

**Former Ring Around Product Facility
Prattville, Alabama
ADEM VCP Site #: 461-9471**

Fact Sheet

A Voluntary Cleanup Program (VCP) Modified Cleanup Plan has been found to be programmatically adequate by the Alabama Department of Environmental Management for the Former Ring Around Product Facility site. Hodges Warehouse and Logistics currently owns the facility located in Prattville, Alabama. This fact sheet has been prepared to briefly advise the public of the principal legal and policy issues of the VCP.

I. VCP PROCESS

The VCP provides a mechanism for the implementation of a cleanup program that encourages applicants to voluntarily assess, remediate, and reuse rural and urban areas of actual or perceived contamination. The program does not relieve any "responsible person" for the liability for administrative, civil, or criminal fines or penalties which are otherwise authorized by law and imposed as a result of the illegal or unpermitted disposal of solid waste, hazardous waste, hazardous constituents, hazardous substances, petroleum products, and/or pollutants to the land, air, or waters of the State on an identified property. The program is designed to expedite the voluntary cleanup process and has been designed for entry at any stage of the cleanup process as long as all applicable criteria have been met up to the point of entry.

II. PROCEDURES FOR REACHING A FINAL DECISION

The Alabama Department of Environmental Management (ADEM) is proposing to issue Hodges Warehouse and Logistics, a final decision for the site remediation.

ADEM Admin Code R. 335-15-6-.02 requires that the public be given a 30-day comment period from the date of the notice. The comment period will begin on November 26, 2016, which is the date of publication of the public notice in major local newspaper(s) of general circulation, and will end on December 26, 2016.

All persons wishing to comment on any of the conditions of the VCP Remediation should submit their comments in writing to the Alabama Department of Environmental Management, Permits and Services Division, 1400 Coliseum Blvd. (Zip 36110). P.O. Box 301463 (Zip 36130-1463) Montgomery, Alabama, ATTENTION: Mr. Russell Kelly. Written comments on the VCP activities should be submitted to the Alabama Department of Environmental Management and be received by 5:00 p.m. on December 26, 2016.

ADEM will consider all written comments received during the comment period while making a final decision on this issue. When the Department makes its final decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final decision.

III. FACILITY DESIGN

TTL, Inc. has completed Site Investigation activities under the VCP at the Former Ring Around Product Facility located at 1040 Friction Drive, Prattville, Autauga County, Alabama. The facility was formerly a producer, processor, buyer, and distributor of agricultural field seed. Prior to 1978, Ring-Around Products also formulated and mixed pesticides at the Prattville facility. The facility operated from 1968 until 1985, and was purchased in 1986 by Hodges Bonded Warehouse. Today the site is owned by Hodges Warehouse and Logistics and the future use of the property is under consideration. TTL has submitted a modification to the original cleanup plan. This modification details engineering controls that will be used at this site to eliminate or minimize potential exposures associated with future use and/or development.

IV. TECHNICAL CONTACT

Crystal Collins, Project Manager
Redevelopment Section
Industrial Hazardous Waste Branch
Land Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard (Zip 36110)
P.O. Box 301463 (Zip 36130-1463)
Montgomery, Alabama
(334) 271-3073



2743-B Gunter Park Drive West
Montgomery, AL 36109
334.244.0766

www.TTLUSA.com

October 4, 2016

Ms. Crystal Collins
Redevelopment Section
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

**Re: *Technical Information –Exterior Cap and Floor Sealant
Former Ring Around Products Facility
Prattville, Alabama
ALERA No.: 461-9471
TTL Project No. 060205038***

Dear Ms. Collins:

On behalf of Hodges Warehouse and Logistics (Hodges), TTL, Inc. (TTL) is submitting this document in response to your January 7, 2015, letter requesting additional information regarding the exterior cap to be installed at the site, as well the proposed interior floor covering.

Exterior Cap

TTL previously submitted technical information for the exterior cap on September 8, 2011. Since that time, an additional area of contamination was identified. TTL recommended that the cap be expanded to cover this additional area. The attached Asphalt Cap/Parking Lot Recommendations letter provides the technical information (including material, thickness, and dimensions) for the expanded cap.

Interior Floor Sealant

Hodges proposes to use JETCOAT Concrete Sealer to coat the concrete floor inside the warehouse. The product is a 100% acrylic water-based clear drying emulsion. The manufacturer indicates the product is salt and chemical resistant. A product specification sheet and the safety data sheet for the product are attached.

Application

Hodges applied the sealant in July 2016 in accordance with the manufacturer's recommendations.

TTL proposes to collect wipe samples of the sealed concrete floor in up to five locations to verify that the sealant prevents contact with pesticides in the concrete. The wipe samples will be submitted to TTL's laboratory in Tuscaloosa, Alabama for analysis of pesticides in accordance with EPA Method 8081. If pesticides are detected in the wipe samples, an additional coat of the sealant will be applied, and a second set of wipe samples will be collected.

Maintenance

Hodges will inspect the travel areas of the concrete floor after each use for the first six months after installation. If wear of the sealant is observed during an inspection, the area will be recoated. If after the initial six months no significant wear areas are observed, the inspections will be conducted on a semiannual basis thereafter. Hodges also proposes to collect wipe samples as described above on

an annual basis to verify that the sealant is still preventing contact of building occupants with the pesticide-impacted concrete.

A check in the amount of \$10,640 for the modification of the Cleanup Plan is attached. Please let us know if you require additional information.

Sincerely,
TTL, Inc.



Sheryle G. Reeves, P.E.
Principal Engineer



Shannon H. McDonald, P.G.
Principal Geologist

Attachments: ADEM Letter Dated 1/7/15
Asphalt Cap/Parking Lot Recommendations
JETCOAT Concrete Sealer Specification Sheet
JETCOAT Concrete Sealer Safety Data Sheet
Check for Modification Fee



Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

January 7, 2015

Mr. Lance Hunter
Hodges Warehouse and Logistics
1065 North Eastern Boulevard
Montgomery, Alabama 36117

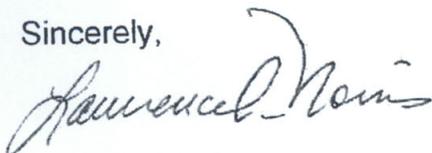
Re: Former Ring Around Product Facility
Report of Additional Assessment Activities
ALRERA #: 461-9471

Dear Mr. Hunter:

Personnel from the Alabama Department of Environmental Management have completed a review of the referenced report. Based on this review the Department has determined that the described activities (i.e. increasing the physical area of the external cap and placement of an impervious sealant on the building floor) constitute a modification of the original approved cleanup plan. As such, the modification fee of \$8,865.00 cited in ADEM Division 1, Fee Schedule is applicable prior to public notice and approval. Further, a detailed description (material, depth and dimensions) of the exterior capping activities as well as technical information on the interior flooring sealant must be submitted to the Department.

