



CAROLINA GROCERY

CORRECTIVE ACTION PLAN

ATTF CP-15



Carolina Grocery
14072 U.S. Hwy 29 South
Andalusia, Covington Co., AL
Fac ID 20341-039-008237
UST 16-09-01

PREPARED FOR

Carolina Grocery, Inc.
12258 J.E. McDonald Road
Andalusia, AL 36420

DATE

February 27, 2019

PREPARED BY

CDG Engineers & Associates, Inc.
1840 E. Three Notch St.
Andalusia, AL 36420

CERTIFICATION PAGE

"I hereby certify that, in my professional judgment, the components of this document and associated work satisfy the applicable requirements set forth in Chapter 335-6 of the ADEM Administrative Code, and are consistent with generally accepted professional consulting principles and practices. The information submitted herein, to the best of my knowledge and belief, is true accurate, and complete. I am aware that there are significant penalties for submitting false information."

This document has been prepared based on historical site assessment data and has been prepared to address soil and groundwater contamination at the Carolina Grocery site (Facility Identification Number 20341-039-008237) in Andalusia, Covington County, Alabama. The recommended action should not be construed to apply to any other site.


Signature



The seal is circular with a dotted border. The text inside the seal reads: "ALABAMA" at the top, "LICENSED" below it, "No. 32719" in the center, "PROFESSIONAL" below the number, "ENGINEER" at the bottom, and "JAMES ALAN BARCK" around the inner edge. There are two stars on either side of the central text.

James Alan Barck

Registered Professional Engineer in the State of Alabama

Registration No. 32719

3-5-19
Date

PROJECT SUMMARY

The Carolina Grocery site has served as a gasoline station, convenience store, and/or truck stop since approximately 1969. The site formerly had two 1,000-gallon unleaded gasoline USTs installed in 1969 and one 1,000-gallon unleaded gasoline UST installed in 1980. These three USTs were closed by removal in 1988 and four new USTs were installed at that time. Carolina Grocery Inc. is the Alabama Tank Trust Fund (ATTF) responsible party for the site.

In August 2016, a Limited Phase II investigation was conducted by CDG at the site. Results of the investigation indicated that petroleum products had been released. As a result of the Limited Phase II Report, ADEM sent Carolina Grocery, Inc. a Notification of Requirement to conduct Investigative and Corrective Actions. In a second letter dated September 20, 2016, ADEM issued a Notice of Alabama Tank Trust Fund Eligibility. In a third letter, ADEM issued pre-approval for Preliminary Investigation activities.

From October 2016 through October 2017, a Preliminary Investigation, a Secondary Investigation and Well Installations were conducted at the site. During these assessment activities, a total of eighteen Type II monitoring wells, one Type III vertical delineation well, and four 4" recovery wells were installed at the site. Additionally, Mobile Enhanced Multi-phase Extraction (MEME) events were initiated in January 2018. An Alabama Risk Based Corrective Action (ARBCA) Tier I/Tier II Evaluation was conducted in November 2017 and approved by ADEM on December 4, 2017. Between October 2016 and August 2018, seven groundwater monitoring events have been conducted.

In a letter dated June 11, 2018, ADEM requested that MEME events be discontinued and an alternate remediation technology be proposed. A High Resolution Soil Profile Study (HRSPS) was conducted at the site in August 2018 and alternatives to the current corrective action approach were discussed with ADEM. As approved under CP-15, the following report Corrective Action Plan (CAP) has been developed based on the recommended approach, derived from that discussion. The data summary tables are included in Appendix A and site figures are included in Appendix B.

SUMMARY OF PREVIOUSLY CONDUCTED CORRECTIVE ACTIONS

Investigative and Corrective Actions at the Carolina Grocery site have been ongoing since 2016. From January 2018 through January 2019, ten 12-hr MEME events have been conducted at the site. Approximately 112 pounds of hydrocarbons or the equivalent 18 gallons of gasoline have been removed from the site. Additionally, a total of 5,750 gallons of petroleum contaminated water have been recovered and transported for disposal. The following table summarizes the results of these events:

Date	Length of event (hrs)	Total HC removed (lbs)	Equivalent HC (gal)	Total PCW liquid (gal)
01/31/18	12	10.50	1.70	600
02/26/18	12	10.04	1.63	850
03/28/18	12	7.66	1.24	800
06/25/18	12	9.39	1.52	900
07/26/18	12	9.09	1.47	200
08/29/18	12	8.92	1.45	100
09/26/18	12	6.08	0.99	600
10/23/18	12	18.61	3.02	750
11/29/18	12	16.50	2.67	650
01/22/19	12	15.07	2.44	300
TOTALS	120	111.86	18.13	5,750

REMEDIAL OBJECTIVES AND SITE CHARACTERIZATION

GENERAL REMEDIAL OBJECTIVES

The general objectives of the corrective action activities for the facility are as follows:

- Ensure that the health and safety of all project personnel is maintained during remediation activities.
- Prevent hydrocarbon migration to sensitive receptors.
- Remove free product from the site subsurface if present.
- Reduce adsorbed phase petroleum hydrocarbons from soils within the vadose and saturated zone, primarily in the source area, to below accepted Site Specific Target Levels (SSTLs).
- Reduce dissolved petroleum hydrocarbons from groundwater to below proposed SSTLs.
- Accomplish these objectives in a timely and cost-effective manner.

VADOSE ZONE SOIL CHARACTERIZATION

Soil borings previously conducted during the Preliminary and Secondary Investigations and Well Installation were reviewed to determine the subsurface soil conditions and the feasibility of the various remediation options for the site. The Chemicals of Concern (COCs) for the release at the site include Benzene, Toluene, Ethylbenzene, Total Xylenes, Methyl-tert-butyl-ether, and Naphthalene (BTEX/MTBE/Naphthalene) constituents. The analytical results from the soil samples collected during the site characterization activities are summarized in the Tables located in Appendix A. Figures, located in Appendix B, show the locations of the soil borings and the distribution of soil COC concentrations across the site. The vadose zone soils are predominantly comprised of clayey sands with an average porosity of 36.2%.

AQUIFER CHARACTERIZATION

The analytical results of the groundwater samples collected during the site characterization activities are summarized in data summary tables located in Appendix A. The average historical depth to groundwater beneath the site is approximately 10.34 feet below ground surface (bgs). Based on the most recent groundwater level measurements collected during the December 14, 2018 sampling event, a potentiometric surface map was constructed for the site. As shown in the figures located in Appendix B, the general groundwater flow direction beneath the site is to the north.

Slug testing conducted during the Secondary Investigation activities indicated that the average hydraulic conductivity (K) of the site soils was approximately 0.0000351 cm/sec. Based on these values, the anticipated Darcy velocity (K_i) of groundwater flow beneath the site would be approximately 15.39 cm/yr. Using the analytical data from the December 14, 2018 groundwater sampling event, a groundwater analytical and benzene contour map was constructed to represent the approximate extent of the current dissolved phase hydrocarbon plume. All site figures are included in Appendix B.

EXPOSURE ASSESSMENT

An exposure assessment was conducted by CDG during the Alabama Risk Based Corrective Action (ARBCA) evaluation. The current land use site conceptual exposure model indicates that complete exposure pathways exist onsite for indoor and outdoor

vapor inhalation from soil and groundwater for commercial and construction workers and for dermal contact with affected soil by construction workers. Complete exposure pathways also exist for dermal contact and indoor and outdoor vapor inhalation from impacted soil and groundwater for offsite residential properties, commercial workers and construction workers. Future land use of the site and the surrounding area is expected to remain the same. There are is one public water supply well currently being constructed that is located approximately 250 feet northwest (downgradient) of the site. It is likely that the Carolina Grocery site will be within the well head protection area for the new public well that is currently being installed.

Additionally, there are four domestic water supply wells located within 1,000 feet of the site. The Reniel Well is located 200 feet upgradient of the site and has been inactive since November 2016. The Cooper Well is located 520 feet upgradient and the current use is unknown. The Bonds Well is located 855 feet upgradient and is used for potable purposes. The Day Well is located 1,020 feet upgradient and is used for potable purposes. CDG has not been granted access to collect a sample from the Cooper Well. Two private wells (Bonds Well and Day Well) are used for drinking water and permission was granted to sample both private wells. No detectable BTEX/MTBE/Naphthalene concentrations have been found in any of the samples taken from the Bond or Day Wells from July 2017 through December 2018.

SITE-SPECIFIC TARGET LEVELS

To assess the risk to human health and the environment of the dissolved hydrocarbon plume associated with the Carolina Grocery site, an ARBCA Tier I/ Tier II evaluation was performed. Details of this evaluation are contained in a report submitted to ADEM in November 2017. Based on the ARBCA Tier II evaluation, Site Specific Target Levels (SSTLs) for site remediation were calculated for the various media (soil and groundwater) at the site. The accepted SSTLs for soil and groundwater are summarized in the following table.

Site Specific Target Levels for Carolina Grocery						
Chemicals of Concern	Soil				Groundwater	
	Dermal Contact (mg/Kg)	On-site Indoor Inhalation (mg/Kg)	Off-Site Indoor Inhalation (mg/Kg)	Groundwater Resource Protection (mg/Kg)	On-site Indoor Inhalation (mg/L)	Off-Site Indoor Inhalation (mg/L)
Benzene	249	0.0624	0.00952	0.121	5.44	0.83
Toluene	111	8.34	0.777	24.1	526	50.6
Ethylbenzene	45.7	27.5	2.56	16.9	169	135
Xylenes	52.4	10.1	0.944	175	175	41.9
MTBE	378	224	20.9	0.483	11,400	1,060
Naphthalene	31.4	6.62	0.616	0.483	19.3	1.79

A more detailed presentation of these values is provided in the November 2017 ARBCA Evaluation Report. The individual Groundwater Resource Protection (GRP) ACALs generated for each of the site monitoring wells are presented in data summary tables located in Appendix A.

SUMMARY OF SITE CHARACTERIZATION

Soil Characterization Summary

The results of the geotechnical analyses indicate the following physical properties for the soils at the Carolina Grocery site:

- The vadose zone soils are comprised of clayey sand.
- Soil has a porosity of 36.2 %.
- Volumetric water content 21.7 %
- Available porosity for vapor transport within the vadose zone is 14.5 %.

Aquifer Characterization Summary

The results of the aquifer characterization at the site indicate the follow physical properties for the unconfined groundwater zone beneath the site:

- The average depth to groundwater is 10.34 bgs.
- The average hydraulic conductivity within the saturated zone is 0.0000351 cm/sec.

- The general groundwater flow beneath the site is to the north.
- The calculated Darcy velocity for groundwater flow is 15.39 cm/yr.
- No measurable accumulations of free product have been observed in any of the wells since the beginning of assessment activities.

Exposure/Risk Assessment Summary

Based upon current and historical constituent concentrations and site physical properties, SSTLs were calculated for the site using the ARBCA process. The SSTLs have been proposed as ACALs for the site. The ARBCA Evaluation indicates that there are complete exposure pathways for vapor inhalation from both soil and groundwater on and off-site. The groundwater Benzene concentrations have historically been above the proposed GRP ACALs. Exceedances of the proposed ACALs for indoor inhalation have historically occurred for Benzene, Toluene Total Xylenes, and Naphthalene in the soil and Benzene in the groundwater. The presence of dissolved hydrocarbon concentrations above the ACALs will require remediation.

REMEDIATION RATIONALE AND APPROACH

Based upon current constituent concentrations and the risk assessment results, there are exceedances in the proposed groundwater resource protection and vapor inhalation of groundwater ACALs for Benzene. However, the MEME events have been effective in reducing the presence of dissolved hydrocarbons. The target levels developed at the site were calculated based on a groundwater ingestion POE of a private well is located 200 feet cross-gradient of the site. Additionally, a public water supply well currently being constructed that is located approximately 250 feet northwest (downgradient) of the site. It is likely that the Carolina Grocery site will be within the well head protection area for the new public well that is currently being installed.

Full-scale technologies addressing both soil and groundwater were reviewed for applicability to the Carolina Grocery site. A detailed discussion of the various corrective action alternatives is provided in the CAP Evaluation report submitted in November 2017. Based on the evaluation, it was determined that the most viable approach would be the installation of a dedicated MPE system connected to a network of five recovery

wells installed at the site. It was also decided that the use of air sparge pulsing in four air sparge wells during monthly 24-hr events should also be implemented.

MPE involves applying vacuum to remove liquid and vapor phase contaminants from low to moderately permeable, heterogenous soils. MPE typically provides a more efficient remedial approach as opposed to conventional pump and treat technology. The application of vacuum to a well increases the hydraulic driving force that enables groundwater to flow into a well, while conventional pumping relies mainly on a difference in elevation head.

Air Sparging involves the injection of air into saturated zones, in effect creating a subsurface air stripper, which removes contaminants through volatilization. To increase the efficiency of the MPE system, monthly 24-hr air sparge events are recommended. The vapor phase and absorbed phase hydrocarbon contaminant removal in the soil source area and for dissolved-phase hydrocarbon contaminant removal in the groundwater plume at the Carolina Grocery site can be efficiently addressed with the use of a multi-phase extraction system with monthly 24-hr air sparge events.

REMEDIATION RECOMMENDATION PLAN

The corrective action approach has four main remedial objectives: removal of free product, if present; removal of vapor phase concentrations; removal of absorbed phase concentrations; and removal of dissolved phase concentrations. In an effort to decrease chemicals of concern (COC) concentrations in both soil and groundwater to levels protective of human health and the environment, a dedicated Multiphase Extraction (MPE) system with monthly air sparge pulsing has been deemed the appropriate remediation approach for the Carolina Grocery site.

An illustration of the estimated extent of the dissolved phase contaminant plume based on the December 2018 monitoring event is shown in the figures located in Appendix B. CDG has reviewed the data provided from the High Resolution Soil Profile Study and concludes that the remedial approach described herein is designed to perform in a cost effective and reliable manner throughout the life of the project. Based on the clean-up time calculations, the estimated clean-up time under ideal conditions would be approximately 2 years. Based on CDG's professional experience with similar sites, this

clean-up time estimate would be a reasonable expectation of the period that the system would remain in operation at the site followed by an additional two years of rebound and natural attenuation monitoring before the remediation goals would be achieved and the site eligible for No Further Action (NFA) status.

SYSTEM DETAIL

The proposed MPE system to be installed at the Carolina Grocery site will utilize a single 25 hp oil-sealed liquid ring vacuum pump (LRVP) to produce the high vacuum and airflow rate necessary to remove petroleum constituents from the subsurface. A comprehensive detail of the system components is provided in the vender quote included as Appendix C. The LRVP will be connected to a network of five recovery wells (RW-1 through RW-5). All system components, excluding air treatment operations, will be enclosed in an insulated building with removable panels. Above ground system components will be enclosed in a wooden security fence complete with locking gates in an effort to prevent unauthorized personnel from entering the remediation compound. The fence will be placarded with a sign listing CDG's emergency contact information.

Recovered fluids will travel from the extraction wells to a primary Air/Water Separator (AWS), utilized to separate vapors and groundwater. Vapors will subsequently pass through the LRVP to granular activated carbon vessels for off-gas treatment prior to discharge to the atmosphere. Groundwater will flow from the AWS through an oil-water separator (OWS) to an air stripper (AS) for treatment. The AS is capable of decreasing hydrocarbon concentrations to below permit requirements at flows up to 15 gallons per minute (gpm). The treated groundwater will be discharged into the storm water drainage ditch to the northeast of the subject site under the terms of the general National Pollutant Discharge Elimination System (NPDES) permit. A copy of the NPDES Permit application is included in Appendix D.

Figures in Appendix B illustrate the proposed locations of the extraction wells, extraction lines, effluent discharge and proposed system location. Equipment specifications and process diagrams are provided in Appendix C.

The system will be outfitted with an intrinsically safe alarm sensor such that, should an alarm condition occur, the system will automatically shut down until the alarm can be

relieved and the system reset. These sensors are included in an effort to maintain effective operation of the system and reduce the potential for untreated discharges. The alarms will be integrated with a telemetry system to notify COG of a system fault, so that it can be restarted as soon as possible. The telemetry system will allow COG to remotely restart the system, depending on the type of alarm. In addition, remote shut down capabilities will be available. A run time (hour) meter will be installed on the system and the system will be equipped with applicable gauges and meters to allow for measurements as required for monthly and/or quarterly reporting.

AIR SPARGING

CDG recommends that 24-hour duration air sparge events be conducted at the site during each month in order to reduce dissolved hydrocarbon concentrations in the source area by stripping the contaminants by volatilization. Additionally, air sparging provides oxygenated air which aids microbial degradation of the residual petroleum constituents. Air Sparge technology involves the injection of ambient air into saturated zones, creating a subsurface air-stripper effect, which removes contaminants through volatilization. The amount and pressure of the air being injected varies depending on the lithology of each site. CDG uses a custom-built Air Sparge unit that utilizes a 10-horsepower rotary vane compressor. This compressor has an operating range from 7.25 to 21.75 pounds per square inch (psi) at 0 to 90 CFM of air flow. The system can be connected to five sparge points via a manifold system that is outfitted with pressure regulators, gauges, and Dwyer air flow meters. Additionally, CDG has locking well heads equipped with gauges to record the well head pressure at each connection. The primary objective of the air sparge “pulsing” will be to increase the COC recovery concentrations. The Underground Injection Permit (UIC) permit application submitted to ADEM is included in Appendix E.

OFF-GAS VAPOR TREATMENT

Three off-gas vapor treatment alternatives were reviewed for the site. These alternatives included thermal oxidation, catalytic oxidation, and vapor phase carbon (VPC) absorption. Thermal oxidation is typically utilized for applications having high vapor concentrations and high airflows. Catalytic oxidation is typically utilized for applications having low to moderate vapor concentrations and low to moderate airflows. VPC can be utilized for either situation. Based on the flame ionization detector

(FID) readings taken during the MEME events and ADEM 's air division guidance, granular activated carbon (GAC) has been chosen as the initial air pollution control device (APCD) option for the Carolina Grocery site. The off-gas treatment may be eliminated once it is established that nuisance conditions are not present at the site and upon receiving approval from the Air Division. A copy of the ADEM air emission control permit application is presented in Appendix F.

SOIL REMEDIATION

Analytical data indicates that soil samples collected during the Preliminary and Secondary Investigations and Well Installation exhibited BTEX, Toluene, Total Xylene, and Naphthalene constituent concentrations above the SSTLs (Tables, Appendix A).

Based on site conditions and analytical data, a number of soil remedial technologies are available to address hydrocarbon contamination in the soil. The soil remedial technologies that were reviewed and considered for this CAP included excavation, air sparging, and in-situ soil vapor extraction. Based on the hydrogeology of the site and depth of soil contamination, it appears that 24-hr air sparge events conducted once a month will enhance the remediation of the soil contamination.

Data from the previous MEME events performed at the site were utilized to evaluate expected vacuum radius of influence (ROI). The data indicates that a vacuum ROI of approximately 15 feet once the recovery wells are installed to a deeper depth and an average airflow rate of 20 standard cubic feet per minute (scfm) per extraction well can be expected utilizing an applied vacuum of 9.0 in/Hg or greater. The proposed recovery well locations are illustrated in the site figures located in Appendix B.

Five 4-inch diameter wells will be used as extraction wells. CDG recommends that each of the four existing recovery wells (RW-1 through RW-4) be deepened from 15 feet bgs to 30 feet bgs and to install one additional recovery well (RW-5) to 30 feet bgs. Each of the recovery wells will be plumbed to the MPE system with 2-inch diameter PVC below grade piping. Both vapor and liquid phase hydrocarbons will be removed by applying the vacuum generated by the oil-sealed LRVP to a 1.0-inch diameter Spiralite® drop tube installed in each recovery well. Each well will be plumbed back to the system using

individual recovery piping. The locations of the recovery wells and piping are depicted in Figures in Appendix B.

Four 1-inch diameter wells will be used as air sparge wells. CDG recommends to install four air sparge wells (AS-1 through AS-4) to 40 feet bgs. Compressed air will be injected into the proposed AS points simultaneously with the MPE system operation on a monthly basis for 24 hours at a time. The pulsing action of the air sparge wells will aid in the reduction of COC concentrations within the source area without solidifying the subsurface.

GROUNDWATER REMEDIATION

Based on a review of the historical groundwater elevation data, one distinct water bearing unit exists beneath the site. This unit generally appears to be present under confined conditions. The observed depths to groundwater beneath the site average approximately 10.34 feet below ground level. The depth to groundwater has generally exhibited only small fluctuations between gauging events throughout the sampling history of the site.

Based on previous monitoring well gauging and sampling events conducted at the site, the direction of the shallow groundwater flow is predominantly to the north. A potentiometric surface map from the December 2018 sampling event is presented in Figures (Appendix B).

The proposed recovery well network will consist of five wells. Each recovery well will be connected to the MPE system via underground piping consisting of 2-inch ID Schedule 40 PVC pipe. A one-inch diameter flexible Spiralite® drop tube, extending to approximately one foot below the static groundwater level, will be installed in each extraction well to accomplish soil vapor and groundwater recovery. A dedicated flow line will be constructed to each well and will be terminated at the system within a well control gallery consisting of a ball-valve, vacuum gage, and site glass to allow for control and monitoring of the flow from each well. The proposed piping network, the well control gallery, and a typical recovery well diagram is illustrated in Figures in Appendix B.

Four 1-inch diameter wells will be used as air sparge wells. CDG recommends to install four air sparge wells (AS-1 through AS-4) to 40 feet bgs. Compressed air will be injected into the proposed AS points simultaneously with the MPE system operation on a monthly basis for 24 hours at a time.

Recovered fluids will flow from the well manifold to the air-water separator unit (AWS) where vapor-phase will be separated from groundwater. Groundwater will be transferred from the AWS to the oil-water separator (OWS) for the removal of any phase-separated hydrocarbons. A totalizing flow meter will be placed in line to record the volume of groundwater recovered.

GROUNDWATER TREATMENT

The selection of an appropriate groundwater treatment system was based on the expected flow rate of the extraction system, the influent contaminant concentrations of the groundwater, and discharge limits. Based on the available data, it appears that air stripping is the most feasible and cost-effective method for treatment of recovered groundwater.

The treated effluent will be discharged under the terms of the general National Pollutant Discharge Elimination System (NPDES) permit to the drainage ditch located along the southern right-of-way of the intersection of Highway 29 and Rockhole Bridge Road. A 2-inch diameter discharge line will be installed from the system compound to the drainage ditch. The discharge will be sampled monthly and the discharge monitoring reports (DMRs) submitted to ADEM in accordance with the permit requirements.

SITE PREPERATION ACTIVITIES

Site preparation activities will be conducted prior to system arrival at the property and will include the following activities.

LOCAL PERMITTING

CDG and any subcontractors engaged to work on this project will obtain all necessary permits from the City of Andalusia for the required construction activities. The anticipated cost for obtaining these permits has been factored into the proposed cost for the system installation phase of this project.

SYSTEM INSTALLATION AND OPTIMIZATION ACTIVITIES

The MPE system, and all ancillary equipment, will be delivered to the site within 90 days of the approval from ADEM. A professional geologist or engineer experienced in MPE system operation and an environmental technician will be on site to observe installation and optimization activities.

EQUIPMENT REVIEW

An equipment manual and troubleshooting guide will be provided to CDG by the equipment supplier prior to system arrival. Appropriate CDG personnel will familiarize themselves with the manual before starting and operating equipment.

SYSTEM OFFLOADING AND PLACEMENT

The system and all ancillary equipment will be transported on a trailer and offloaded with a crane. The system will be placed on a concrete slab constructed in the approximate location illustrated in the figures in Appendix B. Above ground system components will be enclosed within a wooden security fence complete with locking gates in an effort to prevent unauthorized personnel from entering the equipment compound. Additionally, the 24-hr air sparge events will be conducted monthly using a mobile air sparge unit.

UTILITY CONNECTIONS

The electrical and telephone connections will be completed by CDG's subcontractor in accordance with local requirements.

INITIAL START-UP AND OPTIMIZATION

CDG will notify the ADEM project manager within a minimum of 15 days prior to initiating start-up activities.

Once all connections have been made, each electric motor will be visually tested prior to initiating long-term operation. This will encompass momentarily operating each motor individually and verifying proper rotation.

The MPE system will be temporarily operated for a period of four to eight hours. During this time, system components will be checked and monitored to ensure the system is operating as expected. Alarm conditions will be manually simulated to verify that automatic shutdown operations will occur if system upset conditions occur.

The following observations will be monitored and analyzed as appropriate:

- Extraction Rate (air and liquids)
- Vacuum at the LRVP and at each extraction well
- Influent and effluent vapor concentrations (PID measurements)

Prior to shutting down system operations, samples will be collected as follows:

- Influent water sample from the sampling port prior to the AWS
- Effluent water sample at discharge point from the AS
- Influent air sample at the inlet of the LRVP

Water samples will be submitted under chain-of-custody protocol to the CDG laboratory in Andalusia, AL to be analyzed for BTEX/MTBE/Naphthalene, and Oil and Grease in accordance with EPA methods 8260B and 1664, respectively. Air samples will be transported under chain-of-custody protocol to CDG laboratory and analyzed for BTEX/MTBE in accordance with a modified version of EPA Method 18. A rapid turnaround time will be requested in an effort to expedite the permanent startup of the system.

In the event that a discharge limit is exceeded, the data will be analyzed and modifications to the system will be performed as needed. The start-up/optimization process will be repeated, and additional samples will be collected in an effort to obtain satisfactory discharge limits prior to permanent start-up of the system.

PERMANENT START-UP

The system will be permanently started once it is observed that the treatment system is capable of producing effluent discharge within the required limits. Once permanent operations are initiated, CDG personnel will remain on site for a minimum of one day to monitor system performance. Modifications will be made as necessary in an effort to enhance system operations. Operation parameters monitored during system testing

activities will be evaluated further during this time. For one 24-hr period a month, the air sparge wells will be connected to a mobile air sparge unit to enhance the hydrocarbon recovery.

SYSTEM OPERATION AND MAINTENANCE

Upon the completion of the initial optimization, CDG will implement an Operation and Maintenance (O&M) program to adequately monitor system performance.

OPERATION AND MAINTENANCE ACTIVITIES

Full scale operations will include O&M of the system and continuing optimization of system performance. Scheduled visits will be made to maintain the system components and ensure the system is operating at the greatest efficiency possible. Minor system components will be regularly inspected and replaced as required. All pumps within the unit will be serviced on a routine basis. If a shutdown of the system occurs, CDG will provide personnel to repair the system within 36 hours of receiving notification of shutdown. The remote start capability of the telemetry system installed in the unit may be utilized to start-up the system following certain shutdown conditions such as interruptions of electrical service. The telemetry can also be utilized to remotely shut-down the system should it become necessary due to an equipment failure or disruption.

Typical O&M activities will include the following:

- Visual inspection of the treatment system components (including pipe connections and bolted flange plates for potential leaks due to vibration)
- Cleaning, inspection, and testing of float switches and conductivity probes
- Monitoring of vacuum levels at designated points in the system
- Monitoring pressure levels on the exhaust side of the LVRP
- Removal of silt and sludge build up from the knockout tank, filtration system, and other system components
- Removal of air stripper foulants
- Monitor destruction efficiency of the granular activated carbon once employed for off- gas treatment
- Treated groundwater effluent sample collection
- Monitor groundwater levels

In order to ensure the system is working properly, during the first quarter of operation, technicians will visit the site weekly. At least twice per month, routine O&M activities as described above will also be conducted. System data, including total operational system hours, temperatures, total system vacuum, individual recovery well vacuums, flow, and water discharge will be recorded for inclusion in quarterly reports to ADEM.

All activities will be performed in accordance with the Quality Assurance/Quality Control Plan and Site Health and Safety Plan included in Appendices G and H, respectively.

QUARTERLY SAMPLING

As part of O&M activities, a groundwater monitoring event will be conducted once per quarter to evaluate the effectiveness of the remediation system. CDG recommends that each of the wells be sampled during the quarterly groundwater monitoring activities.

Prior to sample collection, the depth to groundwater will be measured using an oil/water interface probe. Each monitoring and recovery well will be purged using clean plastic disposable bailers. Approximately three well volumes will be removed from each well. The purge water will be processed through the MPE system.

Samples will be collected using clean plastic disposable bailers and shipped in laboratory supplied 40-mL vials preserved with hydrochloric acid (HCl). The samples will be placed on ice and transported, under chain-of-custody protocol, to the CDG laboratory in Andalusia, Alabama for analysis of BTEX/MTBE and Naphthalene in accordance with EPA method 8260B.

Groundwater effluent samples will be collected monthly. Effluent samples will be collected from a sample port downstream of the air-stripper treatment unit. Effluent samples will be collected in laboratory-supplied 40-mL vials preserved with HCl. Oil and Grease samples will be collected in one liter glass jars preserved with sulfuric acid (H₂SO₄). These samples will be packed on ice and transported, under chain-of-custody protocol, to the CDG laboratory in Andalusia, AL for analysis for total BTEX\MTBE, pH, and Oil and Grease in accordance with EPA Methods 8260B, 150.1, and 1664.

Vapor influent and effluent from the system will be monitored bi-weekly using a photo-ionization detector (PID) to evaluate the efficiency of the off-gas treatment. An influent vapor sample will be collected once per quarter and shipped, under chain-of-custody protocol, to the CDG Laboratory in Andalusia, AL for analysis for BTEX/MTBE in accordance with a modified EPA Method TO-18. All sampling shall be completed in accordance with the procedures set forth in the Quality Assurance/Quality Control Plan (Appendix G).

Quarterly Corrective Action System Effectiveness Monitoring Reports (CASEMR) will be completed in accordance with ADEM requirements. The reports will include a summary of all current and historic sample analysis data with corresponding figures and tables, summary of gallons of treated groundwater to date, and a discussion of system effectiveness/run time. The reports will include recommendations for adjustments to the system, if any, and an estimate of the time required for completion of remediation activities.

PROPOSED REPORTING REQUIREMENTS

CDG will submit reports in accordance with ADEM requirements. These reports will include the following:

REPORTING OF CORRECTIVE ACTION IMPLEMENTATION

This report will be submitted within 120 days of CAP approval. This report will include as-built drawings of the system, analytical results of the first sampling event and copies of all permits issued to date.

