CORRECTIVE ACTION PLAN (CP-9)

Mr. Rodger Pitts
Pitts Grocery #4 Center Hill
ADEM Facility ID: 20720-043-005046
UST Incident Number: UST20-02-02
28705 Highway 91
Hanceville, Alabama 35077
(Cullman County)

May 18, 2022

Prepared for:
Mr. Rodger Pitts
23690 Highway 91
Hanceville, Alabama 35077

Prepared by:
SPHERE 3 ENGINEERING, INC
(Alabama General Contractor #49971)
3433 Sierra Drive
Hoover, Alabama 35216
Phone: (205) 403-3317

SPHERE 3 File: PITTS.G#4CH.09

SPHERE 3
ENGINEERING, INC

CERTIFICATION PAGE

I certify under penalty of law that this Corrective Action Plan and all specifications, and technical data submitted within were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiring of the person or persons who directly gathered the enclosed information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Signature

Greg Hoagland, P.E.

21581

Registration Number

May 18, 2022

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UST RELEASE FACT SHEET

GENERAL INFORMATION:

SITE NAME: **Pitts Grocery #4 Center Hill**

ADDRESS: **28705 Highway 91, Hanceville, Cullman County, AL**

FACILITY I.D. NO.: **20720-043-005046**

UST INCIDENT NO.: **UST20-02-02**

RESULTS OF EXPOSURE ASSESSMENT:

How many private drinking water wells are located within 1,000 feet of site? **One**

How many public water supply wells are located within 1 mile of site? **None**

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? **No**

Have vapors or contaminated groundwater posed a threat to the public? **No**

Are any underground utilities impacted by the release? **No**

Have surface waters been impacted by the release? **No**

Is there an imminent threat of contamination of surface waters? **No**

What is the type of surrounding population? **Residential/Agricultural**

CONTAMINATION DESCRIPTION:

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

Free product present in wells? {**X**} Yes { } No

Max. benzene/MTBE/naphthalene concentrations measured in soil:
0.452 mg/kg benzene / 0.068 mg/kg MTBE / 0.311 mg/kg naphthalene

Max. benzene/MTBE/naphthalene concentrations in groundwater:
1.630 mg/L benzene / 0.374 mg/L MTBE / 1.190 mg/L naphthalene

ADEM 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:	Pitts Grocery #4 Center Hill
SITE ADDRESS:	28705 Highway 91
	Hanceville (Cullman County) Alabama 35077
FACILITY I.D. NO.:	20720-043-005046
UST INCIDENT NO.:	UST20-02-02
OWNER NAME:	Mr. Rodger Pitts
OWNER ADDRESS:	23690 Highway 91, Hanceville, Alabama 35077
NAME & ADDRESS OF PERSON COMPLETING THIS FORM:	Greg Hoagland, P.E. SPHERE 3 Engineering, Inc.
	3433 Sierra Drive; Hoover, Alabama 35216

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.	☐	☒
CLASSIFICATION	***DESCRIPTION***	***YES***	***NO***
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, stormwater 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:	C.2

Corrective Action Plan Certification
This Corrective Action Plan (CAP) has been developed under the guidance of and certified by Mr. Greg Hoagland, P.E., Alabama Professional Engineer #21581. The CAP certification page is presented at the beginning of this report.

INTRODUCTION

Executive Summary
As requested by the Alabama Department of Environmental Management (ADEM), this CAP has been prepared for Mr. Rodger Pitts' facility known as Pitts Grocery #4 Center Hill, located at 28705 Highway 91, Hanceville, Alabama (Figures 1 and 2). The subject facility has been impacted by a release of gasoline and/or diesel fuel, as identified below:

Facility I.D.: 20720-043-005046 Incident No.: UST20-02-02

CAP Objectives
The objective of the CAP is to assess that the dissolved Chemicals of Concern (COCs) concentrations and free product (if present), which characterize the subsurface plume at the facility, are being reduced and recovered by remediation by natural attenuation (RNA) supplemented with Mobile-Enhanced Multiphase Extraction (MEME) events.

Based on the results of the Alabama Risk Based Corrective Action (ARBCA) Tiers 1 and 2 evaluations report submitted by SPHERE 3 (dated September 1, 2021, and approved by the ADEM in a letter dated October 18, 2021), RNA supplemented with MEMEs appears to be a viable and economical method of corrective action (CA). MEMEs will provide physical removal of the dissolved COCs and free product (if present) at or near the incident source, while RNA will be used to monitor the natural reduction of dissolved COCs though degradation and possibly microbial consumption. The CA would be considered complete upon the confirmation of the reduction of dissolved COCs concentrations, through groundwater monitoring, to meet the Site Specific Target Levels (SSTLs) established by the ARBCA Tier 2 evaluation.

