

**REPORT OF
HYDROGEOLOGICAL ASSESSMENT**

**THIMLEBERRY FARMS SPRINGS
THIMBLEBERRY FARMS ROAD
SUCHES, GEORGIA
JOB NO. 70524, REPORT NO. 209569**

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January 29, 2002

Canaan Valley
P.O. Box 11
Suches, Georgia 30572

Attention: Mr. John Pace

Subject: Hydrogeological Assessment
Thimbleberry Farm Springs
Thimbleberry Farm Road
Suches, Georgia
Job No. 70524, Report No. 209569

Gentlemen:

QORE, Inc. has completed the authorized work at the referenced site and presents its findings and conclusions in this report.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this assessment is to provide a professional opinion, based on obvious evidence, regarding the hydrogeological characteristics of the springs on-site, the potential for any contaminant threats, review of existing water quality data, and the potential for development of water collection mechanisms and access for potential water storage and loadout facilities. Our scope of services did not include assessments of radon, wetlands mapping, or archaeological/historical/cultural resources, or endangered/threatened species.

It is extremely important that the reader of this report recognize the limitations of the report and the scope of services that form the basis for it. These limitations are described herein. QORE accepts no responsibility for conclusions drawn by any party who claims a lack of familiarity with these limitations.

1.2 Limitations and Exceptions of Assessment

This report is an instrument of service of QORE. It was prepared for and intended for the exclusive use of Mr. John Pace and his designees. The report's contents may not be relied upon by any party other than Mr. John Pace, without the express written permission of QORE.

In performing this site assessment, QORE has endeavored to observe that degree of care and skill generally exercised by other consultants undertaking a similar scope of services at the same time, under similar circumstances and conditions, and in the same geographical area. No other warranty is expressed or implied.

In reading this report you will note that some of the information contained in it is provided by others. We assume this information to be correct and reliable. QORE assumes no responsibility for information provided by others, whether they are under contract with QORE or not.

Be aware that QORE cannot state that the site contains no hazardous or toxic materials, or other latent conditions, beyond those noted by its personnel during performance of this assessment and disclosed within this report. We also point out that our findings apply only to the time during which the individual components of this assessment were performed. Subsequent changes in land use or other activities on or near the site could invalidate those findings.

1.3 Methodology

The following tasks undertaken during this project include the following:

1. A review of available site maps and topographic maps or other geological information.
2. A review of current U.S. EPA and Georgia EPD-maintained lists of known hazardous or toxic substance sites in accordance with the prescribed ASTM radii of the subject site.
3. A visual reconnaissance of the site and adjoining properties.
4. Interviews with past property owners, if feasible, to provide historical information about the springs and past site use.
5. Issue written report documenting our findings and conclusions.

2.0 SITE DESCRIPTION

2.1 Site Location

Thimbleberry Farms encompasses 184.965-acres and is located approximately 2-miles northwest of Suches, Georgia. While the tract does not front Georgia Highway 60 there is a deeded easement to the highway. Contained in Appendix A (Plate 1) is a site location map.

2.2 Site and Vicinity Characteristics

Mr. A. Glenn Motes III, Project Geologist performed a field reconnaissance on January 15, 2002. The site is characterized as a "gentlemen's farm" containing a mixture of undeveloped woodlands and open grassed areas containing three homes/cottages, a barn and other outbuildings. In the open grassed area is a private par-3 nine-hole golf course. Presently livestock is limited to one to two horses and we understand that a landscape company maintains the grounds. Attached are several photographs that provide an overview of the current land use (Appendix B).

Five or more springs and four manmade ponds are present at the site. Groundwater flow from at least three of the springs has in some way been captured and is being used as a water source for two of the residences on-site and/or used to fill the on-site ponds. The largest of the visible springs, which is the focus for further development, is reported to have flow rates that

may reach 140 gallons per minute. An approximate location of this spring is attached (Plate 2, Appendix A).

Topographically, the site is characterized by an approximate 700-foot wide northwesterly trending low area that includes both the floodplain of Suches Creek and open grassed areas, surrounded on three sides by topographic high areas representing Cedar Mountain and Little Cedar Mountain. Topographic relief across the site is estimated at 450 feet or more. Suches Creek enters the site to the north and follows an "horseshoe" alignment through the site and out the western site boundary. Suches Creek is fed as it flows through the site by several spring fed creeks that either originate on-site or within the Chattahoochee National Forest that borders the site. General surface drainage appears to be to the northwest towards the Toccoa River.

The property characteristics within the immediate site vicinity include the undeveloped woodlands comprising the Chattahoochee National Forest to the north, east and south, and residential/farmland to the west.

2.3 Structures, Roads, and Other On-Site Improvements

Presently, the site is accessed by a graveled drive (Thimbleberry Farm Road) that enters the site to the northwest and meanders across the site to provide access to the residential structures and outbuildings. We understand that the access drive from Georgia Highway 60 is part of a dedicated easement. While the present condition of the road is good, it is currently a single lane drive.

The onsite structures and other improvements include three wood-frame homes/cottages, a barn and two other outbuildings, four manmade ponds, and a nine-hole par 3 "golf course". A fourth residential structure was recently razed and the associated swimming pool filled. Water service for two of the residences is from onsite springs. The third residence located in the northwest quarter of the tract utilizes a drilled well. All the homes utilize septic systems. Additionally, the largest visible spring has been preliminarily developed using a concrete pipe riser floored in gravel. Flow from the riser is currently being piped to fill a small pond to the west.

2.4 Surrounding Land Use

Land use on the immediate site vicinity and within a ¼-mile radius of the subject site includes residential, farmland and undeveloped woodlands.

2.5 Past Uses of the Site and Adjoining Properties

To evaluate past land use on or near the site, we reviewed an aerial photograph dated 1975 as part of the USCS soil Survey of Fannin and Union Counties, the USGS topographic map for the Suches, Georgia quadrangle dated 1988, and an interview of Mr. Tim Helton who is the grandson of the gentlemen whom homesteaded the subject site.

The aerial photograph dated 1975 shows open grassed areas as distributed today and at least one of the residential structures. None of the ponds are visible at the time this photograph was taken. However, the access drive is shown.

The USGS 7.5-minute topographic quadrangle for the Suches, Georgia quadrangle dated 1988 shows the access drive, two of the residential structures and the barn. However, the map does not show any of the ponds.