START-UP NOTIFICATION

This report will provide start-up notification within 15 days of corrective action start-up.

REPORTING OF CORRECTIVE ACTION EFFECTIVENESS

CDG will submit corrective action system effectiveness monitoring reports (CASEMR) on a quarterly basis. The CASEMR will summarize field activities and the progress of the system towards meeting the ACALs for the site. The following data will be included in each report: groundwater elevations, a calculation of the volume of vapor-phase

hydrocarbons removed, volume of groundwater treated, and groundwater analytical results. The reports will also include system effectiveness and recommendations concerning any additional modifications deemed necessary.

REPORTING OF AIR INFLUENT CONCENTRATIONS AND FLOW RATES

CDG will monitor the pretreated air influent concentration and air flow rates monthly. As per the ADEM Air Division requirements, semi-annual reports will be submitted.

REQUEST FOR CLOSURE EVALUATION OF CORRECTIVE ACTION

The remediation goals for this project include reduction of dissolved-phase hydrocarbon concentrations to levels below the ACALs established during the ARBCA. This report will include data that shows that remediation goals have been achieved and request No Further Action (NFA) status. Methods for removal of equipment and abandonment of monitoring and recovery wells will be described.

SITE CLOSURE REPORT

This report will describe in detail the closure of the site and abandonment of all monitoring and recovery wells.

SCHEDULE OF IMPLEMENTATION

Task	Time Following CAP Approval
Order System Equipment	10 days
Site Preparation Activities	30 Days
Install System Components	120 days
Initial Start-Up / Optimization	150 days
Quarterly Monitoring of system and evaluation of results with recommendations for system enhancements, if necessary	3 Years
Removal of system equipment; well abandonment; completion and submittal of final report	5 Years

ESTIMATED COST

All costs associated with the system purchase, system installation, and the first four quarters of system O&M are presented on the ATTF Cost Proposals CP-16 through CP-21 which accompany the submittal of this plan.



Engineering. Environmental. Answers.

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TABLES

APPENDIX A

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	MW-1				
INSTALLATION DATE:	10/11/16	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	327.93	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/13/16	3.6200	18.5000	35.6000	4.7900	22.8000	81.6900	1.6400
01/31/17	1.6352	18.1088	35.6715	3.1370	16.2213	73.1386	0.7345
07/12/17	1.5876	15.3749	30.7019	2.9036	15.5063	64.4867	0.6533
10/30/17	1.2985	9.9896	23.1329	2.9880	14.6699	50.7804	0.8997
01/05/18	0.9189	11.7117	32.5190	3.3157	18.8796	66.4260	0.5458
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	1.1050	12.7712	27.9996	3.0743	16.1683	60.0134	0.7642
08/23/18	1.1576	19.1730	39.0872	3.6410	19.2198	81.1209	0.8441
12/14/18	0.0987	1.1484	1.1661	0.0314	1.1953	3.5412	0.0457
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	MW-2						
INSTALLATION DATE:	10/11/16	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	327.71	WELL TYPE:	II	DIAMETER (IN):	2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)											

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/13/16	1.3900	8.0700	23.1000	3.0600	16.1000	50.3300	0.7910
01/31/17	2.7112	9.0499	19.5514	2.7706	13.6358	45.0077	0.5853
07/12/17	0.6080	5.2729	14.4676	2.0257	10.8236	32.5898	0.3934
10/30/17	0.2821	4.3378	13.8256	2.2298	10.8421	31.2352	0.5795
01/05/18	0.2880	5.4748	18.3632	2.3995	13.6537	39.8912	0.4366
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.5412	5.5169	16.5088	2.0692	11.0343	35.1291	0.4864
08/23/18	1.8654	12.8725	30.4890	3.4764	17.2433	64.0813	0.7840
12/14/18	1.4500	8.5261	19.6772	2.1268	11.0893	41.4194	0.3964
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-3		
INSTALLATION DATE:	10/11/16	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	328.00	WELL TYPE:	II
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/13/16	0.5270	9.4700	38.5000	5.8600	29.3000	83.1300	1.6000
01/31/17	1.0283	12.1212	31.5385	3.7712	19.2105	66.6414	0.7182
07/12/17	0.5629	8.2098	23.9752	2.7777	15.0998	50.0625	0.6727
10/30/17	0.5171	7.1305	22.8503	3.2309	16.7043	49.9160	0.8145
01/05/18	0.3902	9.0397	37.6421	3.6825	21.1467	71.5110	0.5073
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.3548	10.6752	30.6841	3.5049	18.6893	63.5535	0.7048
08/23/18	0.5892	13.3759	37.8960	3.8614	19.8161	74.9494	0.7885
12/14/18	<0.2500	2.6189	8.8201	0.8474	9.5171	21.8034	0.4946
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-5		
INSTALLATION DATE:	01/24/17	WELL DEPTH (FT BTOC):	20.1	SCREEN INTERVAL (FT):	5.1 - 20.1	CASING ELEV (FT ABOVE MSL):	328.28	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	<0.0010	0.0014	0.0291	0.0052	0.0344	0.0701	<0.0010
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0014	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.342	0.0855	17.1	12	171	-	0.342
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:		Carolina Grocery		UST NUMBER:		16-09-01		WELL ID:		MW-6		
INSTALLATION DATE:		01/24/17		WELL DEPTH (FT BTOC):		20.0		SCREEN INTERVAL (FT):		5.0 - 20.0		
						CASING ELEV (FT ABOVE MSL):		329.00		WELL TYPE: DIAMETER (IN):		II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)												

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	<0.2000	0.4067	12.0598	2.6179	14.7400	29.8244	0.7725
07/12/17	<0.0500	0.0866	3.2057	0.9311	5.9300	10.1534	0.3119
10/30/17	<0.0100	0.0129	0.4319	0.3172	1.5149	2.2768	0.1113
01/05/18	<0.0100	0.0224	0.9791	0.6657	3.8901	5.5573	0.2932
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0100	0.0196	0.3946	0.3834	2.0519	2.8494	0.1631
08/23/18	<0.0100	<0.0100	0.2942	0.2783	1.6340	2.2065	0.0877
12/14/18	<0.0100	0.0129	0.2130	0.4366	1.6330	2.2954	0.1586
GRP SSTLs:	0.172	0.0429	8.58	6	85.8	-	0.172
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-7		
INSTALLATION DATE:	01/24/17	WELL DEPTH (FT BTOC):	19.9	SCREEN INTERVAL (FT):	4.9 - 19.9	CASING ELEV (FT ABOVE MSL):	328.75	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	<0.2000	0.2325	7.5323	1.7101	12.2966	21.7715	0.5060
07/12/17	<0.0500	<0.0500	1.1193	0.3259	6.5915	8.0367	0.3834
10/30/17	<0.0500	<0.0500	0.3186	0.2793	4.0710	4.6689	0.3870
01/05/18	<0.0200	0.0230	0.5128	0.6858	8.9920	10.2136	0.8211
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0500	<0.0500	0.4056	0.5788	8.0457	9.0300	0.5064
08/23/18	<0.0500	<0.0500	0.3789	0.6621	6.8751	7.9161	0.5347
12/14/18	<0.0500	<0.0500	0.1650	0.2299	4.3009	4.6957	0.3029
GRP SSTLs:	0.255	0.0637	12.7	8.91	127	-	0.255
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	MW-8
INSTALLATION DATE:	01/23/17	WELL DEPTH (FT BTOC):	20.0	SCREEN INTERVAL (FT):	5.0 - 20.0
		CASING ELEV (FT ABOVE MSL):	327.99	WELL TYPE:	II
				DIAMETER (IN):	2

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	3.6799	12.6540	31.7360	3.3957	17.6473	65.4330	0.7420
07/12/17	0.8295	3.4195	11.2832	1.4456	8.1817	24.3300	0.3056
10/30/17	0.1766	2.0124	7.8775	1.3435	7.3218	18.5552	0.3366
01/05/18	0.1181	4.1897	18.4052	3.0940	16.1176	41.8065	0.7144
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.1526	3.4977	15.0021	2.7532	13.7253	34.9783	0.7074
08/23/18	0.2527	6.2165	20.2075	3.3547	16.4465	46.2253	0.9070
12/14/18	<0.0010	<0.0010	0.0032	0.0011	0.0083	0.0125	0.0011
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-9		
INSTALLATION DATE:	01/23/17	WELL DEPTH (FT BTOC):	19.4	SCREEN INTERVAL (FT):	4.4 - 19.4	CASING ELEV (FT ABOVE MSL):	326.93	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	<0.0010	<0.0010	0.0057	0.0010	0.0071	0.0138	<0.0010
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	0.0011	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.228	0.0571	11.4	8	114	-	0.228
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-10		
INSTALLATION DATE:	01/23/17	WELL DEPTH (FT BTOC):	19.1	SCREEN INTERVAL (FT):	4.1 - 19.1	CASING ELEV (FT ABOVE MSL):	326.60	WELL TYPE:	II
								DIAMETER (IN):	2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	0.0014	0.0101	0.0140	0.0019	0.0133	0.0393	0.0014
07/12/17	0.0016	0.0020	<0.0010	<0.0010	<0.0010	0.0020	<0.0010
10/30/17	<0.0010	0.0019	<0.0010	<0.0010	<0.0010	0.0019	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	0.0011
08/23/18	<0.0010	0.0094	<0.0010	0.0011	<0.0010	0.0105	0.0100
12/14/18	<0.0010	0.0104	0.0021	<0.0010	0.0035	0.0159	0.0052
GRP SSTLs:	0.115	0.0288	5.76	4.03	57.6	-	0.115
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-11		
INSTALLATION DATE:	01/23/17	WELL DEPTH (FT BTOC):	19.8	SCREEN INTERVAL (FT):	4.8 - 19.8	CASING ELEV (FT ABOVE MSL):	326.96	WELL TYPE:	II
								DIAMETER (IN):	2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	1.4528	3.1254	20.7066	2.2092	17.3228	43.3640	0.6046
07/12/17	0.1114	0.6632	7.7918	1.4105	15.9526	25.8181	0.4329
10/30/17	0.1988	1.1779	14.8564	2.0904	17.1428	35.2674	0.5489
01/05/18	0.3556	2.1565	25.2735	2.5091	23.3812	53.3203	0.6827
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.2627	1.7219	19.3645	2.3634	21.1879	44.6378	0.8807
08/23/18	0.3315	2.4855	25.1077	3.1294	23.5548	54.2775	1.0476
12/14/18	0.1216	1.1102	13.0871	1.7087	15.4324	31.3384	0.7027
GRP SSTLs:	0.19	0.0475	9.5	6.65	95	-	0.19
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-12		
INSTALLATION DATE:	07/10/17	WELL DEPTH (FT BTOC):	20.1	SCREEN INTERVAL (FT):	5.1 - 20.1	CASING ELEV (FT ABOVE MSL):	323.62	WELL TYPE: DIAMETER (IN):	II 2

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	0.0035	0.0087	0.0013	<0.0010	0.0011	0.0111	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.0204	0.0199	<0.0010	0.0022	0.0035	0.0256	0.0094
08/23/18	0.0417	0.0587	<0.0010	<0.0010	0.0224	0.0812	0.0226
12/14/18	0.0027	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.0471	0.0118	2.36	1.65	23.6	-	0.0471
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-13		
INSTALLATION DATE:	07/11/17	WELL DEPTH (FT BTOC):	19.0	SCREEN INTERVAL (FT):	4.0 - 19.0	CASING ELEV (FT ABOVE MSL):	326.06	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.129	0.0322	6.44	4.51	64.4	-	0.129
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	MW-14				
INSTALLATION DATE:	07/10/17	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	327.16	WELL TYPE:	II
								DIAMETER (IN):	2

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	0.0015	0.0015	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.0516	0.0129	2.58	1.81	25.8	-	0.0516
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-15		
INSTALLATION DATE:	07/10/17	WELL DEPTH (FT BTOC):	20.8	SCREEN INTERVAL (FT):	5.8 - 20.8	CASING ELEV (FT ABOVE MSL):	329.92	WELL TYPE: DIAMETER (IN):	II 2
<small>Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)</small>									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	0.0106	0.0023	0.1713	0.0064	0.1906	0.0877
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	0.0068	0.0068	0.0029
01/05/18	<0.0010	0.0638	0.0132	0.8099	0.4766	1.3635	0.8084
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	0.0083	0.0014	0.0288	0.0307	0.0691	0.0927
08/23/18	<0.0010	0.0446	0.0017	0.1925	0.0619	0.3008	0.2532
12/14/18	<0.0010	0.0022	<0.0010	<0.0010	0.0037	0.0059	0.0017
GRP SSTLs:	0.0439	0.011	2.19	1.54	21.9	-	0.0439
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-16		
INSTALLATION DATE:	07/11/17	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	328.58	WELL TYPE:	II
								DIAMETER (IN):	2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	0.0019
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	0.0031
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.0681	0.017	3.4	2.38	34	-	0.0681
Inhalation SSTLs:	1,060	0.83	50.6	135	41.9	-	1.79

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-17		
INSTALLATION DATE:	07/11/17	WELL DEPTH (FT BTOC):	20.4	SCREEN INTERVAL (FT):	5.4 - 20.4	CASING ELEV (FT ABOVE MSL):	326.70	WELL TYPE: DIAMETER (IN):	II 2

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	0.0016	<0.0010	0.0020	0.0035	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.104	0.0259	5.18	3.62	51.8	-	0.104
Inhalation SSTLs:	1,060	0.83	50.6	135	41.9	-	1.79

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	MW-18		
INSTALLATION DATE:	07/10/17	WELL DEPTH (FT BTOC):	20.1	SCREEN INTERVAL (FT):	5.1 - 20.1	CASING ELEV (FT ABOVE MSL):	325.69	WELL TYPE: DIAMETER (IN):	II 2
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
GRP SSTLs:	0.0605	0.0151	3.02	2.12	30.2	-	0.0605
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	VW-1
INSTALLATION DATE:	01/25/17	WELL DEPTH (FT BTOC):	45.9	SCREEN INTERVAL (FT):	40.9 - 45.9
				CASING ELEV (FT ABOVE MSL):	328.39
				WELL TYPE:	III
				DIAMETER (IN):	2

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/31/17	0.0723	1.6041	8.4040	1.5964	8.3931	19.9976	0.5437
07/12/17	0.0503	0.9565	4.1186	0.1759	3.9728	9.2238	0.2403
10/30/17	<0.0500	0.6374	3.1859	0.2844	3.7847	7.8924	0.2391
01/05/18	0.0317	0.4496	3.1597	0.1769	4.2208	8.0070	0.2139
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	<0.0500	0.2820	1.3075	0.0509	3.8220	5.4623	0.1704
08/23/18	0.0258	0.2439	1.2765	0.1131	3.1662	4.7997	0.1565
12/14/18	0.0216	0.1876	0.9379	0.0467	2.6193	3.7916	0.0860
GRP SSTLs:	0.482	0.12	24.1	16.9	175	-	0.482
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	RW-1		
INSTALLATION DATE:	10/26/17	WELL DEPTH (FT BTOC):	15.3	SCREEN INTERVAL (FT):	5.3 - 15.3	CASING ELEV (FT ABOVE MSL):	327.86	WELL TYPE:	II
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)									

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/30/17	1.1362	5.9894	9.9751	1.6753	6.5437	24.1835	0.4076
01/05/18	0.1821	0.8886	0.0795	0.0252	0.3932	1.3865	0.0406
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.8513	6.0824	12.1287	0.8812	7.3615	26.4538	0.2861
08/23/18	0.5081	3.9055	3.2922	0.8190	3.5877	11.6044	0.2186
12/14/18	0.4350	11.7309	33.9277	2.4673	13.2420	61.3679	1.0111
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table									
SITE NAME:	Carolina Grocery			UST NUMBER:	16-09-01	WELL ID:	RW-2		
INSTALLATION DATE:	10/26/17	WELL DEPTH (FT BTOC):	15.3	SCREEN INTERVAL (FT):	5.3 - 15.3	CASING ELEV (FT ABOVE MSL):	327.63	WELL TYPE: DIAMETER (IN):	II 4

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/30/17	0.0012	0.1681	0.0408	0.0683	0.0943	0.3715	<0.0010
01/05/18	<0.0010	0.0309	0.0040	0.0080	0.0112	0.0541	<0.0010
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.0289	0.5842	0.3639	0.2264	0.5337	1.7082	<0.0200
08/23/18	0.0340	0.2847	0.0377	0.1066	0.1177	0.5466	0.0071
12/14/18	0.0618	0.1853	0.0293	0.0292	0.0817	0.3255	0.0036
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	RW-3				
INSTALLATION DATE:	10/26/17	WELL DEPTH (FT BTOC):	15.3	SCREEN INTERVAL (FT):	5.3 - 15.3	CASING ELEV (FT ABOVE MSL):	327.98	WELL TYPE:	II
								DIAMETER (IN):	4

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit); CA (Corrective Action); NS (Not Sampled)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
10/30/17	0.8923	8.0215	32.6936	3.3532	20.4781	64.5464	0.7797
01/05/18	<0.2500	4.2357	28.1244	3.4500	22.6360	58.4461	0.5214
01/31/18	CORRECTIVE ACTION: MEME EVENTS STARTED						
04/17/18	0.6177	6.1406	27.1716	2.7356	18.4939	54.5418	0.8299
08/23/18	NOT SAMPLED (DRY)						
12/14/18	0.0515	0.1682	0.5597	0.0679	1.2438	2.0396	0.0531
GRP SSTLs:	0.483	0.121	24.1	16.9	175	-	0.483
Inhalation SSTLs:	11,400	5.44	526	169	175	-	19.3

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	Day Private Well
INSTALLATION DATE:	WELL DEPTH (FT BTOC):	SCREEN INTERVAL (FT):		CASING ELEV (FT ABOVE MSL):	WELL TYPE: DIAMETER (IN):

Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit)

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
07/12/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
10/30/17	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
ISLs:	0.02	0.005	1	0.7	10	-	0.02

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	Bonds Private Well		
INSTALLATION DATE:	WELL DEPTH (FT BTOC):	SCREEN INTERVAL (FT):		CASING ELEV (FT ABOVE MSL):		WELL TYPE:	
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit)							

GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
01/05/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
ISLs:	0.02	0.005	1	0.7	10	-	0.02

Monitoring Point Data Summary Table

SITE NAME:	Carolina Grocery	UST NUMBER:	16-09-01	WELL ID:	Carbon Effluent	
INSTALLATION DATE:	WELL DEPTH (FT BTOC):	SCREEN INTERVAL (FT):		CASING ELEV (FT ABOVE MSL):		WELL TYPE: DIAMETER (IN):
Notes: BTOC (Below Top of Casing); MSL (Mean Sea Level); BDL (Below Detection Limit)						

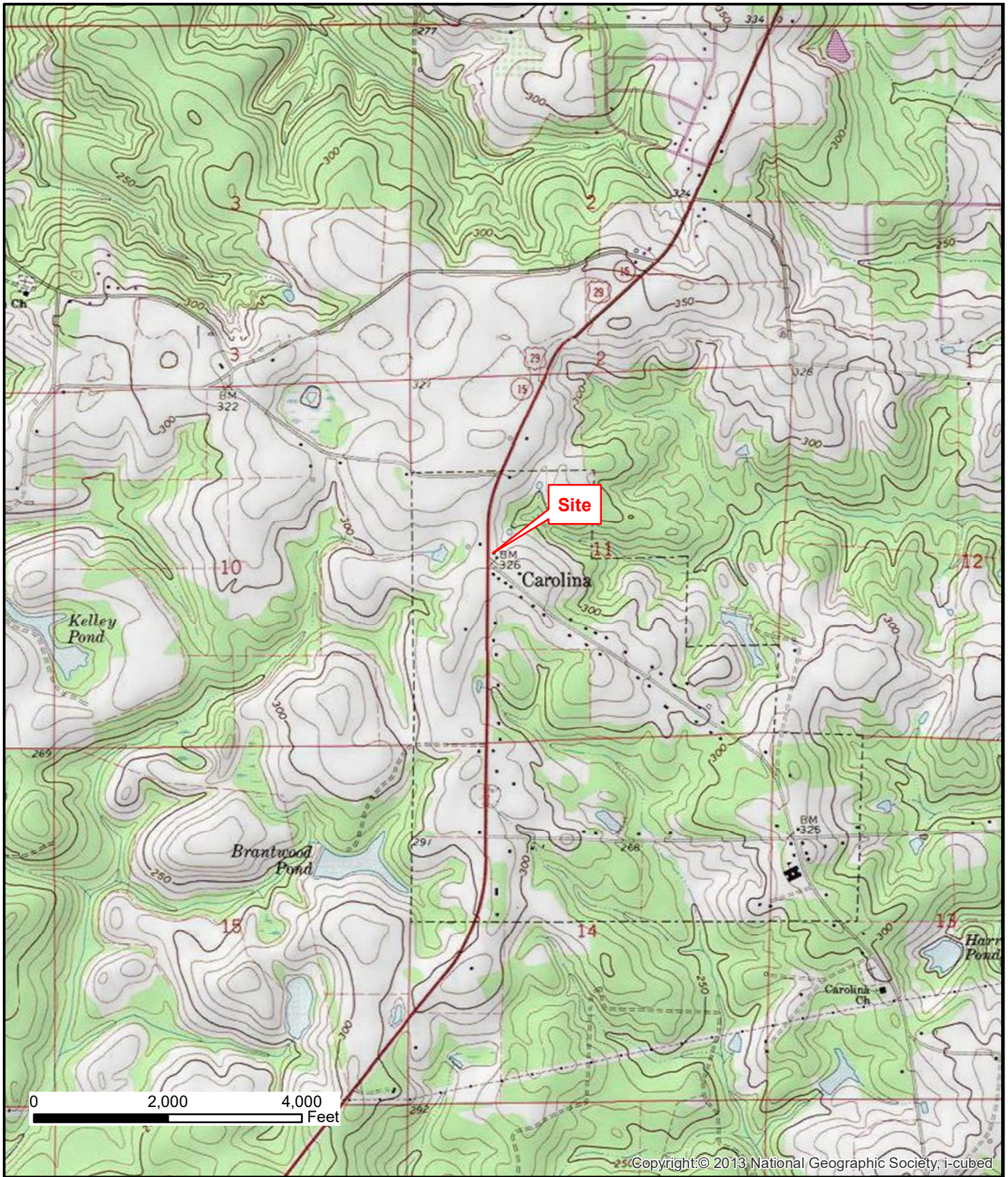
GROUNDWATER ANALYTICAL SUMMARY (mg/L)							
SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
04/17/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
08/23/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
12/14/18	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	BDL	<0.0010
ISLs:	0.02	0.005	1	0.7	10	-	0.02



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FIGURES

APPENDIX B



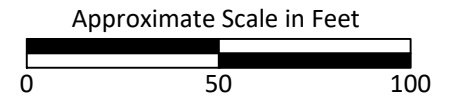
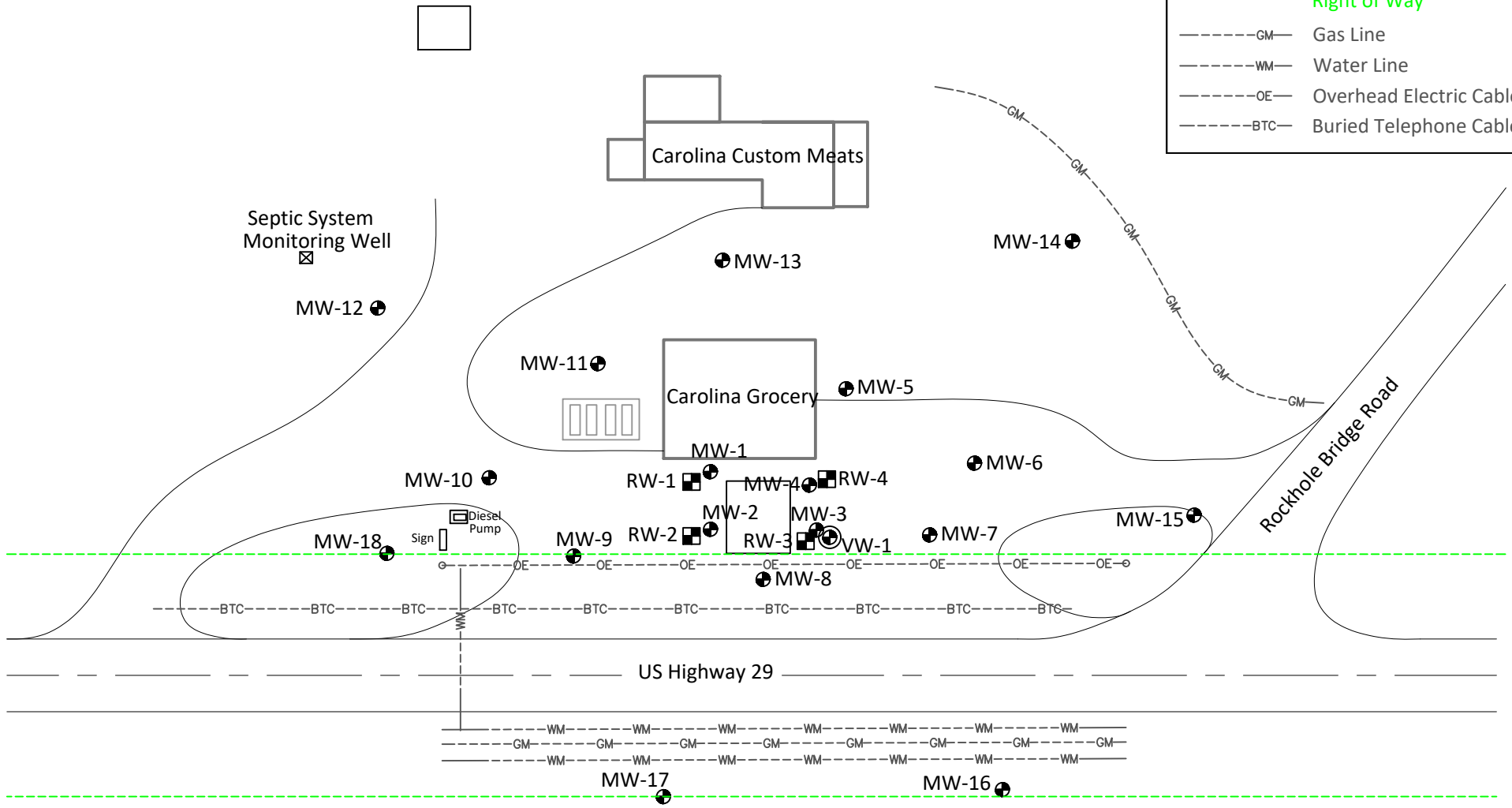
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Site Location USGS Topographic Map

Carolina Grocery
14072 US Highway 29 S
Carolina, Covington County, AL

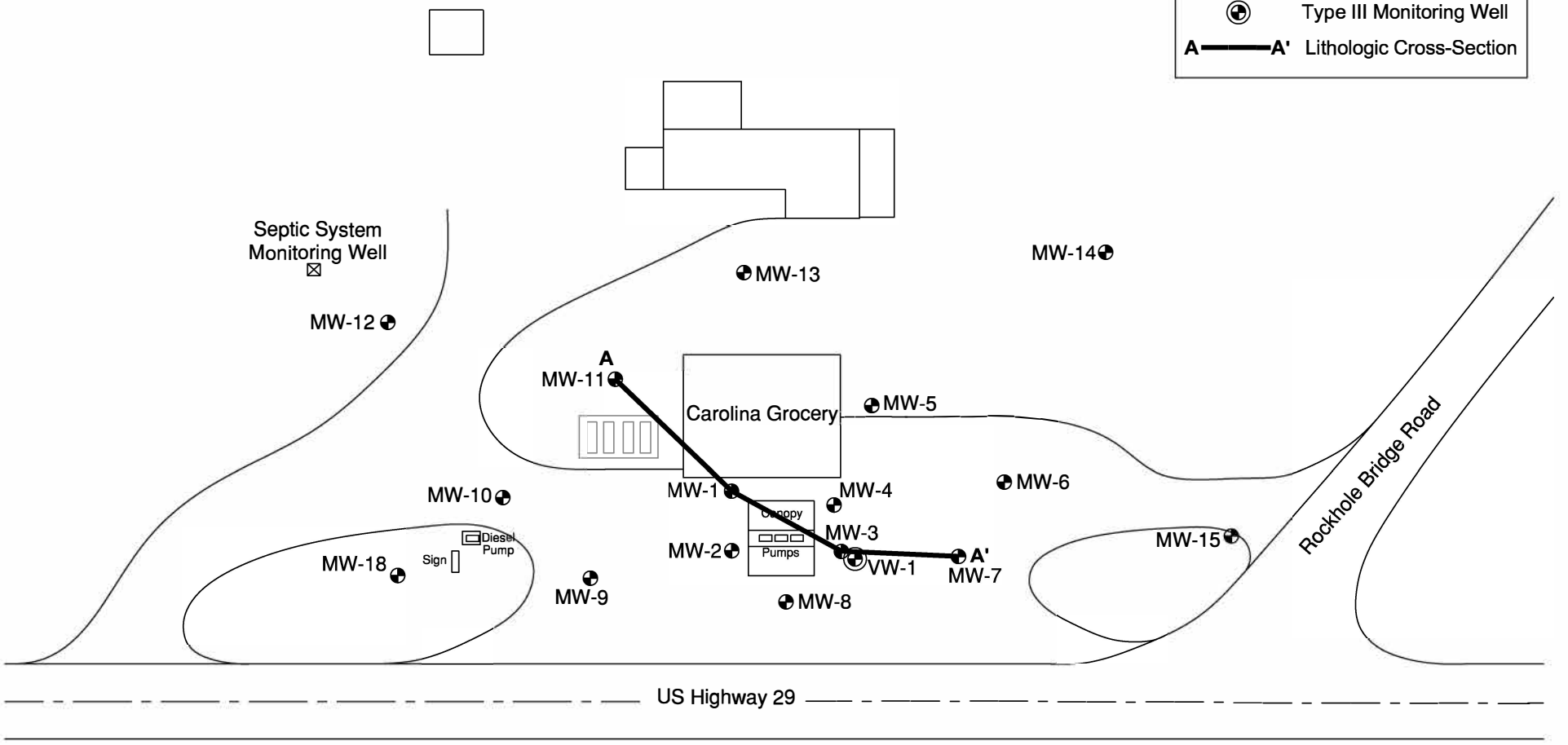


LEGEND	
	Type II Monitoring Well
	Type III Monitoring Well
	Recovery Well
	Right of Way
	Gas Line
	Water Line
	Overhead Electric Cable
	Buried Telephone Cable