SUMMARY OF PREVIOUSLY CONDUCTED SITE ACTIVITIES

Site Location and Description

The subject facility is located in the southwest ¼ of Section 11, Township 11 South, Range 2 West and at 34°05'23.30" North Latitude and 86°43'30.86" West Longitude (Figure 1). The physical address of the facility is 28705 Highway 91, Hanceville, Cullman County, Alabama. Land surface elevation at the site is approximately 606 feet above mean sea level (amsl).

The facility property is improved with a currently vacant convenience store building. Gasoline and diesel motor fuels formerly were stored and dispensed at the facility. According to the Alabama Department of Environmental Management (ADEM) Underground Storage Tank (UST) Site Classification System Checklist, the facility has a ranking of C.2.

Description of Release

SPHERE 3 Engineering, Inc. (SPHERE 3) was contracted by Mr. Rodger Pitts to provide Response Action Contractor services for his UST facility known as Pitts Grocery #4 Center Hill in Hanceville, Alabama. The CAP presented herein was requested by the ADEM in a letter dated May 24, 2021.

A UST Closure Site Assessment Report was submitted by others on December 27, 2019. The closure included the excavation and removal of two steel 3,000-gallon gasoline USTs, one steel 2,000-gallon diesel fuel UST, and associated product piping.

No discrepancies or irregularities were noted during operation of the UST system, and the volume of the release is not known.

Geologic and Hydrogeological Setting

The subject site is located in the Warrior Basin district of the Cumberland Plateaus section of the Appalachian Plateaus province of Cullman County, Alabama. The Warrior Basin district consists of a vast, stream-dissected, peneplain of moderate relief that is underlain predominantly by sandstone and shale. Altitudes range from about 600 feet to 1,100 feet and drainage is primarily into the Mulberry Fork of the Black Warrior River.

Other than stratigraphic units which dip gently toward the southwest, there is little geologic structure in this vicinity. The primary structural features are associated with very minor, localized folding. No large scale faults are depicted on the geologic map for this area.

The target property is situated in an uncomplicated geologic area that is underlain by the Pennsylvanian-age Pottsville Formation. The Pottsville Formation consists of consolidated and tightly-cemented interbeds of quartzose sandstone, shale, siltstone, conglomerate, clay, and several bituminous coal beds. The thickness of this unit ranges from 375 to 4,000 feet (thickens toward the south). The formation is included in the Pottsville aquifer which is the most extensively utilized aquifer in this vicinity. The aquifer is utilized as a source of public and private water well supplies. The City of Hanceville, which supplies potable water to the target property vicinity, operates one well completed within the Pottsville Formation.

Thirteen soil borings (SB-1 through SB-12, and SB-DW1) have been installed as the site as part of the Preliminary and Secondary Investigations. These borings encountered up to 23 feet of natural (unconsolidated) soil materials. The upper 10 feet is generally comprised of gray-brown, sandy, organic-rich, clay containing rock fragments and iron. The middle interval features yellow, yellow-orange, tan-orange, and orange-brown, sandy clay and a layer of clayey sand, which includes thin, weathered lenses of gray shale. The basal five feet features orange, sandy clay underlain by much firmer seams of gray, thin-bedded, shale. Auger refusal was encountered in all borings except SB-12, at depths ranging from approximately 12 feet below ground surface (bgs) in soil boring SB-9 to 23 feet bgs in soil boring SB-DW1.

All of the soil boring locations encountered a saturated water-bearing zone which generally coincided with the five-foot interval above the contact between the natural soils and the underlying bedrock surface. Soil borings SB-1 through SB-4 were each terminated at approximately 24 feet bgs. Soil borings SB-5 through SB-8, SB-10, SB-11, and SB-12 were each terminated at approximately 20 feet bgs. Soil boring SB-9 was terminated at approximately 12 feet bgs. Soil borings SB-1 through SB-12 were completed as Type II monitor wells MW-1 through MW-12, respectively.

Soil boring SB-DW1 was terminated at approximately 44 feet bgs, and was completed as Type III monitor well MW-DW1. A generalized interpretation of the potentiometric data suggests a groundwater flow direction to the south-southwest.

