GRUB MART #24

MODIFIED CORRECTIVE ACTION PLAN
ATTF CP-30

Grub Mart #24
2416 South College Street
Auburn, Lee County, AL
Fac ID 15476-081-017156
UST 15-05-04

PREPARED FOR
Young Oil, Inc.
P.O. Box 328
Piedmont, AL 36272

DATE
November 26, 2019

PREPARED BY
CDG Engineers & Associates, Inc.
3 Riverchase Ridge
Hoover, AL 35244

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 Grub Mart #24 site (Facility Identification Number 15476-081-017156) in Auburn, Lee County, Alabama. The recommended action should not be construed to apply to any other site.

Signature

12/6/19

Date

David C. Dailey
Registered Engineer in the State of Alabama
Registration No. 23095

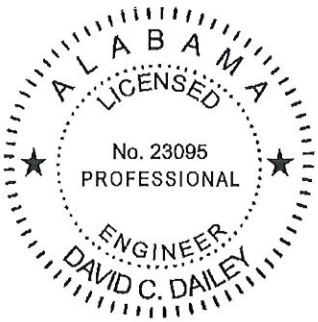


Table of Contents

List of Tables

List of Figures

List of Appendices

UST RELEASE FACT SHEET

GENERAL INFORMATION:

SITE NAME: Grub Mart #24
ADDRESS: 2416 South College Street, Auburn, Lee County, Alabama

FACILITY I.D. NO.: 15476-081-017156
UST INCIDENT NO.: 15-05-04

RESULTS OF EXPOSURE ASSESSMENT:

How many private drinking water wells are located within 1,000 ft. of site?	0
How many public water supply wells are located within 1 mile of the site?	0
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?	{ } Yes { x} No
Have vapors or contaminated groundwater posed a threat to the public?	{ } Yes { x} No
Are any underground utilities impacted or imminently threatened by the release?	{ } Yes { x} No
Have surface waters been impacted by the release?	{ X } Yes { } No
Is there an imminent threat of contamination to surface waters?	{ X } Yes { } No
What is the type of surrounding population?	Residential/Commercial

CONTAMINATION DESCRIPTION:

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

Free product present in wells? { x } Yes { } No Maximum thickness measured: 5.29 feet MW-1 (5/30/15)

Maximum TPH concentrations measured in soil: 212.3944 mg/kg in MW-4 (5/27/15)

Maximum BTEX or PAH concentrations measured in groundwater: 1247.60 mg/L in MW-4 on 10/21/15

ADEM UST Form - 001 (04/22/93)

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:	Grub Mart #24
SITE ADDRESS:	2416 South College Street
	Auburn, Lee County, Alabama
FACILITY I.D. NO.:	15476-081-017156
UST INCIDENT NO.:	UST 15-05-04
OWNER NAME:	Young Oil, Inc.
OWNER ADDRESS:	P.O. Box 328, Piedmont, AL 36272
NAME & ADDRESS OF PERSON COMPLETING THIS FORM:	Chad Elliott CDG Engineers and Associates Inc. 3 Riverchase Ridge Birmingham, AL 35244

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.	☐	☒
A.2	Vapor concentrations at or approaching explosive levels are present in subsurface utility system(s), but no buildings or residences are impacted.	☐	☒
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.	☐	☒
B.2	An active domestic water supply well, domestic water supply line or domestic surface water intake is impacted or immediately threatened.	☐	☒
B.3	The release is located within a designated Wellhead Protection Area I.	☐	☒
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.	☐	☒
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.	☐	☒

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.	☐	☒
D.2	A non-potable water supply well is impacted or immediately threatened.	☐	☒
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.	☐	☒
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.	☐	☒
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.	☐	☒
F.2	Groundwater is impacted and a domestic well is located within 1,000 feet of the site.	☐	☒
F.3	Contaminated soils and/or groundwater are located within designated Wellhead Protection Areas (Areas II or III).	☐	☒
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.	☒	☐
GLASS 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.	☐	☒
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.	☐	☒

ADDITIONAL COMMENTS:

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:	G.1

1.0 SITE LOCATION AND HISTORY

The following Modified Corrective Action Plan (CAP) details the activities which will be undertaken to address the effective remediation of soil and groundwater impacts resulting from an historical release of petroleum product at the Grub Mart #24 facility (Facility ID #15476-081-017156). On May 21, 2015, based on complaints of vapors from the City of Auburn, the Alabama Department of Environmental Management (ADEM) issued a Notice of Requirement to conduct initial abatement, free product removal, and investigative and corrective actions.

The Grub Mart #24 facility is located at 2416 South College Street in the City of Auburn, Lee County, Alabama at an elevation of approximately 525 feet above the national geodetic vertical datum (NGVD). The site is located on an approximate 1-acre parcel. The entire property has been developed. The majority of the property is paved with concrete. Perimeter areas are covered with grass. The convenience store building is serviced with overhead electric power, underground sanitary sewer, telephone and municipal water. The approximate geographical coordinates are Latitude 32° 33' 25" North and Longitude 85° 30' 28" West. The site location is presented in the Figures section.

2.0 SUMMARY OF PREVIOUS SITE INVESTIGATIONS

On May 21, 2015, ADEM issued a pre-approved cost proposal for a Preliminary Investigation and Secondary Investigation Plan. This incident (UST15-05-04) is eligible for ATTF reimbursement. Mr. Vernon Young of Young contracted with CDG to perform UST contractor services for this release. CDG mobilized to the site on May 26, 2015 to initiate field activities for the Preliminary Investigation.

Field activities for the Preliminary Investigation included the installation of four shallow soil borings (SB-1 through SB-4). All of the borings were located on site. The shallow borings were terminated at depths ranging from 21 to 27 feet below land surface (ft-bls). Borings SB-1 through SB-4 were converted into monitoring wells MW-1 through MW-4.

Two soil samples were selected from borings SB-1 through SB-4 for analysis of benzene, toluene, ethyl-benzene, and xylene (BTEX), and methyl tertiary butyl ether (MTBE) constituents in accordance with EPA method 8260B. All eight soil samples collected from the borings contained detectable concentrations of BTEX constituents. The benzene, toluene, ethylbenzene, and total xylenes concentrations for soil boring SB-4 (MW-4) all exceeded their respective ADEM Initial Screening Levels (ISLs). None of the soil samples contained concentrations of MTBE; therefore, none of the ISLs for MTBE were exceeded.

Groundwater samples were collected from the site on June 10, 2015 from monitoring wells MW-2 and MW-3. Monitoring wells MW-1 and MW-4 contained free product. The monitoring wells were sampled and analyzed for BTEX, MTBE, and naphthalene constituents in accordance with EPA Method 8260B. Both of the groundwater samples collected from the monitoring wells contained detectable concentrations of BTEX constituents; however, none of the concentrations present in MW-2 or MW-3 exceeded their respective ISLs. Detectable concentrations of MTBE and naphthalene were present in monitoring well MW-3 but both concentrations were below their respective ISLs. The distribution of dissolved BTEX, MTBE, and naphthalene constituents was not defined during the Preliminary Investigation.

On May 27-29, 2015 nine soil borings, SB-5 through SB-13 were drilled to approximately eight to twenty-three ft-bls, and converted into Type II recovery wells. The toluene and ethylbenzene concentrations in SB-5 (13-15), (6.5414 mg/kg and 3.8704 mg/kg, respectively) exceeded the

ADEM ISLs of 3.60 and 3.61 mg/Kg. No other soil sample concentrations exceeded their respective ISL.

On June 10, 2015, a site wide groundwater event was conducted at the site. Samples were collected and analyzed for BTEX/MTBE/Naphthalene analysis from all existing monitoring wells, with the exception of MW-1, MW-4, MW-5, MW-10, and MW-11 due to free product. Free product was detected in MW-1 (0.19 ft), MW-4 (0.28 ft), MW-5 (0.34 ft), MW-10 (0.11 ft), and MW-11 (0.08 ft).

The June 10, 2015 monitoring event indicated detectable concentrations of BTEX constituents are present in monitoring wells MW-2, MW-3, MW-6, MW-7, MW-8, MW-9, MW-12, and MW-13. Benzene concentrations in monitoring wells MW-9 (0.0413 mg/L), MW-12 (7.4071 mg/L), and MW-13 (0.8282 mg/L) exceeded the ADEM ISL for benzene. Additional BTEX constituents (toluene and ethylbenzene) detected in monitoring well MW-12 exceeded the ADEM ISLs. The MTBE concentration detected in monitoring well MW-13 (0.0254 mg/L) exceeded the ADEM ISL. None of the naphthalene concentrations detected in the wells exceeded the ADEM ISL.

Following the Preliminary Investigation and recovery well installation activities, CDG prepared and submitted a work plan and cost proposal for Secondary Investigation activities. ADEM approved the Secondary Investigation work plan and gave authorization to implement the plan in letters dated August 19, 2015.

Six soil borings (SB-14 though SB-18 and SB-VW-1), which were converted into monitoring wells, were drilled at the site on October 12, 2015 through October 13, 2015. The borings for SB-14 through SB-18 and SB-VW-1 were drilled to total depths ranging from approximately eleven ft-bls to approximately thirty-nine ft-bls.

Two (2) soil samples were selected from borings SB-14, SB-16, and SB-VW-1 for analysis of benzene, toluene, ethyl-benzene, and xylene (BTEX), methyl tertiary butyl ether (MTBE), and naphthalene in accordance with EPA method 8260B. Due to the presence of groundwater, only one (1) sample was collected from borings SB-15, SB-17, and SB-18. Two of the nine soil samples collected from the borings contained detectable concentrations of BTEX constituents. None of the soil samples contained detectable concentrations of MTBE or naphthalene. Although only one of the samples contained a detectable concentration of benzene above the ADEM ISL of 0.00845 mg/kg, five of the samples contained quantitation limits above the ADEM ISL. None of the soil samples contained toluene, ethylbenzene, or xylene concentrations above the ADEM ISLs. None of the samples contained detectable concentrations of MTBE; however, five of the samples contained quantitation limits above the ADEM ISL. None of the soil samples contained a naphthalene concentration above the ADEM ISL.

Soil borings SB-14 through SB-18 were converted into monitoring wells MW-14 through MW-18, respectively. Soil boring SB-VW-1 was converted into vertical well VW-1. The direction of groundwater flow is generally to the west at a hydraulic gradient of approximately 0.0504 feet per foot according to measurements taken from monitoring wells MW-8 and MW-15.

Groundwater samples were collected from the site on October 21, 2015. Each of the site monitoring wells was sampled and analyzed for BTEX, MTBE, and naphthalene in accordance with EPA Method 8260B, with the exception of MW-1 and MW-5 which contained free product. Three of the seventeen groundwater samples collected from the monitoring wells contained detectable concentrations of all BTEX constituents, MTBE, and naphthalene. A total of ten (10) benzene concentrations exceeded the ADEM ISL of 0.005 mg/L. Five of the samples contained toluene and ethylbenzene concentrations above their ISLs of 1.000 mg/L and 0.700 mg/L, respectively. Four groundwater samples contained concentrations above the total xylenes ISL

(10.000 mg/L). Two of the samples contained MTBE concentrations above the ISL (0.020 mg/L). Five of the samples contained naphthalene concentrations above the ISL (0.020 mg/L).

Two additional soil borings were installed at the site on April 27, 2016. Off-site soil borings SB-19 and SB-20 were converted into Type II monitoring wells MW-19 and MW-20. The lateral extent of the dissolved hydrocarbon plume has been defined at the site.

3.0 SUMMARY OF PREVIOUSLY CONDUCTED CORRECTIVE ACTION

A Multi-Phase Extraction (MPE) system was installed at the site in August 2015. The system approved for installation at the Grub Mart #24 facility consists of consists of a 40 horsepower (hp) oil sealed liquid ring vacuum pump, an air stripper for groundwater treatment, and granulated activated carbon for off-gas treatment. The air stripper is capable of decreasing hydrocarbon concentrations to below permit requirements at flows up to fifty gallons per minute (gpm).

As detailed in the approved CAP, the remedial approach undertaken at the Grub Mart #24 site involves the removal of free product, product impacted groundwater, and soil vapors from beneath the site using seven recovery wells. Monitoring wells MW-1, MW-4, MW-5, and MW-9 through MW-12 were installed as 4-inch Type II wells during the Preliminary Investigation and Additional Well Installation activities in May 2015.

4.0 REMEDIAL OBJECTIVES AND EXPOSURE ASSESSMENT

4.1 General Remedial Objectives

The general objectives of this Modified CAP and the remedial efforts 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 approved Site-Specific Target Levels (SSTLs).
- Reduce dissolved petroleum hydrocarbons from groundwater to below approved SSTLs.
- Accomplish these objectives within the proposed period of operation.

4.2 Exposure Assessment

An exposure assessment was conducted by CDG during the ARBCA evaluation. The following receptor survey information has been drawn from the ARBCA Tier II Evaluation report:

Receptor Type	Actual Receptor	Onsite/Offsite	Pathway Status
Commercial Sites	Commercial 10 hr/day	On Site	Complete. Soil & Groundwater Vapor Inhalation. Future - Soil & Groundwater Vapor Inhalation.
	Commercial 10 hr/day	Off Site	Complete. Dermal Contact, Soil & Groundwater Vapor Inhalation. Future - Dermal Contact, Soil & Groundwater Vapor Inhalation.
	Construction Worker	On Site	Complete. Dermal Contact, Soil & Groundwater Vapor Inhalation. Future - Dermal Contact, Soil & Groundwater Vapor Inhalation.
	Construction Worker	Off Site	Complete. Dermal Contact, Soil & Groundwater Vapor Inhalation. Future - Dermal Contact, Soil & Groundwater Vapor Inhalation.
Residences	Resident 24 hr/day	On Site	Not Complete. The site is developed as commercial property. There is no on-site residential use.
	Resident 24 hr/day	Off Site	Not Complete. The area is developed as commercial property. There is no off-site residential use within 500 feet of the site.
Utilities	Water	On Site	Not Complete. Water and sewer is supplied by municipal sources. Utilities are not impacted nor potentially impacted by this release.

The current land use site conceptual exposure model indicates that a complete exposure pathway for vapor inhalation exists for onsite and offsite commercial workers and construction workers. Any commercial facility would likely have consistent hours of operation for employees

at the facility. Employees would usually be on site no longer than 10 hours. Future land use of the site and the surrounding area is expected to remain commercial.

Results of the water well inventory indicate that there are no public water supply wells located within one mile of the site.

4.3 Specific Remedial Objectives

As part of the ARBCA Tier II evaluation process, SSTLs were calculated for the various media (soil and groundwater) at the site based upon the site exposure assessment. The ARBCA was completed in February 2016. The SSTLs generated in the ARBCA evaluation were approved by ADEM on March 23, 2016. A summary of the approved Tier II SSTLs is presented in Appendix A and in the Monitoring Point Data Summary Table.

5.0 RECENT MONITORING ACTIVITIES, RESULTS, AND COMPARISONS TO SSTLS

CDG has prepared the following Modified CAP that will address both soil and groundwater contamination at the site. As part of CAP development, current representative concentrations for the chemicals of concern (COCs) are needed in the evaluation and design of a plan to effectively treat and reduce contaminants. The site has had multiple approved groundwater monitoring events conducted. The most recent groundwater monitoring event was completed on October 2, 2019. The following details the activities and results of the October 2, 2019 groundwater monitoring event.

5.1 Groundwater Monitoring Activities

Groundwater samples were to be collected from each of the twenty-one existing monitoring and recovery wells associated with the site as approved by ADEM. Samples were not collected from three wells. Monitoring well MW-13, MW-15, and MW-16 could not be located. Samples were collected from the remaining eighteen wells using new, clean plastic bailers and transferred to laboratory supplied containers [40-ml amber VOA, preserved with hydrochloric acid (HCl)]. The samples were placed on ice and transported under chain-of-custody protocol to the Waypoint Analytical Laboratory in Memphis, Tennessee where they were analyzed in accordance with EPA Method 8260B for the presence of COCs including the following: BTEX, MTBE, and naphthalene.