LEGEND

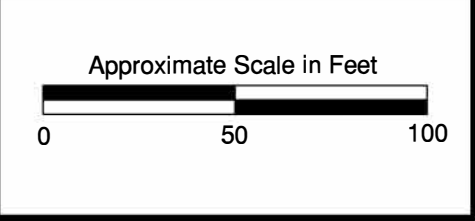
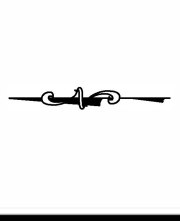
- ⊕ Type II Monitoring Well
- ⊕ Type III Monitoring Well
- A—A' Lithologic Cross-Section

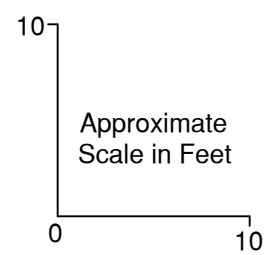
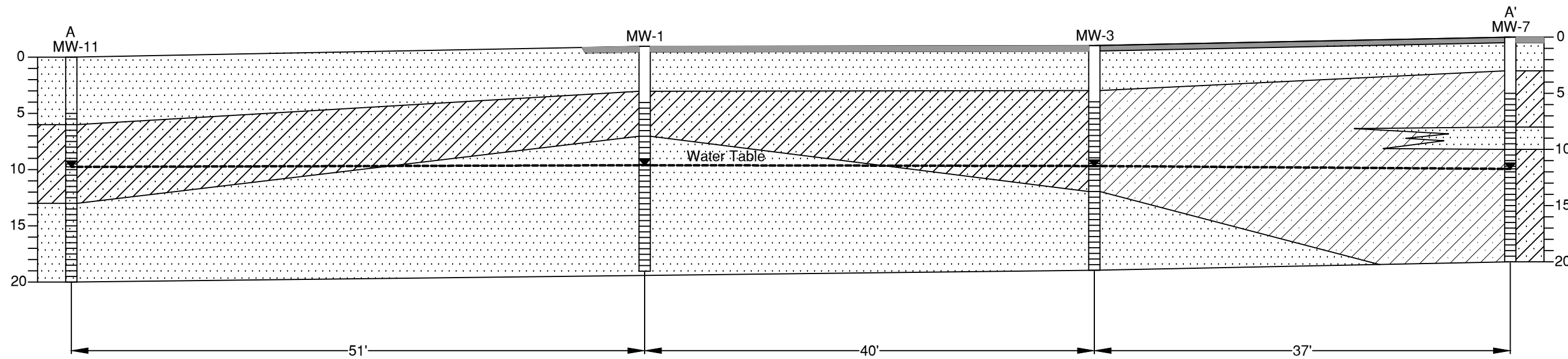


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Lithologic Cross-Section Location Map







Carolina Grocery
14072 US Highway 29 S
Carolina, Covington County, AL
















Legend

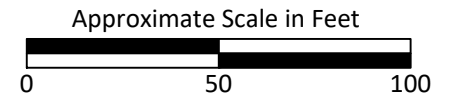
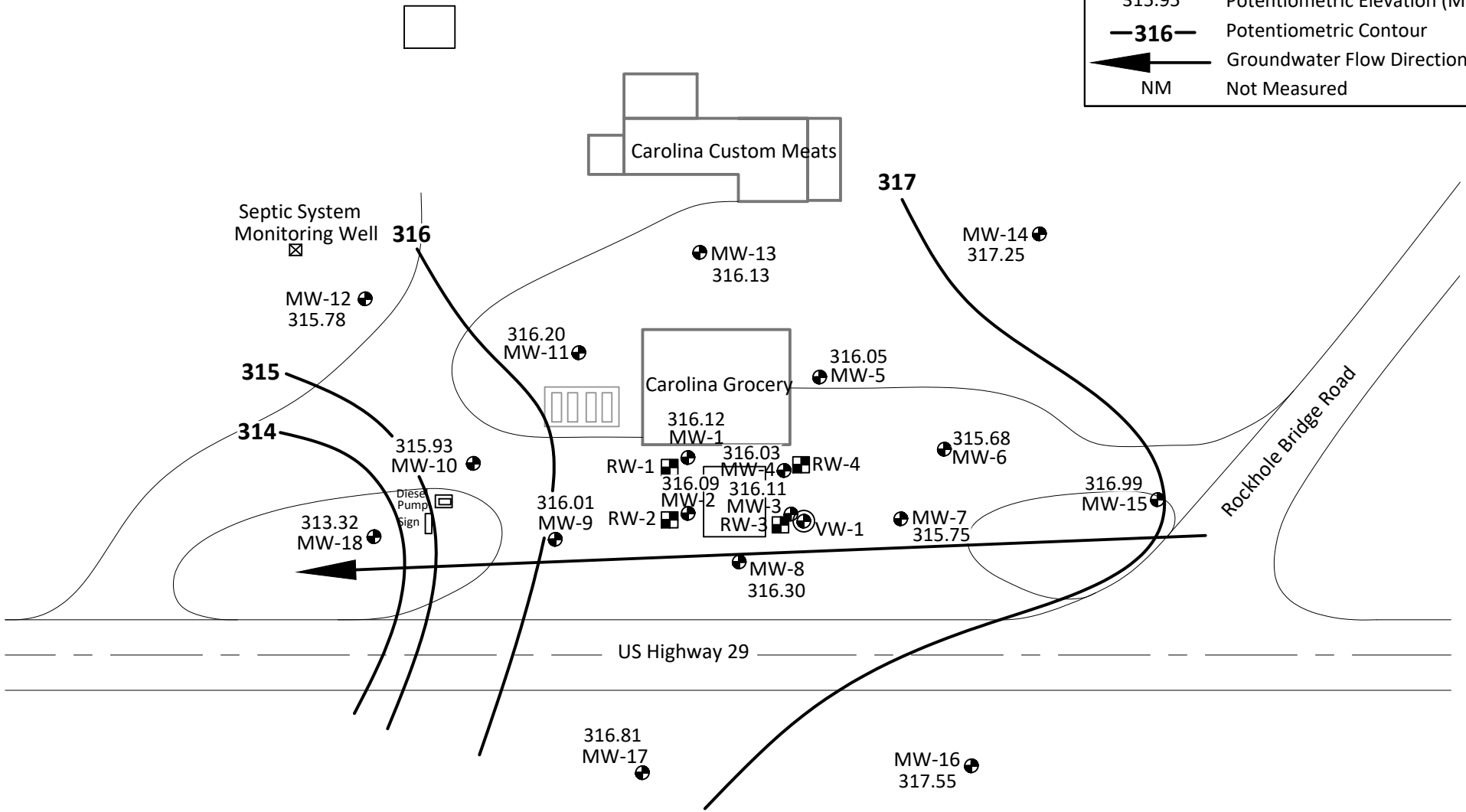
	Clayey Sand		Screened Interval
	Sand		Groundwater Level
	Asphalt		

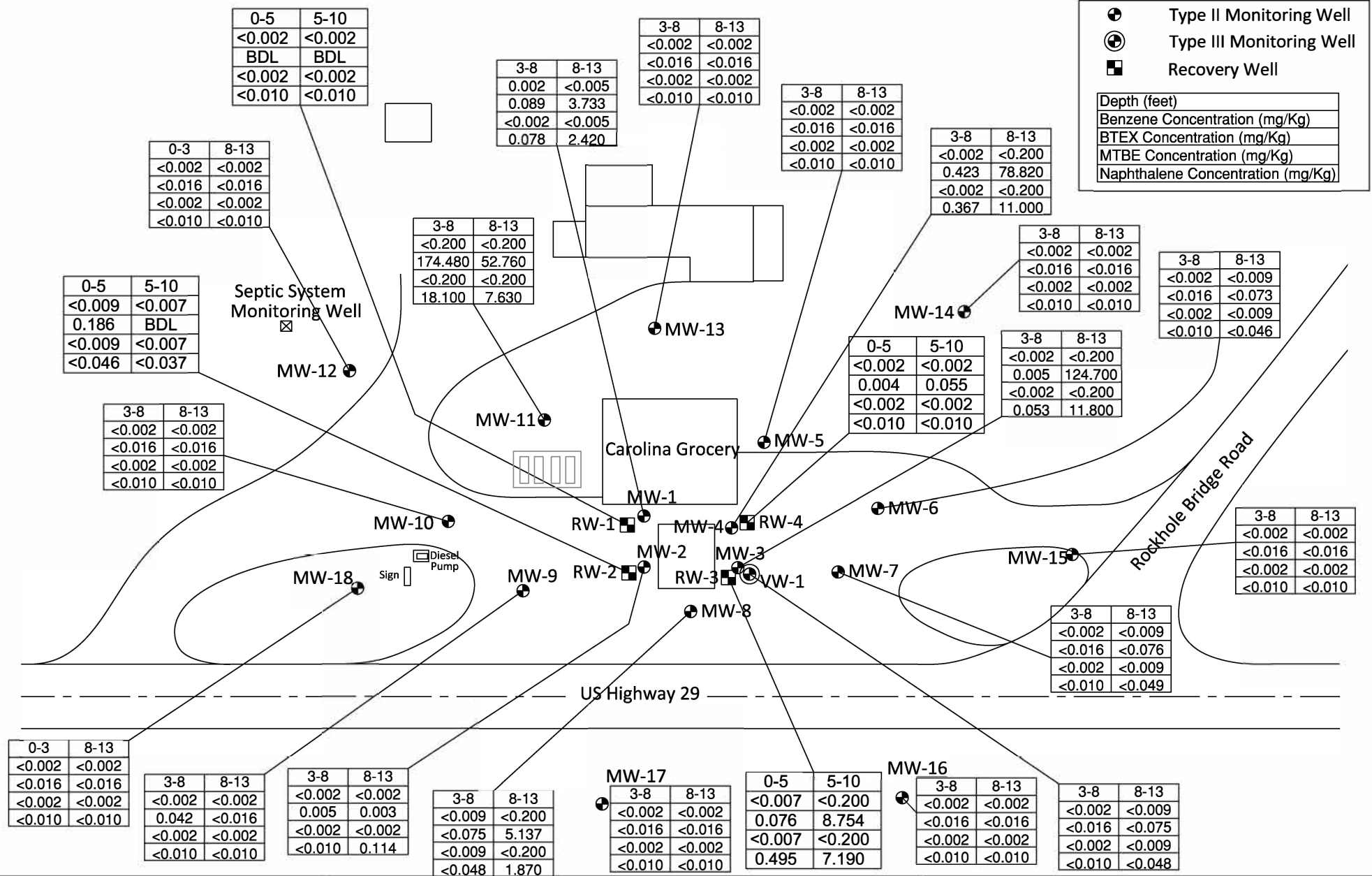







LEGEND	
	Type II Monitoring Well
	Type III Monitoring Well
	Recovery Well
315.95	Potentiometric Elevation (MSL)
	Potentiometric Contour
	Groundwater Flow Direction
NM	Not Measured



LEGEND

- Type II Monitoring Well
 - ⊕ Type III Monitoring Well
 - Recovery Well
- | Depth (feet) | |
|-----------------------------------|--|
| Benzene Concentration (mg/Kg) | |
| BTEX Concentration (mg/Kg) | |
| MTBE Concentration (mg/Kg) | |
| Naphthalene Concentration (mg/Kg) | |



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Soil Analytical Map

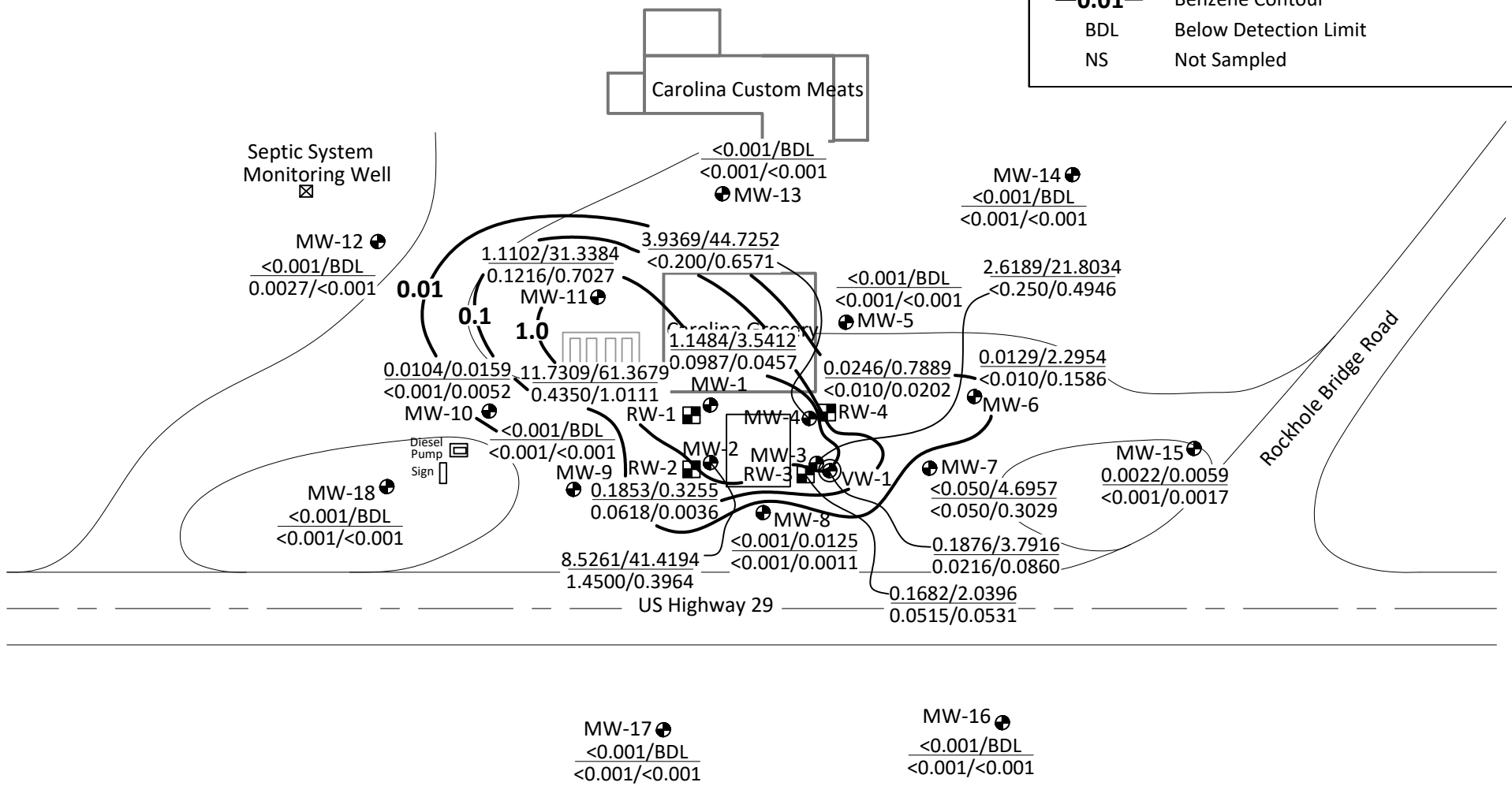
Carolina Grocery
14072 US Highway 29 S
Carolina, Covington County, AL



Approximate Scale in Feet

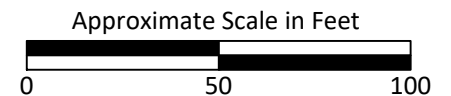


LEGEND	
	Type II Monitoring Well
	Type III Monitoring Well
	Recovery Well
$\frac{<0.001/BDL}{<0.001/<0.001}$	Benzene/BTEX Concentration (mg/L) MTBE/Naphthalene Concentration (mg/L)
-0.01-	Benzene Contour
BDL	Below Detection Limit
NS	Not Sampled

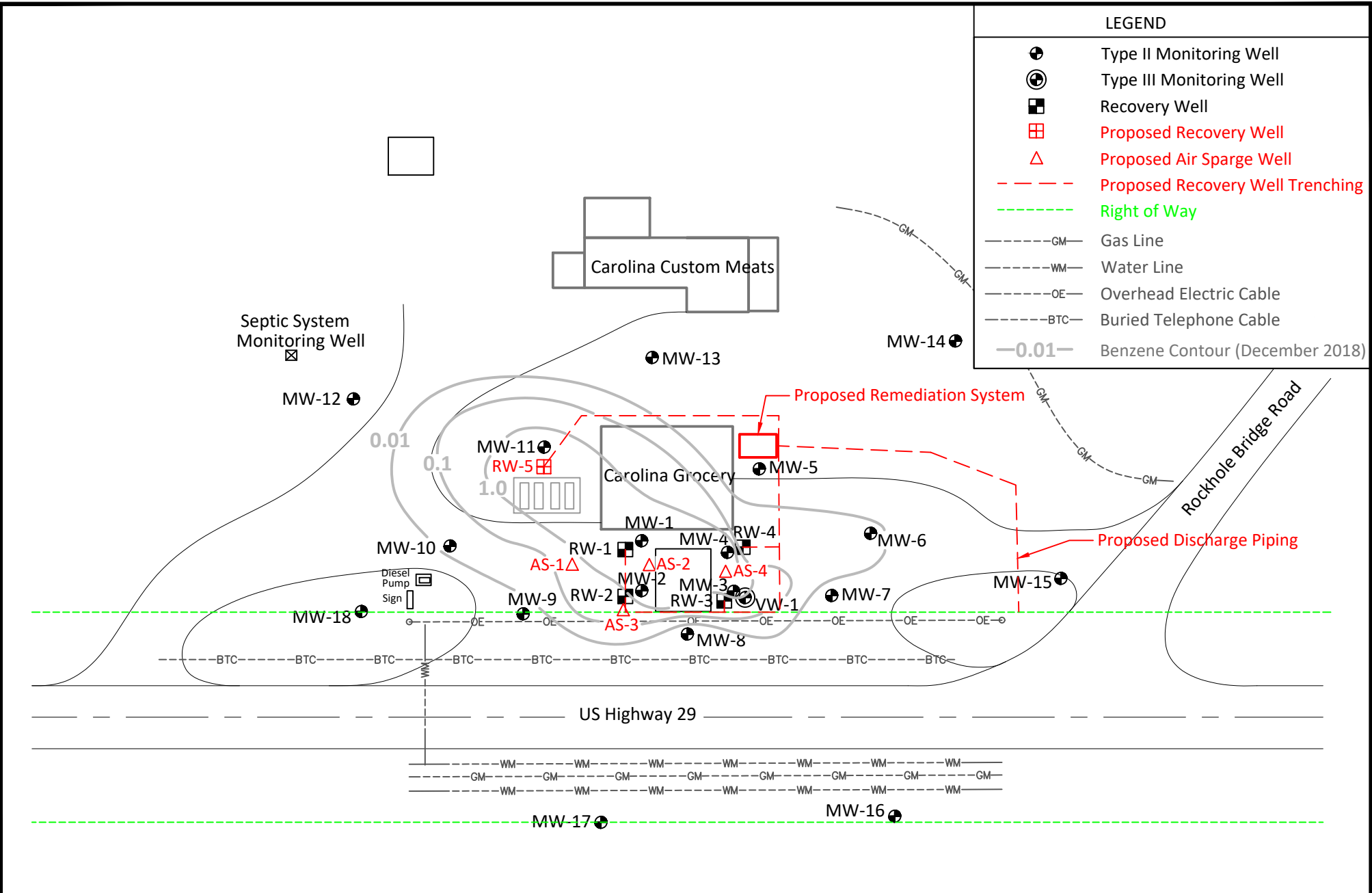


Groundwater Analytical and Benzene Contour Map
December 14, 2018

Carolina Grocery
14072 US Highway 29 S
Carolina, Covington County, AL

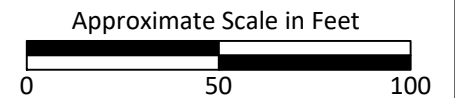


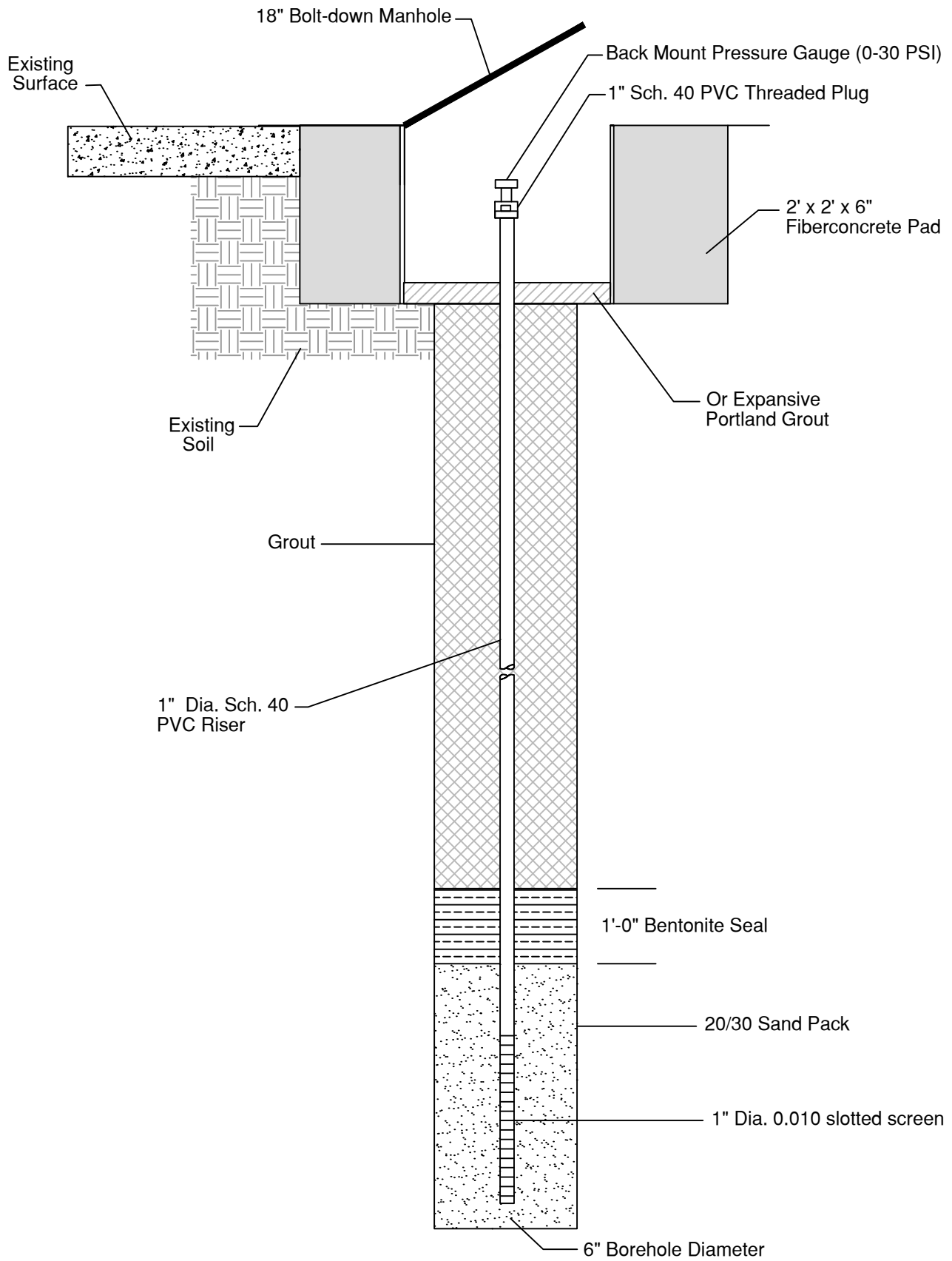
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www.cdge.com



Proposed System Layout Map

Carolina Grocery
 14072 US Highway 29 S
 Carolina, Covington County, AL





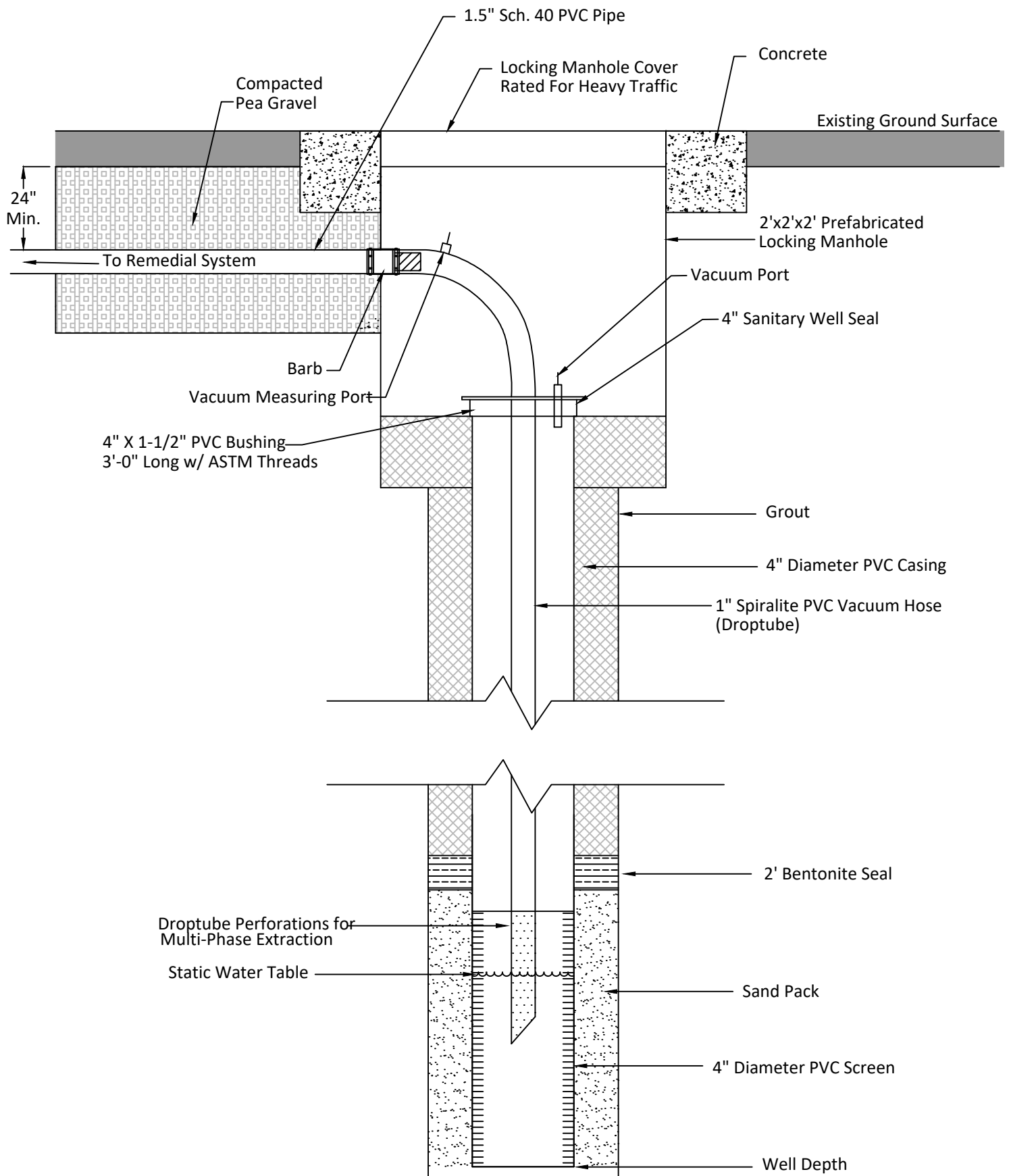
Air Sparge Well Construction Detail

Carolina Grocery
 14072 US Highway 29 S
 Carolina, Covington County, AL

Not to Scale



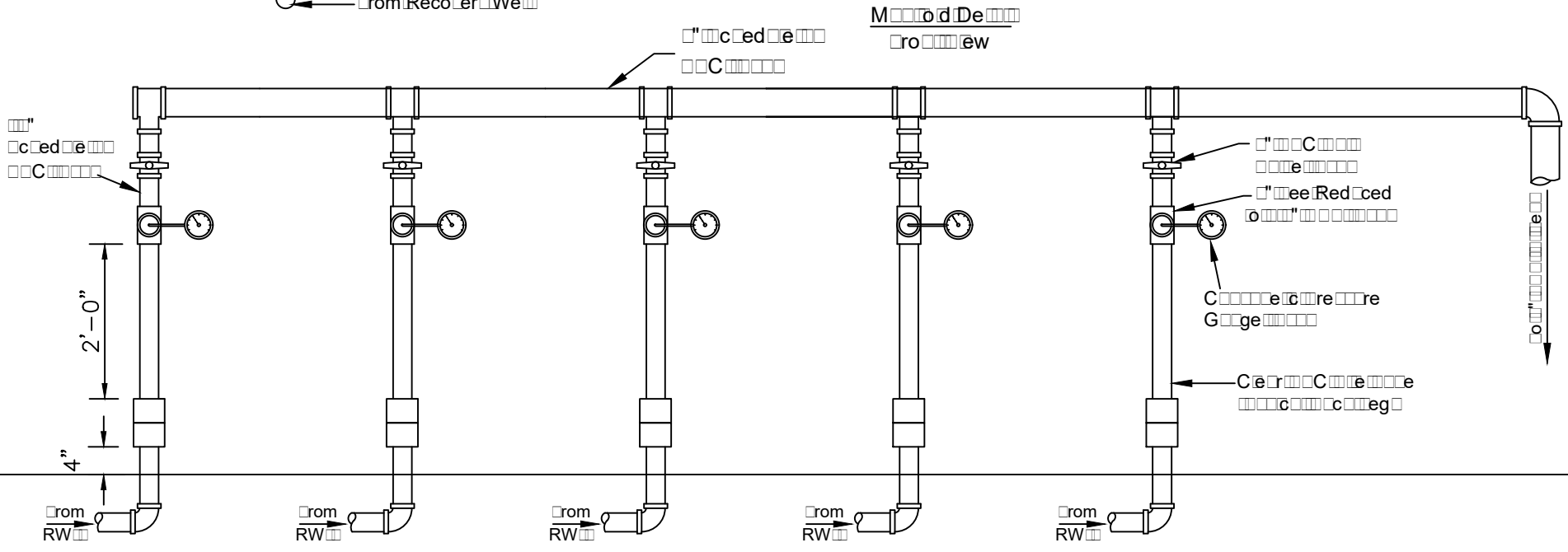
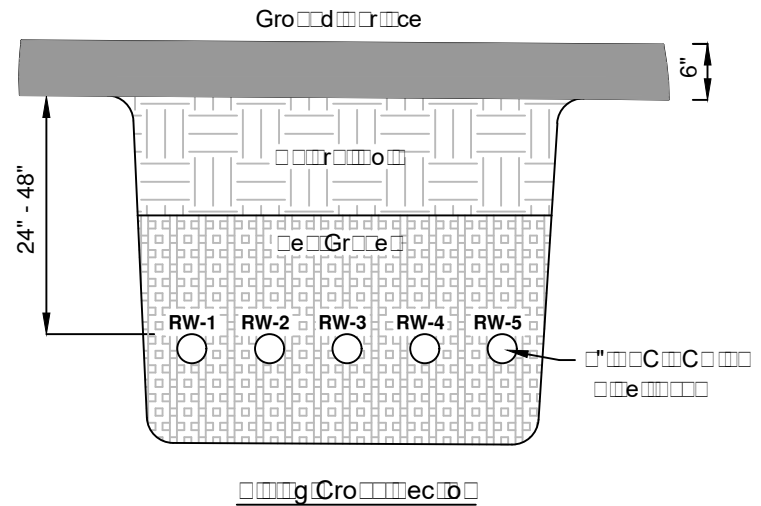
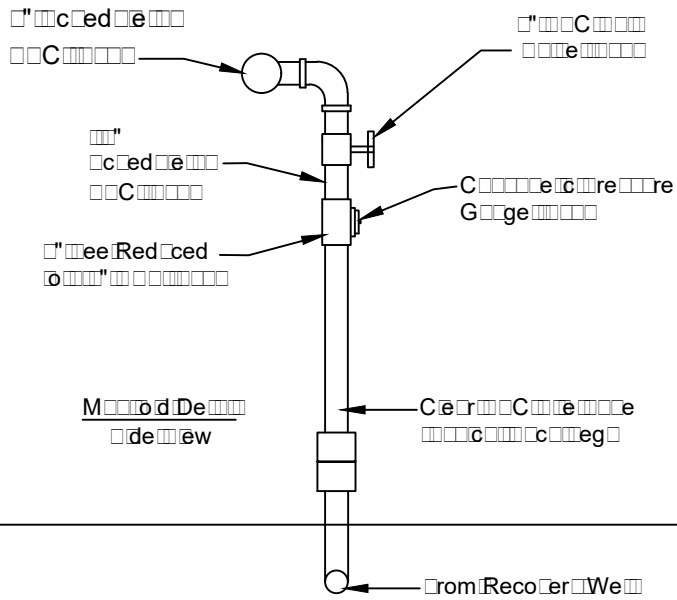
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Recovery Well Construction Detail

Carolina Grocery
 14072 US Highway 29 S
 Carolina, Covington County, AL

Not to Scale



Piping Cross Section and Manifold Detail

Carolina Grocery
 14072 US Highway 29 S
 Carolina, Covington County, AL

Not to Scale



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EQUIPMENT SPECIFICATIONS

APPENDIX C

MK ENVIRONMENTAL INC.