Area Water Wells and Other Potential Environmental Receptors

The subject property is located at the northwestern corner of the intersection of Alabama Highway 91 and Cullman County Road 747, two and one-half miles east of the City of Hanceville, Alabama. Residential properties, wooded tracts, and undeveloped land bound the property to the north. The northwest-southeast trending (Cullman) County Road 747, residential and wooded tracts and the Mulberry Fork River bridge bound the property to the east. Bounding the property on the south is the northeast-southwest trending Alabama Highway 91. Across the highway is a vacant residential property, undeveloped land, and the distant Center Hill Baptist Church and cemetery. Bounding the property on the west is a northerly flowing intermittent tributary, residential properties, and a distant vacant commercial building (screen printing). The surrounding land use is primarily light-residential, wooded, and pasture land. See Figure 2.

An inventory of private water supply wells revealed one potential private water supply well located within 1,000 feet of the target property. The possible well was observed in a decorative enclosure in the front yard of the residential dwelling located across County Road 747, approximately 100 feet east-northeast of the site. The area surrounding the target property is supplied with water by the Hanceville Water Department. The potential well was covered with a metal container and appears to be disconnected and not used as a primary source of water.

An inventory public water supply wells revealed no public water supply wells located within one mile of the facility. The inventory consisted of a telephone interview with the Hanceville Water Board (Mr. Nathan Finley).

The City of Hanceville obtains its public water supply from a single public water supply well. The well is located near the railroad track on the east side of Hanceville (Steppville community), about 2-1/2 miles west-southwest of the target property. The treatment plant is located adjacent to that well location. The Hanceville Water Board water main truncates service in the southwest corner of the intersection. The City of Cullman operates a water main that provides water to the customers along the east side of County Road 747 and also extends a line south toward the Shrine of the Blessed Sacrament.

Underground utilities identified on, or adjacent to, the target property include only a telecommunication line, the water service line, and the septic tank system. The water supply main (Hanceville Water Board) traverses east-west along the south side of Alabama Highway 91. The main is constructed of 4-inch diameter, PVC material. The service line traverses north, beneath the highway, to a meter located near the southeast corner of the store. The electrical, local telephone service and cable television lines are located overhead. Electrical and telephone service enter the southeast corner of the building from a utility pole near that same location. There is no natural gas utility to this vicinity (LP gas tank). There is no municipal sanitary sewer. The property includes a septic tank (along the western side of the building) and field distribution system (extending to the west and northwest from the tank). See Figure 4.

Compilation of Previously Conducted Site Remediation Activities

To date, CA activities conducted as a result of the incident include the soil and groundwater sampling activities associated with the Preliminary and Secondary Investigations, and interim groundwater monitoring events. These investigations were implemented to define the source area and extents of the subsurface COCs, and to evaluate the stability and attenuation of the dissolved COCs plume.

Compilation of Free Product Data from Site Investigations

A measurable thickness of free product has been detected in monitor well MW-1 on four occasions, including October 16, 2020, July 15, 2021, October 12, 2021, and January 14, 2022. Apparent thicknesses of free product in monitor well MW-1 on these dates were 0.07 feet, 0.01 feet, 0.01 feet, and 0.02 feet, respectively. A measurable thickness of free product has been detected in monitor well MW-2 on two occasions, including October 16, 2020 and July 15, 2021. Apparent thicknesses of free product in monitor well MW-2 on these dates were 0.38 feet and 0.03 feet, respectively. During these four site visits, the free product was recovered by manual bailing. To date, a total of approximately 0.3 gallons of free product have been recovered from monitor wells MW-1 and MW-2. A measurable thickness of free product has not been detected in any other monitor well at the site to date. Historical monitor well gauging worksheets are provided as Appendix A.

Compilation of Soil Data from Site Investigations

As part of the incident investigative activities, a total of 26 soil samples were submitted for laboratory analysis. Each soil sample was analyzed for COCs benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tert-butyl ether (MTBE) using Environmental Protection Agency (EPA) method 8260B, and for polynuclear aromatic hydrocarbon (PAH) compounds using EPA Method 8270C. A summary of the results of the soil analyses is presented in Table 1 and depicted on Figure 5. Copies of the historical soil laboratory analytical reports are presented as Appendix B.