If you have questions or comments regarding this matter, please contact Crystal Collins at (334) 279-3076 or at ccollins@adem.state.al.us.

Sincerely,



Lawrence A. Norris, Chief
Redevelopment Section

cc: Shannon McDonald, TTL





3516 Greensboro Avenue
Tuscaloosa, AL 35401
205.345.0816
www.TTLUSA.com

August 31, 2016

Hodges Warehouse & Logistics
Attn: Mr. Lance Hunter
1065 North East Boulevard
Montgomery, AL 36117

**RE: Asphalt Cap/Parking Lot Recommendations
Former Ring-Around Products Facility
Prattville, Alabama
TTL Project No. 060205-038 (Revised)**

Dear Mr. Hunter:

The following report presents the geotechnical data obtained from a subsurface exploration conducted by TTL, Inc. (TTL) at the former Ring-Around Products Facility in Prattville, Alabama. The scope of geotechnical work includes recommendations for an approximate 36,000 square foot pavement "cap". This report is in reference to the "Report of Additional Assessment Activities and Revised RM-1 Alabama Risk-based Corrective Action Evaluation" provided by TTL and is a revision of a report originally issued on May 24, 2010.

Field Operations

On April 7, 2010, five hand-augered soil auger borings, ranging in depth from 1 foot to 3 feet, were performed at the Ring-Around facility, as shown on the attached boring location schematic. The borings were field-located by TTL personnel using a TDS Recon GPS unit. Dynamic Cone Penetrometer testing was performed at select intervals in the borings.

Site Specific Conditions

Boring Nos. 038-01, 038-02, 038-03, and 038-04 encountered silty sand with gravel, clayey sand with gravel, and well-graded gravel with sand. These soils were generally very firm in consistency. Boring No. 038-05, located along the western edge of the area to be capped, encountered 12 inches of topsoil underlain by loose to firm silty sand with gravel. No groundwater was encountered at the time of drilling operations; however, localized areas of perched water may exist during extended periods of inclement weather.

Pavement Subgrade Preparation

Based on the data discussed above, the following conclusions and recommendations are presented for use in preparing the site grading plan for the parking lot area. These recommendations are based on limited excavation to reduce the cost associated with disposing of contaminated soil at this site. Proper pavement subgrade preparation can reduce future maintenance costs which include

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leveling to restore grade in isolated settled areas, patching of failed areas, routine sealing of cracks to reduce water infiltration, and periodic overlays to restore aesthetics.

It will be important for the contractor to maintain the site in a positively drained condition both during and after construction. Ponding water can lead to the deterioration of the subgrade surface necessitating over-excavation of the softened soil. Project specifications should clearly detail the contractor's responsibility to notify the designers and the geotechnical engineer if conditions are encountered in the field that would require remedial treatment or which could affect the integrity of the site.

Initially, the parking lot area should be stripped of all vegetation, topsoil, and any otherwise unsuitable materials. Stripping operations should extend at least 10 feet beyond the limits of the proposed construction area. In order to remove these materials, stripping depths are expected to range from 2 to 4 inches with isolated areas on the western edge up to 12 inches. Thicker intervals of topsoil or root mass may be encountered between explored locations and require deeper stripping depths. All contaminated material removed during stripping operations should be stockpiled on-site and disposed per ADEM regulations.

Subsequent to the stripping operations, prior to fill placement (if necessary), and upon achieving desired grades in cut locations, the exposed soil subgrade should be proofrolled with heavy, rubber-tired equipment (such as a loaded, tandem axle dump truck) in order to delineate any zones of soft or unsuitable soil. A portion of the site identified on the attached boring location schematic is underlain by soft, surficial soils. These materials are particularly susceptible to settlement under additional loading from future traffic on the site. Since this is an environmentally contaminated site, it is uneconomical to undercut and replace the soft soil with clean properly compacted fill to reduce the settlement potential.

These soft soils and any other unstable soils revealed by proofrolling may be stabilized with a geosynthetic separation fabric such as Mirafi HP570, or an equivalent. The geosynthetic separation fabric should extend at least 5 feet beyond the unstable area. The geosynthetic separation fabric should be placed by means which minimize traffic from construction equipment and reduce further damage to the subgrade. A minimum of 12 inches of granular fill material, as approved by the geotechnical engineer, should then be placed on the fabric by end dumping and pushing the material onto the fabric. The granular fill material should be a material that can provide an adequate support platform. The granular fill should be compacted as outlined in this report. A geogrid may be used in lieu of the geosynthetic separation fabric; however, the granular fill material to be placed on top of the geogrid should be replaced with a crushed aggregate such as ALDOT 825B or another gradation of crushed aggregate as required by the geogrid manufacturer.

Anticipated fill is expected to be minimal and only required to achieve positive drainage. During construction, fill material should be classified as SC or CL using the Unified Soil Classification System. All fill material should have a plasticity index of less than 25 and a minimum CBR of 10. Fill material should be placed in horizontal layers not exceeding 6 inches in loose depth and compacted to the recommended density. No material should be placed on surfaces that are muddy, frozen or that contain frost.

Compaction may be accomplished by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers or other equipment appropriately-suited to the soil being compacted. Materials should be moistened or aerated, as necessary, to provide a moisture content that will facilitate obtaining the recommended compaction. Moisture content should be maintained between ± 3 percent of

optimum, and the fill should be compacted to at least 98 percent of the maximum dry density determined in accordance with ASTM D 698.

Pavement Recommendations

As requested, we have provided a pavement buildup for the proposed parking lot based on information provided by Hodges Warehouse & Logistics. This recommendation includes a pavement design for an asphalt buildup based on similar facilities from past projects. At the time of this report, actual traffic information was not available. It is our understanding that Hodges will be responsible for maintaining the "cap" for 30 years as directed by ADEM. Therefore, we caution that the integrity of this buildup is limited to the type of traffic used in the design.

The following asphalt design section reflects our assumptions for the anticipated service vehicle loads and a 10- to 12-year service life. These designs are based on a minimum CBR of 10. The pavement section listed below for the car-only parking areas will not support loads from heavy vehicles such as garbage trucks, construction traffic or other heavy equipment.

The asphalt design provided is within the guidelines recommended by the Asphalt Institute, the American Concrete Pavement Association, and the Alabama Department of Transportation and is believed to be an economical design commensurate with approved construction criteria.

The parking lot area must be prepared in accordance with the Site Preparation section of this report in order to obtain a satisfactory pavement subgrade. Our understanding is the existing concrete pads on-site will remain in place and the proposed pavements placed up to the pads. Some water infiltration may still occur at these interfaces. We recommend the pavement "cap" be extended at least 30 feet beyond the contaminated limits at any location where traffic will be entering or exiting the paved area.