765 Springer Drive
Lombard, IL. 60148-6412
615-392-7737 (direct)

igiltz@mkenv.com

QUOTATION

Date: 1/30/2019
Quote No. 219009
Reference: Carolina Grocery
Page No. 1 of 4
Freight: Included
Terms: PWP Net 180
Ship Via: FLATBED
F.O.B.: Factory

SOLD TO:	SHIP TO:
Anna Brunson CDG Engineers & Associates Inc. 1840 US Hwy 29 North Andalusia, AL. 36420 334-222-9431	Carolina Grocery 14072 US Highway 29 South Andalusia, AL.

Quotation valid for 60 days

QUANTITY		UNIT PRICE	AMOUNT
	200 amp 3/60/230 volt 4 wire plus ground electrical service Brought to NEMA 3R control Panel Interior electrical will comply with NEC requirements for Class 1, Division 2, Group D Hazardous locations Motors will be TEFC construction		
1	25.0 HP single stage oil sealed liquid ring blower 375 ACFM @ 20"Hg. Capacity 3/60/230-460 volt, TEFC motor Direct drive motor Oil Scavenge line Backpressure gauge Multistage filtration system allows operation over the full range of vacuums, Temperature gauge Y strainer with clean out plug High temperature switch low and high oil level switches inlet filter inlet check valve Includes extra 5 gallon bucket of replacement seal oil LRP heat exchanger recirculation sound box with hardware	36,558.00	\$36,558.00
1	190 gallon Air/water separator with conductivity probe level switches 10" diameter clean out ports with vacuum rated quick release lid Clear PVC sight glass piping to liquid ring pump, to check for water carryover Liquid filled vacuum gauge Vacuum assist hose 2" drain valves Vacuum relief valve Dilution valve with filter/silencer Inlet screen		
1	1.5 hp transfer pump, 3450 rpm, TEFC motor Cast Iron housing with composite impeller, anti air lock design manual "Pump ON" button inside building for sampling		
1	5-Point dual phase inlet manifold inside system building including 4" main x (5) 2" branches, each branch includes; 2" throttling valve, vacuum gauge, 6" section of clear pvc site tube with quick Fernco disconnect 50' of bulk 2" clear tiger flex hose for stub up connection by others		
1	MKE Model SA15B STRIPPERATOR 15 GPM oil/water Separator and Air stripper treatment system Coalescing separator with skimming weir and water sump tank Low profile air stripping system with nylon aeration tubes and dual pattern diffusers 2.0 HP aluminum blower, AMCA B rated spark resistant Air pressure gauge Intrinsically safe high-high sump level and low blower pressure alarm switches Stainless steel construction Air stripper blower silencer	16,377.00	\$16,377.00
1	1.5 hp transfer pump, 3450 rpm, TEFC motor Cast Iron housing with composite impeller, anti air lock design manual "Pump ON" button inside building for sampling		
1	Groundwater flow totalizer with pulse output for remote totalization Flow calibration button		

MK ENVIRONMENTAL INC.

Anna Brunson
 CDG Engineers & Associates Inc.

Date 1/30/2019
 Quote No. 219009
 Reference Carolina Grocery
 Page No. 2 of 4

QUANTITY		UNIT PRICE	AMOUNT
1	<p>Master Control Panel System, Including: NEMA 3R control panel with blank front cover Swing out sub panel for gauges, control operators, and switches IEC Magnetic motor starters, safety switches, H-O-A controls Control transformer (8) intrinsically safe relays, (8) alarm indicator LED's, (16) output channels Hard wired relay logic (1) exterior GFCI utility outlet System run time totalizing hour meter Blower low pressure alarm Anti-falsing alarm circuit to prevent nuisance tripping Auto-release restart timer for remote restarts via telemetry Three phase voltage and phase monitor Emergency E-stop LED red indicator light located on swing out sub panel</p> <p><u>Liquid ring automatic shut down upon:</u> AWS1 high liquid level Oil resevoir tank low and high level alarms Liquid ring High temperature alarm Air stripper blower low pressure Air stripper sump High liquid level alarm Phase fault condition Interior Emergency Stop Mushroom button with twist to release detent</p>	17,207.00	\$17,207.00
1	<p>Fused Main Disconnect system for liquid ring and oxidizer Includes: (1) 200 amp disconnect box for LRP (1) Weatherhead with extension pole and bracket support (1) 200 amp Electric meter socket base installed</p>		
1	<p>FleetZOOM FZ300 Cellular Wireless Monitoring Unit. 14 Digital Inputs, 4 Digital Outputs, 2 Analog Input plus internal temperature and DC power monitoring. Includes: Cellular antenna, wiring diagrams, setup forms. Web based monitoring capabilities with graphing and data export. Email & SMS alarming capabilities.</p>		
1	<p>One full year of service starting at time of installation. Real Time Alarm Monitoring & Notification, Real Time Status Monitoring. Maximum of 500 alarm or status change events per month, plus sampling of all signals, transmitted every 60 minutes. Annual renewal service invoiced at end of each year, due Jan of following year. Renewal: \$420/yr per unit, BY OTHERS. (subject to change)</p>		
1	<p>Vacuum transducer integrated into telemetry system for real time monitoring, 4-20mA</p>		
1	<p>System building 8.5'W x 12'L x 9.5'H aluminum/steel enclosure, fully insulated with Removable sliding wall panels for ease of maintenance Exterior grade plywood floor, structural steel frame Includes 100 watt XP interior light, and removable center grate for ease of maintenance The breaker panel and control panel will be mounted on a vertical steel bracket attached to platform end. The bracket, panels and all conduits will allow for the removal of the enclosure panels by one person.</p> <p>10" structural steel base with 4" steel cross members Steel corner posts and roof frame Continuous sheet aluminum roof for superior protection</p>	26,221.00	\$26,221.00

MK ENVIRONMENTAL INC.

Anna Brunson
 CDG Engineers & Associates Inc.

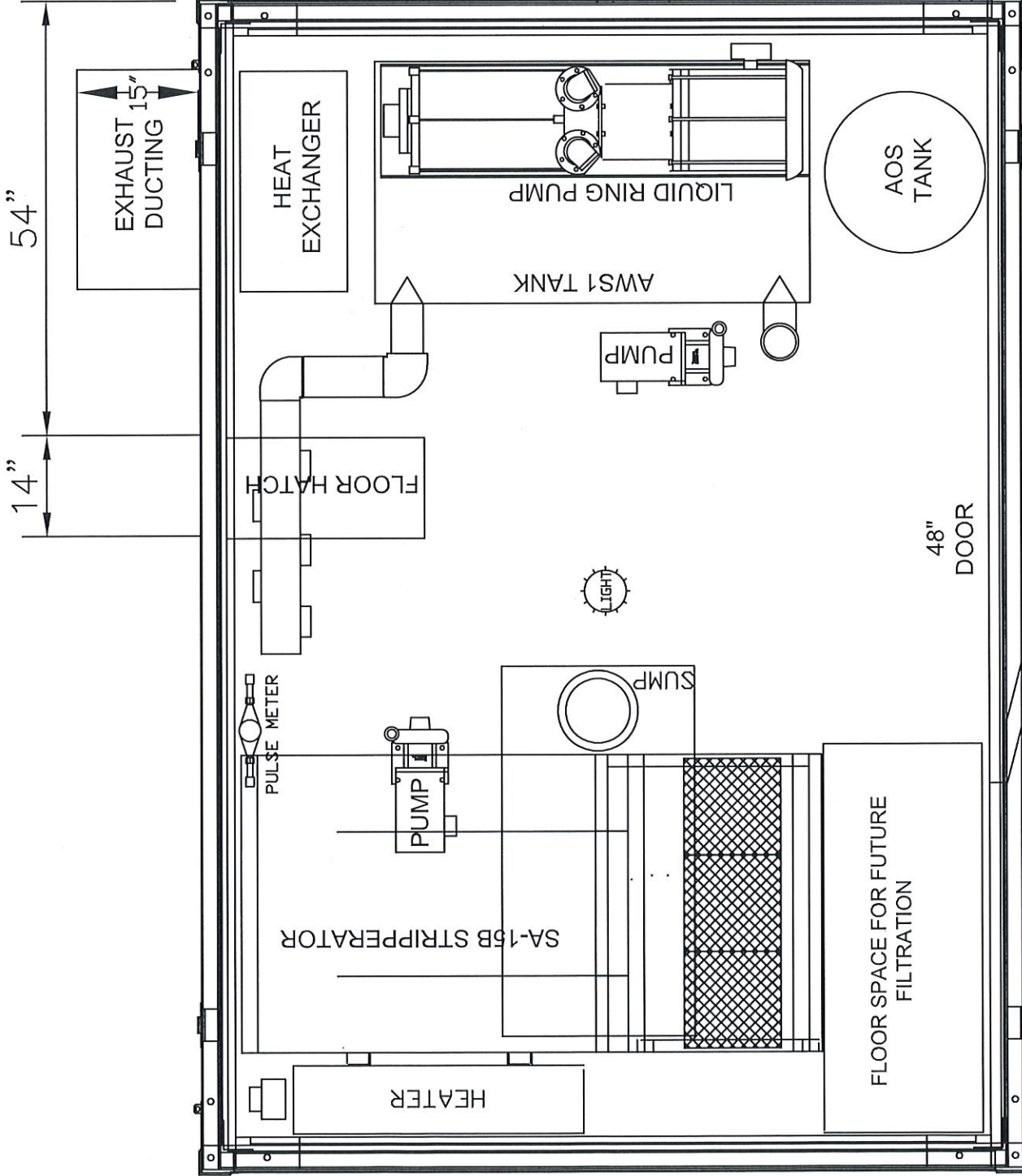
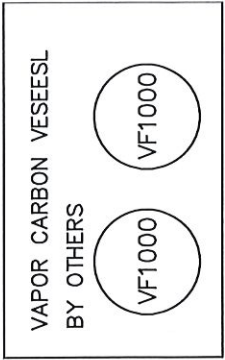
Date 1/30/2019
 Quote No. 219009
 Reference Carolina Gro
 Page No. 3 of 4

QUANTITY		UNIT PRICE	AMOUNT
1	12,000 BTU XP heater with XP thermostat. All components fully piped, wired and factory tested		
1	Equipment Electrical Installation Includes XP wiring, XP seal off connectors, liquid tight flexible conduit UL listed equipment.		
1	Equipment Mechanical Installation Includes mounting, piping and connectors Brass fittings, sample ports, pressure gauges and sight glasses		
1	Third Party MET Certification The entire remediation building to be third party certified at MK Environmental factory. National Recognized Testing Lab (NRTL)		
1	Startup & Training Services 1-day remediation system startup & training services. Based on 2 weeks prior notice.	2,500.00	\$2,500.00
1	Freight Services Remediation system building freight to jobsite. Off loading and placement by others.	2,500.00	\$2,500.00

Does not include permits, fees, etc...
 Offloading & placement by others.

Jerry Giltz,
 MK ENVIRONMENTAL, INC.

EQUIP. SUB TOTAL	\$101,363.00
EQUIP. SALES TAX	
START UP/TRAINING	
FREIGHT	
NET TOTAL	\$101,363.00



54"

14"

EXHAUST DUCTING
15"

102"

145 1/2"

REVISION:	BY:	DATE:

MK ENVIRONMENTAL INC.

DATE: 1-30-19

DRAWN BY: JAG

JOB NUMBER: 219009

FACILITY ID/TAG#

DRAWING NUMBER

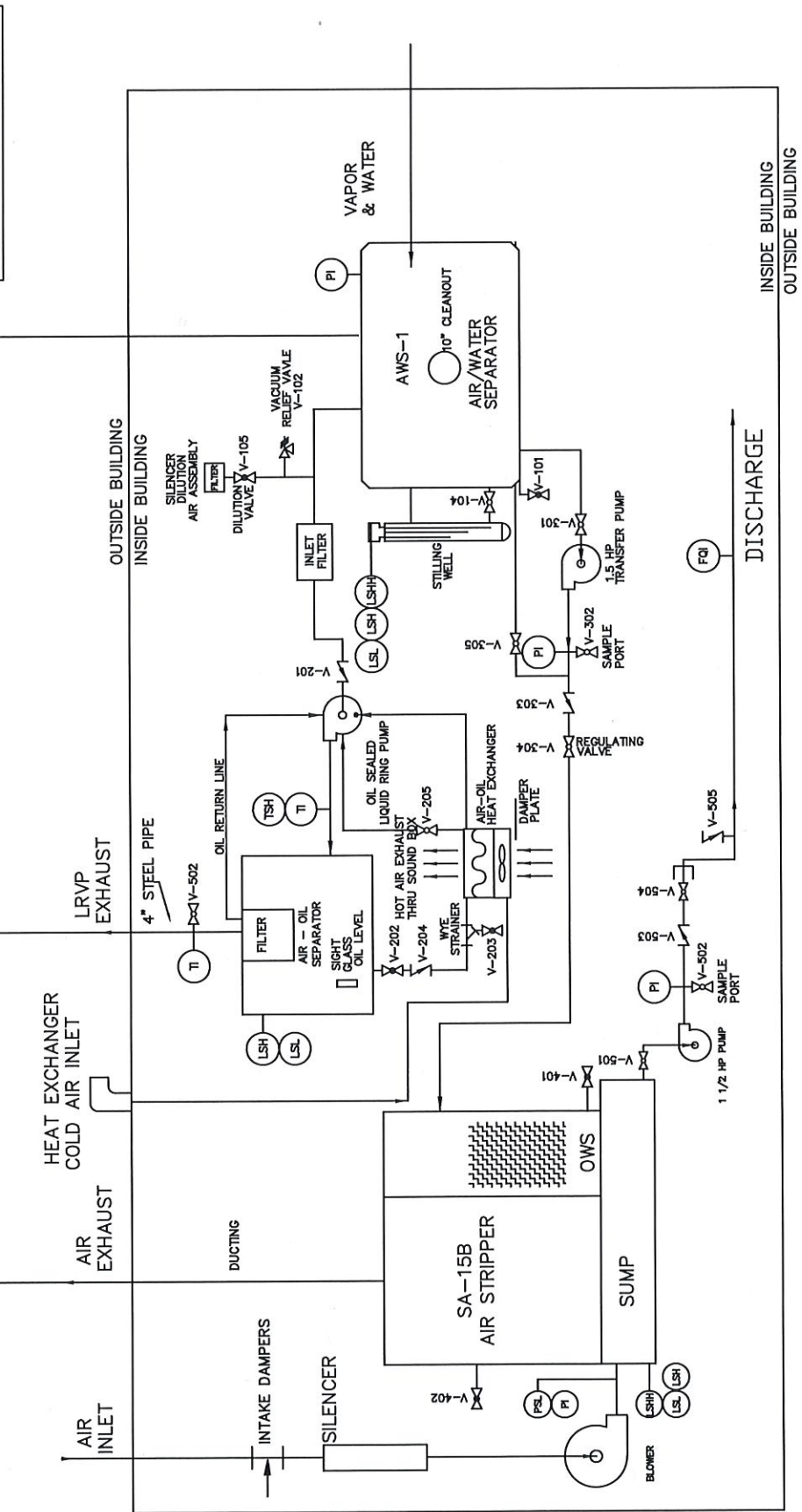
CDG ENG.
CAROLINA GROCERY

REVISION:	BY:	DATE:

VAPOR CARBON VESSELS PROVIDED BY OTHERS

VF1000

VF1000



LABEL	DESCRIPTION	VALVE TYPE	DESCRIPTION	LABEL	DESCRIPTION	VALVE TYPE	DESCRIPTION	LABEL	DESCRIPTION	VALVE TYPE	
V-201	1" BALL VALVE	1"	AIR/OIL FLOW CHECK	V-301	AWS-1 PUMP ON/OFF	1-1/4"	1.5 HP TRANSFER PUMP	V-501	SUMP PUMP ON/OFF	1-1/4"	BALL VALVE
V-202	2" VACUUM RELIEF	2"	SEAL OIL ON/OFF	V-302	INFLUENT SAMPLE PORT	1/4"	1.5 HP TRANSFER PUMP	V-502	EFFLUENT SAMPLE PORT	1/4"	BALL VALVE
V-203	1/2" BALL VALVE	1/2"	SEAL OIL DRAIN	V-303	AWS-1 CHECK VALVE	1"	AIR STRIPPER DRAIN	V-503	SUMP CHECK VALVE	1"	BALL VALVE
V-204	1" GATE VALVE	1"	SEAL OIL CHECK VALVE	V-304	AWS-1 FLOW REGULATOR	1"	AIR STRIPPER DRAIN	V-504	SUMP FLOW REGULATOR	1"	BALL VALVE
V-205	2" BALL VALVE	2"	SEAL OIL VENT VALVE	V-305	AWS-1 REGRULATION	1/2"	AIR STRIPPER DRAIN	V-505	ANTI-SIPHON VALVE	3/4"	VAC RELIEF

VACUUM PRESSURE SWITCH

INDICATOR FLOW QTY IND. (TOTALIZER) FRI

TEMPERATURE

ENVIRONMENTAL INC. MK

DATE: 1-30-19

DRAWN BY: JAG

JOB NUMBER: 219009

FACILITY ID/TAG#

DRAWING NUMBER

CDG ENG.

CAROLINA GROCERY

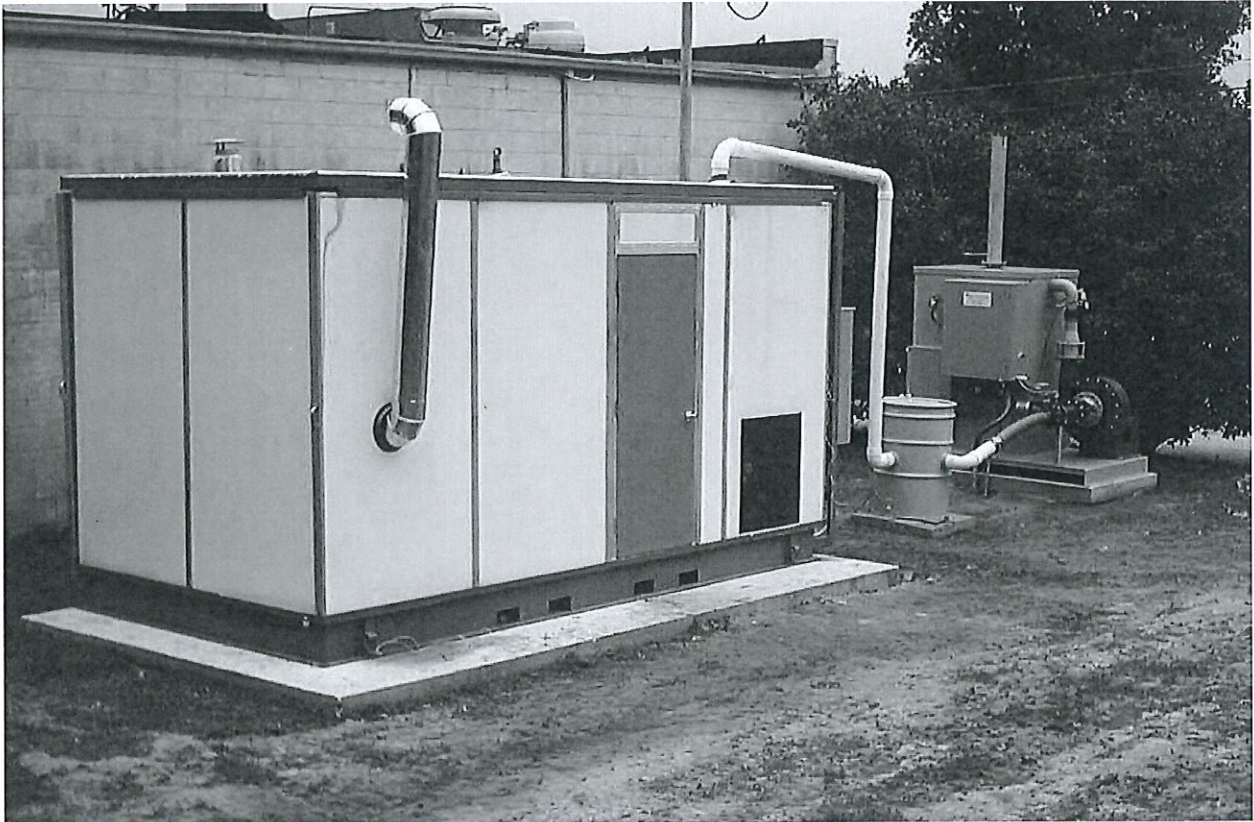
Product Specifications



Environmental Inc.

MK Environmental Inc.
7150 S. Madison Street
Willowbrook, IL. 60527
630-920-1104 Phone
630-920-8013 Fax

MK ON-SITE REMEDIATION EQUIPMENT



SYSTEM DESCRIPTION

MK Environmental is your single source manufacturer for all your remediation needs. Designed to save time, space and money - Engineering for maximum UPTIME. All the room needed for maintenance, without taking up a lot of room.

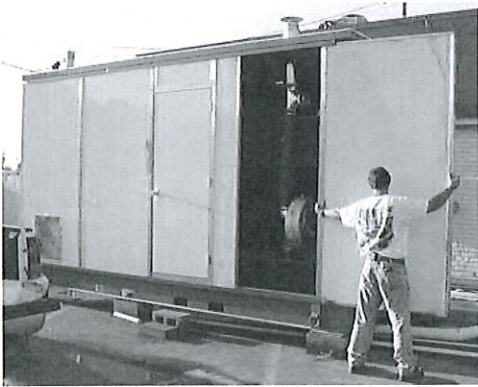
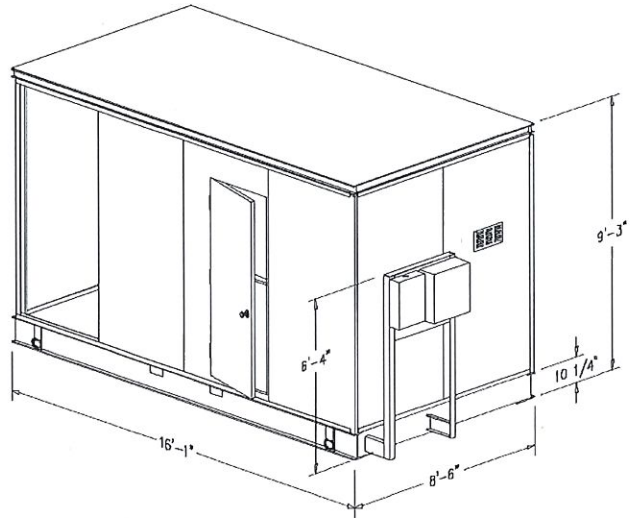
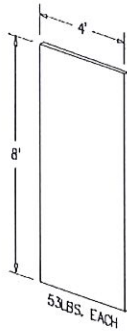
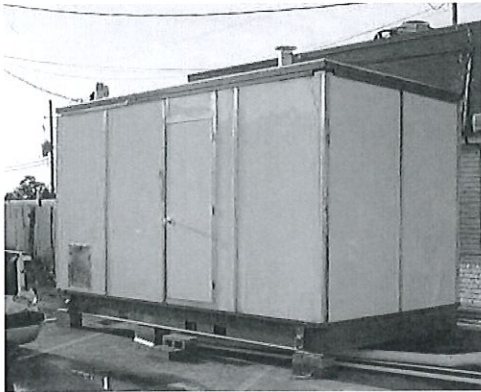
- All equipment fully piped, wired and tested
- Completely Integrated remediation system
- Factory built equipment stand alone building
- Structural steel construction with aluminum exterior for low maintenance
- Removable sliding wall panels; fully insulated and faced inside and out with aluminum sheeting
- All panels removable for full accessibility and maintenance to all equipment within
- MK Environmental manufactures all process components
- Dimensions: 8, 12, 16, 20, 24 or 28' long x 8.5' wide x 9.5' high
- Off gas treatment with oxidizer or carbon for purchase or rent

MK ENVIRONMENTAL ON-SITE PLATFORM

INSULATED, REMOVABLE WALL PANELS

TYPICAL OF AN 8' X 16' PLATFORM.

OTHER SIZES AVAILABLE.



MK Building Specifications:

- 10" structural steel I beam base, 4" steel corner posts, 2" steel roof frame
- 100 MPH rated construction. PE stamped design. 150 MPH available
- Roof constructed of a single sheet of aluminum for watertight construction
- Roof and walls are insulated with minimum 1.5" urethane insulation (R10)
- Removable 4'x 8' sliding aluminum wall panels (53 lbs/ea) for ease of maintenance
- Class 1, Division 2, Group D XP electrical interior
- 3/4" plywood flooring with I beams on 12" centers
- Man door and 100 watt interior explosion-proof light fixture is standard
- White interior and exterior
- Single source for equipment, service and support

Optional Building Features:

- Flatbed trailer mount building (enclosed)
- XP heater with thermostat
- XP ventilation fan
- Noise Issues: Sound insulation packages
- Factory installed fused main disconnect, meter base and weatherhead
- Factory UL listed control panel & entire MK buildings by MET Labs (NRTL)

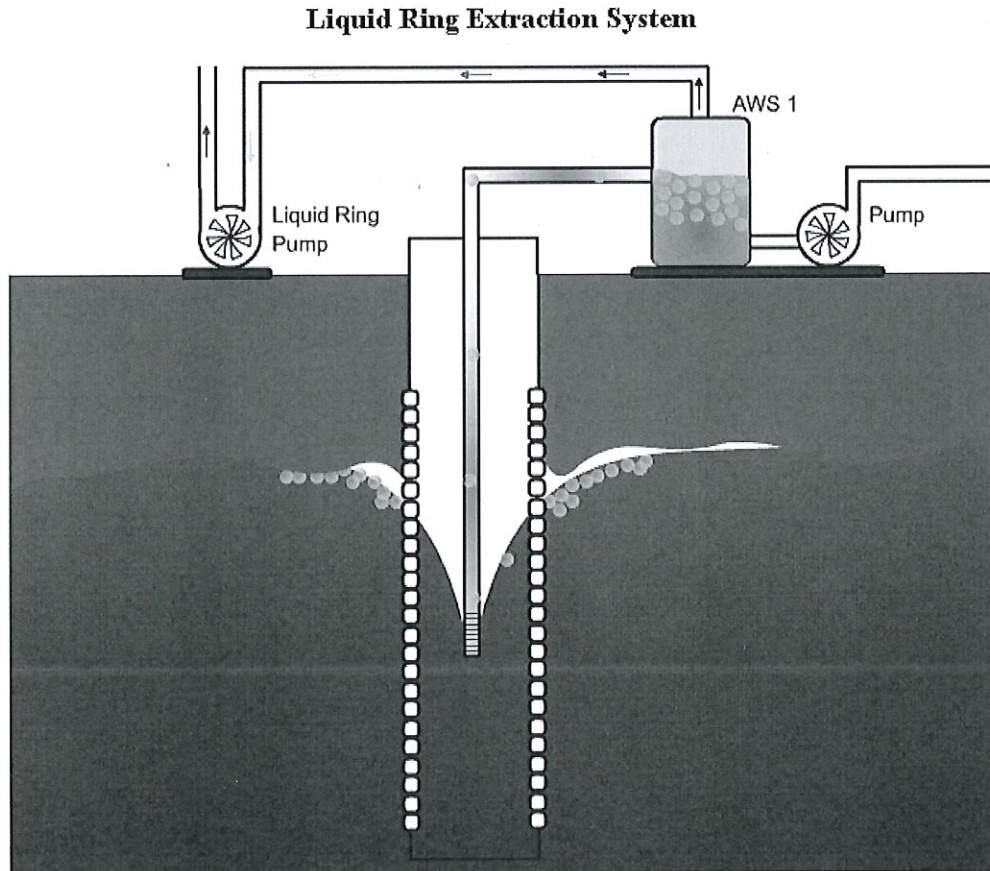
Product Specifications



MK Environmental Inc.
7150 S. Madison Street
Willowbrook, IL. 60527
630-920-1104 Phone
630-920-8013 Fax

Environmental Inc.

