issued for the operation of nuclear power plants or nuclear waste repositories or medical, industrial, or research applications. The MLTS database lists license quantities and uses of nuclear materials.

The subject site was not found in the MLTS database.

**EPA – Toxic Substances Control Act (TSCA) Database.**

Source: USEPA

The TSCA database identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

The subject site was not found on the TSCA database. In addition, the site was not listed on the EPA Enforcement and Compliance History Online (ECHO) database.

## 5.2 Physical Setting Source(s)

### 5.2.1 Mandatory Standard Physical Setting Source

United States Geologic Survey (USGS) *7.5 Minute Topographic Map of the Dexter, KY Quadrangle (1983)* was reviewed as the ASTM required standard physical setting source. The topography of the site is rolling with moderate changes in relief near the blue-line streams located along the northern and southern property lines. The approximate surface elevation of the site ranged between approximately 480 and 540 feet above sea level (National Geodetic Vertical Datum of 1929)

### 5.2.2 Discretionary and Non-Standard Physical Setting Sources

United States Geologic Survey (USGS) *Geologic Map of the Dexter, Calloway County, Kentucky Quadrangle*, was reviewed to determine the general characteristics of the subsurface lithology. According to the map, the site is immediately underlain by Quaternary- and Tertiary aged deposits to an approximate depth of at least 250 feet:

Loess, Claiborne formation and Porters Creek formation are all mapped on site. Loess is described as silt and clay, gray to yellowish brown, unstratified. The Claiborne formation is described as sand, brown to red, medium to coarse grained, in places cemented with iron oxide and includes silty clay lenses. The Porters Creek formation is described as clay, silt and sand. Clay, dark-gray, dries light gray, slightly silty moderately micaceous, brittle, fractures conchoidally. Silt and fine grained sand, grayish-orange to reddish-brown, argillaceous contain abundant mica and dark opaque minerals.

United States Department of the Interior, Fish and Wildlife Service, *National Wetlands Inventory Map (1988)*. After a review of the map, no wetlands designated soil or vegetation was identified for the site according to the available map. However, it should be noted that two small areas near the northern boundary of the site had been flagged as potential wetland delineated areas by other parties. Prior to development it is recommended that the area be assessed for the presence of wetlands, if any.

## 5.3 Historical Use Information on the Subject Property

The objective of consulting historical sources is to develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to any recognized environmental conditions in connection with the property.

## **5.4 Historical Use Information on the Adjoining Properties**

### **5.4.1 Standard Historical Sources**

#### **5.4.1.1 Aerial Photographs**

1998 Aerial Photograph -- The aerial photograph depicts the adjacent properties as farmland, wooded areas and some residential. No Recognized Environmental Conditions were identified during the review of this aerial map.

#### **5.4.1.2 USGS topographic Maps**

The following topographic map was obtained from an online database (URL: <http://www.topozone.com>). The topographic map is for the Dexter, Kentucky Quadrangle.

1983 Topographic Map: The area surrounding the subject site is shown as rolling hills and moderately steep topographic relief wooded areas. No Recognized Environmental Conditions were identified during the review of the topographic map.

#### **5.4.1.3 Local Street Directories**

Business directories including city, county and cross reference directories were not available for this area of Calloway County.

## **6.0 Site Reconnaissance**

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the subject property.

### **6.1 Methodology and Limiting Conditions**

The methodology used in the site reconnaissance included physical site visit and "walk-over". The site was visually observed during the "walk-over" to the extent possible and that was not obstructed by bodies of water, adjacent buildings or other obstacles. The walk-over included visual observations of the entire property perimeter and a grid based pattern for the visual observations of the interior portions of the site.

The site was readily accessible during the walk-over. Mr. Chris Farmer of Geotech performed the site walk-over unaccompanied. Photographic documentation of the site walk-over is available in the appendices. The residential structures located on site were locked and were not accessible.

### **6.2 General Site Setting**

The subject site is comprised of three parcels including two Young Farms parcels (109.8 acre and 0.933 acre) and one Gantt parcel (22.8 acres). The two Young Farms parcels will be grouped together for purposes of this description. The project area is in a generally rural

setting with mainly open farmland and wooded areas. Small residential areas are located along U. S. Highway 641.