Three surface water samples were also collected from the nearby creek to ensure that the concentrations present at the site are not a threat to the creek. The stream samples were also analyzed according to the aforementioned method.

5.2 Laboratory Analytical Results

Groundwater samples were collected during the October 2, 2019 site visit. Based on the most recent water level measurements, the shallow groundwater flow direction appears to be primarily to the west. Current water level measurements are presented in the Monitoring Point Data Summary Table. An estimated potentiometric surface maps and groundwater analytical map with benzene contours are located in the Figures section.

The BTEX/MTBE/Naphthalene analyses for this event indicate that contaminant concentrations continue to be present at the site at levels above the approved SSTLs in five of the eighteen

sampled monitoring and recovery wells. The concentrations above the approved SSTLs are as follows:

	COC	Stream SSTL	GRP SSTLs	Indoor Inhalation SSTLs	Concentration
MW-1	Benzene	**0.0844 mg/L**	**0.503 mg/L**	25.0 mg/L	**8.33 mg/L**
	Toluene	**1.34 mg/L**	101 mg/L	526 mg/L	**17.8 mg/L**
MW-4	Benzene	**0.1150 mg/L**	0.684 mg/L	25.0 mg/L	**0.412 mg/L**
MW-5	Benzene	**0.0556 mg/L**	**0.3310 mg/L**	25.0 mg/L	**2.07 mg/L**
MW-6	Benzene	**0.0331 mg/L**	**0.1970 mg/L**	25.0 mg/L	**0.331 mg/L**
MW-12	Benzene	**NA**	**0.0208 mg/L**	25.0 mg/L	**0.030 mg/L**

None of the stream samples contained concentrations exceeding the surface water protection standards.

5.3 Conclusions

Soil/ Groundwater Contamination and Site Conditions

Based on the exposure assessment that onsite commercial and construction workers, current soil and groundwater concentrations were compared to the proposed SSTLs determined in the ARBCA evaluation.

Groundwater samples collected in October 2019 and previous events indicate that a petroleum hydrocarbon plume most likely originated in the area around the UST hold. Based upon the October 2019 sampling event, the benzene concentrations in monitoring wells MW-1, MW-4, MW-5, MW-6, and MW-12 exceeded the approved GRP and/or stream protection SSTLs. The toluene concentration detected in monitoring well MW-1 exceeded the stream protection SSTLs. All other BTEX constituent concentrations were below the ARBCA Tier II SSTLs generated for each of the source wells and POCs. The SSTLs generated for MTBE were not exceeded in any

of the samples collected. Free product has not been detected in any of the monitoring wells at the site since 2015.

6.0 REMEDIATION RATIONALE AND APPROACH

A comparison of the current groundwater data indicates that dissolved hydrocarbon concentrations in monitoring wells MW-1, MW-4, MW-5, MW-6, and MW-12 are above the GRP and stream protection SSTLs. The rate of dissolved hydrocarbon concentration reduction has decreased over time with the use of MPE technology.

In order to accelerate the reduction of dissolved hydrocarbon concentrations, CDG recommends that the air sparging technology be used in conjunction with the existing MPE system. Air sparging involves the injection of air into saturated zones in effect creating a subsurface air stripper, which removes contaminants through volatilization. The air sparging technology will be designed to operate at high air-flow rates to effect volatilization. The air sparging system will be operated in tandem with the existing MPE system at the site in order to capture contaminants stripped from the saturated zone.

7.0 REMEDIATION RECOMMENDATION PLAN

To address the existing levels of groundwater contamination at the site, the following approach is recommended:

Six air sparge points will be installed in the vicinity of recovery wells MW-1 and MW-5. Each of the proposed sparge points will be constructed with one-inch diameter Schedule 40 PVC risers extending from just below the ground surface to approximately two feet above the bottom of the boring. Approximately two feet of screen (0.020-inch slotted) will be connected to the

bottom of the solid riser. The risers and screen will be connected using threaded, flush-joint connections. The locations of the proposed sparge points are illustrated in the Figures section.

The total depth of the proposed sparge points is approximately 28 ft-bls. Well-graded sand will be placed in the boring annulus for each sparge point from the bottom of the boring to at least two feet above the top of the screen. A bentonite seal approximately two feet thick will be placed at the top of each sand pack. A cement/bentonite grout will be placed above the bentonite seal to within approximately one ft-bls. The purpose of the bentonite seal and grout is to reduce the potential for air to escape up the boring and to the ground surface.

The sparge points will be set within twelve-inch diameter steel manway covers surrounded by concrete pads. Construction details are shown in the Figures section.

The proposed air sparge system will consist of a Becker rotary vane compressor pump capable of producing 48 standard cubic feet per minute (scfm) flow at a maximum pressure of 22 pounds per square inch (psi). The mechanical air sparging equipment will be integrated into the existing MPE system using intrinsically safe wiring. The sparge points will be connected to the sparge compressor via underground piping. Each sparge point will be equipped with a ball valve to regulate flow. In order to receive authorization to inject atmospheric air into the subsurface, an Underground Injection Control (UIC) Permit will be required by ADEM.

8.0 OPERATION AND MAINTENANCE ACTIVITIES

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

8.1 Operation and Maintenance

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 attempt to provide personnel to repair the system within 72 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 for certain unscheduled shutdowns such as interruption of electrical service.

Typical O&M activities will include the following:

- Visual inspection of the overall system condition;
- Monitoring of the total system AS pressure;
- Monitoring of the total system vacuum;
- Checking and recording the AS pressure at each injection well;
- Checking and recording the vacuum applied at each recovery well;
- Adjusting the valves at each AS point and recovery well for maximum efficiency;
- Maintaining proper function of the pumps and blowers;
- Measuring vacuum and temperature readings at the vacuum pump and air/water separator;
- Measuring air flow rates;
- Routinely checking seals and connections for possible leaks; and
- Monitoring groundwater levels.

In order to ensure the system is working properly, during the first quarter of operation, technicians will visit the site weekly to inspect the carbon vessels and measure concentrations with a photo-ionization detector (PID). During two visits per month, routine O&M activities as

described above will also be conducted. System data, including total operational system hours, temperatures, total AS system pressure, total MPE system vacuum, individual injection/recovery well pressure/vacuums, and flow will be recorded for inclusion in quarterly reports to the ADEM.

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

8.2 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 a comprehensive sampling event that includes all site monitoring wells be conducted during the first quarter of system operation.

Prior to sample collection, the depth to groundwater will be measured using an oil/water interface probe. Each monitoring well will be purged using clean plastic disposable bailers. Approximately three well volumes will be removed from each well. The purge water generated during groundwater monitoring activities will be managed in the same manner as the purge water generated during well development.

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 placed on ice and transported, under chain of custody protocol, to the Waypoint Analytical laboratory in Memphis, Tennessee for analysis of BTEX/MTBE and naphthalene in accordance with EPA method 8260B.

Influent and effluent exhaust will be monitored biweekly using a photo-ionization detector (PID) to ensure the destruction efficiency of the granular activated carbon. All sampling shall be completed in accordance with the procedures set forth in the Quality Assurance/Quality Control Plan (Appendix C).

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/runtime. The reports will include recommendations for adjustments to the system, if any, and an estimate of the time required for completion of remediation activities.

9.0 PROPOSED REPORTING REQUIREMENTS

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

Start Up Notification

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

Report 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 and copies of all permits issued to date.

Reporting of Corrective Action Effectiveness

CDG proposes to submit quarterly CASEMR reports, which will summarize field activities and the progress of the system towards SSTLs. The following data will be included in each report: groundwater elevations, pounds of hydrocarbon removed in the vapor phase and groundwater

analytical results. The reports will also include system effectiveness and recommendations concerning 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's air division request, semi-annual reports will be submitted.

Request for Closure Evaluation of Corrective Action

The remediation goals for this project include the removal of free product and the reduction of dissolved hydrocarbon concentrations to below the groundwater SSTLs. The groundwater SSTLs for the source area and downgradient wells are presented in Monitoring Point Data Summary Tables. 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 removal of all remediation equipment.

10.0 SCHEDULE OF IMPLEMENTATION

Task	Time Following Cap Approval
Order System Equipment	10 days
Install System Components	120 days
Initial Start Up / Optimization	30 days
Quarterly Monitoring of system and evaluation of results with recommendations for system enhancements, if necessary	2-3 Years
Removal of system equipment; well abandonment; completion and submittal of final report	3-4 Years

Engineering. Environmental. Answers.