OIL SEAL DUAL EXTRACTION SYSTEM



HOW IT WORKS

Dual extraction is a method by which both groundwater and vapors can be extracted from the same well with a single vacuum pump located in the equipment compound. The recovered groundwater is then typically treated with an oil/water separator and air stripper, and the air discharged to atmosphere. The typical limit for dual extraction is from wells less than 25' deep. Extraction from deeper wells is possible, but requires some additional fittings. Most systems utilize a liquid ring vacuum pump as the vacuum source because they can achieve the high levels of vacuum required, typically 18-22 inches of mercury.

Oil Seal Dual Extraction System Continue

In most dual extraction systems, a high vacuum is applied to a suction tube placed down an extraction well, below the static groundwater table, with the bottom end of the tube at the elevation in which draw down is desired. The top of the well casing is sealed to atmosphere. The vacuum applied to the tube then begins to extract the groundwater from the well until the well is drawn down and the water surface in the well reaches the bottom of the tube. At this point, the tube "breaks suction" and begins to apply the vacuum to the air space in the well and surrounding soil. As additional groundwater flows into the well, it is sucked up the tube until it again breaks suction. This process then continues indefinitely, with alternating slugs of groundwater and vapors pulled up the suction tube, out of the well and on to the process equipment. The extracted vapors and groundwater then flow through piping from the well to the first Air/Water Separator, AWS1. There, the liquids, groundwater and product are separated from the vapors by cyclonic action. The liquid flows into a sump where it is then pumped to the oil/water separator and air stripper for treatment. The contaminated vapors continue on into the liquid ring vacuum pump. It is then discharged, under pressure, out of the liquid ring pump to atmosphere.

MK Environmental Inc.

7150 S. Madison Street, Willowbrook, IL. 60527

630-920-1104

630-920-8013 fax

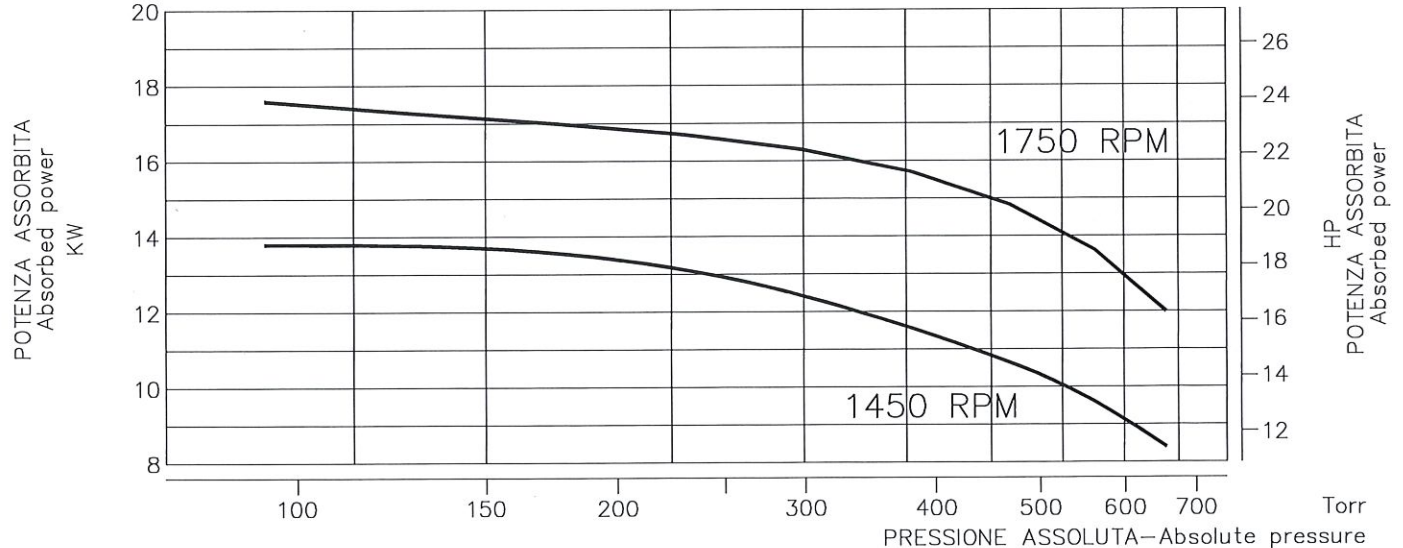
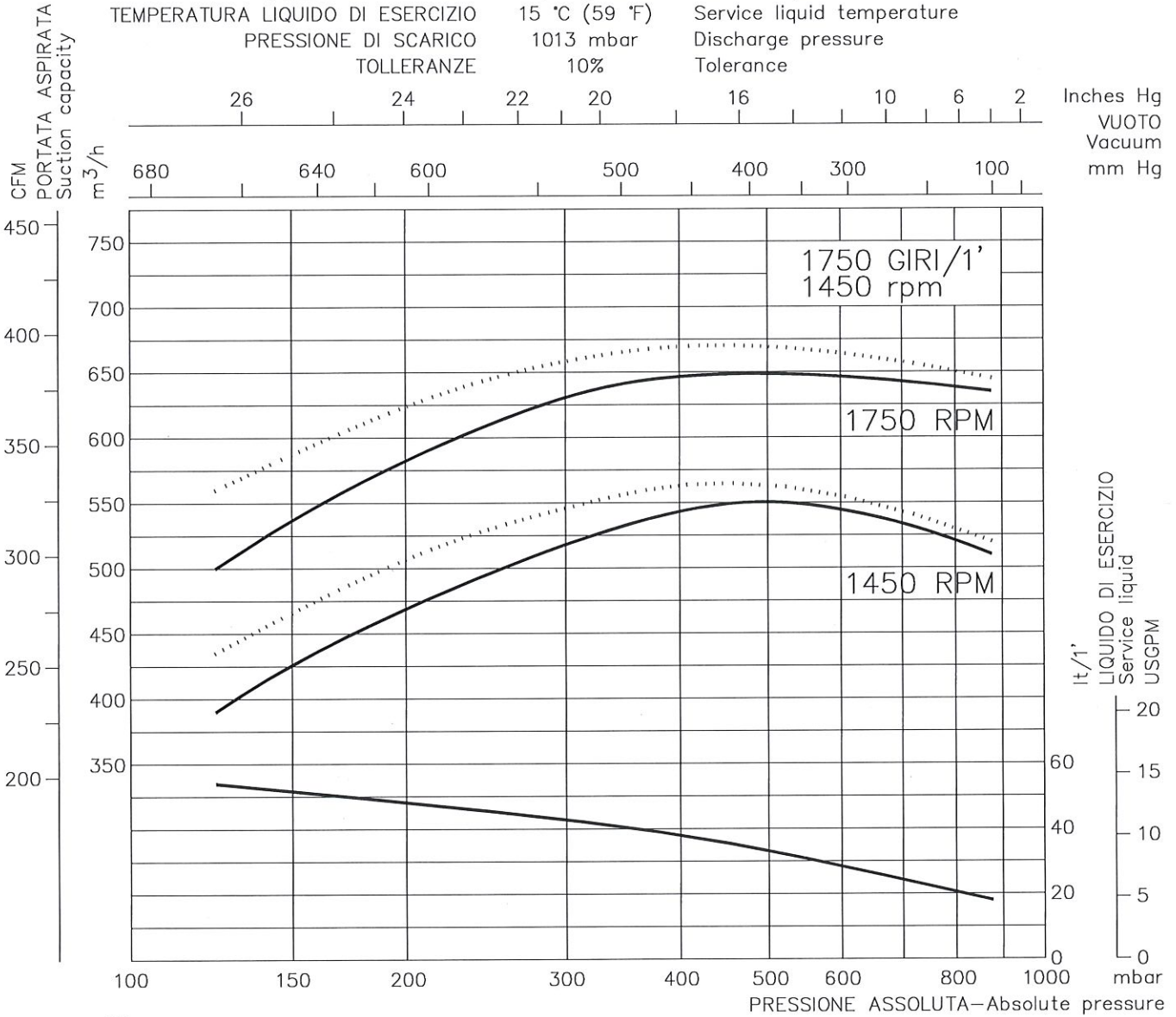
mkenv.com



I DATI RIPORTATI SONO RIFERITI A :

Data refers to :

ARIA SECCA A 20 °C	—————	Dry air at 20 °C (68 °F)
ARIA SATURA A 20 °C	Saturated air at 20 °C (68 °F)
LIQUIDO DI ESERCIZIO	ACQUA / Water	Service liquid
TEMPERATURA LIQUIDO DI ESERCIZIO	15 °C (59 °F)	Service liquid temperature
PRESSIONE DI SCARICO	1013 mbar	Discharge pressure
TOLLERANZE	10%	Tolerance





Environmental Inc.

MK Environmental Inc.
7150 S. Madison Street
Willowbrook, IL. 60527
630-920-1104 Phone
630-920-8013 Fax

STRIPPERATOR SA15B



The Stripperator SA15B is a complete process treatment unit for hydrocarbon-contaminated water. It integrates both coalescing oil/water separator and the Cascade low profile Air Stripper into one component. The unit will separate free product, coalesce suspended hydrocarbons and settle solids.

- Integrates a coalescing oil/water separator and cascade low profile air stripper and effluent sump into a single component (3 tanks built into 1)
- Gravity flow from oil/water separator to the air stripper (NO PUMP REQUIRED)
- Fully gasketed lids with quick release adjustable latches
- Small footprint 37"W X 71"L X 37" H
- 304 Stainless Steel construction
- Fits through a double door – minimal space required
- Easy access to separator and air stripper as well as simple to maintain
- Allows quick inspection and viewing of operation
- 15 GPM capacity

CT Series

High Pressure Centrifugal Pumps
 $\frac{1}{2}$ - 2 $\frac{1}{2}$ HP
 Heads to 140 Feet
 Capacities to 95 GPM



MYERS CT SERIES LINE OF HIGH PRESSURE CENTRIFUGAL PUMPS PROVIDES QUALITY AT A COMPETITIVE PRICE. The complete line of $\frac{1}{2}$ to 2 $\frac{1}{2}$ HP units provide strong pressures up to 140 feet and flows up to 95 gpm.

The rugged cast iron body construction is available with either a corrosion resistant composite or brass impeller. The brass impeller unit is equipped with a high temperature, viton seal for more demanding applications. The heavy duty motor features a double ball bearing, 50° C ambient, dual voltage design for dependable service. The compact, back pullout design provides easy installation and serviceability.

The quality features of the CT series will provide dependable service for a wide variety of applications.

SPECIFICATIONS

HP	Catalog No.		Pipe Tapping Sizes		Motor Voltage	Phase	Approx. Wt. Lbs.
	Composite Impeller	Brass Impeller	Suction (NPT)	Discharge (NPT)			
$\frac{1}{2}$	CT05	CT05B	$\frac{1}{4}$ "	1"	115/230	1	30
	CT05A	CT05B3	$\frac{1}{4}$ "	1"	208/230/460	3	30
$\frac{3}{4}$	CT07	CT07B	$\frac{1}{4}$ "	1"	115/230	1	32
	CT07A	CT07B3	$\frac{1}{4}$ "	1"	208/230/460	3	32
1	CT10	CT10B	$\frac{1}{4}$ "	1"	115/230	1	35
	CT10A	CT10B3	$\frac{1}{4}$ "	1"	208/230/460	3	35
1 $\frac{1}{2}$	CT15	CT15B	$\frac{1}{4}$ "	1"	115/230	1	40
	CT15A	CT15B3	$\frac{1}{4}$ "	1"	208/230/460	3	40
2	CT20	CT20B	$\frac{1}{4}$ "	1 $\frac{1}{2}$ "	115/230	1	57
	CT20A	CT20B3	$\frac{1}{4}$ "	1 $\frac{1}{2}$ "	208/230/460	3	57
2 $\frac{1}{2}$	CT25	CT25B	2"	1 $\frac{1}{2}$ "	115/230	1	62
	CT25A	CT25B3	2"	1 $\frac{1}{2}$ "	208/230/460	3	62

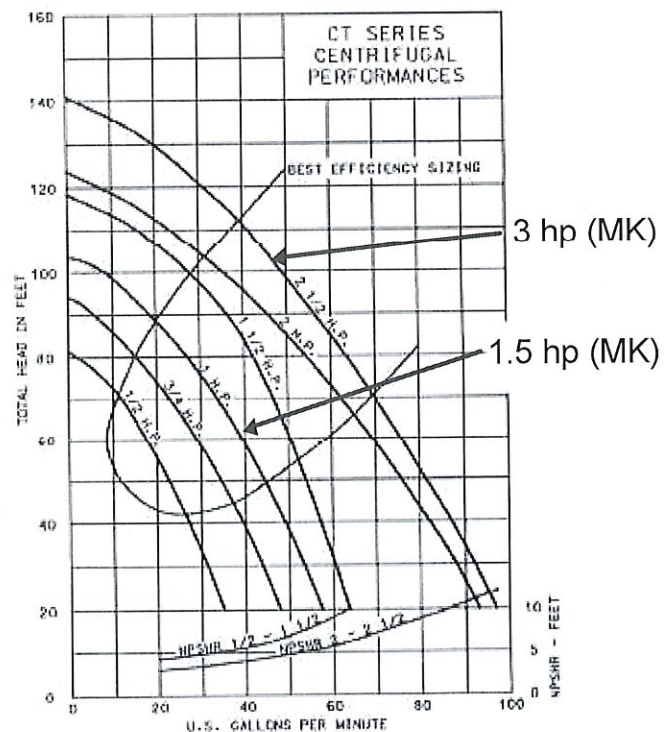
ADVANTAGES BY DESIGN

- Heavy duty cast iron construction.
- Back pull-out design.
- Dependable double ball bearing motor
- Continuous duty rating motor.
- Choice of brass or composite impeller.
- Brass impeller pumps rated 212° F.
- Composite impeller pumps rated 140° F.
- Maximum working pressure of 125 psi.
- CSA listed.

Applications

- Booster service
 - Irrigation
 - Circulating
 - Cooling towers
 - Air conditioning
 - Liquid transfer
 - Sprinkling systems
 - General industrial service
- Note: MK Environmental uses oversized pump motors. See below

PUMP PERFORMANCE



WHERE INNOVATION MEETS TRADITION

Myers

ISO 9001 Certified Company

CT Series

High Pressure Centrifugal Pumps

1/2 - 2 1/2 HP

Heads to 140 Feet

Capacities to 95 GPM

1. MOTOR MK standard is TEFC construction

- NEMA standard
- Double ball bearing
- Open drip proof
- 60 Hz, 3450 rpm
- Stainless steel shaft
- Single phase with built-in overload protection
- Three phase require overload protection in starter unit
- Non-overloading
- Continuous duty
- Strong capacitor start design

2. SEAL PLATE

- Heavy duty cast iron for dependable service and long life

3. IMPELLER

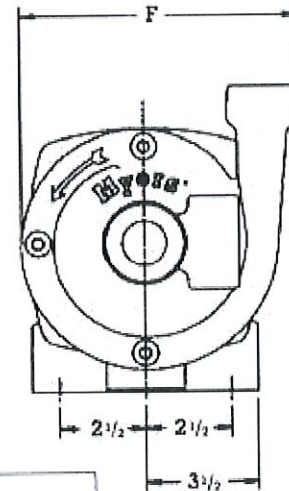
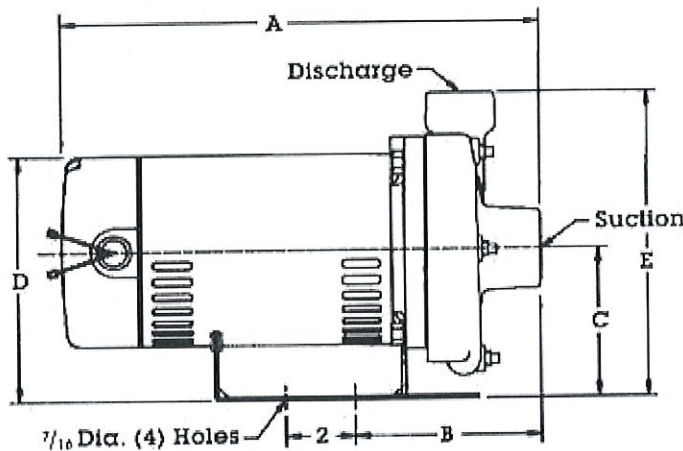
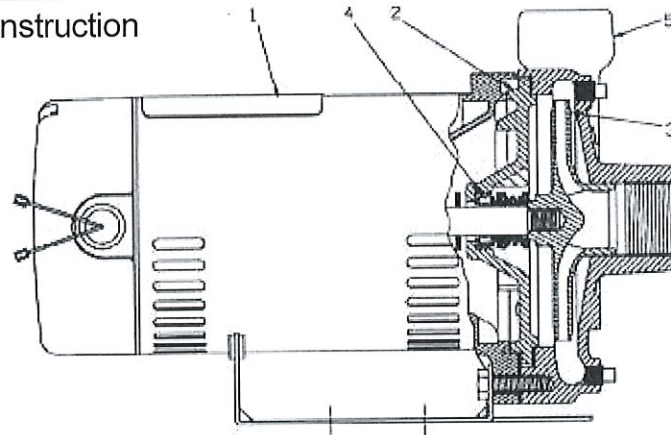
- Reinforced composite for applications to 140° F
- Threaded SST insert on composite impellers
- Brass for applications to 212° F
- Enclosed design for high efficiencies
- Balanced for smooth operation

4. MECHANICAL SEAL

- Standard carbon/ceramic faces, Buna elastomers, 300 series SST components (standard for pumps with composite impellers)
- High temperature carbon/ceramic faces, viton elastomers, 300 series SST components (standard for pumps with brass impellers)

5. CASING

- Heavy duty cast iron construction
- Back pull-out design
- Discharge can be rotated in four positions
- Tapped openings for priming, venting and draining
- Vertical discharge standard



HP	Dimensions, Inches							
	A	B	C	D	E	F	Suct.	Disch.
1/2	13 7/8	5 1/2	4 3/8	7 1/4	9	8	1 1/2	1
3/4	14 3/8	5 1/2	4 3/8	7 1/4	9	8	1 1/4	1
1	15 1/8	5 1/2	4 3/8	7 1/4	9	8	1 1/4	1
1 1/2	15 1/8	5 1/2	4 3/8	7 1/4	9	8	1 1/4	1
2	16 1/2	6 1/4	4 1/2	7 1/2	9 1/2	8 7/8	1 1/2	1 1/4
2 1/2	16 1/2	6 1/4	4 1/2	7 1/2	9 1/2	8 7/8	2	1 1/2



FZ300

Cellular Monitoring System

Overview:

The FZ300 is a compact cellular transceiver for monitoring industrial equipment that sends live data to the monitoring web site, providing real-time status and alarms. It features 14 digital inputs, 4 digital outputs and 2 analog inputs. In addition to alarming on status changes, the system keeps track of on-time and cycles for the digital inputs; useful for monitoring pump, fan, or compressor run times and duty cycles. Analog inputs can alarm on high or low conditions and are useful for monitoring temperatures, pressures, tank levels or flow rates. The unit monitors input power voltage and provides an optional battery backup which enables the system to alarm on main power voltage level or failure and continue operating without main power.

The easy to use web site updates continuously, displaying location and operating status for all of your monitored equipment. Alarms are immediately displayed on the web site and trigger messages sent to interested personnel in your organization via SMS text messages and emails. Every event is permanently logged in the web site allowing powerful historical analysis using the built in reporting features to give equipment owners detailed insight into the operation and readiness of their equipment fleets.

Proactive service reminders are automatically generated and sent as equipment reaches service intervals based on run-time. Service logs and manuals available over the secure web site reduce paperwork and automate record keeping while providing up to the minute service records for all of your monitored equipment.

Features:

Easy to install cellular monitoring system. A variety of optional enclosures and mounting options provide for a clean and professional installation. Unit includes a quad magnet bracket for quick mounting and templates for mounting with included standoffs.

Advanced power management employing low power idle modes enable the unit to operate in solar powered applications with minimal power draw.

No software to buy, install or maintain; all mapping and data features are accessible over the secure web site from any computer with Internet access.

Technical Specifications:

Size	4.0" x 4.3" x 2.3" in.	Power	9 - 32 Volts DC
Radio	Quad Band GPRS GSM	Battery Backup	Internal
Transmit Power		Current Consumption	
850 / 900 MHz	Class 4, 2 Watts	Idle	65 mA
1800 / 1900 MHz	Class 2, 1 Watt	Transmit, Average	250 mA
Digital Inputs	14	Peak	2.1 A
Digital Outputs	4	Temperature	
Analog Inputs	2, 0-5 Volt or 0 to 20 mA	Operating	-30°C to +70°C
Connectors	5mm Terminal Blocks	Storage	-40°C to +85°C
GSM Connector	SMA	Max. Humidity	95% Non-Condensing

Radio Agency Approvals:

FCC	Part 15 Part 22 Part 24
GCF	Version 3.21.1
PTCRB	Version 3.7.1
Industry Canada	Yes
CE Mark	Yes
RoHS Compliant	Yes
Emark	Yes

Each Complete Monitoring System Includes:



Digital Cellular Monitoring Unit:

- 14 Digital Inputs
- 4 Digital Outputs
- 2 Analog Inputs
- Connected 24x7x365



Low Profile or High Gain Cellular Antenna:

- 4" (Low Profile)
- 12.4" (High Gain)
- 12' Cable Length
- Magnet Mount



Mapping & Reporting:

- Web Accessible
- Graphical Map Overview
- Simple User Interface
- Run Service Reports
- Monitor Equipment Use



Alarming & Notifications:

- Equipment Status Change
- Equipment Service Needed
- SMS Text Message
- BlackBerry, PDA Message
- Email



Engineering. Environmental. Answers.

NPDES Permit Application

APPENDIX D

NOTICE OF INTENT – GENERAL PERMIT NUMBER ALG340000

(ADEM Form 394 _____)

DISCHARGES ASSOCIATED WITH PETROLEUM PRODUCTS CONSISTING OF STORM WATER, HYDROSTATIC TEST WATER, AND GROUNDWATER RESULTING FROM THE STORAGE, HANDLING, TRANSPORTATION, INVESTIGATION OF POTENTIAL CONTAMINATION, OR OTHER OPERATIONS INVOLVING PETROLEUM AND TREATED VEHICLE WASHWATER ASSOCIATED WITH PETROLEUM AND ITS DERIVATIVES

Mail to: Alabama Department of Environmental Management
Industrial General Permit Section
Industrial/Municipal Branch
Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

FOR OFFICE USE ONLY	
NPDES PERMIT NUMBER	_____
FACILITY NUMBER	_____

ANSWER ALL QUESTIONS IN APPLICABLE SECTIONS. PLEASE MARK THE "NOT APPLICABLE" BOX IF A SECTION IS NOT APPLICABLE. INCOMPLETE OR WRONG ANSWERS COULD RESULT IN MORE STRINGENT PERMIT REQUIREMENTS. IF SPACE IS INSUFFICIENT TO ADDRESS ANY ITEM BELOW PLEASE CONTINUE ANSWER ON AN ATTACHED SHEET OF PAPER.

FACILITY IDENTIFICATION INFORMATION

- A. Name of Facility to be shown on Permit: Carolina Grocery
Name of permittee if different from above: Mr. Tommy Byrd
- B. Mailing Address of Facility: – PO Box or Street Route 14072 Highway 29 South
City, State and Zip Code Andalusia, AL 36420
- C. Location (STREET ADDRESS) of Facility: 14072 Highway 29 South
City, County: Andalusia, AL 36420 Covington
- D. Provide the latitudinal and longitudinal coordinates of the facility location. (Front Gate):
Latitude 31.241083 N Longitude -86.527686 W
- E. Facility Contact Person and Title: Anna Brunson, Project Manager
Telephone Number: 334-222-9431
- F. Standard Industrial Code (SIC) (Names and Codes): 5541 - Gasoline Service Stations
- G. Description of industrial activity and land use at the facility:
Gas Station/UST Remediation
- H. Check the type of discharge at your facility and complete the applicable sections associated with the type checked:
 Groundwater and/or storm water incidental to groundwater cleanup operations which has been contaminated with automotive gasoline, aviation fuel, jet fuel, or diesel fuel
 Storm water from petroleum storage and fueling areas
 Exterior vehicle and equipment wash water
 Hydrostatic test water generated on site.
- I. Please indicate which, if any, of the discharges in H. are combined.

- J. Has the facility ever been issued an NPDES Permit? Yes [] No [x]
Please provide the permit number and facility name at time of permitting.
Permit Number: _____
Facility Name: _____
- K. Has the facility been issued an NPDES **INDIVIDUAL** wastewater permit?
Yes [] No [x] NPDES Permit No. AL00 _____
Do you intend to replace your individual permit with this General Permit? Yes [] No []
- L. Has the facility been issued a State Indirect Discharge (SID) Permit?
Yes [] No [x] SID Permit No. IU _____
- M. Is this Notice of Intent for (check one):
x First time issuance of a **GENERAL** Permit
Renewal of **GENERAL** Permit No. ALG _____
Modification of **GENERAL** Permit No. ALG _____
- N. Are any of the discharges that you intend to be covered by this permit going to municipal storm sewer?
Yes [] No [x]
- O. Name of surface water to which the municipal storm sewer discharges: _____
- P. Have you notified the municipality by letter as required by 40 CFR 122.26(a)(4)? Yes [] No []
- Q. Date facility started or will start operations: 06/01/2019
- R. What is the size of the site in acres? 1 acre
- S. Do you discharge to any waters of the State that are impaired (303(d) or TMDL)? Yes [] No [x]
(A list of the impaired waters can be found at <http://adem.alabama.gov/programs/water/303d.cnt>
for 303(d)listed waters and <http://adem.alabama.gov/programs/water/wquality/2011ApprovedTMDLs.zip> for waters
subject to a TMDL.)
If yes, do your discharges contain pollutants of concern listed for the impaired water(s)? Yes [] No []
If yes, then enhanced BMPs are required. Also, an Individual NPDES Permit may be required, so please contact the
Industrial/Municipal Branch of ADEM before proceeding.

DSN001-DISCHARGES ASSOCIATED WITH GROUNDWATER REMEDIATION ACTION

NOT APPLICABLE []

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

0011	Latitude	<u>31.240753</u>	N	Longitude	<u>-86.527647</u>	W
	Receiving Stream	<u>UT to BAY BRANCH</u>				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				

- B. Has groundwater runoff from the facility been analyzed for presence of any known pollutants? Yes [] No [X] If yes, attach the most recent copy of the analysis.
- C. Groundwater discharges to:
 X Surface water
 Seeps into the ground
 Municipal storm sewer
- D. Does the facility discharge to a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? Yes [] No [X]
- E. This permit requires the development and implementation of a Best Management Practice (BMP) Plan. Does the facility have a BMP Plan? Yes [X] No []
- F. Does the facility have any of the following other control measures to prevent pollution?
- | | |
|---|----------------|
| 1. Structural control measures (basins, etc.) | Yes [] No [X] |
| 2. Treatment of groundwater (retention, aeration) | Yes [X] No [] |
| 3. Other. If so, please describe. _____ | |
- G. List outfall(s) in A. of this section that are treated for groundwater
 0011

- H. Will there be any discharge of groundwater as a result of aquifer testing? Yes [] No [X] If yes, this discharge must meet the requirements of this general permit.
- I. Does the facility plan to discharge well purge waters? Yes [X] No [] If yes, this discharge must meet the requirements of this general permit.
- J. Does the facility plan to discharge storm water accumulated in UST tank pits during closure? Yes [] No [X] If yes, this discharge must meet the requirements of this general permit.
- K. Were there any past industrial activities on the site that would contribute to storm water pollution? Yes [] No [X] If yes, please explain.
- L. Did the facility handle leaded fuels? Yes [] No [X] If yes, did the contamination result from the handling of leaded fuel? Yes [] No []
- M. Has the facility ever handled aviation fuel, jet fuel, or diesel fuel? Yes [X] No [] If yes, did the contamination result from the handling of aviation fuel, jet fuel, or diesel fuel? Yes [] No [X]
- N. Will you stockpile contaminated material on site? Yes [] No [X] If yes, which outfall(s) in A. of this section are for storm water runoff from these stockpiles?

DSN002 AND DSN004 – STORM WATER FROM PETROLEUM BULK STORAGE AND FUELING AREAS

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

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Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Number

Size

B. List number and size of above ground storage tanks.

List number and size of underground storage tanks.