The site is bordered to the north and south by farmland, wooded areas and residential properties. The site is border to the west by farmland and wooded areas. U. S. Highway 641 extends along the eastern boundary of the site with Murray Industrial Park lying beyond.

### 6.3 Exterior Observations

#### Young Farm Parcels:

The Young Farm Parcels consist of approximately 110.7 acres of mainly undeveloped farmland, wooded areas and a residential parcel. The Young Farm parcels extend and incorporate all of the western and southern property boundaries. The southeastern portion of the site extends along U. S. Highway 641 and the turns and runs west to approximately half the property distance. (See Site Location Map) A gravel roadway nearly bisects the site as a whole and extends to the rear of the property to an existing corrugated metal clad barn and farm pond. The barn housed what appeared to be many general household good and general building products (old doors, etc.). Several farm implements and trailers were observed in and around the barn. Some small amounts of household chemical containers (cleaners) were observed in the barn. No industrial chemicals, herbicides or pesticides were observed. Near the barn to the southwest was a trash burn pile. Based on information from the current property owner this was the site of a historic residential structure. The structure was demolished and the area is used for burning brush. Moderate amounts of corrugated metal, a few metal buckets, PVC piping and several tires were observed in and around the burn pile. A concrete cistern was observed adjacent to the burn pile and was covered with a small piece of corrugated metal pipe. The cistern was observed to contain water. Two farm ponds were observed in the general vicinity of the metal clad barn. The ponds appeared to be in good conditions with no manmade debris observed in or around them.

The western portion of the site was used for farmland and had been recently cultivated. Wooded areas extend along the northern and southern areas of the site and extend toward the east. The wooded areas appeared to be undeveloped with no debris and dumps being visible. Two small areas near the northern property boundary in the wooded areas were observed to have been flagged with red survey flags label wetland boundary. Two creeks were observed, one near the northern property boundary and the other along the southern boundary. The creeks were running with water and were observed to be nearly free from debris.

A small residential structure was observed near U. S. Highway 641 on the Young Farm property. The structure was brick clad and was currently occupied. Immediately behind the residential structure was a wood clad barn and small farm pond. The barn appeared to be used as a carport and storage shed for four wheelers and a small boat. No chemicals, pesticides or herbicides were observed. The small farm pond appeared to be in good conditions with no man-made debris in or around it.

### **Gantt Parcel**

The Gantt parcel consist of approximately 22.8 acres of mainly farmland, wooded areas and residential parcels near U. S. Highway 641. The Gantt parcel is located in the northeast corner of the site as a whole. The Gantt parcel extends from the Young property to the north along U. S. Highway 641 to a blue-line stream and turns west along the stream to approximately half the distance of the property as a whole the south toward the bisecting gravel road and back east to Highway 641.

The southwest corner of the Gantt parcel was used a farmland and had been recently cultivated. The northern portion of the parcel was wooded and extended toward the east. Two residential structures were located on the eastern boundary of the Gantt parcel near U. S. Highway 641. A chain-link fenced municipal water tower parcel is located behind the residential structures and is nearly surrounded by the Gant property.

One of the two residential structures was unoccupied at the time of site walkover. Both of the structures were brick clad, single story residential structures. The interiors of the residential structures were not accessible. Both structures were covered with asphalt shingles. A grade mounted concrete cistern was observed behind the unoccupied structure. The cistern was covered with a concrete lid and was not internally observed.

Two outbuildings were observed behind the unoccupied structure. These buildings were used for small storage buildings for lawnmowers, etc. Only small amounts of gasoline and oil for lawn mowers were observed. No stained or stressed vegetation was identified on the exterior portion of the site.

An area of historic commercial use was observed immediately north of the northern most residential (occupied) structure. Based on the current property owner information this area was formerly used as a masonry block manufacturing areas. Various bricks, masonry blocks and fragments were observed in and around the location. An underground storage tank fill pipe was observed, as well as an aboveground gasoline dispenser. Additionally some small debris were observed in this area. No staining of ground surface was observed and no stressed vegetation was identified.

### **6.4 Interior Observations**

None of the three residential structures were accessible during the time of the site walk-over. Both of the barns were observed on the Young Farms property. The metal clad barn located near the center of the property contained various household goods and farm implements and trailers. Some small amounts of household chemicals were observed. No industrial or large quantities of chemicals, pesticides or herbicides were observed.