Tables

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-1**		
INSTALLATION DATE:	05/26/15	WELL DEPTH (FT BTOC):	21.14	SCREEN INTERVAL (FT):	10.64-20.64	CASING ELEV (FT ABOVE MSL):	513.88	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	18.52	495.50	0.19	-
10/21/15	16.75	497.15	0.03	-
11/24/15	16.42	497.46	-	-
02/29/16	16.51	497.37	-	-
05/18/16	16.67	497.21	-	-
08/31/16	14.38	499.50	-	-
11/30/16	15.40	498.48	-	-
02/22/17	15.12	498.76	-	-
05/17/17	14.61	499.27	-	8.5
08/31/17	15.60	498.28	-	5.5
11/16/17	15.05	498.83	-	6.5
02/06/18	15.71	498.17	-	7.0
04/27/18	15.90	497.98	-	7.5
08/27/18	14.42	499.46	-	7.5
11/26/18	14.74	499.14	-	5.0
02/18/19	15.00	498.88	-	12.0
05/20/19	16.25	497.63	-	8.0
07/22/19	17.26	496.62	-	7.0
10/02/19	17.03	496.85	-	6.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-1**	
INSTALLATION DATE:	05/26/15	WELL DEPTH (FT BTOC):	21.14	SCREEN INTERVAL (FT):	10.64-20.64	CASING ELEV (FT ABOVE MSL):	513.88	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	NOT SAMPLED - FREE PRODUCT (0.19 FEET)						
09/09/15	CA VIA MEME						
10/21/15	NOT SAMPLED - FREE PRODUCT (0.03 FEET)						
11/24/15	1.0321	**16.0220**	**55.6819**	**6.4639**	33.6642	111.8320	0.8964
02/29/16	0.776	**20.600**	**106.000**	**20.500**	105.000	252.100	**22.600**
05/18/16	0.552	**24.000**	**112.000**	**20.900**	104.000	260.900	**6.040**
08/31/16	<0.5	**5.1397**	**18.2966**	1.7314	11.4911	36.6588	0.6427
11/30/16	0.082	**5.140**	**24.200**	**4.180**	23.400	56.920	0.638
02/22/17	0.2418	**5.0731**	**19.8265**	2.0546	12.3585	39.3127	0.4134
05/17/17	0.1016	**4.9989**	**19.5558**	1.7378	12.7510	39.0435	0.3617
08/31/17	0.038	**8.100**	**37.000**	**4.440**	27.200	76.740	0.985
11/16/17	0.014	**1.690**	**8.220**	0.598	5.690	16.198	0.486
02/06/18	<0.100	**3.7079**	**11.6330**	0.7168	5.0802	21.1379	0.2380
04/27/18	0.1836	**6.0802**	**23.0077**	2.5241	15.0680	46.6800	0.5697
08/27/18	<0.100	**2.1366**	**8.4168**	0.8812	6.0293	17.4639	0.1993
11/26/18	<0.100	**6.0526**	**19.2894**	2.5753	15.6039	43.5212	0.5049
02/18/19	<0.1	**2.1380**	**3.7360**	1.0647	6.5656	13.5043	0.2206
05/20/19	<0.050	**6.65**	**24.0**	2.45	12.0	45.10	0.295
07/22/19	<0.200	**3.09**	**6.13**	0.792	4.45	14.462	<1.00
10/02/19	0.036	**8.33**	**17.8**	2.17	12.8	41.10	0.440
GRP SSTLs:	**2.01**	**0.503**	**101**	**70.4**	**175**	**-**	**2.01**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**
Stream SSTLs:	**-**	**0.0844**	**1.34**	**3.47**	**-**	**-**	**4.75**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-2**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	26.10	SCREEN INTERVAL (FT):	15.60-25.60	CASING ELEV (FT ABOVE MSL):	514.17	WELL TYPE: II DIAMETER (IN): 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	18.01	496.16	-	-
10/21/15	15.93	498.24	-	-
11/24/15	15.45	498.72	-	-
02/29/16	13.44	500.73	-	-
05/18/16	16.45	497.72	-	-
08/31/16	14.68	499.49	-	-
11/30/16	15.62	498.55	-	-
02/22/17	15.15	499.02	-	-
05/17/17	14.83	499.34	-	11.0
08/31/17	14.95	499.22	-	7.5
11/16/17	15.30	498.87	-	8.0
02/06/18	15.21	498.96	-	8.0
04/27/18	15.14	499.03	-	8.0
08/27/18	15.40	498.77	-	8.0
11/26/18	15.09	499.08	-	5.0
02/18/19	15.20	498.97	-	20.0
05/20/19	15.24	498.93	-	15.0
07/22/19	15.52	498.65	-	15.0
10/02/19	15.98	498.19	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-2**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	26.10	SCREEN INTERVAL (FT):	15.60-25.60	CASING ELEV (FT ABOVE MSL):	514.17	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	<0.001	0.0013	0.0017	<0.001	0.0041	0.0071	<0.001
09/09/15	CA VIA MEME						
10/21/15	**0.021**	0.209	0.222	0.047	0.128	0.606	0.005
11/24/15	0.0084	0.1478	0.1492	0.0464	0.1518	0.4952	0.0124
02/29/16	0.002	0.012	0.002	0.006	0.016	0.036	<0.005
05/18/16	<0.001	<0.001	<0.001	0.003	0.012	0.015	<0.005
08/31/16	0.0029	0.1334	<0.001	0.0228	0.0059	0.1621	0.0137
11/30/16	0.004	0.206	0.017	0.036	0.036	0.295	0.011
02/22/17	0.0029	0.1967	0.0028	0.0540	0.0138	0.2673	0.0338
05/17/17	0.0021	0.1336	0.0025	0.0348	0.0257	0.1966	0.0240
08/31/17	0.001	0.051	0.006	0.002	0.008	0.067	0.005
11/16/17	<0.001	0.0080	<0.001	0.0010	<0.005	0.0090	<0.005
02/06/18	0.0013	0.0259	<0.001	0.0018	<0.001	0.0277	0.0056
04/27/18	<0.001	0.0058	<0.001	<0.001	<0.001	0.0058	0.0027
08/27/18	0.0015	0.0426	<0.001	<0.001	<0.001	0.0426	0.0076
11/26/18	0.0020	0.1874	0.0161	0.0193	0.0091	0.2319	0.0173
02/18/19	<0.001	0.0017	<0.001	<0.001	<0.001	0.0017	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**2.74**	**0.684**	**137**	**95.7**	**175**	**-**	**2.74**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-3**		
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	21.65	SCREEN INTERVAL (FT):	11.15-21.15	CASING ELEV (FT ABOVE MSL):	514.25	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	16.56	497.69	-	-
10/21/15	15.47	498.78	-	-
11/24/15	14.54	499.71	-	-
02/29/16	13.86	500.39	-	-
05/18/16	14.39	499.86	-	-
08/31/16	13.57	500.68	-	-
11/30/16	14.98	499.27	-	-
02/22/17	14.32	499.93	-	-
05/17/17	14.18	500.07	-	9.0
08/31/17	14.35	499.9	-	5.0
11/16/17	14.31	499.94	-	6.0
02/06/18	14.41	499.84	-	6.5
04/27/18	14.28	499.97	-	6.0
08/27/18	14.37	499.88	-	6.0
11/26/18	14.58	499.67	-	5.0
02/18/19	14.20	500.05	-	14.0
05/20/19	13.95	500.30	-	10.0
07/22/19	13.32	500.93	-	13.0
10/02/19	14.98	499.27	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-3**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	21.65	SCREEN INTERVAL (FT):	11.15-21.15	CASING ELEV (FT ABOVE MSL):	514.25	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	0.0033	<0.001	0.0019	<0.001	0.0048	0.0067	0.0016
09/09/15	CA VIA MEME						
10/21/15	0.009	<0.001	<0.001	<0.001	<0.003	BDL	0.005
11/24/15	0.017	0.003	<0.001	0.0046	<0.001	0.0076	0.0124
02/29/16	0.017	0.006	0.039	0.018	0.096	0.159	<0.005
05/18/16	0.017	0.005	0.004	0.015	0.034	0.058	<0.005
08/31/16	0.012	0.0019	<0.001	0.0134	0.0032	0.0185	0.0137
11/30/16	0.010	<0.001	<0.001	0.009	0.004	0.013	0.011
02/22/17	0.0107	0.0086	<0.001	0.0203	0.0015	0.0304	0.0338
05/17/17	0.0115	0.0127	<0.001	0.0522	0.0029	0.0678	0.0118
08/31/17	0.014	0.034	0.001	0.098	0.003	0.136	0.026
11/16/17	0.013	0.032	0.002	0.113	0.003	0.150	0.008
02/06/18	0.0158	0.0112	<0.001	0.0260	0.0016	0.0388	0.0234
04/27/18	0.0120	0.0263	<0.001	0.0915	0.0015	0.1193	0.0372
08/27/18	0.0136	0.0347	<0.001	0.1540	0.0025	0.1912	0.0603
11/26/18	0.0150	0.0582	0.0013	0.2345	0.0026	0.2966	0.1128
02/18/19	0.0099	0.0057	<0.001	0.0253	<0.001	0.0310	0.0554
05/20/19	0.007	0.008	<0.005	0.102	<0.001	0.110	0.042
07/22/19	0.009	0.006	<0.005	0.074	0.002	0.082	0.058
10/02/19	0.008	0.008	0.021	0.095	0.060	0.184	0.066
GRP SSTLs:	**2.74**	**0.684**	**137**	**95.7**	**175**	**-**	**2.74**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-4**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	26.83	SCREEN INTERVAL (FT):	11.33-26.33	CASING ELEV (FT ABOVE MSL):	514.40	WELL TYPE: II DIAMETER (IN): 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	18.09	496.52	0.28	-
10/21/15	15.93	498.47	-	-
11/24/15	17.23	497.17	-	-
02/29/16	17.78	496.62	-	-
05/18/16	17.45	496.95	-	-
08/31/16	12.11	502.29	-	-
11/30/16	13.09	501.31	-	-
02/22/17	14.03	500.37	-	-
05/17/17	13.68	500.72	-	12.0
08/31/17	15.62	498.78	-	9.0
11/16/17	16.52	497.88	-	7.5
02/06/18	14.50	499.90	-	7.0
04/27/18	14.96	499.44	-	7.5
08/27/18	14.44	499.96	-	7.0
11/26/18	16.93	497.47	-	5.0
02/18/19	15.20	499.20	-	20.0
05/20/19	15.08	499.32	-	15.0
07/22/19	14.25	500.15	-	15.0
10/02/19	15.84	498.56	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-4**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	26.83	SCREEN INTERVAL (FT):	11.33-26.33	CASING ELEV (FT ABOVE MSL):	514.40	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	NOT SAMPLED - FREE PRODUCT (0.28 FEET)						
09/09/15	CA VIA MEME						
10/21/15	**1.190**	**38.600**	**481.000**	**133.000**	**595.000**	1247.600	0.005
11/24/15	0.9815	**14.2789**	**39.5370**	3.9161	21.5881	79.3201	0.0124
02/29/16	<0.001	**16.800**	**79.200**	**11.700**	61.000	168.700	<0.005
05/18/16	0.328	**20.600**	**84.000**	**15.600**	78.100	198.300	<0.005
08/31/16	<0.002	0.0430	0.1809	0.0235	0.2229	0.4703	0.0137
11/30/16	0.224	**11.300**	**39.200**	3.980	24.400	78.880	0.011
02/22/17	0.0513	**2.4258**	**6.7823**	0.6697	5.0437	14.9215	0.0338
05/17/17	<0.005	**0.5772**	0.6688	0.1321	1.2027	2.5808	0.0432
08/31/17	0.025	**3.250**	**10.700**	1.510	9.650	25.110	0.636
11/16/17	0.016	**8.600**	**31.800**	3.850	21.200	65.450	0.588
02/06/18	<0.005	**0.8849**	0.9973	0.1148	1.1743	3.1713	0.0963
04/27/18	0.0154	**5.7700**	**19.0694**	1.6634	9.4254	35.9282	0.3484
08/27/18	<0.010	**1.5580**	1.7759	0.4463	3.5433	7.3235	0.1408
11/26/18	<0.01	**4.9198**	**9.6603**	1.3540	6.8323	22.7664	0.3047
02/18/19	<0.01	**3.7548**	**11.8108**	1.4277	8.6408	25.6341	0.3502
05/20/19	<0.010	**0.575**	0.898	0.126	1.99	3.589	0.093
07/22/19	<0.001	0.037	0.048	0.005	0.097	0.187	0.010
10/02/19	<0.010	**0.412**	0.487	0.069	1.44	2.408	0.084
GRP SSTLs:	**2.74**	**0.684**	**137**	**95.7**	**175**	**-**	**2.74**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**
Stream SSTLs:	**-**	**0.115**	**1.83**	**4.73**	**-**	**-**	**6.47**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-5**		
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	23.68	SCREEN INTERVAL (FT):	13.18-23.18	CASING ELEV (FT ABOVE MSL):	513.86	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	18.84	495.28	0.34	-
10/21/15	17.24	496.64	0.02	-
11/24/15	17.72	496.14	-	-
02/29/16	17.80	496.06	-	-
05/18/16	17.71	496.15	-	-
08/31/16	11.88	501.98	-	-
11/30/16	DRY			
02/22/17	17.51	496.35	-	-
05/17/17	17.45	496.41	-	8.0
08/31/17	16.55	497.31	-	7.0
11/16/17	16.98	496.88	-	7.5
02/06/18	16.40	497.46	-	7.0
04/27/18	16.22	497.64	-	7.5
08/27/18	16.50	497.36	-	7.0
11/26/18	16.56	497.30	-	5.0
02/18/19	16.50	497.36	-	14.0
05/20/19	18.08	495.78	-	8.0
07/22/19	16.93	496.93	-	10.0
10/02/19	16.55	497.31	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-5**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	23.68	SCREEN INTERVAL (FT):	13.18-23.18	CASING ELEV (FT ABOVE MSL):	513.86	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	NOT SAMPLED - FREE PRODUCT (0.34 FEET)						
09/09/15	CA VIA MEME						
10/21/15	NOT SAMPLED - FREE PRODUCT (0.02 FEET)						
11/24/15	0.8672	**15.4872**	**50.9296**	**4.7591**	24.3555	95.5314	0.6999
02/29/16	<0.001	**19.000**	**88.800**	**12.700**	62.100	182.600	**9.760**
05/18/16	0.220	**16.100**	**81.200**	**15.800**	79.500	192.600	**7.920**
08/31/16	0.0013	0.0086	0.0303	0.0057	0.0419	0.0865	0.0071
11/30/16	NOT SAMPLED - DRY						
02/22/17	0.3102	**8.1412**	**29.5959**	**3.2208**	17.2027	58.1606	0.4217
05/17/17	0.4044	**9.7169**	**30.9034**	**3.0961**	16.5319	60.2483	0.3547
08/31/17	0.289	**10.500**	**33.600**	**5.660**	28.200	77.960	0.806
11/16/17	0.002	0.022	0.062	0.002	0.042	0.128	0.022
02/06/18	0.2018	**6.0438**	**9.4677**	0.9455	5.7343	22.1913	0.2294
04/27/18	0.3330	**9.8434**	**10.4002**	**2.5626**	13.8827	36.6889	0.3242
08/27/18	0.1853	**5.5072**	**2.5971**	1.7780	9.8129	19.6952	0.2232
11/26/18	0.1037	**4.4277**	**1.6445**	1.2155	5.9018	13.1895	0.2411
02/18/19	0.1704	**6.5000**	**2.9370**	1.5786	7.7331	18.7487	0.1838
05/20/19	0.093	**6.17**	**5.65**	**2.56**	11.8	26.18	0.338
07/22/19	0.111	**5.79**	**2.70**	1.39	5.95	15.83	<0.250
10/02/19	<0.010	**2.07**	0.548	1.03	4.06	7.708	0.138
GRP SSTLs:	**1.32**	**0.331**	**66.2**	**46.4**	**175**	**-**	**1.32**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**
Stream SSTLs:	**-**	**0.0556**	**0.884**	**2.29**	**-**	**-**	**3.13**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-6**		
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	22.30	SCREEN INTERVAL (FT):	11.80-21.80	CASING ELEV (FT ABOVE MSL):	514.44	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	19.33	495.11	-	-
10/21/15	18.27	496.17	-	-
11/24/15	19.06	495.38	-	-
02/29/16	18.81	495.63	-	-
05/18/16	19.22	495.22	-	-
08/31/16	18.97	495.47	-	-
11/30/16	20.16	494.28	-	-
02/22/17	18.18	496.26	-	-
05/17/17	18.60	495.84	-	5.0
08/31/17	18.72	495.72	-	5.0
11/16/17	18.7	495.74	-	5.0
02/06/18	18.65	495.79	-	5.5
04/27/18	18.85	495.59	-	6.0
08/27/18	19.15	495.29	-	5.5
11/26/18	19.24	495.20	-	4.0
02/18/19	19.20	495.24	-	6.0
05/20/19	19.12	495.32	-	5.0
07/22/19	19.19	495.25	-	3.5
10/02/19	19.35	495.09	-	4.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-6**	
INSTALLATION DATE:	05/27/15	WELL DEPTH (FT BTOC):	22.30	SCREEN INTERVAL (FT):	11.80-21.80	CASING ELEV (FT ABOVE MSL):	514.44	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	<0.001	0.0019	0.0110	0.0019	0.0097	0.0245	<0.001
09/09/15	CA VIA MEME						
10/21/15	<0.001	**0.084**	0.210	0.016	0.061	0.371	0.009
11/24/15	<0.001	**0.0603**	0.1312	0.0154	0.0734	0.2803	<0.001
02/29/16	<0.001	0.028	0.008	0.006	0.042	0.084	<0.005
05/18/16	<0.001	0.010	0.001	0.002	0.012	0.025	<0.005
08/31/16	0.0011	**0.0412**	0.0085	0.0206	0.0872	0.1575	<0.001
11/30/16	<0.001	**0.129**	0.023	0.062	0.209	0.423	<0.005
02/22/17	<0.001	0.0059	<0.001	0.0021	0.0065	0.0145	<0.001
05/17/17	<0.001	**0.0574**	0.0020	0.0211	0.0473	0.1278	<0.001
08/31/17	<0.001	0.023	0.002	0.010	0.024	0.059	<0.005
11/16/17	<0.001	0.0190	0.0020	0.0090	0.0220	0.0520	<0.005
02/06/18	<0.001	0.0230	0.0013	0.0122	0.0206	0.0571	<0.001
04/27/18	<0.001	**0.0479**	0.0019	0.0327	0.0373	0.1198	0.0025
08/27/18	0.0013	**0.1635**	0.0068	0.1692	0.1053	0.4448	0.0120
11/26/18	0.0012	**0.1074**	0.0033	0.1240	0.0488	0.2835	0.0122
02/18/19	<0.001	**0.0639**	0.0026	0.0706	0.0268	0.1639	0.0085
05/20/19	<0.001	**0.328**	0.018	0.128	0.250	0.724	0.005
07/22/19	0.001	**0.097**	<0.005	0.086	0.029	0.212	0.013
10/02/19	<0.001	**0.331**	0.011	0.128	0.127	0.597	0.016
GRP SSTLs:	**0.79**	**0.197**	**39.5**	**27.6**	**175**	**-**	**0.79**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**
Stream SSTLs:	**-**	**0.0331**	**0.527**	**1.37**	**-**	**-**	**1.87**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-7**		
INSTALLATION DATE:	05/29/15	WELL DEPTH (FT BTOC):	15.50	SCREEN INTERVAL (FT):	5.00-15.00	CASING ELEV (FT ABOVE MSL):	515.20	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	11.55	503.65	-	-
10/21/15	11.82	503.38	-	-
11/24/15	11.57	503.63	-	-
02/29/16	10.55	504.65	-	-
05/18/16	11.17	504.03	-	-
08/31/16	11.28	503.92	-	-
11/30/16	11.31	503.89	-	-
02/22/17	10.24	504.96	-	-
05/17/17	10.72	504.48	-	1.5
08/31/17	10.31	504.89	-	5.5
11/16/17	14.18	501.02	-	3.0
02/06/18	10.22	504.98	-	3.5
04/27/18	10.30	504.90	-	3.5
08/27/18	11.03	504.17	-	3.5
11/26/18	10.42	504.78	-	5.0
02/18/19	10.50	504.70	-	10.0
05/20/19	10.53	504.67	-	8.0
07/22/19	10.42	504.78	-	7.0
10/02/19	11.07	504.13	-	6.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-7**	
INSTALLATION DATE:	05/29/15	WELL DEPTH (FT BTOC):	15.50	SCREEN INTERVAL (FT):	5.00-15.00	CASING ELEV (FT ABOVE MSL):	515.20	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	**0.0093**	<0.001	<0.001	<0.001	0.0013	0.0013	<0.001
09/09/15	CA VIA MEME						
10/21/15	**0.010**	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/24/15	0.0094	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/29/16	0.009	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
05/18/16	0.009	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	0.0119	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	0.0037	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	0.002	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	0.003	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	0.0049	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	0.0029	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	0.0057	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	0.0046	<0.001	<0.001	<0.001	<0.001	BDL	0.0016
02/18/19	0.0031	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	0.003	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	0.004	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	0.003	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.422**	**0.106**	**21.1**	**14.8**	**175**	**-**	**0.422**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-8**		
INSTALLATION DATE:	05/29/15	WELL DEPTH (FT BTOC):	18.31	SCREEN INTERVAL (FT):	7.81-17.81	CASING ELEV (FT ABOVE MSL):	514.88	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	9.85	505.03	-	-
10/21/15	10.75	504.13	-	-
11/24/15	10.19	504.69	-	-
02/29/16	8.64	506.24	-	-
05/18/16	8.11	506.77	-	-
08/31/16	8.89	505.99	-	-
11/30/16	10.01	504.87	-	-
02/22/17	9.71	505.17	-	-
05/17/17	8.49	506.39	-	10.5
08/31/17	8.78	506.10	-	8.0
11/16/17	9.19	505.69	-	7.5
02/06/18	9.97	504.91	-	7.0
04/27/18	9.40	505.48	-	6.5
08/27/18	9.69	505.19	-	6.5
11/26/18	9.74	505.14	-	5.0
02/18/19	8.70	506.18	-	18.0
05/20/19	8.51	506.37	-	15.0
07/22/19	9.12	505.76	-	15.0
10/02/19	9.98	504.90	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-8**	
INSTALLATION DATE:	05/29/15	WELL DEPTH (FT BTOC):	18.31	SCREEN INTERVAL (FT):	7.81-17.81	CASING ELEV (FT ABOVE MSL):	514.88	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	<0.001	<0.001	0.0025	<0.001	0.0023	0.0048	<0.001
09/09/15	CA VIA MEME						
10/21/15	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/24/15	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/29/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**2.58**	**0.645**	**129**	**90.3**	**175**	**-**	**2.58**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-9**		
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	495.85	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	5.15	490.70	-	-
10/21/15	4.68	491.17	-	-
11/24/15	5.22	490.63	-	-
02/29/16	5.62	490.23	-	-
05/18/16	5.49	490.36	-	-
08/31/16	6.06	489.79	-	-
11/30/16	9.68	486.17	-	-
02/22/17	9.40	486.45	-	-
05/17/17	9.12	486.73	-	1.5
08/31/17	9.36	486.49	-	1.5
11/16/17	9.53	486.32	-	2.5
02/06/18	8.17	487.68	-	3.5
04/27/18	7.26	488.59	-	5.0
08/27/18	7.65	488.20	-	4.5
11/26/18	3.73	492.12	-	5.0
02/18/19	3.50	492.35	-	13.0
05/20/19	3.53	492.32	-	8.0
07/22/19	2.76	493.09	-	13.0
10/02/19	3.48	492.37	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-9**	
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	495.85	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	<0.001	**0.0413**	0.1946	0.0269	0.2740	0.5368	0.0071
09/09/15	CA VIA MEME						
10/21/15	0.003	**0.043**	0.071	0.017	0.100	0.231	0.018
11/24/15	0.0152	**0.2591**	**0.6229**	0.0858	0.4645	1.4323	0.0256
02/29/16	0.012	**0.288**	**0.732**	0.077	0.468	1.565	0.232
05/18/16	0.004	**0.131**	**0.364**	0.059	0.266	0.820	<0.005
08/31/16	0.0039	**0.1195**	0.2022	0.0355	0.1408	0.4980	0.0048
11/30/16	0.002	0.007	0.005	0.006	0.013	0.031	<0.005
02/22/17	<0.001	**0.0219**	0.0306	0.0244	0.1356	0.2125	0.0060
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	0.0030	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	0.0091	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	0.0068	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	0.003	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.318**	**0.0794**	**15.9**	**11.1**	**159**	**-**	**0.318**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**
Stream SSTLs:	**-**	**0.0133**	**0.212**	**0.549**	**-**	**-**	**0.751**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-10**		
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	494.60	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	5.37	489.31	0.11	-
10/21/15	4.71	489.89	-	-
11/24/15	5.47	489.13	-	-
02/29/16	5.38	489.22	-	-
05/18/16	5.50	489.10	-	-
08/31/16	6.70	487.90	-	-
11/30/16	7.31	487.29	-	-
02/22/17	7.09	487.51	-	-
05/17/17	6.94	487.66	-	4.5
08/31/17	7.14	487.46	-	3.0
11/16/17	7.62	486.98	-	2.0
02/06/18	8.26	486.34	-	3.5
04/27/18	7.71	486.89	-	3.5
08/27/18	7.98	486.62	-	3.5
11/26/18	6.74	487.86	-	5.0
02/18/19	4.45	490.15	-	11.0
05/20/19	4.35	490.25	-	8.0
07/22/19	3.45	491.15	-	11.0
10/02/19	4.37	490.23	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-10**	
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	494.60	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	NOT SAMPLED - FREE PRODUCT (0.11 FEET)						
09/09/15	CA VIA MEME						
10/21/15	<0.001	**2.790**	**18.800**	2.870	14.700	39.160	**0.332**
11/24/15	<0.001	**0.3604**	5.1291	0.8274	5.5142	11.8311	**0.3377**
02/29/16	0.006	**0.258**	4.700	1.140	7.070	13.168	**0.162**
05/18/16	<0.001	**0.069**	1.230	0.557	3.150	5.006	<0.005
08/31/16	<0.0025	**0.0588**	0.2183	0.1263	0.7829	1.1863	0.0396
11/30/16	<0.001	0.016	0.044	0.040	0.211	0.311	<0.005
02/22/17	0.0011	0.0319	0.0394	0.0323	0.1727	0.2763	0.0071
05/17/17	0.0034	0.0021	<0.001	<0.001	<0.001	0.0021	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	0.0058	**0.0939**	0.0097	0.0314	0.1252	0.2602	0.0103
02/18/19	0.0056	**0.0569**	0.0035	0.0066	0.0273	0.0943	0.0035
05/20/19	<0.001	0.001	<0.005	0.001	0.003	0.005	<0.005
07/22/19	<0.001	<0.001	<0.005	0.002	0.002	0.004	<0.005
10/02/19	<0.001	0.011	0.005	0.004	0.012	0.032	<0.005
GRP SSTLs:	**0.161**	**0.0402**	**8.04**	**5.63**	**80.4**	**-**	**0.161**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-11**		
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	493.25	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	5.70	487.61	0.08	-
10/21/15	4.35	488.90	-	-
11/24/15	4.91	488.34	-	-
02/29/16	5.06	488.19	-	-
05/18/16	5.36	487.89	-	-
08/31/16	5.93	487.32	-	-
11/30/16	6.82	486.43	-	-
02/22/17	6.71	486.54	-	-
05/17/17	6.52	486.73	-	5.0
08/31/17	6.93	486.32	-	4.0
11/16/17	7.01	486.24	-	4.0
02/06/18	8.53	484.72	-	3.0
04/27/18	7.98	485.27	-	4.5
08/27/18	8.43	484.82	-	3.0
11/26/18	4.73	488.52	-	5.0
02/18/19	4.40	488.85	-	11.0
05/20/19	4.35	488.90	-	8.0
07/22/19	3.21	490.04	-	11.0
10/02/19	4.56	488.69	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-11**	
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	493.25	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	NOT SAMPLED - FREE PRODUCT (0.08 FEET)						
09/09/15	CA VIA MEME						
10/21/15	<0.001	**3.930**	**32.500**	**4.880**	25.900	67.210	**0.808**
11/24/15	0.0024	**0.9189**	**10.5031**	1.2212	9.6077	22.2509	**0.3466**
02/29/16	0.028	**0.892**	**7.640**	2.360	20.400	31.292	**2.550**
05/18/16	<0.001	**0.118**	0.695	0.257	1.410	2.480	<0.005
08/31/16	0.0053	**0.2984**	0.0894	0.2063	0.4122	1.0063	0.0420
11/30/16	<0.001	0.015	0.044	0.035	0.195	0.289	0.005
02/22/17	0.0069	**0.2829**	0.0534	0.1147	0.1734	0.6244	0.0136
05/17/17	0.0032	0.0018	<0.001	<0.001	<0.001	0.0018	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	0.0077	**0.1704**	0.0057	0.0153	0.0241	0.2155	0.0110
02/18/19	<0.001	0.0103	0.0074	0.0189	0.0871	0.1237	0.0045
05/20/19	0.001	0.027	<0.005	0.004	0.003	0.034	<0.005
07/22/19	<0.001	0.002	<0.005	0.001	0.001	0.004	<0.005
10/02/19	<0.001	0.011	0.005	0.004	0.012	0.032	<0.005
GRP SSTLs:	**0.113**	**0.0282**	**5.64**	**3.95**	**56.4**	**-**	**0.113**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-12**		
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	492.16	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	6.02	486.14	-	-
10/21/15	4.59	487.57	-	-
11/24/15	4.39	487.77	-	-
02/29/16	4.79	487.37	-	-
05/18/16	5.23	486.93	-	-
08/31/16	5.31	486.85	-	-
11/30/16	5.45	486.71	-	-
02/22/17	5.45	486.71	-	-
05/17/17	5.41	486.75	-	6.0
08/31/17	4.10	488.06	-	5.0
11/16/17	4.30	487.86	-	6.0
02/06/18	4.83	487.33	-	5.5
04/27/18	3.85	488.31	-	6.0
08/27/18	4.71	487.45	-	5.5
11/26/18	4.64	487.52	-	5.0
02/18/19	4.20	487.96	-	12.0
05/20/19	4.28	487.88	-	8.0
07/22/19	2.94	489.22	-	12.0
10/02/19	4.45	487.71	-	10.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-12**	
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	10.40	SCREEN INTERVAL (FT):	4.90-9.90	CASING ELEV (FT ABOVE MSL):	492.16	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	<0.2	**7.4071**	**23.4692**	1.6301	8.5233	41.0297	<0.2
09/09/15	CA VIA MEME						
10/21/15	<0.001	**1.700**	**16.200**	**3.820**	17.200	38.920	**0.736**
11/24/15	<0.2	**0.7463**	**6.4681**	1.1627	6.2898	14.6669	**0.3949**
02/29/16	<0.001	**1.320**	**6.280**	1.260	8.160	17.020	**0.212**
05/18/16	<0.001	**0.241**	0.182	0.346	3.750	4.519	<0.005
08/31/16	0.0047	**0.2164**	0.0805	0.1439	0.2617	0.7025	0.0357
11/30/16	0.0040	**0.1720**	<0.001	0.0690	<0.003	0.2410	0.0050
02/22/17	0.0074	**0.3102**	0.0594	0.1269	0.1860	0.6825	0.0142
05/17/17	0.0037	**0.1991**	0.0048	0.0829	0.0877	0.3745	0.0105
08/31/17	0.001	**0.045**	0.001	0.006	0.050	0.102	0.006
11/16/17	0.004	**0.201**	0.005	0.041	0.143	0.390	0.014
02/06/18	0.0050	**0.1377**	0.0061	0.0107	0.0330	0.1875	0.0064
04/27/18	0.0023	**0.0215**	<0.001	0.0011	0.0226	0.0452	0.0027
08/27/18	0.0038	**0.0973**	0.0276	0.0622	0.3620	0.5491	0.0227
11/26/18	0.0097	**0.2111**	0.0090	0.0078	0.0369	0.2648	0.0136
02/18/19	<0.001	0.0141	0.0096	0.0233	0.1074	0.1544	0.0062
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	0.004	**0.030**	<0.005	<0.001	<0.001	0.030	0.009
GRP SSTLs:	**0.0833**	**0.0208**	**4.17**	**2.92**	**41.7**	-	**0.0833**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	-	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-13**		
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	7.42	SCREEN INTERVAL (FT):	1.92-6.92	CASING ELEV (FT ABOVE MSL):	490.83	WELL TYPE: DIAMETER (IN):	II 4