Mr. Tim Helton whose family homesteaded the subject site indicated that the lowland area of the site was used as cropland up until the middle 1900's. After that time the property has changed hands several times but has largely been used since the 1950's as a "gentlemen's farm". We understand that the ponds and "golf course" were built by the owner over the course of the last 20 years.

3.0 RECORDS REVIEW

3.1 Record Sources, Federal and State

Environmental Data Resources, Inc. (EDR) was retained by QORE to provide information regarding the following regulatory databases:

1. The CERCLIS list for the State of Georgia dated July 12, 2001.
2. The ERNS list for the State of Georgia dated August 8, 2000.
3. The National Priority List (NPL Superfund Site Inventory) dated October 22, 2001.
4. The RCRIS list for the State of Georgia dated June 21, 2000.
5. The LUST list for the State of Georgia dated November 1, 2001.
6. The SHWS (Georgia Hazardous Sites Inventory) list dated July 1, 2000.
7. The SWF/LS list of permitted landfills for the State of Georgia dated July 1, 2001.
8. The UST list for the State of Georgia dated April 11, 2001.
9. The CORRACTS list for the State of Georgia, dated November 14, 2001.

The site is not designated by name on any of these lists. Moreover, no sites within the area surveyed are listed. A more detailed listing and discussion is provided with the attached EDR report (Appendix C). With respect to orphan sites, no evidence was provided to suggest that they are located within close proximity of the subject site.

4.0 INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

4.1 Interview With Past Property Owner

An interview was held with Mr. Tim Helton whose family homesteaded the subject site. Mr. Helton indicated that according to his grandfather the springs have always flowed very strongly

despite seasonal and yearly variations and that to his knowledge there have been no environmental incidents associated with the site or immediate area. Approximately 20 years ago the southernmost of the two largest ponds located northeast of the largest/main spring was constructed. The second of the larger ponds was constructed about two years ago. Both of these ponds are connected and are fed by direct spring flow and a spring fed creek that originates on national forest service land. At about the same time as the second of the two larger ponds was constructed the largest of the visible springs on-site was preliminarily developed using a concrete riser pipe floored/bedded in crushed stone.

4.2 Site Reconnaissance

On January 15, 2002, Mr. A. Glenn Motes III, Project Geologist, performed a walkover of the site and areas upstream of the spring that act as the "watershed". The watershed for the on-site springs includes the subject site and undeveloped woodlands that are part of the Chattahoochee National Forest. The approximate boundary of the watershed for the site is provided on Plate 1, Appendix A. Given the limited development of the site and surrounding national forest there appears to be limited potential for impact to the watershed.

Rock exposure across the site is limited to isolated rock float and/or boulders at the surface and several road cut exposures. Rock types associated with the site include biotite gneiss and amphibolite. The biotite gneiss is the predominant rock type and appears to be strongly migmatized and ranges in composition and texture from gneiss to biotite schist. The amphibolite appears to be isolated and likely associated with dikes. No exposures were located where jointing and/or bedding geometry could be accurately measured.

Based upon the geology and morphologic features present on the site it is our opinion that the spring is being fed by groundwater that is present in both bedrock fractures and the overlying saprolite. Such fractures are likely associated with both jointing and exfoliation of the bedrock. We note that an intrusive evaluation using backhoe excavations, borings and/or temporary wells will be required to better delineate the relationships present for any individual spring and to estimate groundwater storage capacity.

An above ground fuel tank is present adjacent to the barn. We estimate the tank to be at least 700 northeast of the main spring. No leaks or evidence of spills was observed around this tank.

4.3 Published Geologic Mapping

While there does not appear to be any published geologic mapping of the subject area, we were able to talk with Dr. John Costello with the Georgia Geological Survey. Dr. Costello confirmed that indeed little published or detailed geologic mapping has been done in the subject area; however, it is likely, based upon the rock types observed, that the site lies within rocks grouped within the Richard Russell Formation or as also referred to as the Hayesville Formation. Structurally, this formation is part of a suite of rocks comprising the Hayesville Thrust Sheet.

4.4 Water Quality

We understand that water samples were collected from the main or largest of the visible springs on October 29, 2001 and were analyzed by National Testing Laboratories LTD., and the University of Georgia, for comparison to national drinking water standards. A copy of the laboratory analysis is attached (Appendix D). It would appear that the results meet or exceed the drinking water standards.

4.5 Spring Development Potential

Further development of the main spring will require that a larger collector or "spring box" be installed. Given the presence of "wet" areas in the immediate area of the current concrete riser overlying the spring the potential for expansion is good. Additionally, the layout of the current grounds is such that water storage and loadout facilities could be constructed in the grassed area of the grounds. Also, there is the potential for constructing a storage and loadout facility nearer to Georgia Highway 60. However, additional easement acquisition will likely be needed and/or further development of the existing access drive required.

5.0 FINDINGS AND CONCLUSIONS

Based upon the work scope performed we assess the potential to be good for further development of the springs at the site. As previously indicated we understand that flow from the main spring has been estimated by Lon Dillard with Byers Well Drilling to approach 140 gallons per minute. While we cannot confirm these flow rates without further quantitative analysis, it is our opinion that the potential for substantial output is present. This output could be supplemented by further development of the other springs on-site as well.

With regards to potential influence of surface waters on the spring, we note that the two largest ponds are located within 100 feet of the main spring. We understand from Mr. Tim Helton that the flow rate from the main spring did not visibly change after construction of the ponds. Nevertheless given the proximity of the ponds to the main spring there is likely some hydrologic connection. Such a connection could help saturate the soils downgradient to the ponds and in addition act as a potential source for groundwater contamination. While no apparent environmental impact exists based upon the water quality test results provided for our review, any further development of the main spring will require that the potential be incorporated in the maintenance plan for both the grounds and ponds. This will include such things as a defined use of the ponds, the use of pesticides and herbicides, and the location of future homes and associated septic systems.

With regards to the potential impact of development on wetland areas, we note that some wetland areas appear to be present outside the bed and bank of Suches Creek downstream and west of the main spring. In addition, there are bed and bank wetlands and possibly isolated pods of wetlands associated with the spring fed streams upgradient to the main on-site spring. While it would appear that the potential for impact to any on-site wetlands would be low for a passive withdrawal system, further study would be required if active pumping of the aquifer were to occur.