- C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [] No []
If yes, attach the most recent copy of analysis.
- D. Storm water runoff discharges to:
Surface water
Seeps into ground
Municipal storm sewer
- E. This permit requires the development and implementation of a Best Management Practices (BMP) plan. Does the facility have a BMP Plan? Yes [] No []
- F. Does the facility have any of the following other control measures to prevent pollution?
1. Structural control measures (basins, etc.) Yes [] No []
2. Treatment of groundwater (retention, aeration) Yes [] No []
3. Other. If so, please describe. _____
- G. Known impact on receiving water? Yes [] No [] If yes, to what extent?

- H. Have any leaks, spills or other instances of storm water contamination occurred within the last 3 years?
Yes [] No [] If yes, what occurred and how did it happen?
- I. Are any above ground tanks that contain a possible pollutant double-walled? Yes [] No []
- J. Are all above ground tanks that contain a possible pollutant double-walled? Yes [] No []
- K. Are any above ground tanks that contain a possible pollutant diked? Yes [] No []
- L. Are all above ground tanks that contain a possible pollutant diked? Yes [] No []
- M. Can dikes contain 110% of the contents of the largest tank in the dike? Yes [] No []
- N. Are the walls and floors of the dikes relatively impermeable to the stored substance? Yes [] No []
- O. From which outfalls in A (this section) is uncontaminated storm water from secondary containment (for above ground storage tanks only) areas discharged? _____
- P. Is treated or untreated water from tank bottoms or water draws discharged on site? Yes [] No []
If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Branch of ADEM before proceeding.
- Q. Were there any past industrial activities on the site that would contribute to storm water contamination?
Yes [] No []. If yes, explain. _____
- R. Does the facility handle leaded fuels? Yes [] No []
- S. Does the facility handle aviation fuel, jet fuel, or diesel fuel? Yes [] No []
- T. Is hydrostatic testing of petroleum handling equipment done on site? Yes [] No [] If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Section of ADEM before proceeding.
- U. Are any trucks or equipment fueled at this facility? Yes [] No [] Is your fueling area protected from storm water including flowing water? Yes [] No [] If yes, please explain:

- V. Is storm water/wash down water from the fueling/loading area treated (oil/water separator, etc.) prior to discharge? Yes [] No []
- W. Does the facility comply with 40 CFR Part 112? Yes [] No []
Last update of SPCC Plan, if applicable

In accordance with 40 CFR Section 112.5 (b), applicable facilities must complete a review and evaluation of the SPCC Plan at least once every five years. If the provided date indicates the SPCC Plan is not valid, is the SPCC Plan currently being reviewed by a Professional Registered Engineer? Yes [] No []

If an SPCC Plan date was not entered, is it because the facility's petroleum storage capacity is below the volume that would require an SPCC Plan? Yes [] No []

X. Is storm water from fueling areas allowed to mix with storm water from other industrial activities? Yes [] No []

Y. Does any discharge or runoff from the facility reach a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? [] Yes [] No

DSN005 – DISCHARGES ASSOCIATED WITH VEHICLE AND EQUIPMENT EXTERIOR WASHING OPERATIONS

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

- B. Is this process water commingled with storm water prior to discharge? Yes [] No []
- C. Has the process water been analyzed for presence of any known pollutants? Yes [] No []
Attach the most recent copy of analysis.
- D. Give detailed description of wash water use, additives, location, ultimate disposal, etc.

E. Do you wash interior of tank rail cars or tank trailers? Yes [] No []
If yes, the facility cannot be covered under this General Permit. Please contact the Industrial Section of ADEM before proceeding.

F. How do you dispose of spent oil, hydraulic fluids and any other potential pollutants that you handle?

G. Does your facility use organic or petroleum based solvents in its washing operations? Yes [] No []
If yes, the facility cannot be covered under this general permit. Please contact the Industrial Section of ADEM before proceeding.

DSN007 – DISCHARGES ASSOCIATED WITH HYDROSTATIC TEST WATER

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

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Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Number

Size

B. List number and size of above ground storage tanks.

List number and size of underground storage tanks.

C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [] No []
If yes, attach the most recent copy of analysis.

D. Storm water runoff discharges to (circle one):

Surface water

Seeps into ground

Municipal storm sewer

E. This permit requires the development and implementation of a Best Management Practices (BMP) Plan. Does the facility have a BMP Plan? Yes [] No []

F. Does the facility have any of the following other control measures to prevent pollution?

1. Structural control measures (basins, etc.) Yes [] No []

2. Treatment of groundwater (retention, aeration) Yes [] No []

3. Other. If so, please describe. _____

G. Known impact on receiving water? Yes [] No [] If yes, to what extent?

H. Is treated or untreated water from tank bottoms or water draws discharged on site? Yes [] No [] If yes, the facility will need to contact the Industrial Section of ADEM regarding an Individual Permit.

I. Is hydrostatic testing of petroleum handling equipment done on site? Yes [] No []
Please be aware the DSN007 outfall only covers hydrostatic test water generated on site.

J. Is chlorine present in any source water (i.e., city or well water) used for hydrostatic testing? Yes [] No []

K. Does the facility discharge to a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? Yes [] No []

GENERAL INFORMATION

Have you included a check for the application fee? Yes [X] No []

DO NOT SUBMIT APPLICATION AND PERMIT FEE SEPARATELY

CERTIFICATION: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations.

SIGNATURES

Signature: eNOI Date Signed: 02/28/2019

Name and Official title (type or print): Jim Thomas Byrd, Owner

NOTE: This Notice of Intent must be signed by the official representative of the facility who is: the owner, the sole proprietor of a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government or an executive officer of **at least the level of vice president** for a corporation, having overall responsibility for the operation of the facility. If the Notice of Intent is not signed, or is found to be incomplete, it will be returned.

Address: 18551 Sugar Road, Andalusia, AL 36420

Phone Number: 334-488-0763

DISCHARGE MONITORING REPORTS (DMR) CONTACT – PLEASE COMPLETE

DMR Contact Name and Official title (type or print): Anna Brunson, Project Manager

DMR Contact Address: P.O. Box 278, Andalusia, AL 36420

DMR Contact Phone Number: 334-222-9431

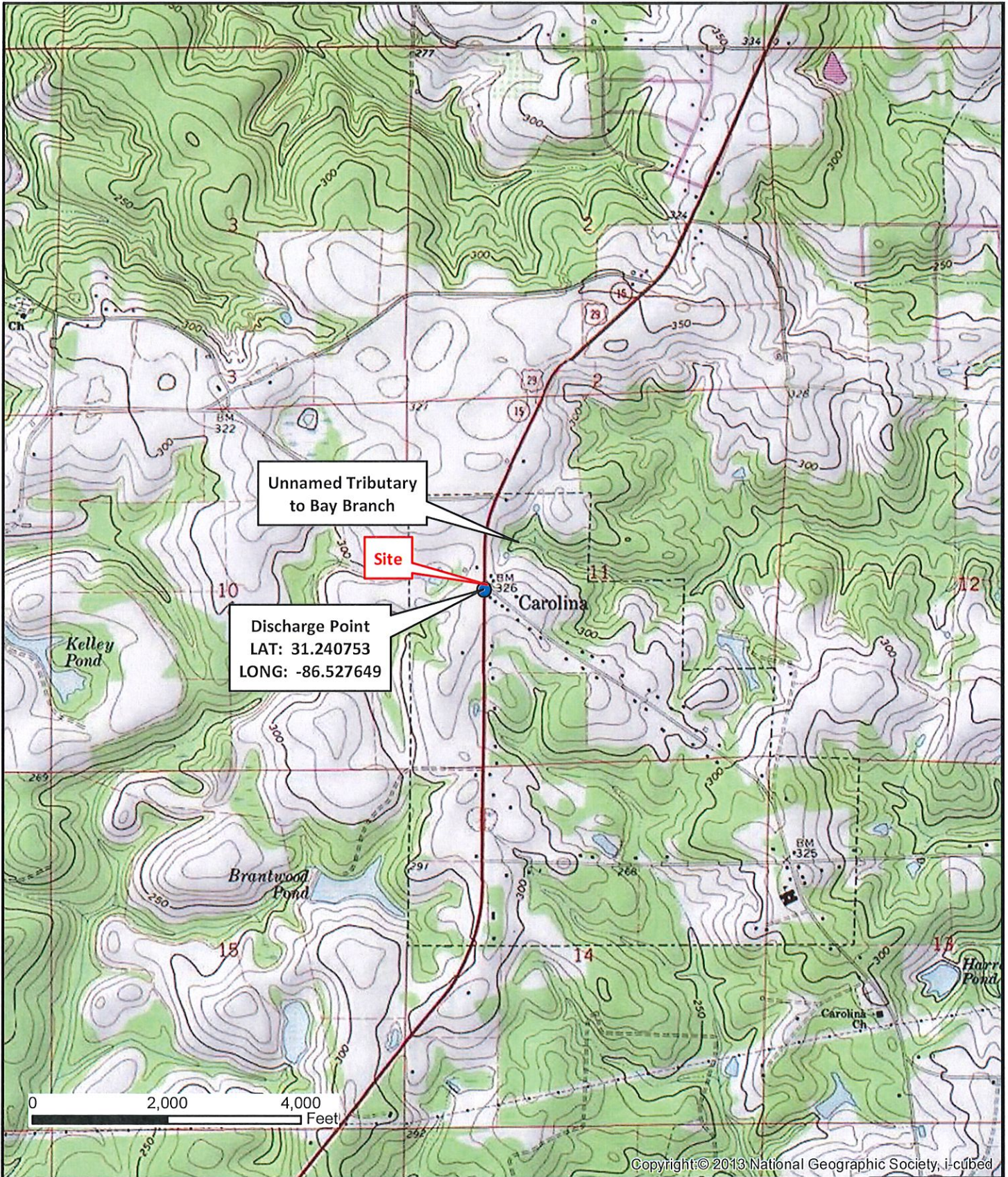
**PLEASE COMPLETE IF NOI IS PREPARED BY A CONSULTANT OR SOMEONE
OTHER THAN AN EMPLOYEE OF THE FACILITY**

Name of Individual (type or print): Anna Brunson, Project Manager

Name of Firm: CDG Engineers & Associates, Inc.

Address: P.O. Box 278, Andalusia, AL 36420

Phone Number: 334-222-9431



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www.cdge.com

Carolina Grocery
14072 US Highway 29 S
Carolina, Covington County, AL

Carolina Quadrangle
Township 3 North; Range 15 East; Section 11
LAT: 31.240908 LONG: -86.527665





Engineering. Environmental. Answers.

NPDES Permit Application

APPENDIX D

NOTICE OF INTENT – GENERAL PERMIT NUMBER ALG340000

(ADEM Form 394 _____)

DISCHARGES ASSOCIATED WITH PETROLEUM PRODUCTS CONSISTING OF STORM WATER, HYDROSTATIC TEST WATER, AND GROUNDWATER RESULTING FROM THE STORAGE, HANDLING, TRANSPORTATION, INVESTIGATION OF POTENTIAL CONTAMINATION, OR OTHER OPERATIONS INVOLVING PETROLEUM AND TREATED VEHICLE WASHWATER ASSOCIATED WITH PETROLEUM AND ITS DERIVATIVES

Mail to: Alabama Department of Environmental Management
Industrial General Permit Section
Industrial/Municipal Branch
Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

FOR OFFICE USE ONLY	
NPDES PERMIT NUMBER _____	
FACILITY NUMBER _____	

ANSWER ALL QUESTIONS IN APPLICABLE SECTIONS. PLEASE MARK THE “**NOT APPLICABLE**” BOX IF A SECTION IS NOT APPLICABLE. INCOMPLETE OR WRONG ANSWERS COULD RESULT IN MORE STRINGENT PERMIT REQUIREMENTS. IF SPACE IS INSUFFICIENT TO ADDRESS ANY ITEM BELOW PLEASE CONTINUE ANSWER ON AN ATTACHED SHEET OF PAPER.

FACILITY IDENTIFICATION INFORMATION

- A. Name of Facility to be shown on Permit: Carolina Grocery
Name of permittee if different from above: Mr. Tommy Byrd
- B. Mailing Address of Facility: – PO Box or Street Route 14072 Highway 29 South
City, State and Zip Code Andalusia, AL 36420
- C. Location (STREET ADDRESS) of Facility: 14072 Highway 29 South
City, County: Andalusia, AL 36420 Covington
- D. Provide the latitudinal and longitudinal coordinates of the facility location. (Front Gate):
Latitude 31.241083 N Longitude -86.527686 W
- E. Facility Contact Person and Title: Anna Brunson, Project Manager
Telephone Number: 334-222-9431
- F. Standard Industrial Code (SIC) (Names and Codes): 5541 - Gasoline Service Stations
- G. Description of industrial activity and land use at the facility:
Gas Station/UST Remediation
- H. Check the type of discharge at your facility and complete the applicable sections associated with the type checked:
- Groundwater and/or storm water incidental to groundwater cleanup operations which has been contaminated with automotive gasoline, aviation fuel, jet fuel, or diesel fuel
 - Storm water from petroleum storage and fueling areas
 - Exterior vehicle and equipment wash water
 - Hydrostatic test water generated on site.
- I. Please indicate which, if any, of the discharges in H. are combined.

- J. Has the facility ever been issued an NPDES Permit? Yes [] No [x]
Please provide the permit number and facility name at time of permitting.
Permit Number: _____
Facility Name: _____
- K. Has the facility been issued an NPDES **INDIVIDUAL** wastewater permit?
Yes [] No [x] NPDES Permit No. AL00 _____
Do you intend to replace your individual permit with this General Permit? Yes [] No []
- L. Has the facility been issued a State Indirect Discharge (SID) Permit?
Yes [] No [x] SID Permit No. IU _____
- M. Is this Notice of Intent for (check one):
x First time issuance of a **GENERAL** Permit
Renewal of **GENERAL** Permit No. ALG _____
Modification of **GENERAL** Permit No. ALG _____
- N. Are any of the discharges that you intend to be covered by this permit going to municipal storm sewer?
Yes [] No [x]
- O. Name of surface water to which the municipal storm sewer discharges: _____
- P. Have you notified the municipality by letter as required by 40 CFR 122.26(a)(4)? Yes [] No []
- Q. Date facility started or will start operations: 06/01/2019 _____
- R. What is the size of the site in acres? 1 acre _____
- S. Do you discharge to any waters of the State that are impaired (303(d) or TMDL)? Yes [] No [x]
(A list of the impaired waters can be found at <http://adem.alabama.gov/programs/water/303d.cnt>
for 303(d)listed waters and <http://adem.alabama.gov/programs/water/wquality/2011ApprovedTMDLs.zip> for waters
subject to a TMDL.)
If yes, do your discharges contain pollutants of concern listed for the impaired water(s)? Yes [] No []
If yes, then enhanced BMPs are required. Also, an Individual NPDES Permit may be required, so please contact the
Industrial/Municipal Branch of ADEM before proceeding.

DSN001-DISCHARGES ASSOCIATED WITH GROUNDWATER REMEDIATION ACTION

NOT APPLICABLE []

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

0011	Latitude	<u>31.240753</u>	N	Longitude	<u>-86.527647</u>	W
	Receiving Stream	<u>UT to BAY BRANCH</u>				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				
	Latitude	_____	N	Longitude	_____	W
	Receiving Stream	_____				

- B. Has groundwater runoff from the facility been analyzed for presence of any known pollutants? Yes [] No [x] If yes, attach the most recent copy of the analysis.
- C. Groundwater discharges to:
 x Surface water
 Seeps into the ground
 Municipal storm sewer
- D. Does the facility discharge to a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? Yes [] No [x]
- E. This permit requires the development and implementation of a Best Management Practice (BMP) Plan. Does the facility have a BMP Plan? Yes [x] No []
- F. Does the facility have any of the following other control measures to prevent pollution?
- | | |
|---|----------------|
| 1. Structural control measures (basins, etc.) | Yes [] No [x] |
| 2. Treatment of groundwater (retention, aeration) | Yes [x] No [] |
| 3. Other. If so, please describe. _____ | |
-
- G. List outfall(s) in A. of this section that are treated for groundwater
 0011
-
- H. Will there be any discharge of groundwater as a result of aquifer testing? Yes [] No [x] If yes, this discharge must meet the requirements of this general permit.
- I. Does the facility plan to discharge well purge waters? Yes [x] No [] If yes, this discharge must meet the requirements of this general permit.
- J. Does the facility plan to discharge storm water accumulated in UST tank pits during closure? Yes [] No [x] If yes, this discharge must meet the requirements of this general permit.
- K. Were there any past industrial activities on the site that would contribute to storm water pollution? Yes [] No [x] If yes, please explain.
- L. Did the facility handle leaded fuels? Yes [] No [x] If yes, did the contamination result from the handling of leaded fuel? Yes [] No []
- M. Has the facility ever handled aviation fuel, jet fuel, or diesel fuel? Yes [x] No [] If yes, did the contamination result from the handling of aviation fuel, jet fuel, or diesel fuel? Yes [] No [x]
- N. Will you stockpile contaminated material on site? Yes [] No [x] If yes, which outfall(s) in A. of this section are for storm water runoff from these stockpiles?

DSN002 AND DSN004 – STORM WATER FROM PETROLEUM BULK STORAGE AND FUELING AREAS

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

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Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Number

Size

B. List number and size of above ground storage tanks.

List number and size of underground storage tanks.

- C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [] No []
If yes, attach the most recent copy of analysis.
- D. Storm water runoff discharges to:
Surface water
Seeps into ground
Municipal storm sewer
- E. This permit requires the development and implementation of a Best Management Practices (BMP) plan. Does the facility have a BMP Plan? Yes [] No []
- F. Does the facility have any of the following other control measures to prevent pollution?
1. Structural control measures (basins, etc.) Yes [] No []
2. Treatment of groundwater (retention, aeration) Yes [] No []
3. Other. If so, please describe. _____
- G. Known impact on receiving water? Yes [] No [] If yes, to what extent?

- H. Have any leaks, spills or other instances of storm water contamination occurred within the last 3 years?
Yes [] No [] If yes, what occurred and how did it happen?
- I. Are any above ground tanks that contain a possible pollutant double-walled? Yes [] No []
- J. Are all above ground tanks that contain a possible pollutant double-walled? Yes [] No []
- K. Are any above ground tanks that contain a possible pollutant diked? Yes [] No []
- L. Are all above ground tanks that contain a possible pollutant diked? Yes [] No []
- M. Can dikes contain 110% of the contents of the largest tank in the dike? Yes [] No []
- N. Are the walls and floors of the dikes relatively impermeable to the stored substance? Yes [] No []
- O. From which outfalls in A (this section) is uncontaminated storm water from secondary containment (for above ground storage tanks only) areas discharged? _____
- P. Is treated or untreated water from tank bottoms or water draws discharged on site? Yes [] No []
If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Branch of ADEM before proceeding.
- Q. Were there any past industrial activities on the site that would contribute to storm water contamination?
Yes [] No []. If yes, explain. _____
- R. Does the facility handle leaded fuels? Yes [] No []
- S. Does the facility handle aviation fuel, jet fuel, or diesel fuel? Yes [] No []
- T. Is hydrostatic testing of petroleum handling equipment done on site? Yes [] No [] If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Section of ADEM before proceeding.
- U. Are any trucks or equipment fueled at this facility? Yes [] No [] Is your fueling area protected from storm water including flowing water? Yes [] No [] If yes, please explain:

- V. Is storm water/wash down water from the fueling/loading area treated (oil/water separator, etc.) prior to discharge? Yes [] No []
- W. Does the facility comply with 40 CFR Part 112? Yes [] No []
Last update of SPCC Plan, if applicable

In accordance with 40 CFR Section 112.5 (b), applicable facilities must complete a review and evaluation of the SPCC Plan at least once every five years. If the provided date indicates the SPCC Plan is not valid, is the SPCC Plan currently being reviewed by a Professional Registered Engineer? Yes [] No []

If an SPCC Plan date was not entered, is it because the facility's petroleum storage capacity is below the volume that would require an SPCC Plan? Yes [] No []

X. Is storm water from fueling areas allowed to mix with storm water from other industrial activities? Yes [] No []

Y. Does any discharge or runoff from the facility reach a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? [] Yes [] No

DSN005 – DISCHARGES ASSOCIATED WITH VEHICLE AND EQUIPMENT EXTERIOR WASHING OPERATIONS

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

- B. Is this process water commingled with storm water prior to discharge? Yes [] No []
- C. Has the process water been analyzed for presence of any known pollutants? Yes [] No []
Attach the most recent copy of analysis.
- D. Give detailed description of wash water use, additives, location, ultimate disposal, etc.

E. Do you wash interior of tank rail cars or tank trailers? Yes [] No []
If yes, the facility cannot be covered under this General Permit. Please contact the Industrial Section of ADEM before proceeding.

F. How do you dispose of spent oil, hydraulic fluids and any other potential pollutants that you handle?

G. Does your facility use organic or petroleum based solvents in its washing operations? Yes [] No []
If yes, the facility cannot be covered under this general permit. Please contact the Industrial Section of ADEM before proceeding.

DSN007 – DISCHARGES ASSOCIATED WITH HYDROSTATIC TEST WATER

NOT APPLICABLE [X]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

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Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Latitude _____ N Longitude _____ W

Receiving Stream _____

Number

Size

B. List number and size of above ground storage tanks.

List number and size of underground storage tanks.

C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [] No []
If yes, attach the most recent copy of analysis.

D. Storm water runoff discharges to (circle one):
Surface water
Seeps into ground
Municipal storm sewer

E. This permit requires the development and implementation of a Best Management Practices (BMP) Plan. Does the facility have a BMP Plan? Yes [] No []

F. Does the facility have any of the following other control measures to prevent pollution?

- | | |
|---|----------------|
| 1. Structural control measures (basins, etc.) | Yes [] No [] |
| 2. Treatment of groundwater (retention, aeration) | Yes [] No [] |
| 3. Other. If so, please describe. _____ | |

G. Known impact on receiving water? Yes [] No [] If yes, to what extent?

H. Is treated or untreated water from tank bottoms or water draws discharged on site? Yes [] No [] If yes, the facility will need to contact the Industrial Section of ADEM regarding an Individual Permit.

I. Is hydrostatic testing of petroleum handling equipment done on site? Yes [] No []
Please be aware the DSN007 outfall only covers hydrostatic test water generated on site.

J. Is chlorine present in any source water (i.e., city or well water) used for hydrostatic testing? Yes [] No []

K. Does the facility discharge to a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? Yes [] No []

GENERAL INFORMATION

Have you included a check for the application fee? Yes [X] No []

DO NOT SUBMIT APPLICATION AND PERMIT FEE SEPARATELY

CERTIFICATION: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations.

SIGNATURES

Signature: eNOI Date Signed: 02/28/2019

Name and Official title (type or print): Jim Thomas Byrd, Owner

NOTE: This Notice of Intent must be signed by the official representative of the facility who is: the owner, the sole proprietor of a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government or an executive officer of **at least the level of vice president** for a corporation, having overall responsibility for the operation of the facility. If the Notice of Intent is not signed, or is found to be incomplete, it will be returned.

Address: 18551 Sugar Road, Andalusia, AL 36420

Phone Number: 334-488-0763

DISCHARGE MONITORING REPORTS (DMR) CONTACT – PLEASE COMPLETE

DMR Contact Name and Official title (type or print): Anna Brunson, Project Manager

DMR Contact Address: P.O. Box 278, Andalusia, AL 36420

DMR Contact Phone Number: 334-222-9431

**PLEASE COMPLETE IF NOI IS PREPARED BY A CONSULTANT OR SOMEONE
OTHER THAN AN EMPLOYEE OF THE FACILITY**

Name of Individual (type or print): Anna Brunson, Project Manager

Name of Firm: CDG Engineers & Associates, Inc.

Address: P.O. Box 278, Andalusia, AL 36420

Phone Number: 334-222-9431

Please attach or in the space below draw a map showing the location of the facility including major highways and/or landmarks.

Alabama Department of Environmental Management

Permittee Registration Form for e-DMR/e-SSO

This form should be used to register a Permittee for ADEM's E2 Reporting System and authorize any changes to permit requirements that may be necessary to allow the identified Permittee to submit Discharge Monitoring Reports and Sanitary Sewer Overflow Reports electronically. This form should also be used by the Permittee to add, change, or delete E2 Reporting System accounts for individuals that the Permittee authorizes (or no longer authorizes) to view/prepare or certify e-DMR or e-SSO submissions. **Note:** Any individual for which a Certifier account is requested must also sign and submit an Electronic Signature Agreement (ESA) for e-DMR/e-SSO (ADEM Form 512). A Certifier account cannot be created without a properly completed and signed ESA. Please review ADEM's E2 Reporting System Permittee Participation Package should you have any questions about completing this form. It is available on ADEM's website at <https://e2.adem.alabama.gov/NPDES>. Please send a hard copy of completed form(s) with original wet-ink signature(s) to:

ADEM
Attn: E2 Coordinator
P O Box 301463
Montgomery, AL 36130-1463

Part A. Permittee Information

1. Permit Number(s): 31820

Note: A Permittee may enroll in the E2 Reporting System for more than one permit on this form; however, please be aware that the User(s) listed in Part B below will have the authorities requested for each permit number listed above. If that is not your intention, only list the permit(s) for which you are requesting authorization for the User(s) listed in Part B below.

2. Permittee Name: Mr. Tommy Byrd

3. Mailing Address (Line 1): 14072 Highway 29 South

4. Mailing Address (Line 2): _____

5. Mailing Address (City, State, Zip): Andalusia, AL 36420

6. Application Purpose: New Application Revised Permittee or Application Information Request for Reactivation

Part B. User Account Information (* indicates required information)

User Account Designation(s) (Both an Account Action and Account Type must be indicated for an e-DMR or e-SSO account.)

1.a. e-DMR Account Action: Add Update Delete N/A 1.b. Account Type: Viewer/Preparer Certifier
 2.a. e-SSO Account Action: Add Update Delete N/A 2.b. Account Type: Viewer/Preparer Certifier

Comment: _____

User General Information and Contact Information

Mr. Ms. Dr. Anna Brunson
 3.a. First Name* 3.b. Middle Name/Initial 3.c. Last Name* 3.d. Suffix
 4. Job Title: Project Manager 5. Employer's Name: CDG Engineers & Associates, Inc.
 6. e-mail*: anna.brunson@cdge.com
 7.a. Office Phone No.*: 3342229431 7.b. Cell Phone No.: 3345044606
 8. Mailing Address (Line 1)*: _____ P.O. Box 278
 9. Mailing Address (Line 2): _____
 10. Mailing Address (City, State, Zip)*: Andalusia, AL 36420

User Account Designation(s) (Both an Account Action and Account Type must be indicated for an e-DMR or e-SSO account.)

1.a. e-DMR Account Action: Add Update Delete N/A 1.b. Account Type: Viewer/Preparer Certifier
 2.a. e-SSO Account Action: Add Update Delete N/A 2.b. Account Type: Viewer/Preparer Certifier

Comment: _____

User General Information and Contact Information

Mr. Ms. Dr. _____ _____
 3.a. First Name* 3.b. Middle Name/Initial 3.c. Last Name* 3.d. Suffix
 4. Job Title: _____ 5. Employer's Name: _____
 6. e-mail*: _____
 7.a. Office Phone No.*: _____ 7.b. Cell Phone No.: _____
 8. Mailing Address (Line 1)*: _____
 9. Mailing Address (Line 2): _____
 10. Mailing Address (City, State, Zip)*: _____

3 R D U S E R A C C O U N T

User Account Designation(s) (Both an Account Action and Account Type must be indicated for an e-DMR or e-SSO account.)

1.a. e-DMR Account Action: Add Update Delete N/A 1.b. Account Type: Viewer/Preparer Certifier

2.a. e-SSO Account Action: Add Update Delete N/A 2.b. Account Type: Viewer/Preparer Certifier

Comment: _____

User General Information and Contact Information

Mr. Ms. Dr. 3.a. First Name* 3.b. Middle Name/Initial 3.c. Last Name* 3.d. Suffix

4. Job Title: _____ 5. Employer's Name: _____

6. e-mail*: _____

7.a. Office Phone No.*: _____ 7.b. Cell Phone No.: _____

8. Mailing Address (Line 1)*: _____

9. Mailing Address (Line 2): _____

10. Mailing Address (City, State, Zip)*: _____

Part C. Permittee Registration

I request that the above identified Permittee be registered for electronic reporting and request any Department initiated minor permit revisions (where no fee is required) that may be necessary to allow use of the ADEM E2 Reporting System. As a Responsible Official or a Duly Authorized Representative, I agree that representatives for this facility will follow permit requirements and the procedures for the electronic submission of DMR and SSO report forms, as described in the Permittee Participation Package.

Please establish or revise the above user accounts in accordance with the information provided for each identified User Account. I understand that if a Certifier account is requested for an individual above, an Electronic Signature Agreement (ESA) for e-DMR/e-SSO (ADEM Form 512) must be properly completed and signed. A Certifier account will not be created without a properly completed and signed ESA.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Jim Thomas Byrd 02/28/2019

Name of Responsible Official or Duly Authorized Representative <i>(Type or print legibly)</i>	Signature	Date Signed
Owner		
Official Title <i>(Type or print legibly)</i>		

Note: This form may only be signed by a Responsible Official (RO) or Duly Authorized Representative (DAR), as specified in the ADEM Admin. Code. An RO may sign this form to appoint any individual as a Viewer/Preparer or Certifier. A DAR may sign this form to appoint himself/herself as a Viewer/Preparer or a Certifier, but may only sign this form for another individual to appoint them as a Viewer/Preparer. The ADEM Admin. Code does not allow a DAR to delegate signatory authority to another individual.

If a DAR signing this form has been granted signatory authority by a document other than an accompanying ADEM Form 512 (ESA), please provide a copy with this application to expedite the processing.

For ADEM Use Only

Name	Date	Date
Received By:		Trial Start:
Approved By:		Full E2:
E2 Updated:		

Notes: _____

Alabama Department of Environmental Management
Electronic Signature Agreement (ESA) for e-DMR/e-SSO

AGREEMENT FOR SUBMITTING ELECTRONIC DOCUMENTS TO THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM) USING THE ALABAMA ELECTRONIC ENVIRONMENTAL (E2) REPORTING SYSTEM (the "Agreement"), by and between the ADEM, Montgomery, Alabama, a state governmental agency, and reporting party ("Certifier") who has signed and returned this Electronic Signature Agreement (ESA), is effective on the date on which ADEM issues the initial PERSONAL IDENTIFICATION NUMBER (PIN), in acceptance of Certifier's signed ESA.