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
06/10/15	5.00	485.83	-	-
10/21/15	6.67	484.16	-	-
11/24/15	5.00	485.83	-	-
02/29/16	5.22	485.61	-	-
05/18/16	4.95	485.88	-	-
08/31/16	5.05	485.78	-	-
11/30/16	6.12	484.71	-	-
02/22/17	4.60	486.23	-	-
05/17/17	5.18	485.65	-	1.0
08/31/17	5.23	485.60	-	2.5
11/16/17	3.01	487.82	-	3.5
02/06/18	4.89	485.94	-	3.5
04/27/18	4.82	486.01	-	3.0
08/27/18	4.90	485.93	-	3.0
11/26/18	4.88	485.95	-	1.0
02/18/19	4.30	486.53	-	6.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
06/10/15	-	-	-
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-13**	
INSTALLATION DATE:	05/28/17	WELL DEPTH (FT BTOC):	7.42	SCREEN INTERVAL (FT):	1.92-6.92	CASING ELEV (FT ABOVE MSL):	490.83	WELL TYPE: II DIAMETER (IN): 4

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
06/10/15	**0.0254**	**0.8282**	**2.2949**	0.1210	0.7899	4.0340	<0.025
09/09/15	CA VIA MEME						
10/21/15	<0.001	**0.184**	0.496	0.100	0.435	1.215	0.008
11/24/15	0.0023	**0.1344**	0.1959	0.0412	0.1948	0.5663	0.0021
02/29/16	0.004	**0.145**	0.157	0.117	0.512	0.931	0.016
05/18/16	<0.001	0.006	0.002	0.006	0.038	0.052	<0.005
08/31/16	<0.001	**0.0126**	0.0033	0.0110	0.0423	0.0692	0.0016
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	**0.0353**	0.0029	0.0346	0.1086	0.1814	0.0050
08/31/17	<0.001	**0.042**	0.003	0.033	0.203	0.281	0.010
11/16/17	<0.001	**0.024**	0.002	0.014	0.121	0.161	0.011
02/06/18	<0.001	0.0050	<0.001	0.0022	0.0186	0.0258	0.0016
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	0.0043	<0.001	<0.001	0.0022	0.0065	0.0020
11/26/18	<0.001	**0.0111**	0.0011	0.0024	0.0562	0.0708	0.0070
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
GRP SSTLs:	**0.0287**	**0.0072**	**1.43**	**1**	**14.3**	**-**	**0.0287**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-14**		
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	25.43	SCREEN INTERVAL (FT):	9.93-24.93	CASING ELEV (FT ABOVE MSL):	514.66	WELL TYPE: DIAMETER (IN):	II 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	15.65	499.01	-	-
11/24/15	17.33	497.33	-	-
02/29/16	17.02	497.64	-	-
05/18/16	16.55	498.11	-	-
08/31/16	16.49	498.17	-	-
11/30/16	17.12	497.54	-	-
02/22/17	17.10	497.56	-	-
05/17/17	16.30	498.36	-	2.0
08/31/17	17.17	497.49	-	2.0
11/16/17	16.77	497.89	-	2.0
02/06/18	17.05	497.61	-	2.5
04/27/18	17.01	497.65	-	3.0
08/27/18	17.28	497.38	-	3.0
11/26/18	15.65	499.01	-	3.0
02/18/19	14.75	499.91	-	5.0
05/20/19	14.75	499.91	-	5.0
07/22/19	16.45	498.21	-	3.5
10/02/19	17.35	497.31	-	3.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-14**	
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	25.43	SCREEN INTERVAL (FT):	9.93-24.93	CASING ELEV (FT ABOVE MSL):	514.66	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	<0.001	0.0020	<0.001	<0.003	0.0020	<0.005
11/24/15	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/29/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**1.06**	**0.264**	**52.9**	**37**	**175**	**-**	**1.06**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-15**	
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.29	SCREEN INTERVAL (FT):	4.79-9.79	CASING ELEV (FT ABOVE MSL):	492.54	WELL TYPE: II DIAMETER (IN): 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	4.65	487.89	-	-
11/24/15	4.31	488.23	-	-
02/29/16	4.38	488.16	-	-
05/18/16	4.63	487.91	-	-
08/31/16	4.72	487.82	-	-
11/30/16	5.36	487.18	-	-
02/22/17	5.72	486.82	-	-
05/17/17	5.06	487.48	-	1.5
08/31/17	5.15	487.39	-	1.5
11/16/17	5.21	487.33	-	1.5
02/06/18	5.26	487.28	-	1.5
04/27/18	5.13	487.41	-	1.5
08/27/18	5.69	486.85	-	1.5
11/26/18	4.79	487.75	-	2.0
02/18/19	3.25	489.29	-	3.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-15**	
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.29	SCREEN INTERVAL (FT):	4.79-9.79	CASING ELEV (FT ABOVE MSL):	492.54	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/24/15	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/29/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	0.0016	<0.001	<0.001	0.0016	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
GRP SSTLs:	**0.0993**	**0.0248**	**4.97**	**3.44**	**49.7**	**-**	**0.0993**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-16**		
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.15	SCREEN INTERVAL (FT):	4.65-9.65	CASING ELEV (FT ABOVE MSL):	490.36	WELL TYPE: DIAMETER (IN):	II 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	3.56	486.80	-	-
11/24/15	3.54	486.82	-	-
02/29/16	2.90	487.46	-	-
05/18/16	3.22	487.14	-	-
08/31/16	2.97	487.39	-	-
11/30/16	3.25	487.11	-	-
02/22/17	4.13	486.23	-	-
05/17/17	3.72	486.64	-	1.5
08/31/17	3.84	486.52	-	2.0
11/16/17	3.90	486.46	-	2.0
02/06/18	4.12	486.24	-	2.0
04/27/18	4.09	486.27	-	2.0
08/27/18	4.81	485.55	-	1.5