As indicated, the availability for development of water storage and loadout facilities is present in the immediate area of the main spring. In addition, it is possible that such facilities could be constructed nearer to Georgia Highway 60. However, there will be increased development costs and likely operational costs associated with this option. Also, we expect that improvements to the access road will be necessary to accommodate the increased traffic that would result from spring development.

Last, we note that statewide development buffers exist for development adjacent to waters of the state. These restrictions are even greater for "trout waters". These restrictions not only include development but also withdrawal rates of groundwater. For example, withdrawal of more than 100,000 gallons per 24-hour day will require a water withdrawal permit from the Georgia EPD. Such restrictions will have to be incorporated into any development plan.

6.0 ACKNOWLEDGMENT

QORE, Inc. appreciates the opportunity to provide this service. Please contact us if you have any questions.

Respectfully submitted,

QORE, INC.



A. Glenn Motes III, P.E., P.G.
Senior Geotechnical Engineer/Geologist
Reg. Nos. Ga. 23774, 920



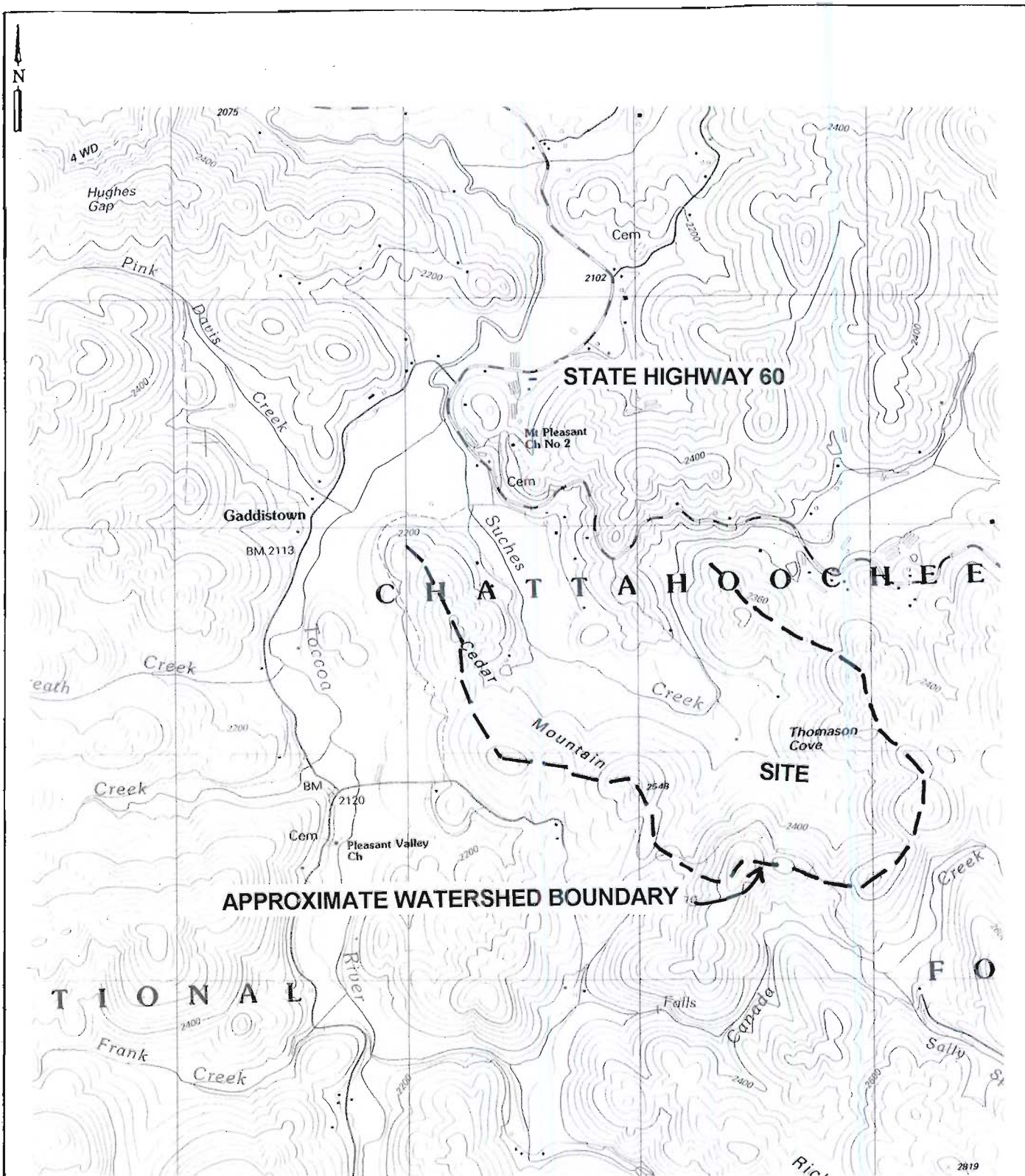
L. T. Gregg, P.G.
Principal Geologist
Reg. Ga. 610




APPENDIX A

SITE LOCATION PLAN (PLATE 1)

BOUNDARY SURVEY & MAIN SPRING LOCATION (PLATE 2)