Any future use of the site should take into account the possible traffic loading to be placed on the pavement. If future traffic loading exceeds those listed above, the pavement can fail prematurely resulting in increased infiltration into the underlying soils. If light-duty, car-only pavement sections are used, access to the pavements should be restricted to any large trucks by using as a minimum, signs and physical measures such as height restricting barriers.

References:

1. Asphalt Institute Thickness Design Manual Series 1 (MS-1), 9th Edition (1999).
2. Alabama Department of Transportation Standard Specifications (2001).
3. American Concrete Pavement Association.

Car-Only Parking Bituminous Pavement Section

1. Bituminous Concrete Surface Layer
(ALDOT No. 429A or 424A) 111 psy 1 inches
2. Bituminous Concrete Binder Layer
(ALDOT No. 429B or 424B) 222 psy 2 inches
3. Prime Coat
(ALDOT Section 401, Ref. 3) 0.22 - 0.25 gal./sq. yd.

- 4. Crushed Aggregate Base
(ALDOT 825, Type "B", Compacted 100% ASTM D-698)6 inches
- 5. Subgrade
(Natural or Filled, Compacted 98% ASTM D-698) As required on plans

Construction Testing and Observation

Additional geotechnical engineering, testing, and consulting services recommended for this project during the construction phase are summarized below:

- 1. **SITE PREPARATION:** TTL's geotechnical engineer, in conjunction with our on-site engineering technician, should evaluate whether a subgrade is prepared for fill placement and make remedial recommendations, if required, to prepare a subgrade for fill placement. Specifically, the engineer or engineering technician should be present on a full-time basis to identify and observe removal of old foundations, soft soils, abandoned utilities, or other materials associated with former structures.
- 2. **FILL PLACEMENT AND COMPACTION:** Our engineering technician should periodically observe the filling operations and take sufficient in-place density tests to check that the recommended fill compaction is achieved. Our staff should observe and evaluate borrow materials before these materials are trucked to the site. As a minimum, we recommend that one compaction test be performed for every 500 square yards of area for every lift of soil.
- 3. **PAVEMENT SUBGRADE PLACEMENT AND COMPACTION:** TTL's soils engineering technician should witness subbase and base placement operations and take a sufficient number of in-place density tests to verify that specified compaction is achieved.

Basis for Recommendations

The recommendations provided are based in part on project information provided to TTL, and they only apply to the specific project and site discussed in this report. If the project information section in this report contains incorrect information or if additional information is available, you should convey the correct or additional information to TTL and retain TTL to review the recommendations of this report. We can then modify our recommendations if they are inappropriate for the proposed project.

Regardless of the thoroughness of a geotechnical exploration, there is always a possibility that conditions between borings will be different from those specific boring locations and that conditions will not be as anticipated by the designers or contractors. In addition, the construction process may itself alter soil conditions. Therefore, experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team along with timely recommendations to solve the problems created. We recommend that the owner retain TTL to provide this service based upon our familiarity with the project, the subsurface conditions, and the intent of the recommendations and design.

Limitations and Restrictions

The analyses and recommendations submitted in this report are based upon the data obtained from the soil borings at the approximate locations shown on the boring location schematic. This report does not reflect any variations which may occur away from these borings. The nature and extent of variations may not become evident until construction has begun. If variations are then evident, it will be necessary for us to re-evaluate the recommendations of this report after we have conducted further evaluation of the situation.

We have prepared this report expressly for the use of Hodges Warehouse & Logistics in accordance with generally accepted soil and foundation engineering practices common to the local area. All information (written or electronic) from TTL concerning TTL's work is for the sole use and reliance of Hodges Warehouse & Logistics. TTL intends no third party beneficiaries (express or implied) and copies of such information received by any third parties are not for reliance unless TTL first receives a signed Secondary Client Agreement from the third party.

TTL appreciates the opportunity to provide you with geotechnical services for this project. If you need further information or require additional geotechnical services, please contact us at 205.345.0816.

Sincerely,
TTL, Inc.



Brian E. Wysock, P.E.
Project Engineer



R. Jason Webber, P.E.
Project Engineer

Attachments:

- ASFE Information*
- Site Location Map*
- Boring Location Schematic*
- Boring Logs*

Important Information about Your Geotechnical-Engineering Report

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

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

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

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

Read the Full Report

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

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

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

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

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

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

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

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

Subsurface Conditions Can Change

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

Most Geotechnical Findings Are Professional Opinions

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

A Report's Recommendations Are *Not* Final

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

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

A Geotechnical Engineering Report Is Subject to Misinterpretation

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

Do Not Redraw the Engineer's Logs

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

Give Contractors a Complete Report and Guidance

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

Read Responsibility Provisions Closely

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

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

Geoenvironmental Concerns Are Not Covered

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

Obtain Professional Assistance To Deal with Mold

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

Rely on Your GBA-Member Geotechnical Engineer for Additional Assistance

Membership in the GEOPROFESSIONAL BUSINESS ASSOCIATION exposes geotechnical engineers to a wide array of risk confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your GBA-member geotechnical engineer for more information.



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Site Location Map
Boring Location Schematic

LEGEND

Hand Auger Boring Location and Identifier **HA-5**

Boring locations shown on this Boring Location Schematic were estimated from existing site features and should be considered approximate. A licensed professional land surveyor should be retained if precise boring locations are required.

Approximate Area of Contamination



3818 Overbrook Avenue ■ Tuscaloosa, Alabama 35401
205.343.2118 ■ Fax 205.343.2682

APPROXIMATE SCALE: 1" = 100'
TTL PROJECT NO.: 060205038

DRAWING PATH:

P:\Archived Projects\2005062005038 Hodges Prattville\CAD\05-038 BLP.dwg

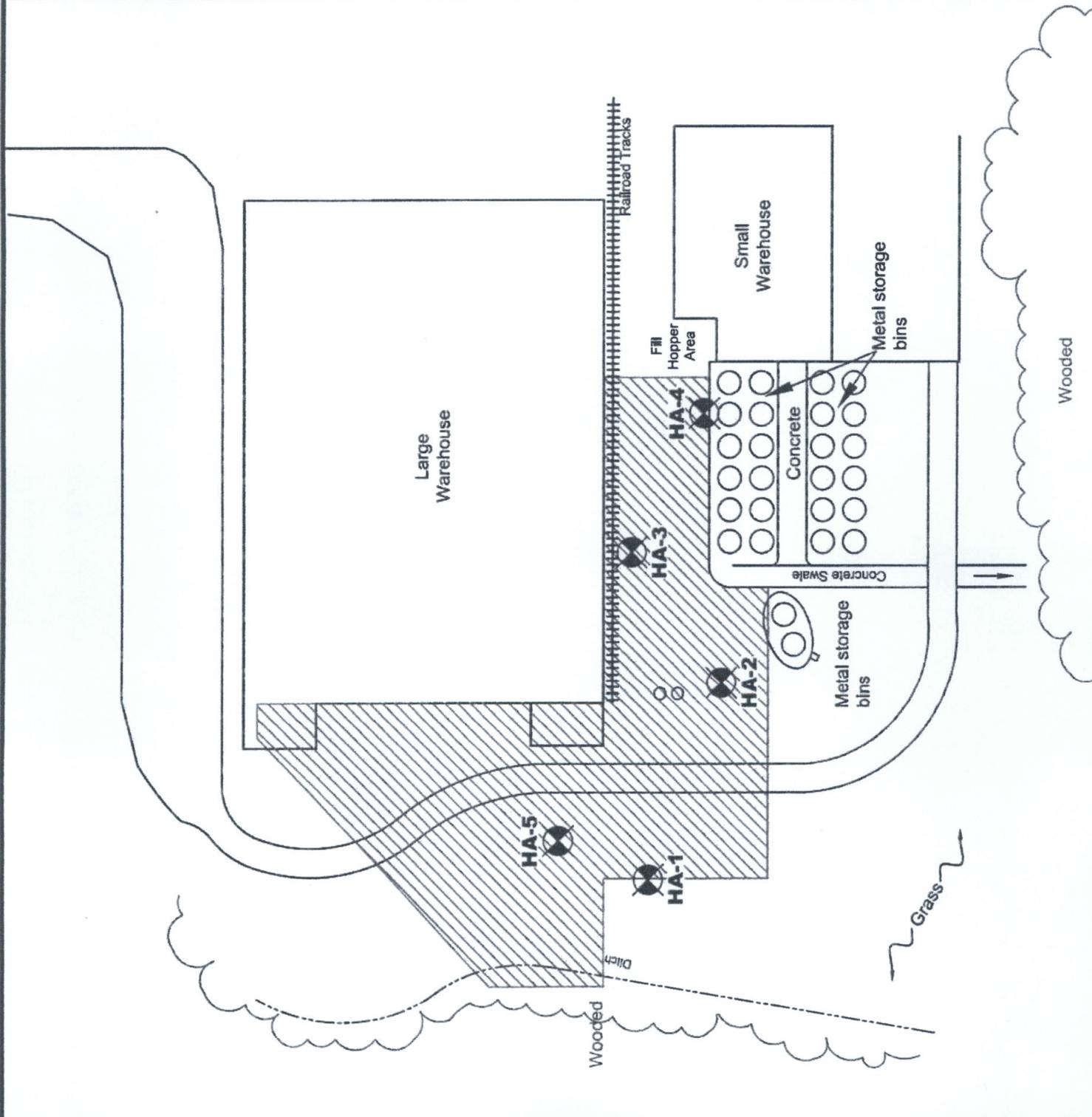
DATE CREATED: 04/12/2010 DATE REVISED: 08/31/2016 REVISION NUMBER: n/a

DRAWN BY: mjc CHECKED BY: RJW

MODIFIED FROM DRAWING: n/a

Boring Location Schematic

Hodges Warehouse and Logistics
Former Ring-Around Products Facility
Prattville, Autauga County, Alabama



Boring Logs

FIELD EXPLORATION PROGRAM

General

Various drill equipment and procedures are used to obtain soil or rock specimens during geotechnical engineering exploration activities. The drill equipment typically consists of fuel-powered machinery that is mounted on a flatbed truck or an all-terrain vehicle. The ground surface conditions at the site generally determine the type of vehicle to use. A hand-powered auger may also be used for shallow borings in areas inaccessible to vehicle-mounted equipment. When assessing soil composition rather than soil strength, test pits may be excavated using standard construction equipment.

Borings can be drilled either dry or wet. The drilling technique depends on the type of subsurface materials (clays, sands, silts, gravels, rock) encountered and whether or not subsurface water is present during the drilling operations. Sometimes a combination of both techniques is implemented.

The dry method can generally be employed when subsurface water or granular soils are not present. The dry method generally consists of advancing the augers without the use of water or drilling fluids. Air can be employed as necessary to remove cuttings from the borehole or cool the drilling bits during some drilling applications. The wet rotary process is generally used when subsurface water, rock or granular soils are present. The wet rotary process utilizes water or drilling fluids to advance the augers, remove cuttings from the borehole, and cool the drilling bits during drilling.

Sampling

Various sampling devices are available to recover soil or rock specimens during the geotechnical exploration program. The type of sampling apparatus to employ depends on the subsurface materials (clays, sands, silts, gravels, rock) encountered and on their consistency or strength. Most commonly used samplers are Shelby tubes, split-spoons or split-barrels, and NQ or HQ core barrels. Depending on the subsurface conditions, sampling apparatus such as the Pitcher barrel, Osterberg sampler, Dennison barrel, or California sampler are sometimes used. The procedures for using and sampling subsurface materials with most of these samplers are described in detail in the most current edition of the American Society for Testing and Materials (ASTM) book titled Annual Book of ASTM Standards. Sampling is generally performed on a 1½-foot continuous interval to a depth of about 6 feet, followed by 2½-foot intervals between the depths of about 10 to 15 feet, on 5-foot intervals to 50 feet and on 10-foot intervals thereafter to the termination depth of the borings. However, sampling intervals may change depending on the project scope and actual subsurface conditions encountered.

If cohesive soils (clays and some silts) are present during drilling, samples are retrieved by using the Shelby tube sampler (ASTM D 1587) or the split-barrel sampler (ASTM D 1586). The Shelby tube is used to recover "virtually" undisturbed soil specimens that can be returned to the laboratory for strength and compressibility testing. The Shelby tube is a 3-inch nominal diameter, thin-walled tube that is advanced hydraulically into the soil by a single stroke of the drill equipment.

The split-barrel sampler is used when performing the Standard Penetration Test (SPT). The recovered sample is considered to be a "disturbed" specimen due to the SPT procedure. The split-barrel is advanced into the soil by driving the sampler with blows from a 140-pound hammer free falling 30 inches. The SPT procedure is performed to evaluate the strength or competency of the material being sampled. This evaluation is based on the material sampled, depth of the sample, and the number of blows required to obtain full penetration of the split-barrel sampler. This blow count or penetration resistance is referred to as the "N" value.

The split-barrel is typically used when cohesionless soils (sands, silts, gravels) are encountered or when good quality cohesive soils cannot be recovered with the Shelby tube sampler. The SPT procedure can be employed when rock or cemented zones are encountered. However, the split-barrel may not penetrate the rock or cemented zone if the layer is extremely hard, thus resulting in no sample recovery.

When hand augering is performed, Dynamic Cone Penetrometer (DCP) testing may be used in lieu of the Standard Penetration Test. DCP testing is typically performed at 1 to 2-foot intervals.