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-16**	
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.15	SCREEN INTERVAL (FT):	4.65-9.65	CASING ELEV (FT ABOVE MSL):	490.36	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	**0.570**	**5.490**	1.840	8.530	16.430	**0.682**
11/24/15	0.0022	**1.1100**	**9.2691**	1.5415	8.0057	19.9263	**0.1706**
02/29/16	0.002	**0.655**	**6.710**	1.630	18.100	27.095	**0.270**
05/18/16	<0.001	**0.211**	2.330	0.455	5.180	8.176	<0.005
08/31/16	<0.001	0.0048	0.0579	0.0245	0.2218	0.3090	0.0083
11/30/16	<0.001	**0.073**	0.323	0.248	2.350	2.994	0.019
02/22/17	<0.001	**0.0771**	0.1400	0.1663	1.0246	1.4080	0.0230
05/17/17	<0.005	**0.0600**	0.0321	0.1418	0.9397	1.1736	0.0173
08/31/17	0.0040	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	NOT SAMPLED						
02/18/19	NOT SAMPLED						
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
GRP SSTLs:	**0.0581**	**0.0145**	**2.91**	**2.03**	**29.1**	**-**	**0.0581**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-17**		
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.72	SCREEN INTERVAL (FT):	5.22-10.22	CASING ELEV (FT ABOVE MSL):	495.90	WELL TYPE: DIAMETER (IN):	II 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	2.83	493.07	-	-
11/24/15	2.69	493.21	-	-
02/29/16	2.41	493.49	-	-
05/18/16	2.92	492.98	-	-
08/31/16	2.68	493.22	-	-
11/30/16	3.14	492.76	-	-
02/22/17	3.79	492.11	-	-
05/17/17	3.49	492.41	-	2.0
08/31/17	2.02	493.88	-	2.0
11/16/17	2.07	493.83	-	2.0
02/06/18	2.07	493.83	-	2.0
04/27/18	2.21	493.69	-	3.5
08/27/18	2.68	493.22	-	3.0
11/26/18	3.56	492.34	-	4.0
02/18/19	2.75	493.15	-	3.0
05/20/19	2.75	493.15	-	3.0
07/22/19	2.43	493.47	-	8.0
10/02/19	0.85	495.05	-	4.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-17**	
INSTALLATION DATE:	10/12/15	WELL DEPTH (FT BTOC):	10.72	SCREEN INTERVAL (FT):	5.22-10.22	CASING ELEV (FT ABOVE MSL):	495.90	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/24/15	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/29/16	<0.001	0.002	<0.001	<0.001	<0.003	0.002	<0.005
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	0.0034	0.0019	<0.001	<0.001	<0.001	0.0019	<0.001
08/31/17	0.0030	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	0.0010	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	0.0083	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	0.0060	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	0.0031	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	0.0022	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.318**	**0.0794**	**15.9**	**11.1**	**159**	**-**	**0.318**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-18**		
INSTALLATION DATE:	10/13/15	WELL DEPTH (FT BTOC):	10.20	SCREEN INTERVAL (FT):	4.70-9.70	CASING ELEV (FT ABOVE MSL):	490.12	WELL TYPE: DIAMETER (IN):	II 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	4.58	485.54	-	-
11/24/15	4.44	485.68	-	-
02/29/16	4.41	485.71	-	-
05/18/16	4.41	485.71	-	-
08/31/16	4.61	485.51	-	-
11/30/16	4.24	485.88	-	-
02/22/17	4.21	485.91	-	-
05/17/17	4.34	485.78	-	1.5
08/31/17	5.09	485.03	-	1.5
11/16/17	5.01	485.11	-	1.5
02/06/18	3.70	486.42	-	3.0
04/27/18	4.35	485.77	-	2.5
08/27/18	4.40	485.72	-	2.5
11/26/18	5.46	484.66	-	2.0
02/18/19	4.50	485.62	-	2.5
05/20/19	4.50	485.62	-	2.0
07/22/19	3.76	486.36	-	2.5
10/02/19	4.45	485.67	-	2.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-18**	
INSTALLATION DATE:	10/13/15	WELL DEPTH (FT BTOC):	10.20	SCREEN INTERVAL (FT):	4.70-9.70	CASING ELEV (FT ABOVE MSL):	490.12	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	0.001	0.002	<0.001	0.004	0.007	<0.005
11/24/15	<0.001	0.0033	<0.001	<0.001	<0.001	0.0033	<0.001
02/29/16	<0.001	0.002	<0.001	<0.001	<0.003	0.002	<0.005
05/18/16	<0.001	0.005	<0.001	<0.001	<0.003	0.005	<0.005
08/31/16	<0.001	0.0035	<0.001	<0.001	<0.001	0.0035	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	0.0019	<0.001	<0.001	<0.001	0.0019	<0.001
05/17/17	<0.001	0.0020	<0.001	<0.001	<0.001	0.0020	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	0.003	<0.005	<0.001	<0.001	0.003	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.0227**	**0.0057**	**1.13**	**0.793**	**11.3**	**-**	**0.0227**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-19**		
INSTALLATION DATE:	04/27/16	WELL DEPTH (FT BTOC):	14.90	SCREEN INTERVAL (FT):	4.40-14.40	CASING ELEV (FT ABOVE MSL):	490.31	WELL TYPE: DIAMETER (IN):	II 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
05/18/16	2.19	488.12	-	-
08/31/16	2.10	488.21	-	-
11/30/16	2.87	487.44	-	-
02/22/17	2.10	488.21	-	-
05/17/17	2.04	488.27	-	3.5
08/31/17	1.78	488.53	-	3.0
11/16/17	1.88	488.43	-	3.0
02/06/18	2.09	488.22	-	3.0
04/27/18	2.08	488.23	-	3.0
08/27/18	2.94	487.37	-	2.5
11/26/18	3.62	486.69	-	4.0
02/18/19	3.00	487.31	-	5.0
05/20/19	3.00	487.31	-	5.0
07/22/19	3.12	487.19	-	4.5
10/02/19	0.73	489.58	-	5.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-19**	
INSTALLATION DATE:	04/27/16	WELL DEPTH (FT BTOC):	14.90	SCREEN INTERVAL (FT):	4.40-14.40	CASING ELEV (FT ABOVE MSL):	490.31	WELL TYPE: II DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.0444**	**0.0111**	**2.22**	**1.55**	**22.2**	**-**	**0.0444**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-20**	
INSTALLATION DATE:	04/27/16	WELL DEPTH (FT BTOC):	15.10	SCREEN INTERVAL (FT):	4.60-14.60	CASING ELEV (FT ABOVE MSL):	489.70	WELL TYPE: II DIAMETER (IN): 2

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
05/18/16	3.65	486.05	-	-
08/31/16	3.38	486.32	-	-
11/30/16	3.93	485.77	-	-
02/22/17	4.30	485.40	-	-
05/17/17	3.08	486.62	-	3.0
08/31/17	3.49	486.21	-	2.5
11/16/17	3.33	486.37	-	2.5
02/06/18	3.44	486.26	-	3.5
04/27/18	3.32	486.38	-	5.5
08/27/18	3.97	485.73	-	5.0
11/26/18	5.04	484.66	-	4.0
02/18/19	3.70	486.00	-	5.0
05/20/19	3.70	486.00	-	5.0
07/22/19	3.18	486.52	-	5.0
10/02/19	3.69	486.01	-	5.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**MW-20**	
INSTALLATION DATE:	04/27/16	WELL DEPTH (FT BTOC):	15.10	SCREEN INTERVAL (FT):	4.60-14.60	CASING ELEV (FT ABOVE MSL):	489.70	WELL TYPE: II DIAMETER (IN): 2

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.026**	**0.0065**	**1.3**	**0.91**	**13**	**-**	**0.026**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**18.5**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**VW-1**		
INSTALLATION DATE:	10/13/15	WELL DEPTH (FT BTOC):	38.44	SCREEN INTERVAL (FT):	32.94-37.94	CASING ELEV (FT ABOVE MSL):	515.02	WELL TYPE: DIAMETER (IN):	III 2

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

POTENTIOMETRIC ELEVATION SUMMARY

MEASUREMENT DATE	DEPTH TO WATER (FT BTOC)	ELEVATION (FT ABOVE MSL)	FREE PRODUCT THICKNESS (FT)	PCW GALLONS REMOVED
10/21/15	19.81	495.21	-	-
11/24/15	18.84	496.18	-	-
02/29/16	19.79	495.23	-	-
05/18/16	19.70	495.32	-	-
08/31/16	16.80	498.22	-	-
11/30/16	17.54	497.48	-	-
02/22/17	18.19	496.83	-	-
05/17/17	18.62	496.40	-	4.5
08/31/17	18.44	496.58	-	6.0
11/16/17	18.59	496.43	-	5.5
02/06/18	18.51	496.51	-	6.0
04/27/18	18.56	496.46	-	8.0
08/27/18	24.65	490.37	-	5.5
11/26/18	18.67	496.35	-	5.0
02/18/19	18.50	496.52	-	9.0
05/20/19	18.50	496.52	-	9.0
07/22/19	18.76	496.26	-	9.0
10/02/19	18.63	496.39	-	9.0

INTRINSIC GROUNDWATER DATA SUMMARY

SAMPLE DATE	DISSOLVED OXYGEN (mg/L)	pH	REDOX POTENTIAL (mV)
10/21/15	-	-	-
11/24/15	-	-	-
02/29/16	-	-	-
05/18/16	-	-	-
08/31/16	-	-	-
11/30/16	-	-	-
02/22/17	-	-	-
05/17/17	-	-	-
08/31/17	-	-	-
11/16/17	-	-	-
02/06/18	-	-	-
04/27/18	-	-	-
08/27/18	-	-	-
11/26/18	-	-	-
02/18/19	-	-	-
05/20/19	-	-	-
07/22/19	-	-	-
10/02/19	-	-	-

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**VW-1**	
INSTALLATION DATE:	10/13/15	WELL DEPTH (FT BTOC):	38.44	SCREEN INTERVAL (FT):	32.94-37.94	CASING ELEV (FT ABOVE MSL):	515.02	WELL TYPE: III DIAMETER (IN): 2

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
09/09/15	CA VIA MEME						
10/21/15	<0.001	0.042	0.363	0.867	0.393	1.665	0.009
11/24/15	<0.001	0.0339	0.2623	0.0565	0.3278	0.6805	0.0064
02/29/16	<0.001	0.068	0.016	0.038	0.133	0.255	<0.005
05/18/16	0.001	0.061	0.005	0.026	0.070	0.162	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	0.0011	0.0011	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	0.0230	<0.001	0.0062	0.0015	0.0307	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
GRP SSTLs:	**0.856**	**0.214**	**42.8**	**30**	**175**	**-**	**0.856**
Inhalation SSTLs:	**48000**	**25**	**526**	**169**	**175**	**-**	**31**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-1**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: DIAMETER (IN):	- -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
04/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
Surface Water Protection Standards:	-	**0.0110**	**0.1750**	**0.4530**	-	-	**0.6200**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-2**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: DIAMETER (IN):	- -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	**0.0617**	0.1039	0.0414	0.2251	0.4321	0.0032
04/27/18	<0.001	**0.0170**	0.0103	0.0111	0.0494	0.0878	0.0014
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	0.0539	0.0231	0.0328	0.1231	0.2329	0.0027
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
Surface Water Protection Standards:	**-**	**0.0110**	**0.1750**	**0.4530**	**-**	**-**	**0.6200**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-3**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: DIAMETER (IN):	- -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
08/31/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
11/16/17	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/06/18	<0.001	0.0011	0.0018	0.0014	0.0050	0.0093	<0.001
04/27/18	<0.001	0.0013	<0.001	0.0011	0.0050	0.0074	<0.001
08/27/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/26/18	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
02/18/19	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/20/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
07/22/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
10/02/19	<0.001	<0.001	<0.005	<0.001	<0.001	BDL	<0.005
Surface Water Protection Standards:	**-**	**0.0110**	**0.1750**	**0.4530**	**-**	**-**	**0.6200**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-4**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: - DIAMETER (IN): -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	NOT SAMPLED						
08/31/17	NOT SAMPLED						
11/16/17	NOT SAMPLED						
11/26/18	NOT SAMPLED						
02/18/19	NOT SAMPLED						
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
Surface Water Protection Standards:	**-**	**0.0110**	**0.1750**	**0.4530**	**-**	**-**	**0.6200**

Monitoring Point Data Summary Table

SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-5**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: DIAMETER (IN):	- -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	NOT SAMPLED						
08/31/17	NOT SAMPLED						
11/16/17	NOT SAMPLED						
11/26/18	NOT SAMPLED						
02/18/19	NOT SAMPLED						
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
Surface Water Protection Standards:	**-**	**0.0110**	**0.1750**	**0.4530**	**-**	**-**	**0.6200**

Monitoring Point Data Summary Table

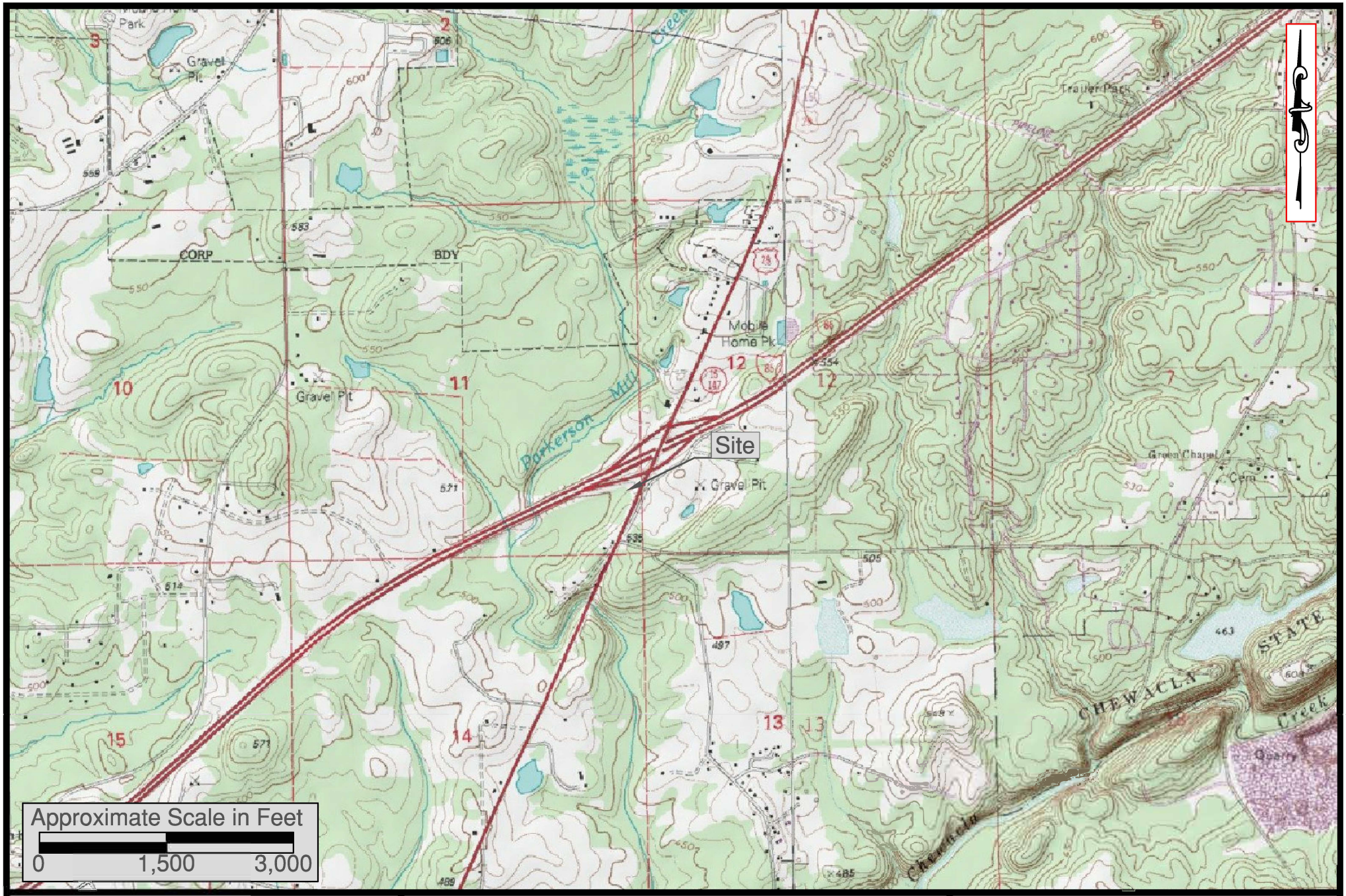
SITE NAME:	Grub Mart #24			UST NUMBER:	15-05-04	WELL ID:	**SS-6**	
INSTALLATION DATE:	-	WELL DEPTH (FT BTOC):	-	SCREEN INTERVAL (FT):	-	CASING ELEV (FT ABOVE MSL):	-	WELL TYPE: DIAMETER (IN):	- -

GROUNDWATER ANALYTICAL SUMMARY (mg/L)

SAMPLE DATE	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	TOTAL BTEX	NAPHTHALENE
09/09/15	CA VIA MEME						
05/18/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
08/31/16	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
11/30/16	<0.001	<0.001	<0.001	<0.001	<0.003	BDL	<0.005
02/22/17	<0.001	<0.001	<0.001	<0.001	<0.001	BDL	<0.001
05/17/17	NOT SAMPLED						
08/31/17	NOT SAMPLED						
11/16/17	NOT SAMPLED						
11/26/18	NOT SAMPLED						
02/18/19	NOT SAMPLED						
05/20/19	NOT SAMPLED						
07/22/19	NOT SAMPLED						
10/02/19	NOT SAMPLED						
Surface Water Protection Standards:	**-**	**0.0110**	**0.1750**	**0.4530**	**-**	**-**	**0.6200**

Engineering. Environmental. Answers.