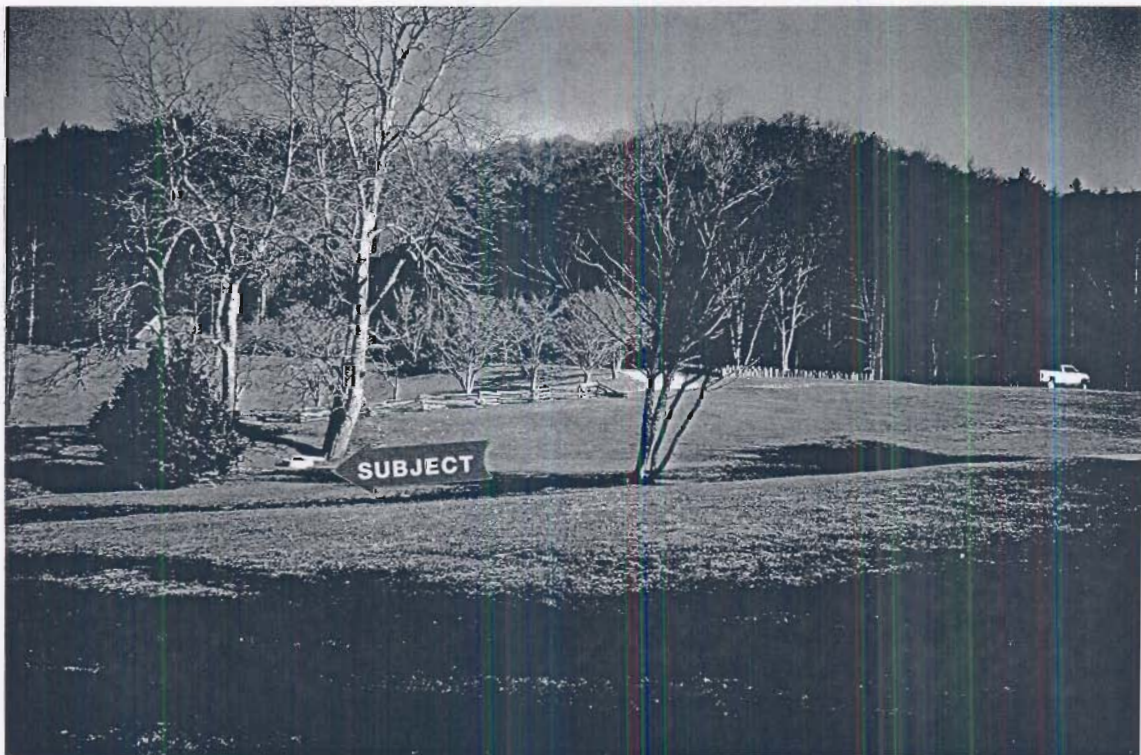


Adapted from U.S.G.S. 7.5-minute Suches Quadrangle dated 1988

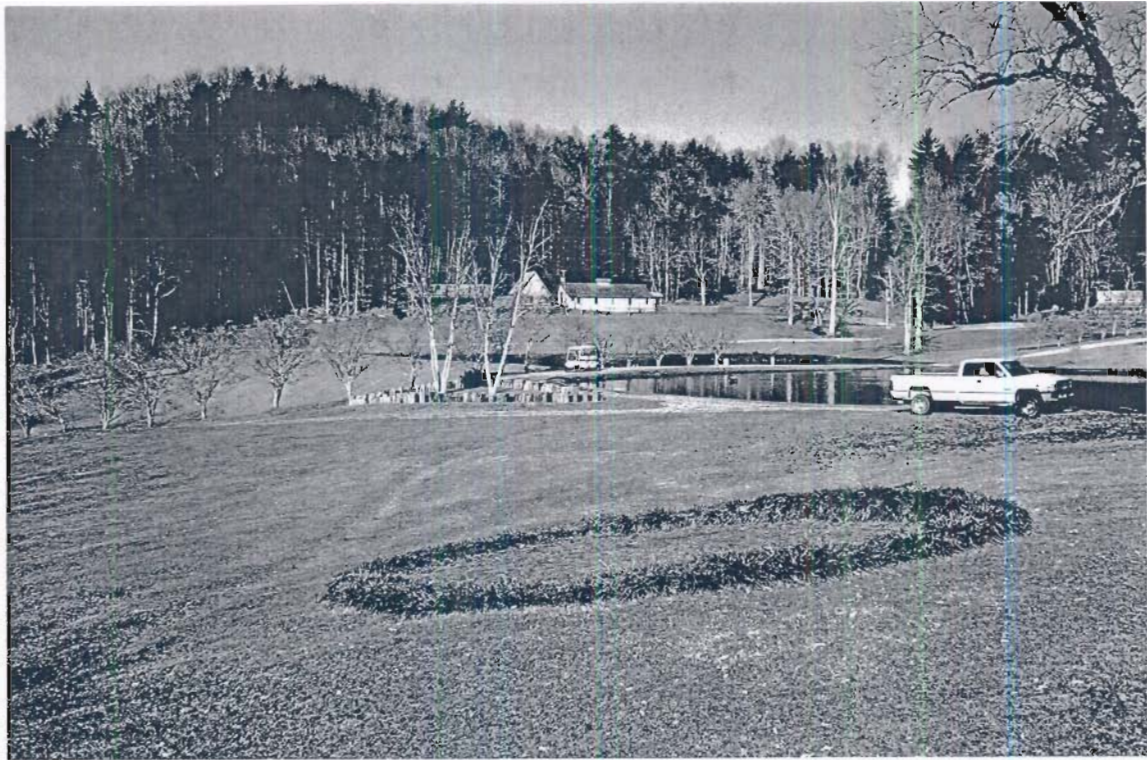
DATE: 01/29/02	CAD FILE: NA	DRAWN BY: AGM	CHECKED BY: AGM	VERT. SCALE: NA	HORZ. SCALE: 1"=2000'	REPORT No.: 209569	JOB No.: 70524	PLATE No.: 1
				SITE LOCATION PLAN THIMBLEBERRY FARMS SUCHES, GEORGIA				



Looking east toward main spring and dam embankment for ponds.
PVC pipe in photo is feeder line for pond to the west of this photo.



Looking northeast, main spring shown with arrow. Embankment for
ponds directly behind concrete riser.



Looking north toward two large ponds and outbuildings.
Main spring is to the left of this photo.



Looking west from edge of grassed area. Main spring location shown with arrow.
One of the small ponds fed by main spring shown in the distance.



Looking east from golf course toward one of the residences.



Looking north from floodplain Suches Creek.