A small wood clad barn was observed near the residence along U. S. Highway 641. The barn was used as a carport and storage for four wheelers and a small boat. No chemicals, herbicides or pesticides were observed.

Two small outbuildings were observed near the rear of the unoccupied residential structure on the Gantt property. The buildings were used for storage of lawn mowers and other lawn equipment. Small amounts of oil and gasoline were observed. The full interior of the outbuildings could not be observed due to obstructions.

## **7.0 Interviews**

### **7.1 Interview with Owner**

The site is comprised of three parcels and is currently owned by currently Young Farms and Rental Properties, Inc., and Vernon Gantt and James Gantt.

#### **Young Farms and Rental Properties, Inc.**

Dr. Burton Young was interviewed for this assessment regarding the history and current activities of the subject site. According to Dr. Young the property has been in the family since at least 1957 when the front portion of the property (approx 25 acres) near U. S. Highway 641 was obtained. The residential structure was built during this time. The remaining portion of the property (approx 85 acres) was acquired in about 1969. The property has only been used as a residence, farmland and undeveloped wooded areas. Some livestock were kept on site during the history of the site. A small amount of row crops were cultivated along U. S. Highway 641. The site usage is still consistency with the historical use. No chemicals or other hazardous materials are currently or have been stored on site. Dr. Young stated that to the best of his knowledge nothing of significant environmental concern are associated with the subject property.

#### **Gantt Property**

Mr. Vernon Gantt and Mrs. Virginia Gantt were interviewed for this assessment regarding the history and current activities of the subject site. Based on the interviews the property was acquired by the family in 1948. The property was used as farmland and residential property. In the same year, a masonry company was located on site and was operated by the family. The masonry company (Brkcrete) made masonry block and brick. The masonry products were comprised of cement, sand and waterproofing agent. A two-story mixer stand structure was located on site. The cement, sand and water proofing agent was mixed with water in a hopper and dumped into a mixer unit. Once agitated the mixture would be placed into block forms and pressed. The Brkcrete company operated for approximately 18 years before closing in 1966.

An underground storage tank (UST) was reportedly installed on site in the general areas of the former plant. The tank was reportedly installed in approximately 1950. The UST contained gasoline and was used for company delivery trucks. The size of the tank could not be ascertained. The tank was last used in 1966 when the Brkcrete company ceased operations.



Since the companies closure in 1966 the property has been only used as farmland, wooded areas and residential properties. No large amounts of chemicals were reportedly stored on site.

## 7.2 Interview with Site Managers

No site managers were associated with the subject properties.

## 7.3 Interviews with Occupants

Two of the residential structures on site were occupied. At the time of the site walk over no occupants were available for interview.

## 7.4 Interviews with Local Government Officials

No environmental concerns were associated with the subject property based on information from the Murray Fire Department.

## 8.0 Findings and Opinions

### 8.1 Current Recognized Environmental Conditions

**FINDING:** The site is currently comprised of three parcels combining for a total of approximately 133 acres. The site as a whole consists of a large area of farmland, areas of wooded land and several residential lots near U. S. Highway 641.

Three residential structures were located near the eastern boundary of the site. Given the age of the residential structures, it is possible that asbestos containing materials (ACMs) or lead based paints may be present within the structure.

A well and at least 2 cisterns were observed on site.

Two small areas along the northern boundary of the site were observed to be flagged as potential wetland areas.

**OPINION:** Based on the findings of this assessment, it is Geotech's opinion that no *current recognized environmental conditions* were identified for the subject site. However, some general recommendations are provided below:

Three residential structures were located near the eastern boundary of the site. Given the age of the residential structures, it is possible that asbestos containing materials (ACMs) may be present within the structure. It is recommended that a certified asbestos abatement contractor be retained to survey the structures to assess any potential ACMs and potential lead based paints.

A well and at least 2 cisterns were observed on site. It is recommended that the well be properly abandoned by a Certified Water Well driller and that the cisterns be rendered useless and filled with inert materials to alleviate for safety concerns associated with them.