Figures



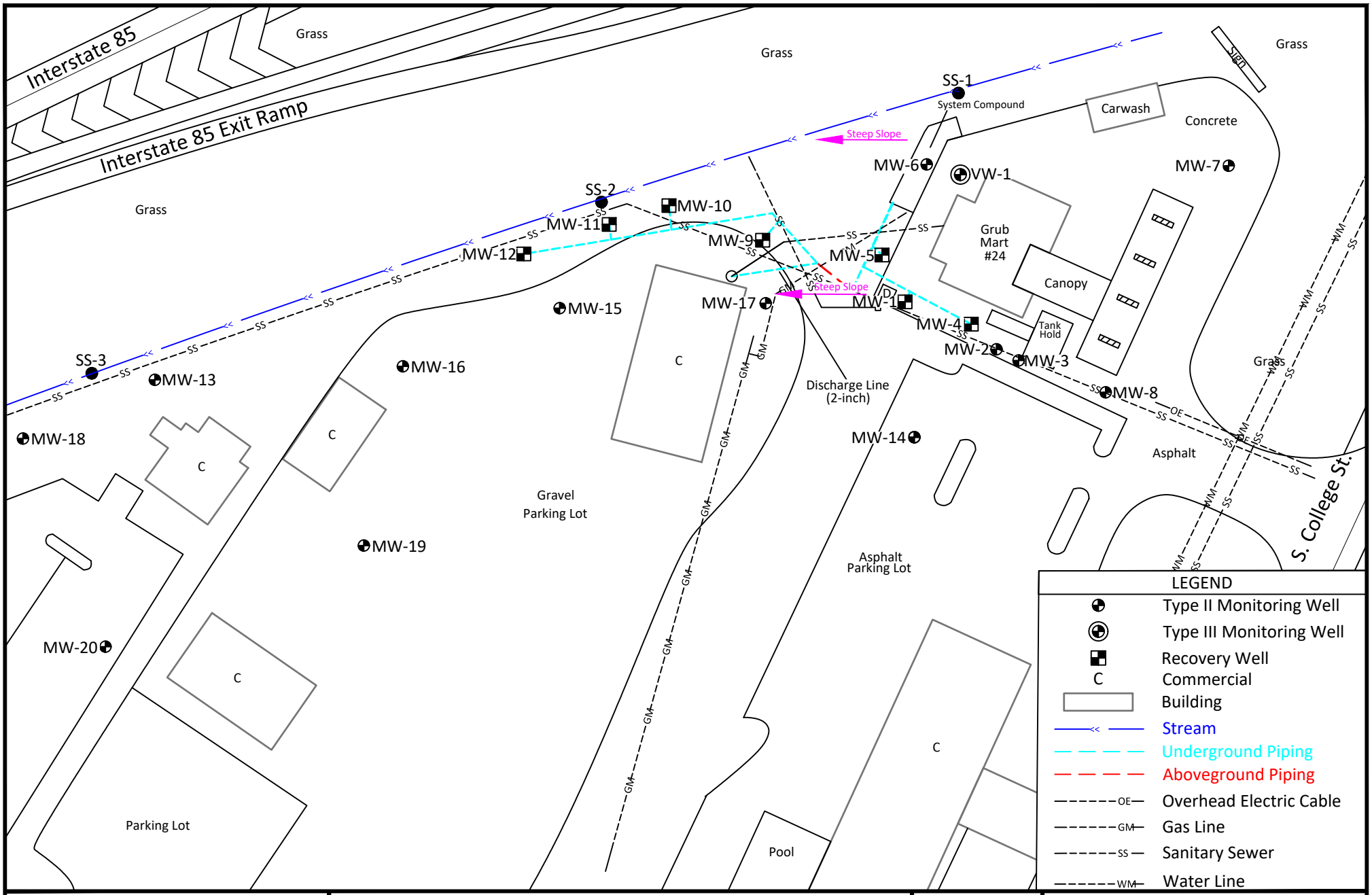
Grub Mart #24
2416 South College Street
Auburn, Lee County, Alabama
321500512

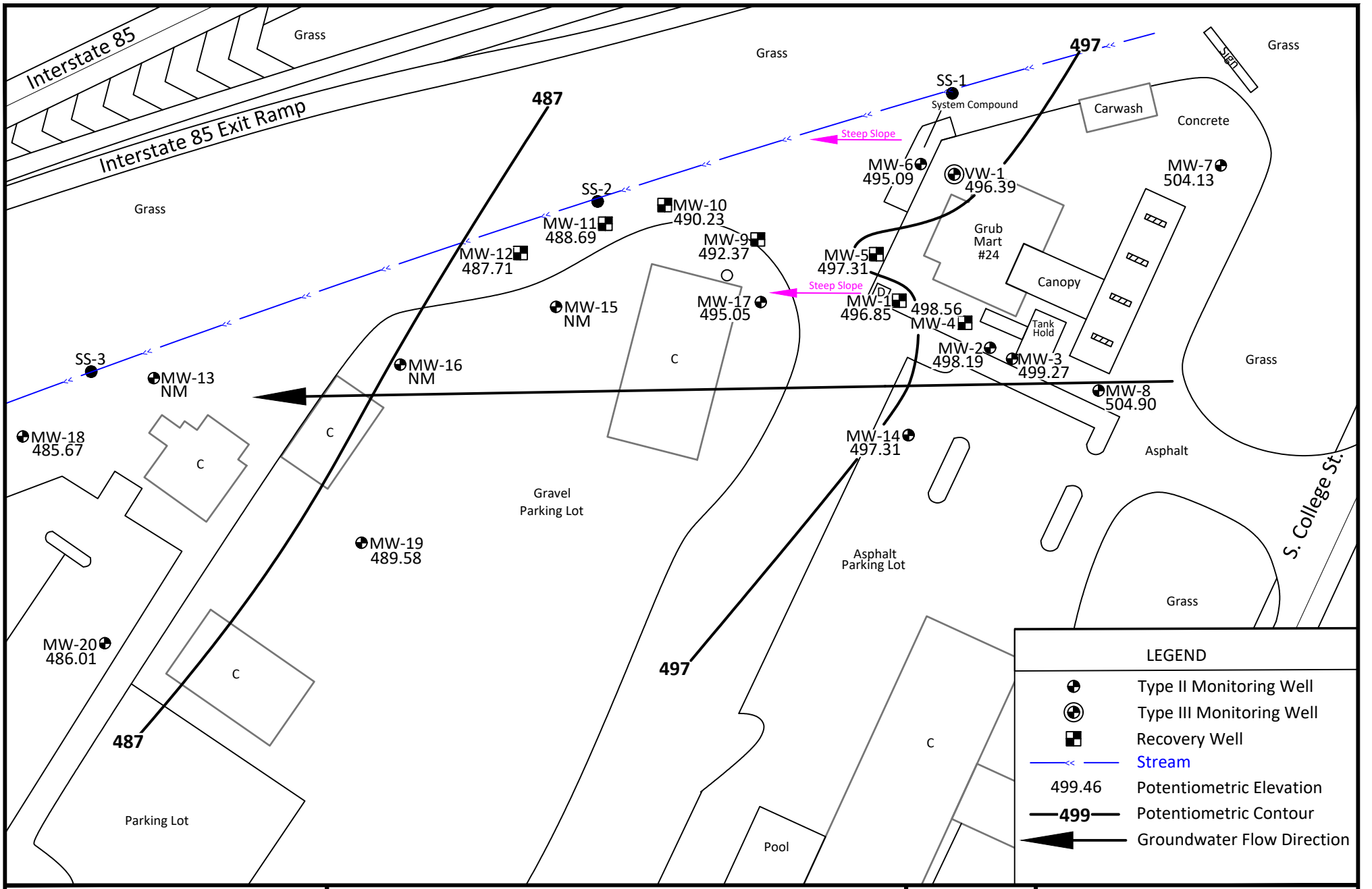
CORPORATE OFFICE
(334) 222-9431
ALBERTVILLE, ALABAMA
(256) 891-3458
ANDALUSIA, ALABAMA
(334) 222-9431

CDG
Engineering. Environmental. Answers.

BIRMINGHAM, ALABAMA
(205) 733-9431
DOTHAN, ALABAMA
(334) 677-9431
HUNTSVILLE, ALABAMA
(256) 539-7470

Topographic Map


Interstate 85
Interstate 85 Exit Ramp
Grass
Grass
Grass
Grass
Sign
SS-1
System Compound
Carwash
Concrete
Steep Slope
MW-6
VW-1
MW-7
SS-2
MW-10
MW-11
MW-12
MW-9
MW-5
Grub Mart #24
Canopy
Steep Slope
MW-17
MW-1
MW-4
Tank Hold
MW-2
MW-3
MW-15
SS-3
MW-13
MW-16
C
Discharge Line (2-inch)
MW-8
MW-18
MW-14
Asphalt
Gravel Parking Lot
MW-19
Asphalt Parking Lot
S. College St.
MW-20
C
C
C
Parking Lot
Pool
LEGEND
Type II Monitoring Well
Type III Monitoring Well
Recovery Well
C Commercial
Building
Stream
Underground Piping
Aboveground Piping
Overhead Electric Cable
Gas Line
Sanitary Sewer
Water Line
CDG
Engineering. Environmental. Answers.
www.cdge.com
Site Map
Grub Mart #24
2416 South College Streeet
Auburn, Lee County, Alabama
Approximate Scale in Feet
0
70
140