The EDR Radius Map with GeoCheck®

Thimbleberry Farm Tract
S. R. 60/Robert Harkins Dr.
Suches, GA 30572

Inquiry Number: 726244.1s

January 22, 2002

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

S. R. 60/ROBERT HARKINS DR.
SUCHES, GA 30572

COORDINATES

Latitude (North): 34.696200 - 34° 41' 46.3"
Longitude (West): 84.060300 - 84° 3' 37.1"
Universal Transverse Mercator: Zone 16
UTM X (Meters): 769288.2
UTM Y (Meters): 3843091.5

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2434084-F1 SUCHES, GA
Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
CERCLIS.....	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP.....	CERCLIS No Further Remedial Action Planned
CORRACTS.....	Corrective Action Report
RCRIS-TSD.....	Resource Conservation and Recovery Information System
RCRIS-LQG.....	Resource Conservation and Recovery Information System
RCRIS-SQG.....	Resource Conservation and Recovery Information System
ERNS.....	Emergency Response Notification System

STATE ASTM STANDARD

SHWS.....	Hazardous Site Inventory
SWF/IF.....	Solid Waste Disposal Facilities
LUST.....	List of Leaking Underground Storage Tanks
UST.....	Underground Storage Tank Database

EXECUTIVE SUMMARY

FEDERAL ASTM SUPPLEMENTAL

CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
Delisted NPL.....	National Priority List Deletions
FINDS.....	Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS.....	Hazardous Materials Information Reporting System
MLTS.....	Material Licensing Tracking System
MINES.....	Mines Master Index File
NPL Liens.....	Federal Superfund Liens
PADS.....	PCB Activity Database System
RAATS.....	RCRA Administrative Action Tracking System
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

GA Spills.....	Spills Information
GA NON-HSI.....	Non-Hazardous Site Inventory

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas.....	Former Manufactured Gas (Coal Gas) Sites
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SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

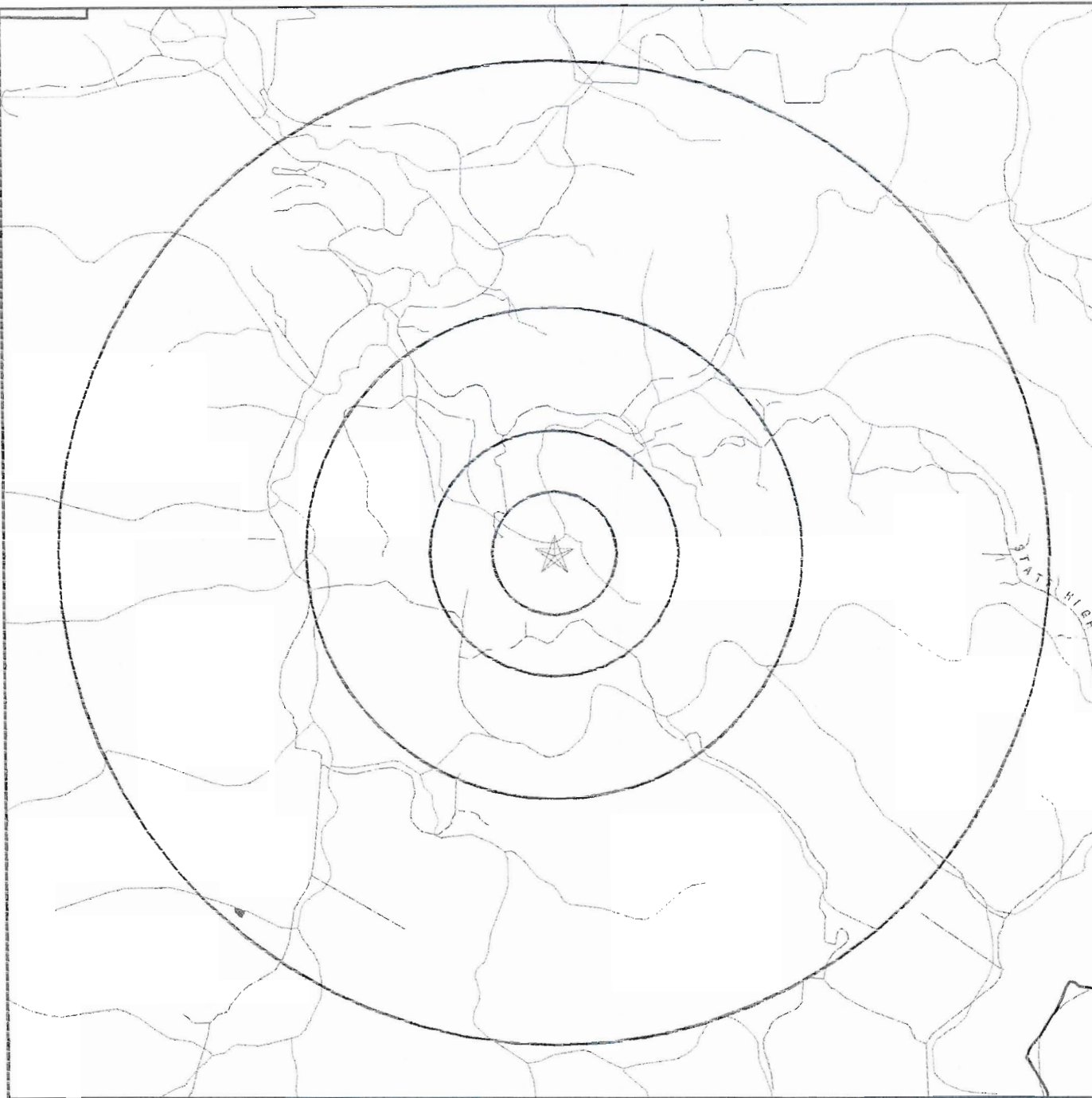
Site Name

Database(s)