When rock or cemented zones are present, and depending on the type of project and engineering testing required, rock coring may be implemented to recover specimens of the particular layer. Typically an NQ or HQ core barrel (ASTM D 2113) is used.

Logging

During the drilling activities, one of our engineers, geologists or engineering technicians is present to make sure that the appropriate sampling techniques are employed and to extrude or remove all materials from the samplers. The samples are then visually classified by our field representative who records the information on a field boring log. Our field representative may perform pocket penetrometer, hand torvane, or field vane tests on the subsurface materials recovered from the Shelby tube samplers. If the SPT procedure is employed, our field representative will record the N values or blow counts that are germane to that particular field test. If rock coring is utilized, our field representative will calculate the percent recovery and Rock Quality Designation (RQD). The test data for all the field tests will be noted on the appropriate field boring log. Upon completion of the logging activities and field testing of the recovered soil or rock samples, representative portions of the specimens were placed in appropriately wrapped and sealed containers to preserve their natural moisture condition and to minimize disturbance during handling and transporting to our laboratory for additional testing.

When subsurface water is observed during the drilling and sampling operations, drilling will be temporarily delayed so the subsurface water level can be monitored for a period of at least 15 to 30 minutes. Depending on the rise of the subsurface water in the borehole and project requirements, subsurface water measurements may be monitored for periods of 24 hours or more. Generally observation wells or piezometers are installed in the completed boreholes to monitor subsurface water levels for periods longer than 24 hours.

Following completion of drilling, sampling, and subsurface water monitoring, all boreholes will be backfilled with soil cuttings from the completed borings unless special backfilling requirements are requested by the client. If there are not enough soil cuttings available, clean sand will be used to backfill the completed boreholes.

Details concerning the subsurface conditions are provided on each individual boring log presented in this Appendix. The terms and symbols used on each boring log are defined in the Symbol Key Sheet, which is also presented in this Appendix.

General Notes

Boring logs shown on the following sheets shall not be copied or altered.

Groundwater depths shown on the boring logs represent groundwater surfaces encountered on the dates shown. The absence of water surface data on certain borings implies that no groundwater data is available, but does not necessarily mean that groundwater will not be encountered at the locations or within the vertical reaches of these borings.

While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local minor variations in characteristics of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially from the description shown with the logs or profiles.

Soils are classified in accordance with the Unified Soil Classification System, ASTM D 2487 and D 2488 for civil projects, American Association of State Highway and Transportation Officials M 145 for roadway projects and Military Standard 619B, dated 12 June 1968, for military projects.

Dynamic cone penetrometer resistance is recorded on the right side of the boring logs. The penetrometer resistance is determined by dropping a 15 pound steel ring weight 20 inches on an E rod slide drive. The cone point is seated 2 inches into the undisturbed bottom of the hole and then driven in 1¾ inch increments using the right weight hammer. This may be repeated for three increments. The blows are recorded for each 1¾ inch increment the penetrometer is driven.

Special Note

Water table (if shown) is an approximation of the water elevation on the date shown. The water elevation may vary and may reach ground surface. Seepage above the water table can be expected at any time. Any conclusions drawn by the Contractor shall be the Contractor's sole responsibility.

DESCRIPTIVE TERMINOLOGY INCLUDED ON BORING LOGS

MOISTURE CONDITIONS

	<u>Fine-Grained Soils</u>	<u>Coarse-Grained Soils</u>
<i>Dry</i>	Seems dry, but contains some moisture	Contains no noticeable moisture
<i>Moist</i>	Moisture below the plastic limit	Contains a noticeable amount of moisture, but no appreciable free water
<i>Very Moist</i>	Moisture above the plastic limit, but below the liquid limit	
<i>Wet</i>	Moisture may approach the liquid limit	Contains free water, but voids are not water-filled
<i>Saturated</i>	Moisture is frequently at or above the liquid limit	Soil voids are water-filled or nearly so

RELATIVE PROPORTIONS

<u>Term</u>	<u>Range</u>
Trace	Less than 10%
Little	10% - 20%
Some	20% - 30%
With	30% - 40%
And	40% - 50%

LEGEND OF SYMBOLS

Soil (USCS Classification)

	GW	WELL-GRADED GRAVELS, GRAVEL/SAND MIXTURES, LITTLE OR NO FINES
	GP	POORLY-GRADED GRAVELS, GRAVEL/SAND MIXTURES, LITTLE OR NO FINES
	GM	SILTY GRAVELS, GRAVEL/SAND/SILT MIXTURES
	GC	CLAYEY GRAVELS, GRAVEL/SAND/CLAY MIXTURES
	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	SM	SILTY SANDS, SAND/SILT MIXTURES
	SC	CLAYEY SANDS, SAND/CLAY MIXTURES
	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
	CH	INORGANIC CLAYS OF HIGH PLASTICITY
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

Rock

	CHALK
	COAL
	DOLOMITE
	GNEISS
	GRANITE
	LIMESTONE
	QUARTZITE
	SANDSTONE
	SAPROLITE
	SCHIST
	SHALE
	SILTSTONE

Other Materials

	BITUMINOUS CONCRETE
	BOULDERS & COBBLES
	CONCRETE
	CRUSHED STONE
	DEBRIS
	FILL
	TOPSOIL

Samplers

	AUGER CUTTINGS
	BULK SAMPLE
	CONTINUOUS SAMPLER
	DYNAMIC CONE PENETROMETER
	PITCHER SAMPLER or PRESSUREMETER
	ROCK CORE
	SHELBY TUBE
	SPLIT SPOON
	SPLIT SPOON WITH NO RECOVERY

Water Level Symbols

	WATER LEVEL AT TIME OF DRILLING
	DELAYED WATER LEVEL
	CAVE-IN DEPTH

TTL



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Former Ring-Around Products Facility**

Prattville, Autauga County, Alabama

**Log of Boring
HA-1**

Page 1 of 1

Drilling Co.: <i>TTL, Inc.</i>	TTL Job No.: <i>060205038</i>	Remarks: Water not encountered at time of drilling.
Driller: <i>J. Webber</i>	Date Drilled: <i>4/7/2010</i>	
Logged by: <i>J. Webber</i>	Boring Depth: <i>3 feet</i>	
Equipment: <i>Hand Auger</i>	Boring Elevation: <i>Not Available</i>	
Hammer Type: <i>Not Applicable</i>	Coordinates: <i>Not Available</i>	
Drilling Method: <i>Hand Auger w/ DCP</i>		

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS CLASSIFICATION	MATERIALS DESCRIPTION	SAMPLE DATA									
					MOISTURE (%)	PPV (tsf)	TYPE	DCP Count (Blows per 1.75")	DYNAMIC CONE PENETROMETER BLOW COUNT (Blows per 1.75 inch)					
									5	10	15	20	25	
			SM	Brown silty SAND with gravel Moist				6 - 9						
1			SC	Reddish-brown clayey SAND with gravel Moist				25+						
2								25+						
3				Boring terminated at 3 feet.				25+						

P:\ARCHIVED PROJECTS\2005\060205038 HODGES PRATTVILLE\060205-038 HAND AUGER.GPJ 08/22/16 Report:2008 HAND AUGER WIDCP

This boring log shall not be separated from the corresponding instrument of service; no third party may rely upon this boring log or the corresponding instrument of service absent a written TTL Secondary Client Agreement.