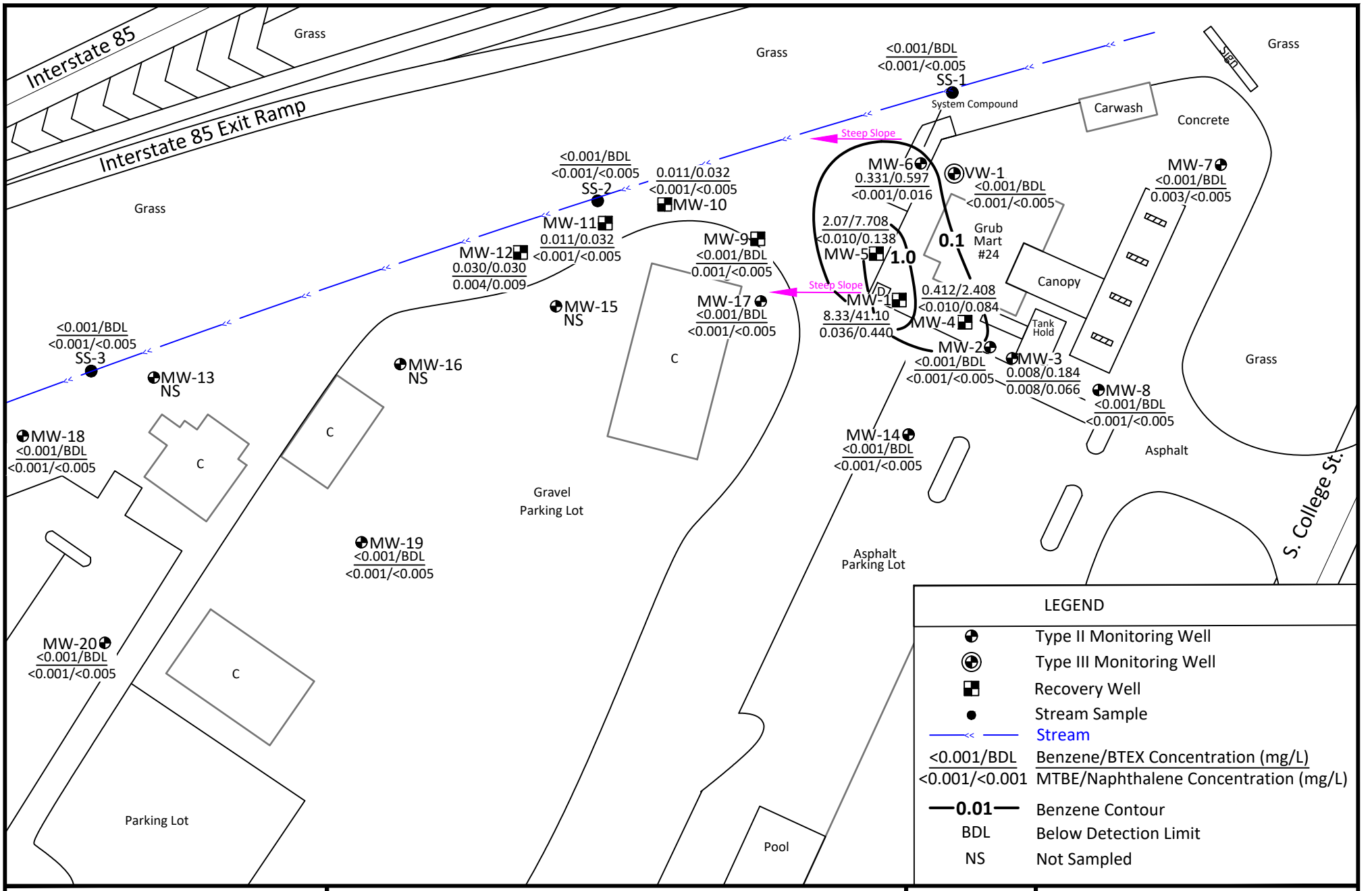


CDG
Engineering. Environmental. Answers.
www.cdge.com

Potentiometric Surface Map
October 2, 2019

Grub Mart #24
2416 South College Streeet
Auburn, Lee County, Alabama

Approximate Scale in Feet
0 70 140

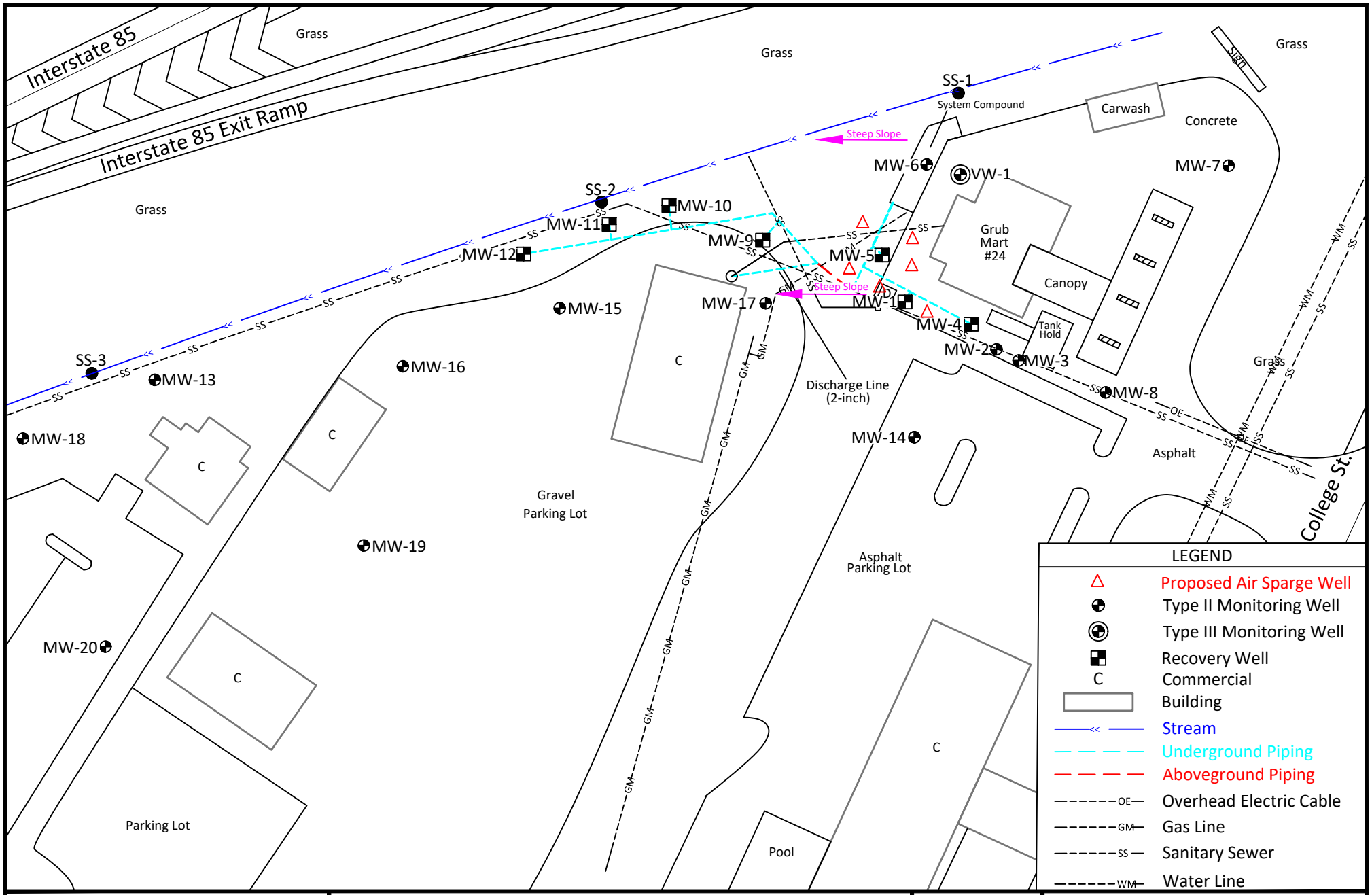


CDG
Engineering. Environmental. Answers.
www.cdge.com

Groundwater Analytical and Benzene Contour Map
October 2, 2019

Grub Mart #24
2416 South College Streeet
Auburn, Lee County, Alabama

Approximate Scale in Feet
0 70 140

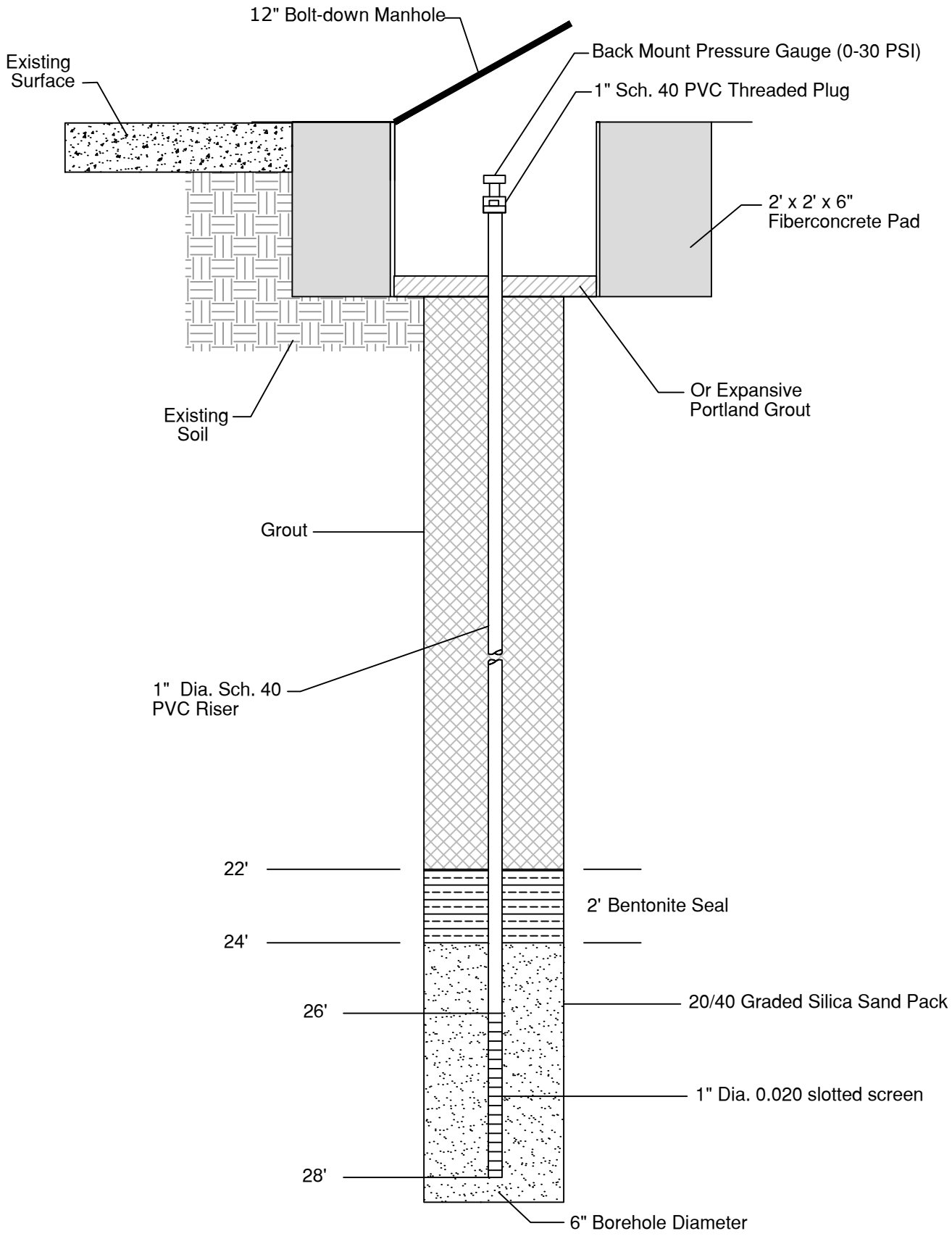


CDG
Engineering. Environmental. Answers.
www.cdge.com

Proposed Air Sparge Point Location Map

Grub Mart #24
2416 South College Streeet
Auburn, Lee County, Alabama

Approximate Scale in Feet
0 70 140



CDG
Engineering. Environmental. Answers.
www.cdge.com

Air Sparge Well Construction Detail

Grub Mart #24
2416 South College Street
Auburn, Lee County, Alabama

Not to Scale

Engineering. Environmental. Answers.

Approved ARBCA SSTLs

Appendix A

ARBCA SUMMARY REPORT									FORM NO. 29a
UST Incident No(s): UST15-05-04						Facility ID: 15476-081-017156			
Date Form Completed: 22-Jan-16						Form Completed By: David C. Dailey			
TIER 2 ON-SITE TARGET LEVELS FOR INHALATION AND INGESTION									
NOTE: The SSTLs listed for each route of exposure are the minimum SSTLs for all the receptors for that particular route of exposure. The Tier 2 on-site target levels are the minimum SSTLs of all routes of exposures within each medium.									
	SURFICIAL SOIL		SUBSURFACE SOIL			GROUNDWATER			
CHEMICALS OF CONCERN	Outdoor Inhalation, Ingestion, & Dermal Contact	On-Site Tier 2 Target Levels	Indoor Inhalation	Outdoor Inhalation	On-Site Tier 2 Target Levels	Indoor Inhalation	Outdoor Inhalation	Ingestion of Water	On-Site Tier 2 Target Levels
	[mg/kg]	[mg/kg]	[mg/kg]	[mg/kg]	[mg/kg]	[mg/L]	[mg/L]	[mg/L]	[mg/L]
ORGANICS									
Benzene	39.6	**39.6**	13.8	1030	**13.8**	25	1750	NA	**25**
Toluene	990	**990**	990	990	**990**	526	526	NA	**526**
Ethylbenzene	448	**448**	448	448	**448**	169	169	NA	**169**
Xylenes (Total)	558	**558**	558	558	**558**	175	175	NA	**175**
MtBE	378	**378**	15900	15900	**15900**	48000	48000	NA	**48000**
Anthracene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(a)anthracene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(a)pyrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(b)fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(g,h,i)perylene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(k)fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Chrysene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Fluorene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Naphthalene	448	**448**	448	448	**448**	31	31	NA	**31**
Phenanthrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Pyrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
METALS									
Arsenic	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Barium	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Cadmium	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Chromium VI	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Lead	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Zinc	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**

NOTE:
NA: Not Available

ARBCA SUMMARY REPORT									FORM NO. 29b
UST Incident No(s): UST15-05-04						Facility ID: 15476-081-017156			
Date Form Completed: 22-Jan-16						Form Completed By: David C. Dailey			

TIER 2 OFF-SITE TARGET LEVELS FOR INHALATION AND INGESTION

NOTE: The SSTLs listed for each route of exposure are the minimum SSTLs for all the receptors for that particular route of exposure. The Tier 2 off-site target levels are the minimum SSTLs of all routes of exposures within each medium.

CHEMICALS OF CONCERN	SURFICIAL SOIL		SUBSURFACE SOIL			GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact [mg/kg]	Off-Site Tier 2 Target Levels [mg/kg]	Indoor Inhalation [mg/kg]	Outdoor Inhalation [mg/kg]	Off-Site Tier 2 Target Levels [mg/kg]	Indoor Inhalation [mg/L]	Outdoor Inhalation [mg/L]	Ingestion of Water [mg/L]	Off-Site Tier 2 Target Levels [mg/L]
ORGANICS									
Benzene	39.6	**39.6**	13.8	1030	**13.8**	25	1750	NA	**25**
Toluene	990	**990**	990	990	**990**	526	526	NA	**526**
Ethylbenzene	448	**448**	448	448	**448**	169	169	NA	**169**
Xylenes (Total)	558	**558**	558	558	**558**	175	175	NA	**175**
MtBE	378	**378**	15900	15900	**15900**	48000	48000	NA	**48000**
Anthracene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(a)anthracene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(a)pyrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(b)fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(g,h,i)perylene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Benzo(k)fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Chrysene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Fluoranthene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Fluorene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Naphthalene	448	**448**	448	448	**448**	31	31	NA	**31**
Phenanthrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Pyrene	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
METALS									
Arsenic	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Barium	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Cadmium	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Chromium VI	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Lead	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**
Zinc	NA	**NA**	NA	NA	**NA**	NA	NA	NA	**NA**

NOTE:
NA: Not Available

Engineering. Environmental. Answers.

Air Sparge System Specifications

Appendix B

BECKER

KDT Series

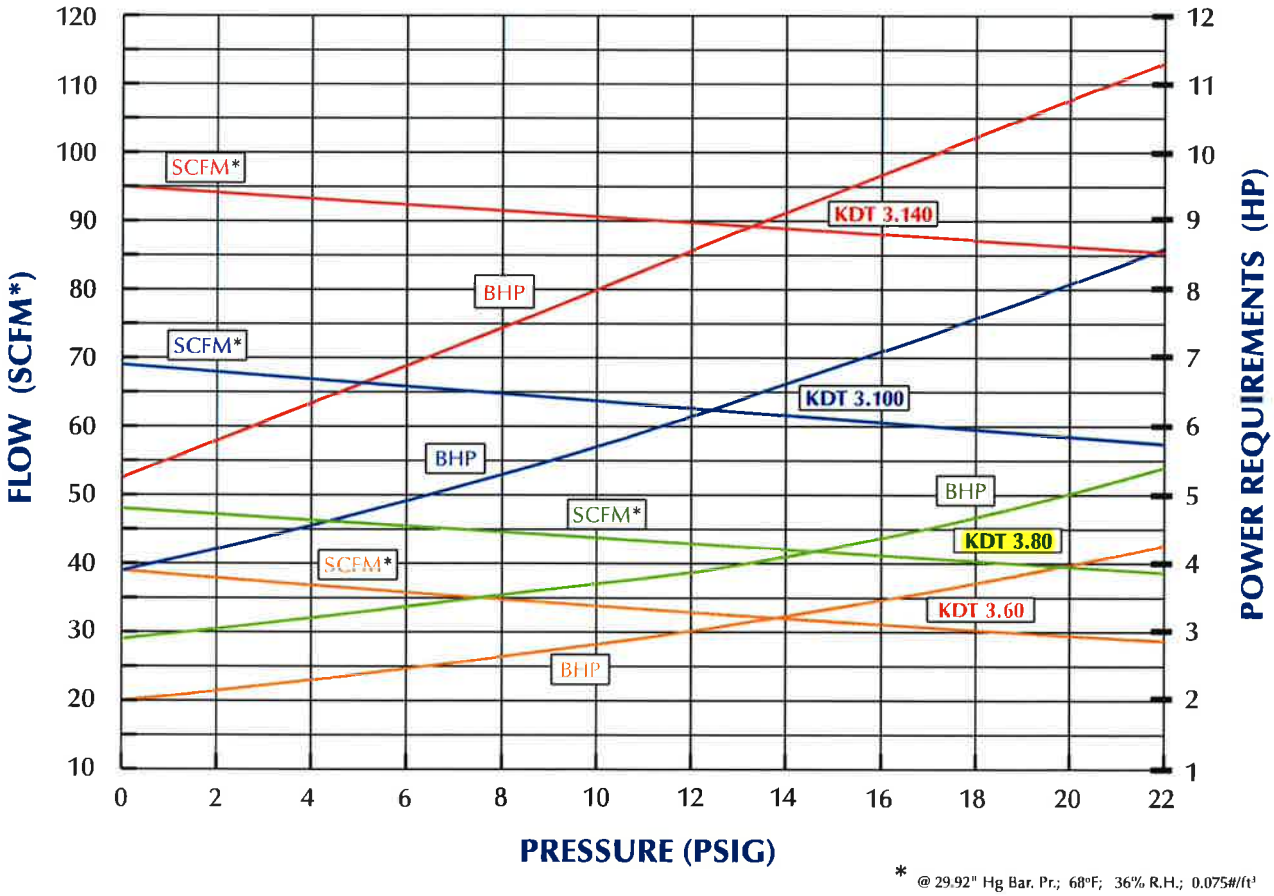
ISO 9001 Certified
CE Compliant

100% OIL-LESS COMPRESSORS

The Becker KDT series is a line of 100% Oil-less, rotary vane, low pressure compressors. They are designed to operate on a continuous basis throughout a pressure range from atmospheric pressure to 22 PSIG.

Each KDT unit is a direct drive compressor and is supplied with a TEFC flange mounted electric motor. Each unit is equipped with inlet and discharge filters, a pressure regulating valve, and vibration isolators as standard equipment, all of which are an integral part of the compressor.

The Becker KDT compressor is ideal for applications where air is the gas and where operation is in the low pressure range where high pressure compressors are less efficient. Applications for the KDT compressor include graphic arts, soil remediation, pneumatic conveying, robotics and material handling, packaging, and paper converting.