1. **RECITALS.** The intent of this agreement is to create legally binding obligations upon the parties using the specified data transmission protocols and the E2 Reporting System, to ensure that the Certifier agrees to: (i) maintain the confidentiality and protect the electronic signature from unauthorized use or compromise, and follow any procedures specified by the ADEM for this purpose; (ii) be held as legally bound, obligated, or responsible by use of the assigned electronic signature as by hand-written signature.
2. **VALIDITY AND ENFORCEABILITY.** This Agreement has been executed by the parties to evidence their mutual intent to follow Department procedures to create binding regulatory reporting documents using electronic transmission and receipt of such records consistent with the provisions of Chapter 6 of the ADEM Administrative Code. Acceptance and execution of this agreement by the ADEM shall be evidenced by the issuance of a PIN to the Certifier. Consistent with ADEM Administrative Code electronic signatures under this agreement shall have the same force and effect as a written signature.
3. **RECEIPT.** Once submitted by a Certifier, a document shall be deemed received by ADEM when the submission ID is generated and the file processed by the E2 System Server. No Document shall satisfy any reporting requirement or be of any legal effect until the auto generated submission ID is provided. The Certifier is responsible for the content of each transmission, in accordance with the associated certification statement, and for reviewing the accuracy of the processed document information and as made available by the ADEM E2 Reporting System.
4. **SIGNATURE.** The Certifier shall adopt as its electronic signature any Personal Identification Number (PIN) assigned by ADEM following acceptance of this ESA. The Certifier agrees that any such Signature affixed to or associated with any transmitted Document shall be sufficient to verify such party originated and possessed the requisite authority both to originate the transaction and to verify the accuracy of the content, in the format of the specified E2 Reporting System transmission protocol or otherwise, at the time of transmittal. The Certifier also expressly agrees that each report it submits by using its PIN constitutes their agreement with the associated certification statement.
5. **DEFINITIONS.** Whenever used in this Agreement or any documents incorporated into this Agreement by reference, the following terms shall be defined as follows:
 - (a). *Personal Identification Number (PIN).* Assigned by ADEM following acceptance of this ESA, each PIN will consist of a unique sequence of alpha-numeric characters and when combined with the knowledge based security question answer shall constitute the electronic signature.
 - (b). *Compromise.* When the PIN is intentionally or unintentionally given, disclosed, delegated, or otherwise made available, including any theft or loss, to any other person or organization.
 - (c). *Writing.* Any document properly transmitted pursuant to this Agreement shall be considered to be a "writing" or "in writing".
6. **TRANSMISSION PROTOCOLS.** All Reports transmitted between the parties shall adhere to the Protocol(s) established by the ADEM for files to be received by the ADEM E2 Reporting System and in affect at the time of a transaction. The Department may modify such Protocol(s), as may be necessary, to promote or continue usability of the E2 Reporting System. The Department shall make available any such Protocol(s), changes to Protocols, or related implementation guidelines for reporting using the ADEM E2 Reporting System.
7. **SECURITY.** The parties shall take reasonable actions to implement and maintain security procedures necessary to ensure the protection of transmissions against the risk of unauthorized access, alteration, loss or destruction including, but not limited to: protecting the secrecy of passwords and electronic signatures and transmitting only files in an acceptable protocol.
 - (a). *Use of PIN.* Each Certifier shall be either the Responsible Official or a person identified as an authorized representative for signatory purposes by the Responsible Official for each facility, person, or other entity for which information is being reported. If a PIN has been compromised or where there is evidence of potential compromise, it will be automatically or manually suspended. In addition, ADEM will inactivate or revoke a PIN where the Certifier is no longer an authorized representative. Each Certifier expressly agrees that the Department may act immediately and unilaterally in any decision to suspend, inactivate, revoke, or otherwise disallow use of a PIN by any Certifier, where the Department believes that such action is necessary to ensure the authenticity, integrity, or general security of transmissions or records, or where there are any actual or apparent violations of this ESA.

- (b). *Protection of PIN.* Each party must protect the security and confidentiality of any PIN from compromise and shall take all necessary steps to prevent its loss, disclosure, modification, or unauthorized use. The Certifier shall notify ADEM immediately, but, not later than one business day, if it has reason to believe the security of any PIN has been compromised and must request a change. If ADEM has reason to believe that PIN security has been compromised, the ADEM will consult with the Certifier, when practical, and initiate PIN changes where necessary. The Certifier is responsible for immediately notifying ADEM (in writing) of termination of employment, reassignment, or any other change or cessation of status as an authorized representative.
- 8. SEVERABILITY.** Any provision of this Agreement which is determined to be invalid or unenforceable will be ineffective to the extent of such determination without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such remaining provisions.
- 9. INABILITY TO TRANSMIT OR FILE REPORTS ELECTRONICALLY.** No party shall be liable for any failure to perform its obligations in connection with any Electronic Transaction or any Electronic Document, where such failure results from any act or cause beyond such party's control which prevents such party from electronically transmitting or receiving any Documents, except that the Certifier is nonetheless required to submit records or information required by law via other means, as provided by applicable law and within the time period provided by such law.
- 10. GOVERNING LAW.** This Agreement shall be governed by and interpreted in accordance with Chapter 6, Alabama Statutes, other applicable provisions of Laws of Alabama, and the Federal laws of the United States.

The ADEM and the Certifier have caused this Agreement to be properly executed on their behalf, as of the date the Certifier is issued a PIN, in accordance with and following acceptance of this agreement by the ADEM.

Type or Print Legibly

Certifier:

I, the undersigned, have the authority to enter into this Agreement under the ADEM Admin. Code r. 335-6-5-.14 or 335-6-6-.09, as applicable, for (Permittee Name) _____ and for (Permit Number(s) _____.

Name of Certifier <i>(Type or print legibly)</i>	Certifier's Signature	Date Signed
Certifier's Official Title <i>(Type or print legibly)</i>	Certifier's Employer's Name <i>(Type or print legibly)</i>	

If the Certifier listed above does not meet the definition of Responsible Official as defined in the ADEM Admin. Code r. 335-6-5-.14(1) or 335-6-6-.09(1), as applicable, or has not been previously appointed as an Authorized Representative as provided in ADEM Admin. Code r. 335-6-5-.14(2) or 335-6-6-.09(2), as applicable, a Responsible Official (RO) must appoint the Certifier as an Authorized Representative below:

I, (RO Name) _____, authorize the individual named above to sign reports and other information *(excluding applications, reports, and other information specified in ADEM Admin. Code r. 335-6-5-.14(1) or 335-6-6-.09(1), as applicable, as requiring the signature of a Responsible Official)* on my behalf for (Permittee Name) _____ as an Authorized Representative and certify that the individual named above meets the criteria for an Authorized Representative as defined in ADEM Admin. Code r. 335-6-5-.14(2)(b) or 335-6-6-.09(2)(b), as applicable.

Responsible Official's Signature	Responsible Official's Title <i>(Type or print legibly)</i>	Date Signed
---	---	--------------------



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UIC Permit Application

APPENDIX E

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
NOTICE OF INTENT – UIC GENERAL PERMIT NUMBER ALIG010000**

Instructions: This form should be used to submit a Notice of Intent for coverage under UIC General Permit Number ALIG010000, which is the general permit authorizing discharges associated with injection of air, oxygen, or ozone to aid in the remediation of existing soil and/or groundwater contamination. Answer all questions. Incomplete or wrong answers will result in processing delays and possible denial of the permit application. If space is insufficient to address any item below please continue answer on an attached sheet of paper. Commencement of activities applied for in this Notice of Intent (NOI) are not authorized until permit coverage has been issued by the Department.

Permit Applicant Information

- A. Applicant Name: Carolina Grocery
- B. Responsible Official (RO)*: Tommy Byrd, Owner
- C. RO Mailing Address: 14072 Highway 29 South, Andalusia, AL 36420
- D. RO Phone Number: 334-222-9431
- E. RO Email Address: jennifergurleybyrd@gmail.com

Property Owner Information (if different from the applicant)

- F. Name: Tommy Byrd, Owner
- G. Mailing Address: 14072 Highway 29 South, Andalusia, AL 36420
- H. Phone Number: 334-222-9431
- I. Email Address: jennifergurleybyrd@gmail.com

Facility Information

- J. Facility Name: Carolina Grocery
- K. Physical Address: 14072 Highway 29 South, Andalusia, AL 36420
- L. Phone Number: 334-222-9431
- M. Latitude: 31.241083 Longitude: -86.527686
- N. Directions to site:

Intersection of AL Highway 29 and Rockhole Bridge Road

Process Information

- O. Describe the fluids and/or pollutants to be injected and proposed operational procedures. Include estimated average and maximum daily injection rates as well as total volume to be injected:

Air

P. Number of injection wells (each point of injection is considered a separate well): 4

Signatures

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

RO Signature: eNOI Date Signed: 02/28/2019

RO Name: Jim Thomas Byrd RO Title: Owner

***NOTE:** This Notice of Intent must be signed by the responsible official who represents the permit applicant. Please check the appropriate box indicating the responsible official (only the people listed below may sign this Notice):

- in the case of a corporation, the principal executive officer of at least the level of vice-president;
- in the case of a partnership, a general partner;
- in the case of a sole proprietorship, the owner;
- in the case of a municipal, state, federal, or other public agency, either a principal executive officer or ranking elected official.



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AIR DIVISION PERMIT

APPENDIX F



Engineering. Environmental. Answers.

1840 East Three Notch Street
Andalusia, AL 36421
Post Office Box 278
Andalusia, AL 36420
Tel (334) 222-9431
Fax (334) 222-4018

www.cdge.com

February 27, 2019

Ms. Katie Smith
ADEM, Air Division
PO Box 301463
Montgomery, Alabama 36130-1463

RE: REQUEST FOR APPROVAL OF AIR EMISSION CONTROL

Carolina Grocery
14072 Highway 29 South
Andalusia, Covington County, Alabama
Fac. ID 20341-039-008237
UST 16-09-01

Dear Ms. Smith:

CDG Engineers & Associates, Inc. (CDG) has been requested by the Alabama Department of Environmental Management (ADEM) to perform corrective action activities at the Carolina Grocery site in Andalusia, Alabama. Air emissions will be produced during the operation and maintenance of a proposed multi-phase extraction (MPE) system. No measurable accumulations of free product have been detected at the site since the beginning of assessment activities. Corrective action activities at the site are being conducted under the Alabama Tank Trust Fund (ATTF).

The proposed air control device for the MPE system will consist of granular activated carbon. The MPE system will be equipped with two 1,000 pound carbon vessels connected in series for air emission control.

Air samples (both prior to and after off-gas treatment) will be collected on a quarterly basis. The samples will be analyzed for BTEX and Total Petroleum Hydrocarbons (TPH) using a modified EPA Method TO-3. Off gas loading to the atmosphere after carbon treatment will be calculated and reported to ADEM Air Division on a quarterly basis. Air emission control will be utilized until the free product is removed or until Volatile Organic Compound (VOC) emissions do not exceed 0.1 pound per hour (lbs/hr), unless Air Toxic Modeling indicates otherwise. Modeling may indicate that control is initially required; however, the quarterly data may indicate at some future date that emission control is no longer necessary.

ALBERTVILLE

ANDALUSIA

AUBURN

DOTHAN

GADSDEN

HOOVER

HUNTSVILLE



Engineering. Environmental. Answers.

1840 East Three Notch Street
Andalusia, AL 36421
Post Office Box 278
Andalusia, AL 36420
Tel (334) 222-9431
Fax (334) 222-4018

www.cdge.com

Attached is the ADEM Form 448. Please note that there are a number of assumptions in the air calculations for emissions. Off-gas loading estimates were determined using data from multiple Mobile Enhanced Multiphase Extraction (MEME) events conducted at the site. Based on CDG's experience with conducting remediation at similar sites, the rate of off-gas loading will decrease rapidly as soil and groundwater concentrations are reduced throughout the remediation process. As the off-gas loading concentrations decrease below threshold levels, the MPE system's air emission control would be discontinued.

The proposed system will use a total of five recovery wells. The most recent groundwater sampling event was conducted at the site on December 14, 2018 and are included in the attached tables.

The most recent 12-hour MEME event was conducted at the site on January 22, 2019 by Brown Remediation, Inc. During the 12-hour event, approximately 15.07 pounds of hydrocarbons (2.44 equivalent gallons of gasoline) were recovered at an applied vacuum of 10.0 in-Hg and an average effluent flow rate of approximately 192.1 SCFM.

If you have any questions, or if you need any additional information, please do not hesitate to contact me at (334) 222-9431.

Respectfully,

CDG ENGINEERS & ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Anna Brunson". The signature is written in a cursive, flowing style.

Anna Brunson
Project Manager

ALBERTVILLE

ANDALUSIA

AUBURN

DOTHAN

GADSDEN

HOOVER

HUNTSVILLE



Engineering. Environmental. Answers.

QUALITY ASSURANCE/QUALITY CONTROL MONITORING AND SAMPLING PLAN

APPENDIX G

QA/QC MONITORING/SAMPLING PLAN

FIELD ACTIVITIES

Groundwater Monitoring/Sampling Activity Protocols

Groundwater monitoring/sampling includes the following associated activities:

- 1) Measurement of free product if present;
- 2) Measurement of static water level;
- 3) Calculation of standing water volume (in well);
- 4) Well Evacuation
- 5) Collection of samples; and
- 6) Decontamination of equipment

Groundwater sampling parameters are recorded in the field on a monitoring well sampling record form. Details for the above referenced monitoring/sampling activities are described in the following sections.

Calculation of Standing Water Volume

The standing water volume in a monitoring well is calculated using the equation:

$$v = 3.14 \times r^2 \times l$$

(where **v** = well volume, **r** = well radius, and **l** = length of the water column).

The column of water in the well can be calculated using the equation:

$$l = w - d$$

(where **w** = distance from the top of casing to the bottom of the well and **d** = distance from the top of casing to the top of the water).

Well Evacuation

Well evacuation is initiated after the static water level is measured and the standing water volume has been calculated. Well evacuation is conducted by either using a new disposable (single-use) bailer, a well-dedicated PVC bailer, or a surface mounted pneumatic operated diaphragm pump. A diaphragm pump is only used in deep wells

(greater than 25 feet) or wells that yield such large volumes that hand-bailing is not practical.

Well evacuation with a bailer is performed by attaching a new nylon line to the bailer, and then lowering the bailer in to the well until the bailer is submerged. The bailer is then retrieved from the well in such a manner that the bailer and nylon line do not contact the ground or surrounding vegetation (to prevent contaminating the bailer or line). The water removed from the well is poured into a graduated bucket so that the amount of water removed can be determined. This procedure is repeated until three well volumes of water are removed, or until the well is purged dry. For wells that recharge very slowly, the purge water is limited to one well volume. The volume of groundwater purged from each well will be recorded.

Well evacuation with a diaphragm pump is conducted by lowering disposable tubing into the well to sufficient depth. For deeper wells, a PVC pipe, equipped with a foot valve (to stage-lift the water out of the well) will be employed. The piping will be dedicated to each well to prevent cross-contamination. Pumping will be performed until at least three well volumes are recovered (purge volume will be recorded).

Petroleum contaminated water (PCW) purged from wells in conjunction with groundwater monitoring/sampling activities will be processed through the on-site MPE system.

Groundwater Sample Collection

Groundwater samples are collected from monitoring wells not containing free-phase hydrocarbons unless otherwise directed by the ADEM. Groundwater sampling is performed using a new disposable bailer for each sampled well. The disposable bailers are purchased in individually wrapped packages, and are not opened until ready to use. Once opened, the bailers are attached to a length of new nylon string. The bailer and string are not allowed to touch the ground or vegetation, and are disposed of after each well. Sampling is accomplished by slowly lowering the bailer into the well to a depth where the bailer is almost completely submerged. The bailer is then slowly retrieved from the well to minimize agitation of the sample. Once collected, the water sample is

immediately transferred (poured slowly to minimize agitation and formation of air bubbles) into the designated sample containers.

Groundwater samples collected for BTEX/MTBE/Naphthalene analysis (volatile organics) are poured very slowly down the inside of the sample vial to avoid aeration. The sample vials, consisting of 40 ml glass with a Teflon septum cap, are provided directly from the CDG analytical laboratory. The groundwater sample is added to the vial until a convex meniscus is formed across the top of the vial. The Teflon septum cap is placed on the vial and the vial is upended to check for trapped air bubbles. If bubbles are present, the sample container is opened, and topped off again until an air-free sample is obtained. If the vial cannot be closed "air-free" after three tries, it is discarded. Two samples are collected for each BTEX/MTBE/Naphthalene (volatile) analysis. The preservation employed for BTEX/MTBE/Naphthalene (volatile) analysis will include either of the following (depending on holding time constraints):

- Cool collected sample to 4°C and maintain (7-day holding time), or
- Add 4 drops concentrated HCl to sample vial (typically the acid is pre-added by the laboratory to the sample vial) and then cool sample to 4°C and maintain (14-day holding time).

Immediately following collection of each groundwater sample, the sample is labeled, placed in bubble pack (to prevent the glass vial from breaking during shipping), and stored in an ice chest with sufficient ice. Each sample label includes the site location, sample identification number, name of collector, date/time of collection, and parameter(s) requested.

Following collection of all samples, the ice chest will be sealed and transported to the laboratory following appropriate chain of custody protocols (refer to description of Chain of Custody protocols provided below).

Decontamination of Groundwater Sampling Equipment

All equipment used for groundwater sampling is either well-dedicated or is used only once and disposed of. As a result, cleaning/decontamination of sampling equipment are minimal.

QA/QC PROCEDURES DISCUSSION

Chain of Custody

Sample custody begins with the CDG laboratory when sample kits are prepared and shipped for field personnel use at a specified project location. Responsibility for sample container materials and preparation lies with the CDG laboratory. Upon receipt of the kits, CDG field personnel complete an inventory of the contents to confirm that the containers, etc. are adequate for the number of wells and specified analytes. Sample bottles may be pre-labeled and contain the proper preservative. The individual sample vials and/or other sample containers are not opened until used in the field. CDG will secure the sample kits inside the office until the specific sampling project is to be performed.

The samples remain in the custody of the CDG field personnel representative until delivered to the CDG laboratory or dispatched via common carrier for shipment to the laboratory. In cases where samples leave the direct control of CDG personnel, such as shipment to a laboratory by a common carrier (FedEx, UPS, etc.), a seal will be provided on the shipping container or individual sample bottles to ensure that the samples have not been opened or otherwise disturbed during transportation.

To establish and maintain the documentation necessary to trace sample possession from the time of collection, a chain of custody record will be completed and will accompany every sample. The record contains the following types of information:

- Sample number
- Signature of collector
- Date and time of collection
- Sample type (soil, groundwater, air, etc.)
- Identification of well
- Number of containers
- Parameters requested for analysis
- Required detection limit
- Signature of person(s) involved in the chain of possession.

Field QA/QC Program

Various types of field blanks are collected to verify that the sample collection and handling process has not affected the quality or integrity of the samples.

- 1) Trip Blanks – A trip blank is a field blank that is transported from the laboratory to the sampling site, handled in the same manner as other samples, and then returned to the laboratory for analysis in determining QA/QC of sample handling procedures. The trip blank is prepared in the laboratory with distilled/organic free water and is utilized at a frequency of 1 trip blank for each cooler (or other shipping container) used to transport samples from the laboratory to the field and back to the laboratory.

- 2) Duplicate Sample – Duplicate samples are collected simultaneously from the same source, under identical conditions, into separate sample containers. These samples provide a check on the sampling techniques as well as laboratory equipment. Duplicate samples are only collected on groundwater samples at a frequency of one sample per sampling event.

The results of the analysis of the blanks will not be used to correct the groundwater data. If contaminants are found in the blanks, an attempt to identify the source of contamination will be initiated and corrective action, including re-sampling if necessary, will be evaluated.

After completing a sampling program, the field data package (field logs, calibration records, chain of custody forms, etc.) will be reviewed for completeness and accuracy. Some of the items considered in the Field Data Package Validation Procedure include but are not limited to the following:

- A completeness review of field data contained on water and soil sampling logs;
- A verification that sampler blanks were properly prepared, identified, and analyzed;
- A check on field analyses for equipment calibration and condition; and
- A review of chain of custody forms for proper completion, signatures of field personnel and the laboratory sample custodian, and dates.

Laboratory QA/QC Program

The selection of a contract laboratory can be directed either by the client or by CDG. In either case, the selection of the laboratory is typically based upon several facts including cost, laboratory certification, quality of data and reporting, and turn around time. The most critical factor in the selection of an analytical laboratory by CDG is the quality of data and reporting provided by the laboratory. Typically, the results of analytical laboratory testing dictate the activities conducted at a site. The activities conducted when selecting a laboratory include discussions with current and past customers, discussions with regulatory agencies, and review of laboratory QA/QC practices.

The normal turn around for samples will be two weeks for most samples. Prior to contracting a laboratory to conduct analysis, an estimate of the turn around time is obtained. If the expected turn around is in excess of three weeks then a backup laboratory is contacted to determine their availability. A decision of which laboratory to use in a particular instance is made on a case-by-case basis.

Once an analytical report is received by CDG, validation of the analytical data package will be performed. The Analytical Data Package Validation procedure will include but is not limited to the following:

- A comparison of the Data Package to the reporting level requirements designed for the project, to ensure completeness;
- A comparison of sampling dates, sample extraction dates, and analysis dates to determine if samples were extracted and/or analyzed within the proper holding times' as failure in this area may render the data unusable;
- A review of analytical methods and required detection limits to verify that they agree with set standards; as failure in this area may render the data unusable;
- A review of sample blanks to evaluate possible sources of contamination. The preparation techniques and frequencies, and the analytical results (if appropriate) will be considered; and
- A review of blanks (trip blanks, reagent blanks, method blanks, and extraction blanks) to assure that they are contamination free at the lowest possible

detection limit. All blank contaminants must be explained or the data applicable to those blanks will be labeled suspect and may only be sufficient for qualitative purposes.

- A review of detection limits, to ensure sample results are accurate to below the levels specified as ADEM Initial Screening Levels.
- A review of data “qualifiers” reported by the laboratory for significance to the results.



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SITE HEALTH AND SAFETY PLAN

APPENDIX H

Site Health and Safety Plan

**Carolina Grocery
14072 U.S. Highway 29 South
Andalusia, Covington County, Alabama
Facility ID# 20341-039-008237
UST No. 16-09-01**

Prepared For:

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12258 J.E. McDonald Farm Road
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Prepared By:

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1.0 INTRODUCTION

This Health and Safety Plan (HASP) has been prepared specifically for corrective action activities to be conducted by CDG Engineers & Associates, Inc. (CDG) for the Carolina Grocery site in Andalusia, Covington County, Alabama. These activities include all fieldwork necessary to conduct soil and groundwater remediation of petroleum hydrocarbons at the site.

2.0 PURPOSE

This HASP describes the preventative measures, personal protection, and safety procedures to be followed by CDG personnel and subcontractors during all field activities. The HASP has been prepared in accordance with and meets the requirements of the Occupation Safety and Health Administration (OSHA) General Safety Standards for industry under 29 CFR 1910 and construction under 29 CFR 1926, the joint NIOSH/OSHA/USCG/EPA, *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities*, dated October 1985, and NFPA Safety Guidelines. Should any unexpected conditions arise, the HASP will be amended to accommodate site specific conditions.

3.0 KEY PERSONNEL AND RESPONSIBILITIES

All CDG personnel have received an initial 40-hour HAZWOPER certification, which is updated annually through an 8-hour refresher course. This training course meets the requirements of the OSHA 29 CFR 1910.120 standards. CDG personnel assigned to the project include:

NAME	TITLE	RESPONSIBILITIES
James Alan Barck	Professional Geologist	Overall management of entire project from beginning to completion. Responsible for preparation and implementation of the HASP and reporting of all hazard incidents to appropriate enforcement agencies. Coordinates and oversees all field activities.
Anna Brunson	Project Manager	Performs all field activities and is responsible for recognizing site hazards and reporting hazard incidents to Corporate HSO.

4.0 SCOPE OF WORK

Work to be performed will include the installation of additional recovery wells, air sparge wells,

system installation, and quarterly operation and maintenance activities.

5.0 CHEMICAL HAZARDS

When conducting the corrective action activities, the primary chemicals of concern are gasoline.

5.1 Gasoline

Gasoline is a substance to be potentially encountered in the soil and groundwater at the site. Gasoline components include benzene, toluene, ethylbenzene, and xylenes (BTEX).

5.2 Hazard Identification

During the corrective action activities, many hazards or potential hazards may be encountered when dealing with gasoline or diesel. This section serves as a guideline in recognizing hazards associated with these chemicals that exist or may potentially arise during field activities. Recognition is the first step in eliminating exposure to these hazards.

Occasionally, methyl-tertiary butyl ether (MTBE) is encountered. MTBE has been used since 1979 as an oxygenate to gasoline in order to decrease carbon monoxide production in cars, particularly older model cars; however, MTBE has been determined to be a potential carcinogen. MTBE has low taste and odor thresholds, which can make a water supply non-potable even at low concentrations.

Exposure to MTBE will only be seen through exposure to gasoline containing MTBE and the effects of gasoline containing MTBE are relatively similar to gasoline not containing MTBE. The following are hazards associated with exposure to gasoline:

- Contact may irritate or burn the skin and eyes and absorption through the skin may be poisonous.
- Vapors may be poisonous if inhaled and are irritating to the respiratory tract.
- Vapors are an explosion hazard and may travel to a source of ignition and produce flashback.
- A gasoline fire may produce irritating and poisonous gases.
- Gasoline and diesel are flammable/combustible materials that may be ignited by heat, sparks, or flames, and a gasoline container may explode when exposed to heat or fire.

The primary hazard associated with exposure to gasoline is the inhalation of vapors.

5.3 Hazard Prevention

Preventing exposure to chemical hazards generally requires the use of personal protective equipment (PPE). Level D equipment will provide the protection necessary to prevent exposure to these hazards. Level D equipment is discussed further in Section 10.1, Personal Protective Equipment.

5.4 Symptoms and First Aid Procedures

Many of the constituents found in gasoline and diesel act as central nervous system (CNS) depressants. The following table includes first aid measures for CNS depressants, which affect a person through inhalation (breathing), dermal (skin), or ingestion (mouth) exposure. In addition, the eye can be very sensitive to exposure to chemicals and is therefore included in the following table:

ROUTES OF EXPOSURE	SYMPTOMS	TREATMENT
Inhalation	Dizziness, nausea, lack of coordination, headache, irregular and rapid breathing, weakness, loss of consciousness, coma	Bring victim to fresh air. Rinse eyes or throat with plenty of water, if irritated. If symptoms are severe (victim vomits, is very dizzy or groggy, etc.), evacuate to hospital. Be prepared to administer CPR if certified. Monitor victim for at least 48 hours.
Dermal	Irritation, rash, or burning	Flush affected area with water for at least 15 minutes. Apply clean dressing and get medical attention.
Ingestion	Dizziness, nausea with stomach, cramps, loss of consciousness, coma	Evacuate victim to hospital. Do not induce vomiting.
Eye	Redness, irritation, pain, impaired vision	Flush with an abundant amount of water for at least 15 minutes. If severe, seek medical attention immediately.

6.0 EQUIPMENT/OPERATIONAL HAZARDS

The following sections will address the hazards, preventative measures, and first aid procedures associated with the drill rig, backhoes, and other heavy equipment. The drill rig used during these field activities generally requires the use of augers for probing. These augers are designed to rotate in a circular motion while being forced downward through the soil. Field personnel are required to assemble and disassemble these parts. Contact with these rotating parts is one recognized hazard. In addition, the machinery also contains parts that become increasingly heated during operation.

6.1 Hazard Identification

There are several hazards associated with the use of any type of drill rig or heavy machinery while performing corrective action activities. Generally during these field operations, the general public may become fascinated with the operation and approach the work area. All unauthorized personnel are required to remain 100 feet away from the work area. The site HSO officer will be responsible for keeping all unauthorized personnel away from the work area. The hazards associated with the use of a drill rig or other heavy machinery is as follows:

- Gasoline vapors from nearby dispensers can potentially enter the diesel-operated engine thereby causing fire/explosion hazards.
- Rotating augers may catch onto gloves or clothing thereby pulling hands or arms into the rotating machinery.
- Drilling equipment may rupture hydraulic hoses thereby releasing hydraulic fluids.
- Engine and exhaust systems of an engine are extremely hot during and following operation.
- Potential contact with overhead and underground utilities
- Open excavations/boreholes can be the source of trips and falls.
- Digging machinery such as backhoes may puncture subsurface utilities.
- Operators of heavy machinery may be unable to locate pedestrians near the operating equipment; therefore, all field personnel are to remain within eye contact of the operator at all times during operation.

6.2 Hazard Prevention

Hazards associated with heavy machinery can easily be avoided with additional planning. The

key to avoiding these hazards includes being familiar with the equipment and the process. In addition, being familiar with and implementing the precautionary measures listed below may reduce or eliminate the risks of a hazardous situation.