WOODY GAP SCHOOL
JIMMY WATKINS GROCERY
TOCCOA BEND COUNTY STORE

LUST, UST
LUST
LUST

OVERVIEW MAP - 726244.1s - QORE Property Sciences



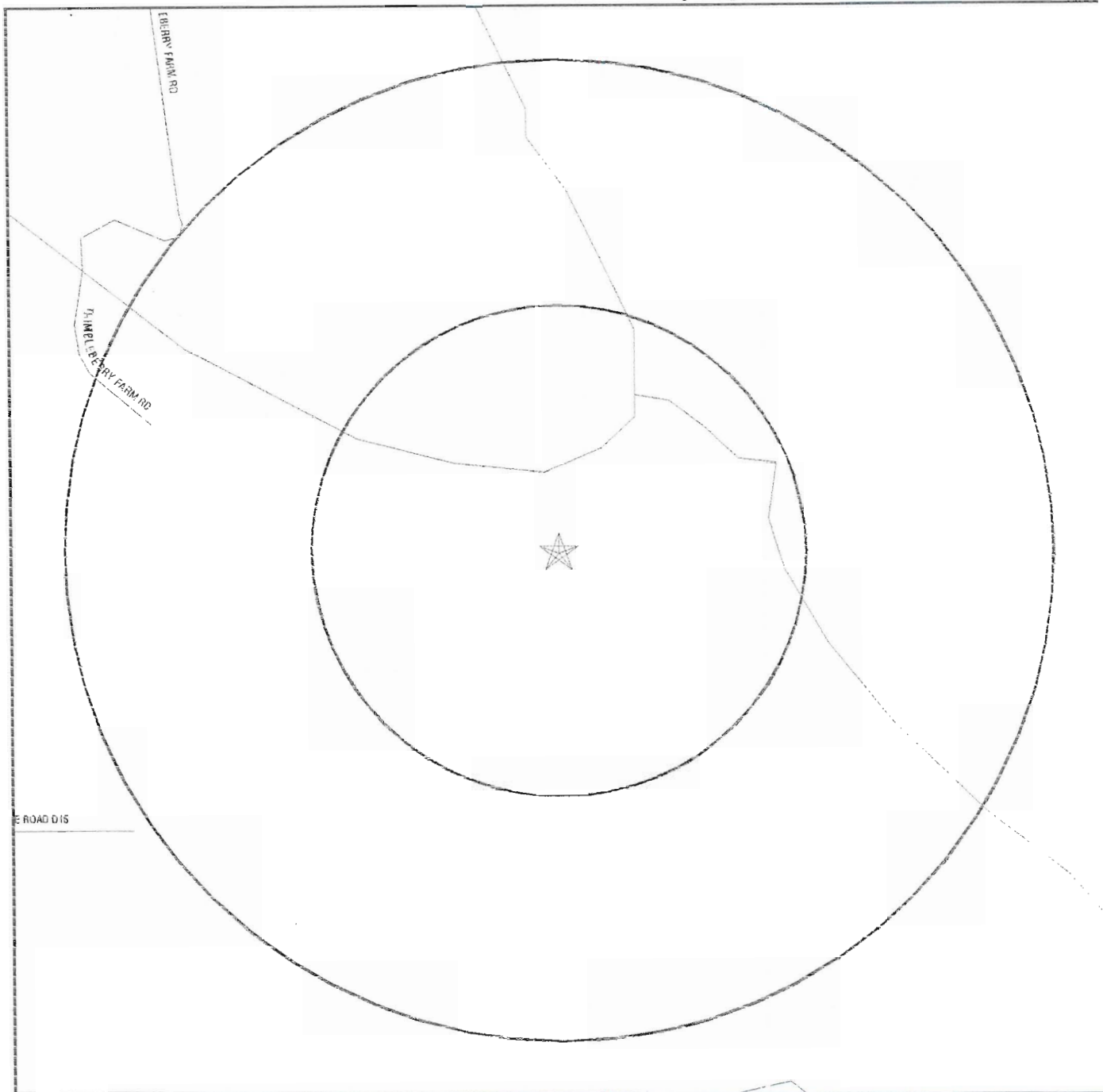
- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- National Priority List Sites
- Landfill Sites

~ Power transmission lines
 ~ Oil & Gas pipelines

TARGET PROPERTY: Thimbleberry Farm Tract
 ADDRESS: S. R. 60/Robert Harkins Dr.
 CITY/STATE/ZIP: Suches GA 30572
 LAT/LONG: 34.6962 / 84.0603

CUSTOMER: QORE Property Sciences
 CONTACT: Mr. Glenn Motes
 INQUIRY #: 726244.1s
 DATE: January 22, 2002 5:43 pm

DETAIL MAP - 726244.1s - QORE Property Sciences



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ▲ Sensitive Receptors
- National Priority List Sites
- Landfill Sites

- ~ Power transmission lines
- ~ Oil & Gas pipelines

TARGET PROPERTY: Thimbleberry Farm Tract
 ADDRESS: S. R. 60/Robert Harkins Dr.
 CITY/STATE/ZIP: Suches GA 30572
 LAT/LONG: 34.6962 / 84.0603

CUSTOMER: QORE Property Sciences
 CONTACT: Mr. Glenn Motes
 INQUIRY #: 726244.1s
 DATE: January 22, 2002 5:43 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.500	0	0	0	0	0	0
Proposed NPL		1.500	0	0	0	0	0	0
CERCLIS		1.000	0	0	0	0	NR	0
CERC-NFRAP		0.750	0	0	0	0	NR	0
CORRACTS		1.500	0	0	0	0	0	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.750	0	0	0	0	NR	0
RCRIS Sm. Quan. Gen.		0.750	0	0	0	0	NR	0
ERNS		0.500	0	0	0	NR	NR	0

STATE ASTM STANDARD

State Haz. Waste		1.500	0	0	0	0	0	0
State Landfill		1.000	0	0	0	0	NR	0
LUST		1.000	0	0	0	0	NR	0
UST		0.750	0	0	0	0	NR	0

FEDERAL ASTM SUPPLEMENTAL

CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0

STATE OR LOCAL ASTM SUPPLEMENTAL

GA Spills	TP		NR	NR	NR	NR	NR	0
Non-HSI		1.000	0	0	0	0	NR	0

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas		1.000	0	0	0	0	NR	0
AQUIFLOW - see EDR Physical Setting Source Addendum								

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

NO SITES FOUND

City	EDR ID	Site Name	Site Address	Zip	Data Source	Facility ID
SUCHES	U007484957	WOODY GAP SCHOOL	RT 1	30572	LUST, UST	3440009
SUCHES	S105153661	JIMMY WATKINS GROCERY	3196 HWY 60	30572	LUST	3440027
SUCHES	S105153450	TOCCOA BEND COUNTY STORE	2444 MORGANTON HWY	30572	LUST	3450029

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA

Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/22/01

Date Made Active at EDR: 12/11/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1

Telephone 617-918-1143

EPA Region 3

Telephone 215-814-5418

EPA Region 4

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

EPA Region 8

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA

Telephone: N/A

Date of Government Version: 10/22/01

Date Made Active at EDR: 12/11/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

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

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/12/01

Date Made Active at EDR: 10/16/01

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/24/01

Elapsed ASTM days: 22

Date of Last EDR Contact: 12/26/01

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

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. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/12/01
Date Made Active at EDR: 10/16/01
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/24/01
Elapsed ASTM days: 22
Date of Last EDR Contact: 12/16/01

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/14/01
Date Made Active at EDR: 01/14/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/14/01
Elapsed ASTM days: 61
Date of Last EDR Contact: 11/14/01

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. 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).