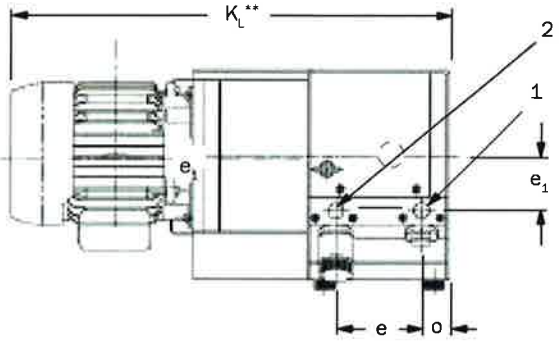


* @ 29.92" Hg Bar. Pr.; 68°F; 36% R.H.; 0.075#/ft³

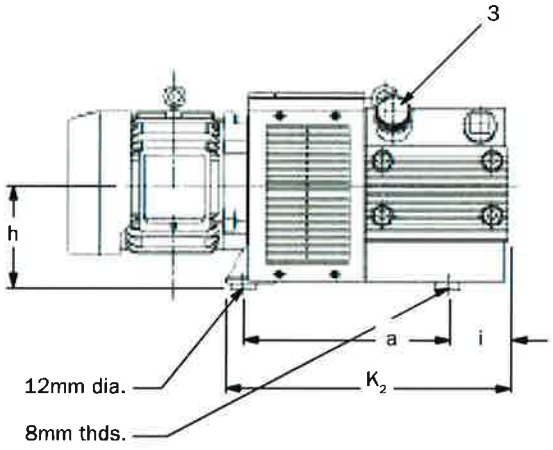
Becker Pumps Corp. • 100 East Ascot Lane • Cuyahoga Falls, Ohio 44223-3768
Ph. (330) 928-9966 · (888) 633-1083 · FAX: (330) 928-7065 · info@beckerpumps.com · www.beckerpumps.com

BECKER

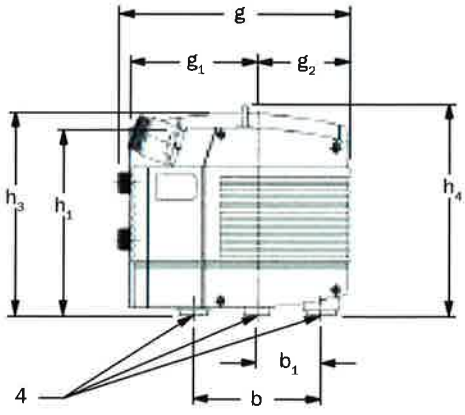
TECHNICAL DATA



Top View



Side View



End View (Opposite Motor End)

All data based on 60 Hz operation	KDT 3.60	KDT 3.80	KDT 3.100	KDT 3.140
Flow (SCFM @ 0 PSIG)	39	48	69	95
Horsepower	5*	7 1/2*	10*	12*
Speed (RPM)	1740	1740	1740	1740
Maximum Pressure (PSIG)	22	22	22	22
Weight (lbs.)—w/o motor	104	108	156	172
Weight (lbs.)—w/ motor**	191*	265*	323*	368*
Noise Level (Max. dBA)	74	76	78	84
Outlet size (BSP, inches)	1	1	1 1/2	1 1/2
Dimensional Data	(Inches)			
a	12.83	12.83	15.67	15.67
b	7.5	7.5	9.65	9.65
b_1	3.75	3.75	4.82	4.82
e	5.43	5.43	7.5	7.5
e_1	2.56	2.56	3.75	3.75
g	13.9	13.9	18.5	18.5
g_1	7.68	7.68	8.78	8.78
g_2	5.55	5.55	9.06	9.06
h	6.38	6.38	6.38	6.38
h_1	11.38	11.38	11.7	11.7
h_3	12.28	12.28	13.0	13.0
h_4	12.9	12.9	13.25	13.25
i	3.78	3.78	5.5	5.5
k_2	17.64	17.64	22.17	22.17
k_L	28.2	30	34.15	36.6
o	1.81	1.81	2.36	2.36

Manufacturer reserves right to alter data without notice.
* Operation at lower pressure may use smaller motor.
** May vary with motor type and manufacturer

1 - Inlet Port
2 - Discharge Port
3 - Pressure Relief Valve
4 - Vibration Isolators

3LIT0006 • 2/00

Becker Pumps Corp. • 100 East Ascot Lane • Cuyahoga Falls, Ohio 44223-3768
Ph. (330) 928-9966 · (888) 633-1083 · FAX: (330) 928-7065 · info@beckerpumps.com · www.beckerpumps.com

Engineering. Environmental. Answers.

Quality Assurance/Quality Control Plan

Appendix C

QA/QC MONITORING/SAMPLING PLAN

FIELD ACTIVITIES

Air Sampling

Air samples are collected utilizing an air sampling pump system or Summa canister. The pump is primed, prior to collection of each sample, to displace any trapped air or gases with the targeted air make-up. The air is drawn in and exits through polyethylene tubing. The sample is collected directly into and stored in a Tedlar air/gas sampling bag or Summa canister. The sample bag or canister is provided to CDG by the analytical laboratory. The air sampling pump system is also used to extract air/gases from a vacuum and drive them into a field-screening instrument. The air sample collection and screening protocols are described below.

Air Screening

Air screening is conducted to provide a field indication of the levels of hydrocarbon gases in vapor phase. The air/gases are screened with an organic vapor analyzer, equipped with a methane filter (as applicable). The field instrument is field calibrated to a gas standard of known concentration. Field air/gas samples are screened at ambient conditions and the data recorded. The field screening test form contains the following information:

- Project name (client and location);
- Data table number;
- Personnel collecting samples;
- Field screening instrument used and I.D. number;
- Calibration information;
- Description of field screening method;
- Sample identification information; and
- Screening data, including time collected/screened, ambient temperature/results.

Air Sampling Protocols

Air samples designated for laboratory analysis are collected in Tedlar bags or a Summa canister. The sample bags or canister are provided to CDG directly by the analytical laboratory. If Tedlar bags are used, two Tedlar bags are filled for each sample, in the event the bags are damaged during shipment. Upon collection, each sample bag is immediately placed in a cooler or other secure shipping container, following laboratory instructions and appropriate chain of custody documentation. The samples are sent direct to the laboratory via overnight carrier, or are picked up from the CDG office by a representative of the laboratory.

Groundwater Monitoring/Sampling Activity Protocols

Groundwater monitoring/sampling includes the following associated activities:

1) Measurement for the presence of free product;
2) Measurement of static water level;
3) Calculation of standing water volume (in well);
4) Sample collection; and
5) Equipment decontamination.

Groundwater sampling parameters are recorded in the field on a monitor well sampling record form. The details for each of the above referenced monitoring/sampling activities are described in the following sections.

Free Product Detection and Measurement

The presence of free product is measured prior to free product recovery, and purging/sampling the selected monitor well. Free product is detected/measured using a hydrocarbon/water interface probe. The probe is lowered slowly into the well until an instrument tone is heard (a constant tone indicates that free product is present, and an intermittent tone indicates that water is present). The point at which a constant tone is first heard is considered the top of free product. The measurement from the top of the PVC well casing to the top of free product is recorded. The measurement is checked at least twice. The probe is then slowly lowered further into the well until an intermittent tone is heard (indicating that the probe has passed through the free product layer into the underlying groundwater interval). Once the intermittent tone is encountered, the probe is slowly raised until the constant tone is again indicated. This point is considered the interface between the floating free product layer and the groundwater table. The measurement from the top of the PVC casing to the interface is recorded. This measurement is also checked at least twice.

The free product thickness is determined by calculating the difference between the measurement to the top of free product and the measurement to the free product/water interface (the interface probe measures free product and water levels to an accuracy of 0.01 feet). If free product is identified by the interface probe, a clear bailer is lowered into the well to collect a sample for visual confirmation of the free product. Remarks regarding visual characteristics of the free product are recorded (black, clear, colored, etc.).

Calculation of Standing Water Volume

The standing water volume in a monitor 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 column of water in the well).

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 in 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 (hose) 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 well-dedicated 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 containerized on-site in labeled 55-gallon drums. PCW will be removed periodically from the site to an appropriate disposal/treatment/recycling facility approved by the ADEM. Records will be maintained as to the volume of PCW accumulated at the site, and identification labels will be affixed to PCW containers. Prior to disposal, samples will be collected and analyzed as required by the ADEM and the disposal/treatment/recycling facility. No waste will be removed from the site without ADEM knowledge/approval.

Groundwater Sample Collection

Groundwater samples are collected from monitor wells not containing free product, 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 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 shipped to CDG directly from the 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 (volatile) analysis. The preservation employed for BTEX/MTBE (volatile) analysis will include either of the following (depending on holding time constraints):

- Cool collected sample to 4^{o}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^{o}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 a well-iced ice chest. 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 iced 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 is minimal.

QA/QC PROCEDURES DISCUSSION

Chain of Custody

Sample custody begins with the subcontracted laboratory when sample kits are prepared and shipped for CDG use at a specified project location. Responsibility for

sample container materials and preparation lies with the subcontracted laboratory. Sample containers and kits are normally shipped to CDG by common carrier or are dropped off by a laboratory representative. Upon receipt of the kits, CDG 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 representative until delivered to the subcontract 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 is typically based upon several facts, including cost; laboratory certification; quality 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 regulators, 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.

Engineering. Environmental. Answers.

Site Health and Safety Plan

Appendix D

Site Health and Safety Plan

Grub Mart #24
Auburn, Lee County, Alabama
ADEM Facility ID# 15476-081-017156
ADEM Incident No. UST15-05-04

Prepared For:

Young Oil, Inc.
P.O. Box 328
Piedmont, Alabama 36272

Prepared By:

CDG Engineers & Associates, Inc.
3 Riverchase Ridge
Hoover, Alabama 35244

Table of Contents

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 Grub Mart #24 facility in Auburn, Lee 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, person 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
David C. Dailey	Professional Engineer/ Corporate HSO	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.
Chad Elliott	Environmental Scientist/ Site HSO/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 installation and sampling activities.

4.1 Installation Activities

Installation activities generally involve preparing the site for installation activities and also the construction of the MPVE unit onsite. More specifically this will include:

- Preparing the site for work to be performed
- Saw-cutting concrete surface, excavating, and installing well vaults
- Installing polyvinyl chloride (PVC) extraction piping and subsurface utility lines
- Installing piping connections from extraction piping to wellhead
- Overseeing placing and leveling of remediation system
- Completing all piping connections from extraction and utility lines to remediation unit
- Completing all electrical connections
- Installing concrete block security fence
- Inspecting rotation on all electric motors
- Inspecting PVC piping, extraction lines, treatment system, and associated connections for leaks at start up

4.2 Operation and Maintenance Activities

Subsequent to the construction and installation of the MPVE unit, the unit must periodically undergo inspections or maintenance. CDG field personnel will inspect the unit on a weekly basis, taking certain instrument readings necessary to determine the progress of the remediation being performed at that particular site. Maintenance of the unit is performed on an as needed basis. The following applies to operation and maintenance activities associated with the MPVE unit:

- Inspecting proper working condition of telemetry system
- Lubricating motors
- Inspecting piping for leaks
- Inspecting belts on Liquid Ring Vacuum Pump (LRVP) system
- Periodic cleaning of equipment and components
- Periodic inspections of electrical connections

- Measuring induced vacuum in on site monitoring wells
- Removing silt and sludge buildup from knockout pot air stripper, filtration system and other system components
- Measuring air flow from MPVE unit
- Measuring liquid levels in wells
- Sampling effluent for discharge parameters
- Measuring volume of liquids removed and discharged

5.0 Chemical Hazards

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

5.1 Gasoline and Diesel

Gasoline and diesel are substances to be potentially encountered in the soil and groundwater at the site. Gasoline components include benzene, toluene, ethylbenzene, and xylenes (BTEX). Diesel components may include anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene.

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 my 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. The Material Safety Data Sheets (MSDS's) are presented in Attachment A.

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 hazardous associated with use of any type of drill rig and 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 hazardous 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 arms into the rotating machinery
- Drilling equipment may rupture hydraulic hoses thereby releasing hydraulic fluids
- Engine and exhaust system 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 with 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 engine during maintenance procedures by removing or tagging ignition key
- Block wheels or lower leveling jacks and set hand brakes to prevent equipment form 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 Attachment B.

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 OHSA.

7.1.1.2 Heat Rash

Heat rash (prickly heat) is the most common heat stress factor, and may result form 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 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, and nausea	Get victim into shade or cooler place. Immediately remove any protective clothing. Victim should drink plenty of fluids. Victim should lie down with 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 are discussed further in the following section.

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 Electrocution

8.2.1 Hazard Identification

The 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

The last hazard identified when performing corrective action activities has 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 know 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 area 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 filed 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		911
Police Department		911
Ambulance		911
Hospital		334-749-3411
Corporate HSO	David Dailey	205-403-2600
Project Manager	Chad Elliott	205-403-2600
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: East Alabama Medical Center

Address: 2000 Pepperell Pkwy, Opelika, AL 36801

Phone: 334-749-3411

Route to Hospital: see attached map with driving directions

Travel Time from Site: 15 minutes

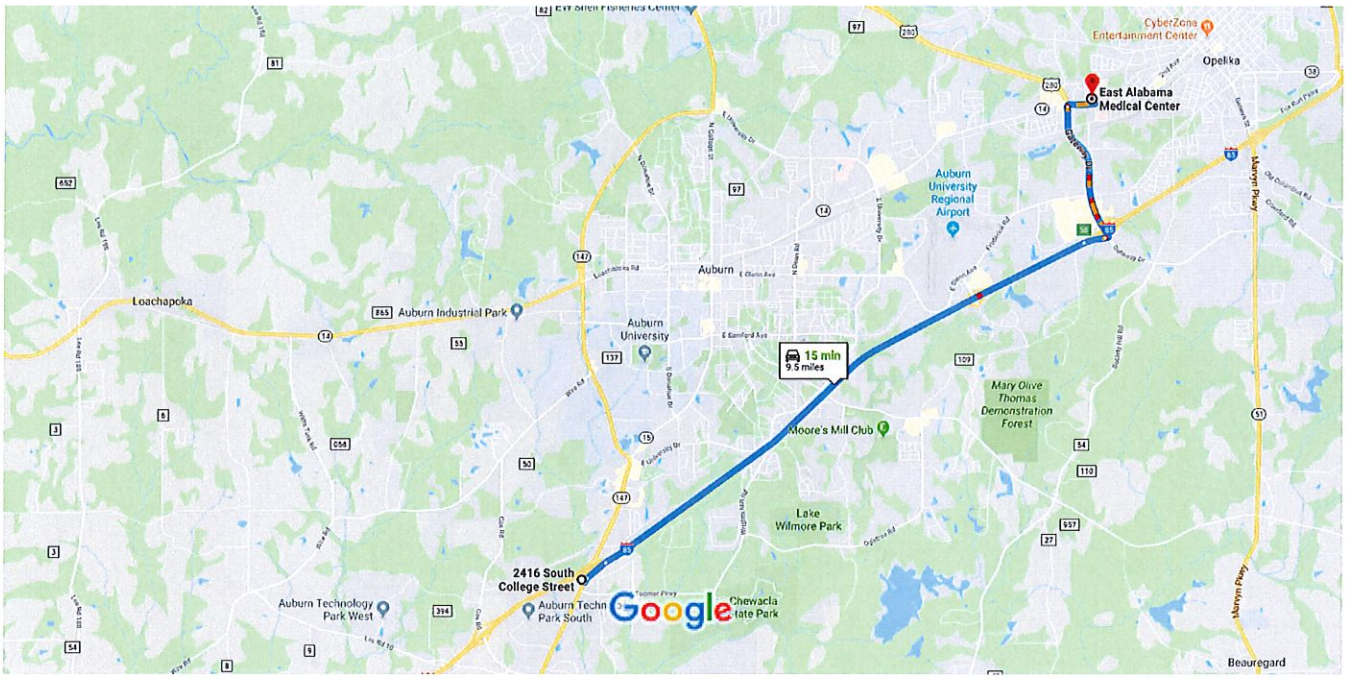
Distance to Hospital: 9.5 miles

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

Google Maps

2416 South College Street, Auburn, AL to East Alabama Medical Center

Drive 9.5 miles, 15 min



Map data ©2019 1 mi

2416 S College St

Auburn, AL 36832

1. Head southeast toward S College St

233 ft

2. Turn left onto S College St

348 ft

3. Use the right lane to take the Interstate 85 N ramp

0.3 mi

4. Merge onto I-85 N

6.8 mi

5. Take exit 58 for U.S. 280 W toward Opelika

0.3 mi

6. Turn left onto US-280 W/Gateway Dr (signs for Opelika)

1.7 mi

7. Turn right onto Pepperell Pkwy

0.3 mi

East Alabama Medical Center

2000 Pepperell Pkwy, Opelika, AL 36801