- Wear hard hat when working near or around the machinery
- Wear safety glasses when performing maintenance to machinery or power tools
- Shut down the machine engine when repairing or adjusting equipment
- Prevent accidental starting of the engine during maintenance procedures by removing or tagging ignition key
- Block wheels or lower leveling jacks and set hand brakes to prevent equipment from moving during drilling procedures
- When possible, release all pressure on hydraulic systems, drilling fluid systems, and air pressure systems of heavy machinery prior to performing maintenance
- Know the location of the emergency shut-off switch for all equipment
- Avoid contact with engine or exhaust system of engine following its operation
- Avoid using gasoline or other volatile/flammable liquids as a cleaning agent on or around heavy machinery
- Replace all caps, filler plugs, protective guards or panels, and high-pressure hose clamps, chains or cables moved during maintenance prior to excavation
- Avoid wearing rings or jewelry during drilling or installation procedures
- Be aware of all overhead and underground utilities
- Avoid alcohol or other CNS depressants or stimulants prior to excavation
- Avoid contact with equipment parts during freezing weather. Freezing of moist skin to metal can occur almost instantaneously
- Shut all field operations during an electrical storm
- Do not operate heavy equipment within 20 feet of overhead power lines

6.3 Symptoms and First Aid Procedure

Hazards associated with heavy equipment were identified in Section 6.1. Unlike hazards associated with temperature or chemicals, symptoms will not be apparent with these types of hazards. In addition, these hazards will occur rapidly as opposed to over a period of time. Due to the size and composition of hydraulic vehicles, exposure to these hazards will range from extremely serious to life-threatening; therefore CDG requires that exposed field personnel seek

medical attention at the nearest medical facility and the Project Manager be notified immediately. A site location map to the nearest hospital is presented in the back.

7.0 TEMPERATURE HAZARDS

Another hazard associated with corrective action activities involves working in extreme weather conditions. Temperatures in the Southeast USA during the spring, summer, and occasionally the fall seasons can vary from mild to extremely hot. During this season, extra precautions are necessary to prevent hazards associated with elevated temperatures, which result in various forms of heat stress. In addition, the Southeast is known for its rather mild winter condition; however, on occasion, the Southeast may experience freezing conditions; therefore, precautions are also necessary to prevent hazards associated with these extreme temperatures.

7.1 Heat

As stated in OSHA's regulatory guidelines for heat exposure operations involving high air temperatures, radiant heat sources, high humidity, direct physical contact with hot objects, or strenuous physical activities have a high potential for inducing heat stress. Additional factors to consider in the determination of heat stress on an individual include age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs, and a variety of medical conditions such as hypertension (high blood pressure). The following sections will identify the hazards associated with heat stress, the measures needed in order to prevent exposure to these hazards, and first aid procedures in the event exposure to these hazards should occur.

7.1.1 Hazard Identification

Heat stress is a major hazard, especially for workers wearing protective clothing. Depending on the ambient conditions and the work being performed, heat stress can occur very rapidly- within as little as 15 minutes. The key to preventing excessive heat stress is educating personnel on the hazards associated with working in heat and the benefits of implementing proper controls and work practices. The hazards associated with heat stress range from heat fatigue (mild discomfort) to heat stroke (extreme danger, which may result in death, and are discussed in the following sections.

7.1.1.1 Heat Fatigue

Heat fatigue occurs due to a lack of acclimatization (adjusting one's tolerance to work in elevated temperatures). Acclimatization is a gradual process. This process should include all field personnel being permitted to work in elevated temperatures in specified increments. On a daily basis, the maximum allowable work period should gradually be increased until the worker is able to perform his/her duties more proficiently under these conditions. The use of an acclimatization program is recommended in the regulatory guidelines established by OSHA.

7.1.1.2 Heat Rash

Heat rash (prickly heat) is the most common heat stress factor and may result from continuous exposure to heat or humid air where the skin remains wet due to lack of evaporation. Under these conditions, sweat ducts become plugged, and a skin rash appears, generally in areas where clothing is restrictive. This uncomfortable rash can be prevented by resting in a cool place during breaks and by implementing good daily personal hygiene.

7.1.1.3 Heat Collapse

Heat collapse is commonly referred to as "fainting." Fainting generally occurs when the brain does not receive enough oxygen. As a result of this condition, the exposed individual may lose consciousness. Heat collapse is rapid and unpredictable; therefore, acclimatization is an important factor in preventing this condition.

7.1.1.4 Heat Cramps

Heat cramps are muscular spasms, which usually occur in the abdomen or limbs due to loss of electrolytes following profuse sweating. Cramps are caused by either too much or too little salt intake. During the sweating process, salt exits the body; therefore, without the proper replenishment, the body experiences an electrolyte imbalance thereby inducing heat cramps. Thirst cannot be relied upon as a guide to the need for water. When working in hot environments, water must be replenished every 15 to 20 minutes.

7.1.1.5 Heat Exhaustion

Heat exhaustion is a result of overexertion in hot or warm weather. It is highly possible

for an onsite worker to experience heat exhaustion due to the use of worker-protective coveralls, boots, gloves, and respirator protection, even when ambient temperatures are mild. Fainting may also occur with heat exhaustion. This can become an extreme hazard if operating heavy machinery.

Caution: Individuals with heart problems or on a “low sodium” diet who may work in these environments should consult a physician and Corporate HSO prior to working in these conditions.

7.1.1.6 Heat Stroke

Heat stroke is the most severe form of heat stress. The body’s temperature control system is maintained through sweat production. Perspiration is a cooling process for the body and keeps the body core temperature within a stable range. During heat stroke, sweat production is inhibited and the body temperature begins to rapidly rise. Brain damage and death may occur if body core temperature is extremely elevated and is not reduced.

7.1.2 Hazard Prevention

Hazards associated with temperature extremes can also be prevented with additional planning and preparation. The hazards associated with temperature can range from heat fatigue to heat stroke as described previously in Section 7.1.1 Measures to ensure the prevention of temperature hazards are as follows:

- Adhere to acclimatization process by exposing field personnel to progressively longer periods of time in hot environments.
- Schedule work for early morning or evening during warm weather.
- Work in shifts; limit exposure time of personnel and allow frequent breaks.
- Have cool liquids at an Exclusion Zone border for exposed personnel to continuously replace body fluids. As stated in the previous section, OSHA recommends that fluids, preferably water and/or a water-electrolyte solution be replenished every 15 to 20 minutes.
- Avoid caffeine and alcoholic beverages both during work hours and 24 hours prior to performing field activities

The site HSO or designee should continually monitor personnel for signs of heat stress. If any signs of heat disorders are apparent, all field personnel must immediately rest and

replenish fluids until body core temperature is lowered and remains stable.

7.1.3 Symptoms and First Aid Procedures

As discussed previously in Section 7.1.1, hazards associated with heat stress range from heat fatigue to heat stroke. Taking precautionary measures to ensure that personnel are not exposed to extreme temperatures for long periods of time can prevent these hazards. First aid measures for heat fatigue, heat rash, and heat collapse include taking frequent breaks so that the body core temperature can cool down. The following table includes first aid measures for signs of overexposure to heat.

TEMPERATURE HAZARDS	SYMPTOMS	TREATMENT
Heat Fatigue	Impaired performance of skilled sensorimotor, mental or vigilance jobs	No known treatment. Victim should be placed under cooler conditions until body core temperature lowers.
Heat Rash	Rash due to plugged sweat ducts, generally where clothing is restrictive	Keep dry towels or paper towels at the site to dry skin when excessive sweating occurs. Rash usually disappears when affected individual returns to cooler environment.
Heat Collapse	Loss of consciousness	Attempt to awaken individual. Relocate victim to a cooler area until body core temperature lowers and replenish fluids. Victim should rest for a few days.
Heat Cramps	Uncontrollable muscle spasms	Apply warm, moist heat and pressure to reduce pain. Give electrolyte drinks by mouth. Victim should intake additional potassium (Bananas are good potassium source).
Heat Exhaustion	Pale, clammy skin, profuse perspiration, weakness, headache,	Get victim into shade or cooler place. Immediately remove any protective clothing. Victim should drink plenty of fluids. Victim should lie down with

	and nausea	feet raised. Fan and cool victim with wet compresses. If vomiting occurs, transport to hospital. Victim should rest for a few days.
Heat Stroke	Pale, dry skin due to lack of perspiration, weakness, unconsciousness	Immediately take precautions to cool body core temperature by removing clothing and sponging body with cool water, or placing in tub of cool water until temperature is lowered sufficiently (102°F). Stop cooling and observe victim for 10 minutes. Once temperature remains lowered, dry person off. Use fans or air conditioning, if available. Do not give the victim stimulants. Transfer to medical facility. Under no condition is the victim to be left unattended unless authorized by a physician.

8.0 EXPLOSION/ELECTROCUTION HAZARDS

As stated previously in Section 4.1, extensive efforts are made in order to determine the location of subsurface utilities prior to corrective action activities. Efforts are made to obtain the location of underground utilities through the Line Locator Services, and utility companies are notified in advance to perform a site inspection and utility marking; however, the potential for a subsurface utility to go unnoticed exists. Therefore, the hazards associated with exposure to these utilities are identified and preventative measures and first aid procedures are discussed further in the following sections.

8.1 Explosion

Primarily when dealing with subsurface utilities, two potentially life-threatening hazards exist. The first hazard identified in association with subsurface utilities during excavation activities is discussed further in the following sections.

8.1.1 Hazard Identification

The main hazard associated with puncturing a subsurface utility gas line is explosion. By releasing gas (usually natural gas, which is generally methane gas or propane gas) into the atmosphere, explosive conditions are favorable; therefore, ignition sources must be immediately eliminated in the event a gas release occurs. Due to the flammability of

gasoline, ignition sources will be minimized; however, the engines are needed during field activities. Therefore, the only alternative to reducing the explosion hazard is to stop the release as soon as possible. However, when dealing with gases under pressure, the volatilization process may occur at such a rapid speed that an explosive situation is inevitable.

8.1.2 Hazard Prevention

Preventative measures are ensured prior to field activities. These measures generally encompass locating subsurface utilities. In addition, CDG will request local utility companies to perform site inspections and mark all subsurface utilities. In addition to this notification, if a particular subsurface utility is not identified and CDG suspects the utility to exist, CDG will take additional precautionary measures to ensure the suspected utility does not exist. These measures generally include locating utility meter boxes, etc. In addition, a field technician or subcontractor will generally probe the ground with a small rod in order to possibly identify the existence of subsurface utilities. This is conducted usually when machinery reaches 2-3 feet below the ground surface (ft-bgs).

8.2 Electrocutation

8.2.1 Hazard Identification

The second main hazard associated with puncturing a subsurface electrical line or coming into contact with an overhead power line is electrocution. When dealing with electricity, all things are classified as either conductors or insulators. Conductors allow electricity to pass through them while insulators prevent electricity to pass through. Examples of conductors are metals, wood, and water, and examples of insulators are rubber and PVC. Humans are also classified as conductors; therefore, contact with electrical sources can be fatal.

Because the heavy machinery is metal, which has been classified as one of the best sources of electrical conduction, contact with exposed electrical lines will allow current to flow. The National Electrical Code (NEC) has determined that 20 milliamps (mA) of current can be fatal. For comparison, a common household circuit breaker may conduct 15, 20, or 30 amps of electrical current.

8.2.2 Hazard Prevention

As stated previously in Section 8.1.2, preventative measures to locate subsurface and overhead electrical lines prior to corrective action activities are required by CDG. CDG will notify local utility companies to provide a site inspection and mark any existing subsurface electrical lines. In addition, CDG will contact the local power provider to insulate overhead lines if necessary. When dealing with the electrical components of the dewatering system, the following precautionary measures may prevent exposure to electrocution:

- Avoid contact with exposed connections/wiring and other related components
- If unfamiliar with the system, do not attempt contact with any component
- Call the Project Manager if unsure of any connections associated with the operations of the system.

8.2.3 Symptoms and First Aid Procedures

As discussed previously in Section 8.2.1, the hazard associated with puncturing subsurface electrical utilities and contacting electrical components of dewatering system is electrocution. The primary route of exposure is contact. The transmission of electricity is allowed because the metal equipment serves as a conductor for electrical current. Symptoms and treatment for exposure to electrical current is presented in the following table:

Caution: NEVER attempt to dislodge or remove someone that is contacting a high voltage line. Use an insulating material (PVC) to release the victim from the electrocution source.

9.0 MISCELLANEOUS HAZARDS

Additional hazards identified when performing corrective action activities have been classified as miscellaneous hazards due to the variety of these hazards. These hazards generally are nothing more than nuisances and with additional planning should be entirely avoidable; however, there are instances in which exposure to these hazards will occur. Therefore, these hazards are identified and preventative measures and first aid procedures are discussed in further detail in the following sections.

9.1 Hazard Identification

Occasionally, exposure to common nuisances may potentially result in a life-threatening

situation. For example, a wasp or bee sting for some individuals only causes irritation or localized soreness; however, to others with little tolerance for wasp or bee venom, an allergic reaction can result which could potentially lead to death if not treated immediately. Therefore, allergic reactions to these insects have been identified as a potential hazard. In addition to the insects, contact with black widow spiders (red hourglass), brown recluse spiders (violin shape on back), and snakes are also potential hazard.

9.2 Hazard Prevention

Prevention, with regards to miscellaneous hazards, is more difficult to plan ahead. Generally, prior to conducting corrective action activities, the primary location for the activities has been established; therefore, barricades such as cones and company vehicles can be placed around the work area to prevent exposure to incoming and ongoing vehicles. However, the limitation to using cones is that they are often small and unnoticeable to drivers once inside the vehicles; therefore, the best prevention with regards to this miscellaneous hazard is to constantly be aware of your surroundings. This preventative measure can also be applied to exposure to insects, snakes, and spiders. Be aware of your surrounding when working around dark, secluded areas such as cracks and crevices, where snakes, spiders, and mice like to hide.

9.3 Symptoms and First Aid Procedures

If an employee or subcontractor shows any signs of an allergic reaction (anaphylactic shock, hives, or difficulty breathing) to a sting or bite, immediately seek medical attention at the nearest hospital. In the event that an operating vehicle strikes a person, seek medical attention immediately. In the meantime, a first aid kit and eye wash bottle will be provided by CDG and should be kept in all company vehicles. If field personnel are aware of their allergic reactions to insect bites, CDG requires that medication be kept on hand during field activities and at least one other field technician be made aware of the medication in the event of an allergic reaction should occur.

10.0 ADDITIONAL PRECAUTIONS

Additional precautions have been implemented in order to ensure overall safety for all field personnel. The safety protocols listed in this segment are to be considered the minimum requirements to be met by all field personnel engaging in corrective action activities.

10.1 Personal Protective Equipment

PPE is the most effective measure to prevent exposure to chemical hazards. There are four levels of PPE protection ranging from Level A to Level D equipment. Level A protection serves as the most conservative protective equipment, and Level D protection serves as the least conservative protective equipment. These levels are described further in the following table:

LEVELS OF PPE PROTECTION	PPE REQUIREMENTS
Level A	Worn when the highest level of respiratory, skin, and eye protection is necessary.
Level B	Worn when the highest level of respiratory protection is needed, but a lesser level of skin protection is necessary.
Level C	Worn when the criteria for using air-purifying respirators are met, and a lesser level of skin protection is necessary.
Level D	Refers to work conducted without respiratory protection. This level should be used only when the atmosphere contains no known or suspected airborne chemical or radiological contaminants and oxygen concentrations are between 19.5 % and 23.0%

Level D protective clothing, as indicated below, shall be considered the minimum requirements for installation and excavation operations:

- Hard hat
- Coveralls*
- Non permeable gloves
- Steel-toe, non-permeable boots
- Hearing protection*
- Safety goggles (chemical)*

*These items are mandatory on an “as needed” basis. Generally, normal site conditions do not warrant the use of this equipment; however, under certain conditions where large amounts of free product are encountered, the issue of coveralls and safety goggles may be warranted. Safety goggles and hearing protection are mandatory when near the drill rig to reduce stress on the ear and also prevent objects from the soil or drill rig from lodging in the eye.

Equipment may be upgraded to Level C depending on the site conditions and/or monitoring results. Level C protection, in addition to Level D protection, includes the following:

- Rubber/chemical resistant outer gloves
- Face-shield if splash hazards exists
- Outer disposable booties
- Half-mask respirator

10.2 Signs, Signals, and Barricades

As stated previously in Section 9.1, corrective action activities are generally conducted at retail gasoline facilities and convenience stores, and are therefore, high traffic areas. All CDG field personnel must be aware of his/her surroundings at all times. In addition, the items listed below will be provided to secure the area in order to protect all field personnel as well as the general public.

- Utilize barricades to protect workers, pedestrians and vehicles from work activities
- Post area for “NO SMOKING”
- Utilize cones to protect workers from incoming and ongoing vehicles

10.3 Fire Protection and Prevention

As stated previously in Section 5.1, gasoline is a highly flammable substance. CDG requires that the work area be posted with “NO SMOKING” signs in an attempt to prevent fires from occurring; however, as a secondary precaution CDG plans to implement the following:

- Maintain a 20 lb. ABC Dry Chemical fire extinguisher on site at all times
- Eliminate ALL ignition sources in the vicinity of any releases
- The contractor will clean up all small spills using absorbent materials or by pumping

10.4 Storage and Decontamination

During the corrective action activities, impacted soils will be encountered. Groundwater will be treated and pumped to an NPDES outfall. Contaminated soil will be temporarily stored until transported for disposal. Decontamination procedures will be implemented should chemical exposure occur. The procedures are detailed below:

- Avoid contact with liquid gasoline or diesel
- Place contaminated soil on visqueen and cover once removed from the excavation
- Change any product contaminated soil immediately
- Wash any contaminated skin surfaces immediately with soap and water

Caution: All personnel are required to wash hands at the completion of work, before and after restroom use and before eating in order to prevent dermal contact with or ingestion of contaminants encountered during field activities.

11.0 EMERGENCY CONTINGENCY PLAN

If an incident occurs that requires declaring an emergency, all personnel will assemble at a designated emergency meeting location for further instruction. Arrangement for decontamination, evacuation and/or transport will be made at that time. The client and appropriate CDG personnel will be notified of the incident as soon as possible.

11.1 Notification/Reporting Procedures

In the event of an emergency, CDG Project Manager will be notified as soon as possible regarding the nature of the incident and emergency service contact will be notified as needed (see Section 11.7, Contingency Contacts). It is the responsibility of the Site HSO to report all incidents to the CDG Corporate HSO so that the required reporting procedures may be implemented.

11.2 Hazardous Substance Release

In the event that potentially hazardous substances migrate from the work zone and potentially endanger unprotected personnel or the community all on site activities will cease until the release is brought under control. CDG will immediately notify the proper authorities so that they may be able to ensure that public health and safety is maintained throughout this process event to the extent of evacuation if necessary.

11.3 Personnel Injury

In the event of an injury, all personnel will assemble at the designated emergency meeting location. The Site HSO, prior to the beginning of field activities should designate this location. If the injured person is immobile one or more persons should remain nearby to provide any necessary first aid techniques. If medical help is necessary, the Site HSO will summon the

appropriate assistance for transportation to the nearest medical facility. Due to the potential for these situations, CDG recommends that at least one qualified person be CPR/First Aid certified.

11.4 Evacuation Plan

Gasoline and diesel are flammable substances; therefore, a fire/explosion potential exists during the excavation activities. In the event of an onsite evacuation, the following plan will be implemented:

- A signal consisting of one continuous blast of a vehicle or air horn will be used
- All personnel will immediately evacuate the area and report to the designated emergency meeting location for further instruction

11.5 Spill Prevention and Response

In the event of a leak or spill, the area will be blocked using barricades, and the spill contained until absorbed and removed by authorized personnel. Unauthorized persons will be denied access to the area until all spills have been removed and field operations completed. CDG will follow prescribed procedures for reporting and responding to large releases by notifying the National Response Center (see Section 11.7). All materials will be disposed of according to regulatory guidelines.

11.6 Emergency Communication

In the event of an emergency situation, the following standard hand signals will be used onsite as a means of communication:

- Hand gripping throat- (cannot breathe)
- Grip partner's wrist or both hands around waist- (leave area immediately)
- Hands on top of head- (need assistance)
- Thumbs up- (OK, I am all right, I understand)
- Thumbs down- (No, negative)

11.7 Contingency Contacts

In the event of an emergency, CDG has provided several emergency contacts. These contacts, along with phone numbers, are listed in the following table. The Site HSO will be responsible

for the notification of these contacts in the event of an emergency.

AGENCY	CONTACT	TELEPHONE NO.
Fire Department	Andalusia Fire Department	334-222-1155 or 911
Police Department	Andalusia Police Department	334-222-1155 or 911
Ambulance	Advanced EMS	334-222-4155 or 911
Hospital	Andalusia Regional Hospital	334-222-8466
Corporate HSO	Robert Shepard	334-222-9431
Project Manager	Anna Brunson	334-222-9431
EPA RCRA-Superfund Hotline		800-424-9346
Chemtrec (24 hours)		800-424-9300
Bureau of Explosives (24 hours)		202-293-4048
Centers for Disease Control (Biological Agents)		404-633-5353
National Response Center		800-424-8802

MEDICAL FACILITY

Name of Hospital: Andalusia Regional Hospital

Address: 849 South Three Notch Street

Andalusia, Alabama 36420

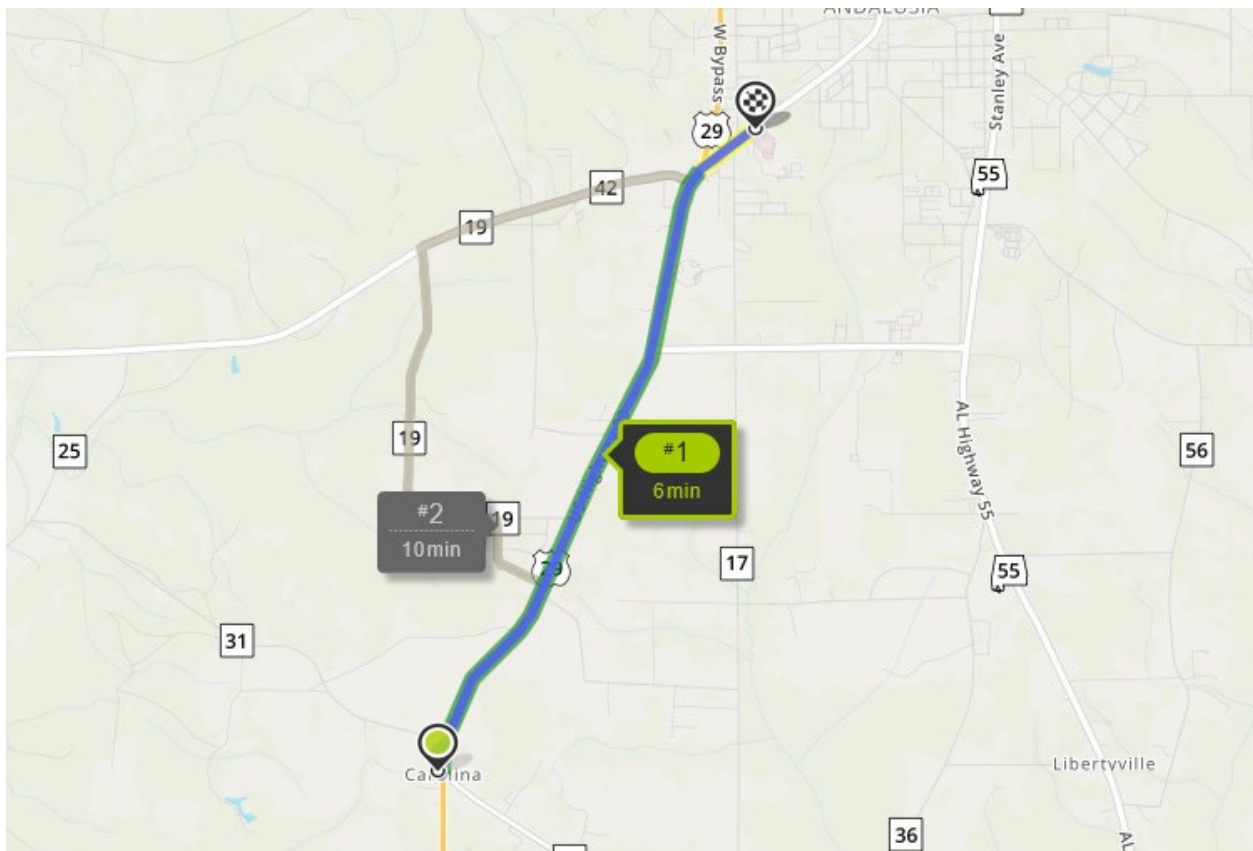
Phone: 334-222-8466

Route to Hospital: Depart site for going north of U.S. Highway 29 toward Salem Church Road. Follow for 4.05 miles; Turn slight right onto South Three Notch Street for 0.42 miles; Turn right to enter Andalusia Regional Hospital.

Travel Time from Site: 6 minutes

Distance to Hospital: 4.5 miles

In cases of construction accidents, rapid notification to OSHA is required.





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ADEM FORMS

APPENDIX I

UST RELEASE FACT SHEET

GENERAL INFORMATION:

SITE NAME: Carolina Grocery
 ADDRESS: 14072 Highway 29 South
Andalusia, Covington County, Alabama

FACILITY I.D. NO.: 20341-039-008237
 UST INCIDENT NO.: UST16-09-01

RESULTS OF EXPOSURE ASSESSMENT:

How many private drinking water wells are located within 1,000 ft. of site?	4
How many public water supply wells are located within 1 mile of the site?	1 (being constructed)
Have any drinking water supply wells been impacted by contamination from this release?	No
Is there an imminent threat of contamination to any drinking water wells?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Have vapors or contaminated groundwater posed a threat to the public?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are any underground utilities impacted or imminently threatened by the release?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Have surface waters been impacted by the release?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there an imminent threat of contamination to surface waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
What is the type of surrounding population?	Residential

CONTAMINATION DESCRIPTION:

Type of contamination at site: Gasoline, Diesel, Waste Oil
 Kerosene Other _____

Free product present in wells? Yes No Maximum thickness measured: N/A

Maximum BTEX or PAH concentrations measured in soil: BTEX 174.480 mg/Kg in MW-11 (3-8') on 01/23/17

Maximum BTEX or PAH concentrations measured in groundwater: BTEX 83.130 mg/L in MW-3 on 10/13/16

ADEM GROUNDWATER BRANCH
UST SITE CLASSIFICATION SYSTEM
CHECKLIST

Please read all of the following statements and mark either yes or no if the statement applies to your site. If you have conducted a Preliminary or Secondary Investigation, all questions should be answered. Closure site assessment reports may not provide you with all the necessary information but answer the statements with the knowledge obtained during the closure site assessment.

SITE NAME: Carolina Grocery
 SITE ADDRESS: 14072 Highway 29 South
Andalusia, Covington County, Alabama
 FACILITY I.D. NO.: 20341-039-008237
 UST INCIDENT NO.: UST16-09-01

OWNER NAME: Carolina Grocery, Inc.
 OWNER ADDRESS: 12258 J.E. McDonald Farm Road
Andalusia, Alabama 36420

NAME & ADDRESS OF PERSON COMPLETING THIS FORM: Anna Brunson, Project Manager
CDG Engineers & Associates, Inc.
P.O. Box 278
Andalusia, Alabama 36420

CLASSIFICATION	DESCRIPTION	YES	NO
CLASS A	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
A.1	Vapor concentrations at or approaching explosive levels that could cause health effects, are present in a residence or building.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A.2	Vapor concentrations at or approaching explosive levels are present in subsurface utility system(s), but no buildings or residences are impacted.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS B	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
B.1	An active public water supply well, public water supply line or public surface water intake is impacted or immediately threatened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2	An active domestic water supply well, domestic water supply line or domestic surface water intake is impacted or immediately threatened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.3	The release is located within a designated Wellhead Protection Area I.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS C	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
C.1	Ambient vapor/particulate concentrations exceed concentrations of concern from an acute exposure, or safety viewpoint.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C.2	Free product is present on the groundwater, at ground surface, on surface water bodies, in utilities other than water supply lines, or in surface water runoff.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CLASSIFICATION	DESCRIPTION	YES	NO
CLASS D	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
D.1	There is a potential for explosive levels, or concentrations of vapors that could cause acute effects, to accumulate in a residence or other building.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2	A non-potable water supply well is impacted or immediately threatened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.3	Shallow contaminated surface soils are open to public access, and dwellings, parks, playgrounds, day care centers, schools or similar use facilities are within 500 feet of those soils.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS E	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
E.1	A sensitive habitat or sensitive resources (sport fish, economically important species, threatened and endangered species, etc.) are impacted and affected.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS F	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
F.1	Groundwater is impacted, and a public well is located within 1 mile of the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.2	Groundwater is impacted and a domestic well is located within 1,000 feet of the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.3	Contaminated soils and/or groundwater are located within designated Wellhead Protection Areas (Areas II or III).	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS G	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
G.1	Contaminated soils and/or groundwater are located within areas vulnerable to contamination from surface sources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS H	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
H.1	Impacted surface water, storm water or groundwater discharges within 500 feet of a surface water body used for human drinking water, whole body water-contact sports, or habitat to a protected or listed endangered plant and animal species.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CLASS I	LONG TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
I.1.	Site has contaminated soils and/or groundwater but does not meet any of the above-mentioned criteria.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ADDITIONAL COMMENTS:

A public supply well is currently being constructed approximately 250 feet downgradient of the property boundary.

Complete the classification evaluation questions listed above. Upon completion, determine the highest rank of the site (A.1 is the highest rank) based on the statements answered with a yes.

Enter the determined classification ranking:	F.1
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TASKS PERFORMANCE SUMMARY

APPENDIX J

TASK PERFORMANCE SUMMARY

Corrective Action Plan, CP-15
 Carolina Grocery
 14072 U.S. Hwy 29 South
 Andalusia, Covington County, Alabama

Task Completed by Personnel/Title:	Griffin Gatschet, P.G.	James Alan Barck, P.G., P.E.	Anna Brunson, Project Manager	Ray Hollinghead, Drafter	Leigh Caylor, Administrative Assistant	Kim Ballard, Administrative Assistant	Patricia Horwath, Administrative Assistant
Project Management			X				
Work Plan Preparation/Review			X				
Cost Proposal Preparation/Review	X		X		X	X	
Field Work			X				
Data Interpretation/Tabulations			X				
Drafting				X			
Report Preparation/Review		X	X			X	X
Payment Request Preparation/Review	X		X			X	X

Notes:

- DO=Drilling Oversight
- BL=Boring Log Description/Soil Classification
- WG=Well Gauging
- GSC=Groundwater Sample Collection
- MEME=MEME Oversight
- PM=Project Management
- O&M=Routine Operation & Maintenance
- HRS=High Resolution Study
- VM=Vapor Monitoring
- FC=Fan Check