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Prattville, Autauga County, Alabama

**Log of Boring
HA-2**

Page 1 of 1

Drilling Co.:	TTL, Inc.	TTL Job No.:	060205038	Remarks: Water not encountered at time of drilling.
Driller:	J. Webber	Date Drilled:	4/7/2010	
Logged by:	J. Webber	Boring Depth:	1 feet	
Equipment:	Hand Auger	Boring Elevation:	Not Available	
Hammer Type:	Not Applicable	Coordinates:	Not Available	
Drilling Method:	Hand Auger w/ DCP			

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS CLASSIFICATION	MATERIALS DESCRIPTION	MOISTURE (%)	PPV (tsf)	TYPE	SAMPLE DATA					
								DCP Count (Blows per 1.75")	DYNAMIC CONE PENETROMETER BLOW COUNT (Blows per 1.75 inch)				
									5	10	15	20	25
			SM	Brown silty SAND with gravel				25+					
				Moist									
1				Boring terminated at 1 feet.				25+					
2													
3													

P:\ARCHIVED PROJECTS\2005\060205038 HODGES PRATTVILLE\060205-038 HAND AUGER.GPJ 08/22/16 Report:2008 HAND AUGER W/DCP

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Former Ring-Around Products Facility**

Prattville, Autauga County, Alabama

**Log of Boring
HA-3**

Page 1 of 1

Drilling Co.: <i>TTL, Inc.</i>	TTL Job No.: <i>060205038</i>	Remarks: Water not encountered at time of drilling.
Driller: <i>J. Webber</i>	Date Drilled: <i>4/7/2010</i>	
Logged by: <i>J. Webber</i>	Boring Depth: <i>1 feet</i>	
Equipment: <i>Hand Auger</i>	Boring Elevation: <i>Not Available</i>	
Hammer Type: <i>Not Applicable</i>	Coordinates: <i>Not Available</i>	
Drilling Method: <i>Hand Auger w/ DCP</i>		

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS CLASSIFICATION	MATERIALS DESCRIPTION	MOISTURE (%)	PPV (tsf)	TYPE	SAMPLE DATA					
								DCP Count (Blows per 1.75")	DYNAMIC CONE PENETROMETER BLOW COUNT (Blows per 1.75 inch)				
									5	10	15	20	25
			GW	Brown well-graded GRAVEL with sand				25+					
				Moist									
1				Boring terminated at 1 feet.				25+					
2													
3													

P:\ARCHIVED PROJECTS\2005\060205038 HODGES PRATTVILLE\060205-038 HAND AUGER.GPJ 08/22/16 Report:2009 HAND AUGER W/DCP

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**Log of Boring
HA-4**

Prattville, Autauga County, Alabama

Page 1 of 1

Drilling Co.:	TTL, Inc.	TTL Job No.:	060205038	Remarks: Water not encountered at time of drilling.
Driller:	J. Webber	Date Drilled:	4/7/2010	
Logged by:	J. Webber	Boring Depth:	2 feet	
Equipment:	Hand Auger	Boring Elevation:	Not Available	
Hammer Type:	Not Applicable	Coordinates:	Not Available	
Drilling Method:	Hand Auger w/ DCP			

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS CLASSIFICATION	MATERIALS DESCRIPTION	SAMPLE DATA								
					MOISTURE (%)	PPV (tsf)	TYPE	DCP Count (Blows per 1.75")	DYNAMIC CONE PENETROMETER BLOW COUNT (Blows per 1.75 inch)				
									5	10	15	20	25
			SM	Brown silty SAND with gravel				25+					
1				Moist				25+					
2				Boring terminated at 2 feet.				25+					
3													

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Former Ring-Around Products Facility**

**Log of Boring
HA-5**

Prattville, Autauga County, Alabama

Page 1 of 1

Drilling Co.: <i>TTL, Inc.</i>	TTL Job No.: <i>060205038</i>
Driller: <i>J. Webber</i>	Date Drilled: <i>4/7/2010</i>
Logged by: <i>J. Webber</i>	Boring Depth: <i>3 feet</i>
Equipment: <i>Hand Auger</i>	Boring Elevation: <i>Not Available</i>
Hammer Type: <i>Not Applicable</i>	Coordinates: <i>Not Available</i>
Drilling Method: <i>Hand Auger w/ DCP</i>	

Remarks:
Water not encountered at time of drilling.

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	USCS CLASSIFICATION	MATERIALS DESCRIPTION	SAMPLE DATA								
					MOISTURE (%)	PPV (tsf)	TYPE	DCP Count (Blows per 1.75')	DYNAMIC CONE PENETROMETER BLOW COUNT (Blows per 1.75 inch)				
									5	10	15	20	25
				TOPSOIL (12")				4 - 4	•				
1			SM	Reddish-brown silty SAND with gravel				3 - 5	•				
2				Moist				6 - 8	•				
3				Boring terminated at 3 feet.				12 - 12	•				

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1000 sq ft per 5 GALLONS

4 50.00 PER 5 GALLONS ON 3 PALLET

36 PER PALLET



Revised: 03/08

Concrete Sealer

Professional Grade 100% Acrylic Emulsion Sealer

- Seals & Protects
- Weatherproofs
- Dustproofs
- Water-Based
- Clear Finish
- Cures Concrete
- Salt & Chemical Resistant



Manufacturer:

JETCOAT
472 Brehl Avenue
Columbus, Ohio
Phone: 800-394-0047
Fax: 614-279-7201
www.JETCOATinc.com

Description

A professional grade 100% acrylic water-based clear drying emulsion. It is designed to seal and protect both interior and exterior concrete surfaces.

Uses

- Driveways, Patios, Sidewalks, Pool Decks, Floors, Quarry Tiles, Paver Bricks, Brick Surfaces, Masonry, & More.

Surface Preparation

- **Clean Concrete Surface** - Sweep all dirt and loose debris from concrete surface. Scrub all oil and gasoline stains with household detergent and water. Rinse off entire concrete surface with water and allow to dry thoroughly before applying concrete sealer.
- **Clean and Fill Cracks** - Remove dirt and vegetation from cracks with screwdriver, wire brush or other suitable instrument. Clean out cracks with hose and water and allow to dry. Fill cracks up to 1/2" wide with JETCOAT Pourable Concrete Crack Sealant. Fill larger cracks up to 1" wide with JETCOAT Concrete Patch. Allow crack filler or patch to dry 24 hours prior to applying JETCOAT Concrete Sealer.