Date of Government Version: 06/21/00
Date Made Active at EDR: 07/31/00
Database Release Frequency: Varies

Date of Data Arrival at EDR: 07/10/00
Elapsed ASTM days: 21
Date of Last EDR Contact: 11/07/01

ERNS: Emergency Response Notification System

Source: EPA/NTIS

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 08/08/00
Date Made Active at EDR: 09/06/00
Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/11/00
Elapsed ASTM days: 26
Date of Last EDR Contact: 10/25/01

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99
Database Release Frequency: Biennially

Date of Last EDR Contact: 12/17/01
Date of Next Scheduled EDR Contact: 03/18/02

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0223

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/00
Database Release Frequency: Annually

Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

DELISTED NPL: National Priority List Deletions

Source: EPA
Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 11/13/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/05/01
Date of Next Scheduled EDR Contact: 02/04/02

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA
Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/29/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation
Telephone: 202-366-4526

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 05/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 10/22/01
Date of Next Scheduled EDR Contact: 01/21/02

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/24/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/02
Date of Next Scheduled EDR Contact: 04/01/02

NPL LIENS: Federal Superfund Liens

Source: EPA
Telephone: 205-584-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/19/01
Date of Next Scheduled EDR Contact: 02/18/02

PADS: PCB Activity Database System

Source: EPA
Telephone: 202-260-3936

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

Date of Government Version: 09/30/01
Database Release Frequency: Annually

Date of Last EDR Contact: 11/13/01
Date of Next Scheduled EDR Contact: 02/12/02

RAATS: RCRA Administrative Action Tracking System

Source: EPA
Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/11/01
Date of Next Scheduled EDR Contact: 03/11/02

TRIS: Toxic Chemical Release Inventory System

Source: EPA
Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/99
Database Release Frequency: Annually

Date of Last EDR Contact: 12/28/01
Date of Next Scheduled EDR Contact: 03/25/02

TSCA: Toxic Substances Control Act

Source: EPA
Telephone: 202-260-5521

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

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 10/24/01
Date of Next Scheduled EDR Contact: 01/21/02

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/28/01
Date of Next Scheduled EDR Contact: 03/25/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA
Telephone: 202-564-2501

Date of Government Version: 10/25/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/28/01
Date of Next Scheduled EDR Contact: 03/25/02

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF GEORGIA ASTM STANDARD RECORDS

SHWS: Hazardous Site Inventory

Source: Department of Environmental Protection
Telephone: 404-657-8600

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

Date of Government Version: 07/01/01
Date Made Active at EDR: 08/01/01
Database Release Frequency: Annually

Date of Data Arrival at EDR: 07/30/01
Elapsed ASTM days: 2
Date of Last EDR Contact: 12/28/01

SWF/LF: Solid Waste Disposal Facilities

Source: Department of Natural Resources
Telephone: 404-362-2696

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/31/01
Date Made Active at EDR: 09/26/01
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 09/06/01
Elapsed ASTM days: 20
Date of Last EDR Contact: 12/03/01

LUST: List of Leaking Underground Storage Tanks

Source: Environmental Protection Division
Telephone: 404-362-2687

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/01/01
Date Made Active at EDR: 01/08/02
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/26/01
Elapsed ASTM days: 13
Date of Last EDR Contact: 10/15/01

UST: Underground Storage Tank Database

Source: Environmental Protection Division
Telephone: 404-362-2687

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/11/01
Date Made Active at EDR: 05/17/01
Database Release Frequency: Annually

Date of Data Arrival at EDR: 04/24/01
Elapsed ASTM days: 23
Date of Last EDR Contact: 11/05/01

STATE OF GEORGIA ASTM SUPPLEMENTAL RECORDS

SPILLS: Spills Information

Source: Department of Natural Resources
Telephone: 404-656-6905

Oil or Hazardous Material Spills or Releases.

Date of Government Version: 08/28/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/30/01
Date of Next Scheduled EDR Contact: 01/28/02

NON HSI: Non-Hazardous Site Inventory

Source: Rindt-McDuff Associates, Inc.
Telephone: N/A

This list was obtained by EDR in 1998 and contains property listings that have reported contamination of soil or groundwater under the Georgia Hazardous Site Response Act (HSRA). These sites were not placed on the Georgia Priority list (Hazardous Site Inventory or HSI) because their hazard evaluation scores did not exceed the threshold levels established for sites posing an imminent threat to health or the environment. Disclaimer provided by Rindt-McDuff Associates - the database information has been obtained from publicly available sources produced by other entities. While reasonable steps have been taken to insure the accuracy of the data, RMA does not guarantee the accuracy of the data. No claim is made for the actual existence of pollution at any site. This data does not constitute a legal opinion.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/12/01
Database Release Frequency: Annually

Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

THIMBLEBERRY FARM TRACT
S. R. 60/ROBERT HARKINS DR.
SUCHES, GA 30572

TARGET PROPERTY COORDINATES

Latitude (North):	34.696201 - 34° 41' 46.3"
Longitude (West):	84.060303 - 84° 3' 37.1"
Universal Transverse Mercator:	Zone 16
UTM X (Meters):	769288.2
UTM Y (Meters):	3843091.5

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2434084-F1 SUCHES, GA
Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: General North

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
UNION, GA

FEMA Flood
Electronic Data
Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
SUCHES

NWI Electronic
Data Coverage
Not Available

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

AQUIFLOW®

Search Radius: 2,000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u> <u>FROM TP</u>	<u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u>
Not Reported		

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	Precambrian	Category:	Metamorphic Rocks
System:	Precambrian		
Series:	Paragneiss and schist		
Code:	Ym (decoded above as Era, System & Series)		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSA) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	ASHE
Soil Surface Texture:	stony - loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Somewhat excessive. Soils have high hydraulic conductivity and low water holding capacity. Depth to water table is more than 6 feet.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	stony - loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 6.00 Min: 4.50
2	7 inches	25 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 6.00 Min: 4.50
3	25 inches	30 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 6.00 Min: 4.50
4	30 inches	34 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

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

Soil Surface Textures: stony - fine sandy loam
loam
stony - sandy loam
fine sandy loam
sandy loam