## 8.2 Historic Recognized Environmental Conditions

**FINDINGS:** Based on the available documentation obtained during this assessment, it is Geotech's opinion that *historic recognized environmental conditions* are identified for the subject site and is listed below:

An underground storage tank (UST) was observed on site and confirmed by the current property owner interview. The UST was installed in about 1950 and was reportedly last used in 1966. No information regarding any historic spills or releases was available. It is recommended that the UST be properly closed in place by filling with inert materials or removed per State UST guidelines by a licensed UST removal contractor. It is recommended that soil samples be collected around the former tank pit area and analyzed by a laboratory for gasoline constituents. Given the age of the UST, documentation is generally not required to be submitted to the State UST Branch unless petroleum hydrocarbon impacts are found or if a Letter of No Further Action (Clean Closure) Letter is needed by the user of this report.

## 9.0 Conclusions

Geotech Engineering & Testing, Inc. has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the subject property described in Section 3.1 of this report. Any exceptions to, or deletions from, this practice are described in Section 11.0 of this report.

Based on the findings of this Phase I Environmental Site Assessment no current recognized environmental conditions were identified on the subject property. However, it is recommended that the existing residential structures be assessed by a certified asbestos abatement contractor for ACMs or lead based materials. In addition, a well was observed on site and should be properly abandoned by a licensed water well driller.

Based on the findings of this Phase I Environmental Site Assessment one historic recognized environmental condition was identified on the subject property. The historic finding was a former gasoline UST. It is recommended that the UST be properly closed by certified UST contractor by filling with inert material or removing from the ground. In either case soil samples should be collected and analyzed for gasoline range constituents.

**10.0 Deviations From ASTM Standard E 1527**

Geotech Engineering & Testing, Inc., prepared this report in general conformance with the ASTM Standard E 1527-05. No deviations or exceptions were noted and no client-imposed constraints were noted.

**11.0 Additional Services**

Additional environmental services outside of the scope of ASTM E1527 were not requested by the user.

## 12.0 References

American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-05).

United States Geological Survey, Geologic Map of the McKee, Jackson County, Kentucky Quadrangle.

1997 Aerial Photograph: Online database. URL: <http://terraserver.msn.com>

2004 Aerial Photograph: Online database. URL: <http://kygeonet.ky.gov/tcm/tcm.htm>

United State Geological Survey, *Topographic Map of the McKee, Jackson County, Kentucky Quadrangle*; dated: 1983; obtained from Online database; URL: <http://www.topozone.com>

Environmental Data Resources (EDR), *The EDR Radius Map with Geocheck*, dated: March 1, 2007, Inquiry No. 1867606.1s

**14.0 Signatures of Environmental Professional**

This Phase I Environmental Site Assessment was conducted under my direct supervision in accordance with ASTM Standard Practice E 1527-05: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". I have personally examined and am familiar with the information submitted in this report. To the best of my Professional knowledge and belief the information submitted is true and accurate.

I also declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the "all appropriate inquiries" in conformance with the standards and practices set forth in 40 CFR Part 312.

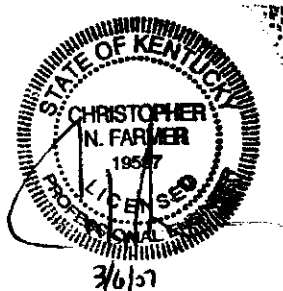
Geotech Engineering & Testing, Inc.



Christopher N. Farmer, P. E.

3/6/07

Date



---

## 15.0 Qualifications of Environmental Professional

### Environmental Professional

Christopher N. Farmer, P. E.  
Principal Engineer  
Geotech Engineering & Testing, Inc.

### Education

B.S. Civil Engineering, University of Louisville, 1991  
Master of Engineering, Civil Engineering, University of Louisville, 1992

### Licensure

#### Professional Engineer

Kentucky License	No.	19597
Tennessee License	No.	105207
Ohio License	No.	63740
Missouri License	No.	E-29927
Mississippi License	No.	16043
Louisiana License	No.	31172

### Professional Experience

Geotech Engineering & Testing, Inc. 1996 – Present  
McIntosh Engineering & Associates 1995 – 1996  
SCA Environmental Technologies, Inc. 1993 - 1995  
Ground Engineering & Testing, Inc. 1991 - 1993

Mr. Farmer has more than fourteen (14) years of experience in completing Phase I and Phase II Environmental Site Assessments, Underground Storage Tanks assessments and development of soil and groundwater remediation systems. Mr. Farmer has conducted environmental assessments for numerous commercial properties including the Louisville Downtown Waterfront (Kentucky Brownfield Site) and for the current locations of the Hillerich & Bradby Company (Louisville Slugger).