Application

Stir pail thoroughly. JETCOAT Concrete Sealer is ready-to-use. Do not dilute. Apply a thin even coat of concrete sealer with a roller, brush, or garden type sprayer. For best results apply at a rate of 200

square feet per gallon per coat. Additional coats may be applied to create a higher gloss surface.

Drying Time

Allow 2-3 hours to dry, depending on weather conditions.

Clean Up

- Wash tools with water before material dries.

Weather Conditions

- Application temperature must be a minimum of 60 °F and rising. Do not apply when temperature is expected to drop below 60 °F within a 24- hour period.
- In areas where dew or fog accumulates in the early evening, it is best to coat in the morning. Stop coating by early afternoon (3:00 pm) to prevent wash off, which will occur if dew, fog, or rain arrives before coating dries.
- Do not apply if rain is imminent or forecast within 24 hours of application.

Coverage (Approximate)

- For best results apply JETCOAT Concrete Sealer at a rate of 200 square feet per gallon (950 square feet per 4.75 gallon pail).

Precautions

- Do Not Freeze
- Do Not Store At Temperatures Below 50 °F

Safety And Environmental Precautions

- Refer To Material Safety Data Sheet Before Using
- For Exterior Application Only
- Close Container When Not In Use
- Environmental Information Is On The Material Safety Data Sheet
- Do Not Reuse Empty Container
- Volatile Organic Content (VOC) Is 150 gm/liter max

Concrete Sealer
Professional Grade 100% Acrylic Emulsion Sealer

Form No.: JC-TD66805

• KEEP OUT OF REACH OF CHILDREN

Packaging

Item #	Container Size	Pack	Weight
66805	4.75 Gallon Pail	1	46 lbs.
66801	.9 Gallon Pail	6	55 lbs.

* At time of manufacturing, containers are filled to maximum. However, due to the reduction in volume that occurs after cooling and settling, the actual volume may be less.

Ingredients:	Cas No.
Water	7732-18-5
Acrylic Polymer	Proprietary



SAFETY DATA SHEET

Issuing Date 15-April-2015

Revision Date 2-Sept-15

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS Product Identifier

Product Name: Concrete Sealer

Other Means of Identification

Product Code(s): 66805, 66801

Synonyms: None

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: No information available.

Uses Advised Against: No information available

Supplier's Details

Supplier Address

JETCOAT Inc.
472 Brehl Avenue
Columbus, OH 43223
TEL: 800-934-0047
www.jetcoatinc.com

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute Oral Toxicity	Category 4
---------------------	------------

GHS Label Elements, Including Precautionary Statements

Emergency Overview

Signal Word • Harmful if swallowed 	Warning	Appearance: Cloudy white, dries clear	Physical State: Liquid	Odor: Mild
-----------------------------------------------------------------------------------------------------------------------------------------	----------------	----------------------------------------------	-------------------------------	-------------------

Precautionary Statements

- | | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prevention | <ul style="list-style-type: none"> • Wash face, hands, and any exposed skin thoroughly after handling. • Do not eat, drink, or smoke when using this product. |
| General Advice | • None |
| Ingestion | <ul style="list-style-type: none"> • If SWALLOWED; Call a POISON CENTER or doctor/physician if you feel unwell. • Rinse mouth |
| Storage | • None |
| Disposal | • Dispose of contents/container to an approved waste disposal plant. |

Hazard Not Otherwise Classified (HNOC)

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Acrylic Polymer	Proprietary	30-60	*
2-Butoxy ethanol	111-76-2	0-5	*
Proprietary Thickener	Proprietary	0-5	*

*The exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of Necessary First-Aid Measures

Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions, see a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most Important Symptoms/Effects, Acute and Delayed

Most Important Symptoms/Effects No information available

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician Treat Symptomatically. May cause sensitization by skin contact.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon Dioxide (CO₂). Dry Chemical. Foam. Water Spray. Water Fog.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available

Explosion Data

Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure- demand MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Personal Precautions: Use personal protective equipment.

Environmental Precautions

Environmental Precautions: See Section 12 for additional Ecological Information. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Wear personal protective equipment. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Storage: Keep container tightly closed
Incompatible Products: Strong oxidizing agents. Strong Bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
2-Butoxy ethanol	20 ppm	TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 ppm TWA 24 mg/m ³

Appropriate Engineering Controls

Engineering Measures: Showers
Eyewash Stations
Ventilation Systems

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: If splashes are likely to occur, wear: Safety glasses with side shields.
Skin and Body Protection: Impervious gloves.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State: Liquid
Odor: Mild
Appearance: Cloudy white, dries clear
Odor Threshold: No Information Available

Property	Values	Remarks/Method
pH	No data available	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	100° C	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Density	1.02 @ 77 F	None known
Water Solubility	Easily dispersible	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Not Flammable	
Explosive Properties	No data available	
Oxidizing Properties	No data available	
VOC Content	No data available	

10. STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: Incompatible products.
Incompatible Materials: Strong oxidizing agents. Strong bases.
Hazardous Decomposition Products: Carbon Monoxide (CO), Carbon Dioxide (CO₂), and unburned hydrocarbons (smoke)

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information
Inhalation: May cause irritation of respiratory tract.
Eye Contact: Contact with eyes may cause irritation.
Skin Contact: May cause irritation.
Ingestion: Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
2-Butoxy ethanol	745 mg/kg (Rat)	1250 mg/kg (Rat)	550 ppm/4 hr. (Rat)

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics

Symptoms: No information available.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure

Sensitization: No information available.

Mutagenic Effects: No information available.

Carcinogenicity: No information available.

ACGIH: (American Conference of Governmental Industrial Hygienists)

IRAC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

OSHA: (Occupational Safety & Health Administration)

Reproductive Toxicity: No information available.

STOT - Single Exposure: No information available.

STOT - Repeated Exposure: No information available.

Aspiration Hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
2-Butoxy ethanol	EC50 72h: 911 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 1474 mg/L static (Oncorhynchus mykiss)	EC50 48h: = 1800 mg/L (Daphnia magna)

Persistence and Degradability: No information available.