Surficial Soil Types: stony - fine sandy loam
loam
stony - sandy loam
fine sandy loam
sandy loam

Shallow Soil Types: silty clay loam
clay loam
sandy clay loam

Deeper Soil Types: sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

gravelly - fine sandy loam
gravelly - sandy loam
weathered bedrock
fine sandy loam
loamy sand

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

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

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

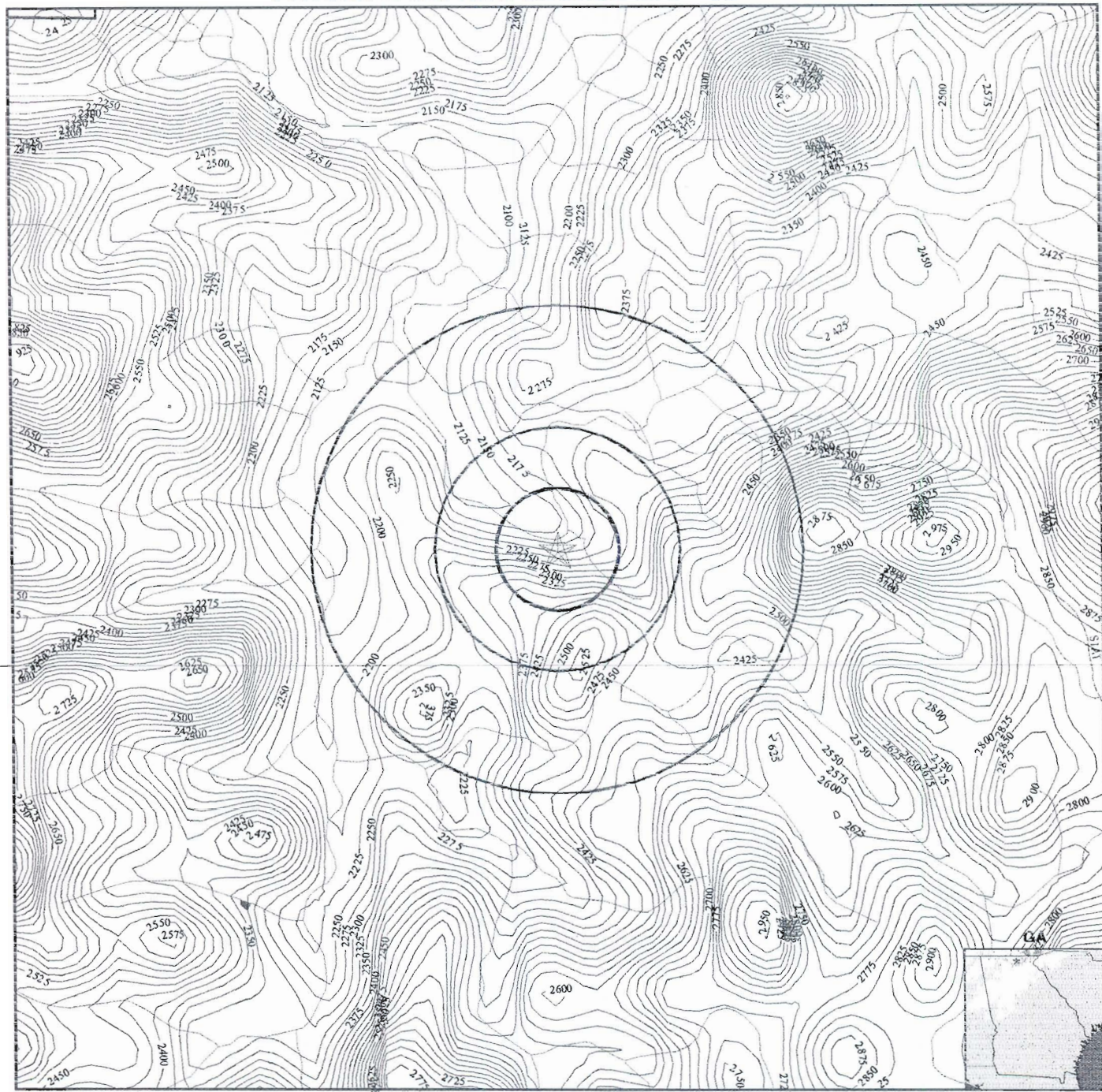
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

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

PHYSICAL SETTING SOURCE MAP - 726244.1s



- Major Roads
- Contour Lines
- Water Wells
- Public Water Supply Wells
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Cluster of Multiple Icons

Earthquake epicenter, Richter 5 or greater

Wildlife Areas

TARGET PROPERTY: Thimbleberry Farm Tract
 ADDRESS: S. R. 60/Robert Harkins Dr.
 CITY/STATE/ZIP: Suches GA 30572
 LAT/LONG: 34.6962 / 84.0603

CUSTOMER: QORE Property Sciences
 CONTACT: Mr. Glenn Motes
 INQUIRY #: 726244.1s
 DATE: January 22, 2002 5:43 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for UNION County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level ≥ 2 pCi/L and ≤ 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Zip Code: 30572

Number of sites tested: 1

Area	Average Activity	% < 4 pCi/L	% $4-20$ pCi/L	% > 20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.400 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, *Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).*

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 800,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Georgia Public Supply Wells

Source: Georgia Department of Community Affairs

Telephone: 404-894-0127

USGS Georgia Water Wells

Source: USGS, Georgia District Office

Telephone: 770-903-9100

RADON

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRMA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Important Information About Your Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

Beware of Change; Keep Your Geoenvironmental Professional Advised

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,
- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

Recognize the Impact of Time

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

Prepare To Deal with Unanticipated Conditions

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change,* sometimes suddenly, due to any number of events, not the least of which include occurrences at

adjacent sites. Recognize, too, that *even some conditions in tested areas may go undiscovered*, because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

Do Not Permit Any Other Party To Rely on the Report

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

Avoid Misinterpretation of the Report

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

Give Contractors Access to the Report

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

Do Not Separate Documentation from the Report

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

Understand the Role of Standards

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care.

Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

Realize that Recommendations May Not Be Final

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The

equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for "exculpatory clauses," that is, provisions whose purpose is to transfer one party's rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not "boilerplate."* They are important.

Rely on Your Geoenvironmental Professional for Additional Assistance

Membership in ASFE exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your ASFE-member geoenvironmental professional for more information.



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