Bioaccumulation

Chemical Name	Log Pow
2-Butoxy ethanol	0.83

Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging: Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

DOT: Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA - Complies

DSL/NDSL - Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 – Threshold Values %
2-Butoxy ethanol	111-76-2	0-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

U.S. State Regulations

California Proposition 65:

None

U.S. State Right-To-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
2-Butoxy ethanol	X	X	X		

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

16. OTHER INFORMATION

NFPA	Health Hazard: 1	Flammability: 0	Instability: 0	Physical and Chemical Hazards- Personal Protection: X
HMIS	Health Hazard: 1	Flammability: 0	Physical Hazard: 0	

Revision Date: 2-Sept-15
Revision Note: Supersedes 15-April-2015

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Collins, Crystal

From: Shannon McDonald <smcdonald@ttlusa.com>
Sent: Friday, October 14, 2016 11:25 AM
To: Collins, Crystal
Cc: Sheryle Reeves; Lance Hunter (lancehunter@hodgeswarehouse.com)
Subject: RE: ring around
Attachments: floor photo #2 10-16.JPG; floor photo #3 10-16.JPG; floor photo #4 10-16.JPG; floor photo #5 10-16.JPG; floor photo 10-16.JPG; interior floor map.pdf

Crystal,

I actually have some supplemental information that will be helpful to you.

See attached photos for pictures of the floor immediately following application of the JETCOAT sealant. Also, it turns out the floor was sealed the last week of September 2016 when the warehouse was empty, NOT July 2016 as stated in my 10/4/16 report.

Also, per our recommendations the client sealed 80% of the interior concrete floor, but did NOT seal the area on the far west side of the building, where wipe and concrete samples have historically contained the highest concentrations of pesticides. See attached map. The area shaded in red has been emptied and CLOSED OFF, and Hodges is willing to permanently restrict access to this portion of the warehouse, and remove it from use for perpetuity.

Thank you!
Shannon

Shannon H. McDonald, P.G.

TTL, Inc.

Principal Geologist/Montgomery Group Leader

Direct: 334.387.1288

Cell: 334.850.1487

Email: smcdonald@ttlusa.com



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From: Collins, Crystal [mailto:CCollins@adem.alabama.gov]

Sent: Friday, October 07, 2016 2:48 PM

To: Shannon McDonald <smcdonald@ttlusa.com>

Subject: ring around

Shannon,

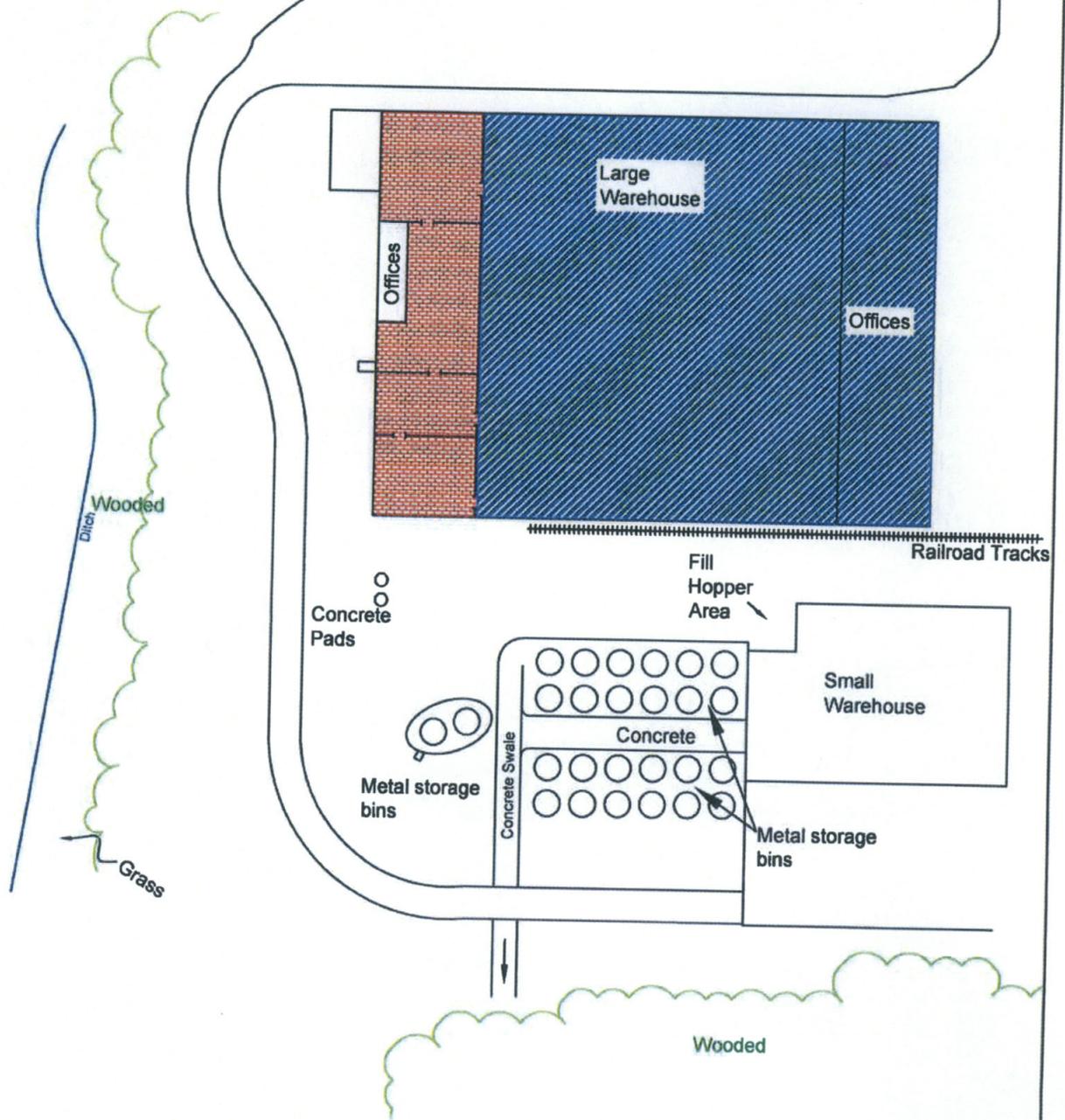
Just wanted to let you know that we received the cap and floor sealant information along with the check for the Ring Around Property. I will be out of the office the beginning of next week but should start the review on it close to the end.

Crystal Collins
Environmental Scientist, Senior
Redevelopment Section
Alabama Department of Environmental Management
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Mission: Assure for all citizens of the state a safe, healthful and productive environment

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LEGEND

-  Extent of warehouse floor sealed with JETCOAT concrete sealer
-  Extent of warehouse floor closed off and unused

Scale 1" = 100'



2743B Gunter Park Drive West ■ Montgomery, Alabama 36109
334 244 0786 ■ Fax 334 244 8688

Extents of indoor warehouse sealed and unused; Former Ring Around Products Facility; Hodges Warehouse & Logistics; Prattville, Autauga County, Alabama.

DRAWING PATH: F:\2007\Proposals\0207-025E - Ring-Around Facility Phase I\ring around(ev) dwg	
DATE CREATED: 9/23/2005	
DRAWN BY: SHM	CHECKED BY: SGR
APPROVED: Sheryle Reeves, P.E.	