TABLE 1
PITTS GROCERY #4 CENTER HILL (UST20-02-02)
COCs IN SOILS ANALYTICAL SUMMARY

BORING	DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	NAPH-THALENE (mg/kg)
SB-1	5	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	0.090	0.371	0.009	<0.050
SB-2	10	<0.005	<0.005	<0.005	0.020	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-3	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-4	5	0.012	<0.005	0.010	0.026	0.021	0.311
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-5	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-6	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-7	5	<0.005	<0.005	0.055	0.196	<0.005	<0.050
	10	<0.005	<0.005	0.007	0.031	<0.005	<0.050
SB-8	5	0.007	<0.005	0.252	0.343	<0.005	<0.050
	10	0.016	<0.005	1.690	2.590	0.006	<0.050
SB-9	5	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-10	5	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-11	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-12	10	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
	15	<0.005	<0.005	<0.005	<0.015	<0.005	<0.050
SB-DW1	5	**0.452**	**20.200**	**28.500**	**161.000**	**0.068**	<0.050
	15	<0.005	<0.005	<0.005	0.021	<0.005	<0.050
GRP SSTLs		*0.0214*	*9.110*	*9.140*	*158.000*	*0.0221*	*1.460*

Note:
mg/kg – milligrams per kilogram
Bold Print - concentrations listed in **bold** print exceed Site-Specific Target Levels (SSTLs) protective of the Groundwater Resource Protection (GRP) area.

SPHERE 3 prepared an ARBCA Tiers 1 & 2 Evaluation report (September 1, 2021) for the facility under Cost Proposal CP-3. The ARBCA evaluation was conducted to establish SSTLs for COCs in soil and groundwater at the site. The ARBCA evaluation and the calculated SSTLs were approved by the ADEM in a letter dated October 18, 2021.

As shown in Table 1, COCs concentrations exceeding applicable SSTLs protective of the Groundwater Resource Protection (GRP) area were detected in soil samples collected from the

5 foot depth interval in soil boring SB-DW1.

Compilation of Groundwater Data

The facility's current monitor well network consists of 12 Type II monitor wells, MW-1 through MW-12, and one Type III monitor well, MW-DW1. See Figure 4.

During the most recent gauging event of January 14, 2022, static groundwater levels in the Type II monitor wells ranged from 3.32 feet below the top of well casing (btoc) in monitor well MW-7 to 10.50 feet btoc in monitor well MW-12. Groundwater elevations as measured in the Type II monitor wells ranged from 592.65 feet above mean sea level (amsl) in monitor well MW-12 to 602.41 feet amsl in monitor well MW-9. The depth to water in Type III monitor well MW-DW1 was 27.08 feet btoc, and the corresponding groundwater elevation was 578.65 feet amsl. Interpretation of these data indicates a predominant groundwater flow direction to the south-southwest, under an average hydraulic gradient of approximately 6.3 feet per 100 feet. During the gauging event of January 14, 2022, free product was detected in monitor well MW-1, at an apparent thickness of 0.02 feet. An immiscible sheen and/or globules of free product also was observed on the water surface within the bailers used to collect groundwater samples from monitor wells MW-2, MW-7, MW-8, and MW-10. Groundwater elevation data for the most recent gauging event are presented on Figure 6.

A measurable thickness of free product has been detected in monitor well MW-1 on four occasions, including October 16, 2020, July 15, 2021, October 12, 2021, and January 14, 2022. Apparent thicknesses of free product in monitor well MW-1 on these dates were 0.07 feet, 0.01 feet, 0.01 feet, and 0.02 feet, respectively. A measurable thickness of free product has been detected in monitor well MW-2 on two occasions, including October 16, 2020 and July 15, 2021. Apparent thicknesses of free product in monitor well MW-2 on these dates were 0.38 feet and 0.03 feet, respectively. Historical monitor well gauging worksheets are provided as Appendix A.

To monitor the dissolved plume, groundwater samples have been collected at each monitor well as part of the various phases of investigative activities. Copies of the historical groundwater laboratory analytical reports are presented as Appendix C. A historical summary of dissolved COCs data is presented in Appendix D.

As indicated in the historical dissolved COCs summary in Appendix D, dissolved COCs concentrations exceeding applicable SSTLs were detected in monitor wells MW-1, MW-2, MW-3, MW-7, and MW-8 during the most recent groundwater sampling event of January 14, 2022.

The dissolved COCs in samples collected during the most recent groundwater sampling event of January 14, 2022 are depicted on Figure 7.

Summary of the ARBCA Evaluation as Compared to Current Data

SSTLs for soil and groundwater have been generated for the facility through a Tier 2 ARBCA evaluation. As shown in Table 1, the results of the Tier 2 evaluation indicated that COCs concentrations exceeding applicable SSTLs were detected in soil samples collected from soil boring SB-DW1. Specifically, the benzene, toluene, ethylbenzene, xylenes, and MTBE

concentrations in the sample collected from the 5-foot depth interval in soil boring SB-DW1 exceeded applicable SSTLs. The SSTLs protective of the GRP for soils are the most stringent of the Tier 2 target levels, including those generated for any reasonably completed human exposure pathways.

Historical groundwater analytical data for the site are summarized in Appendix D. This historical summary also includes the ARBCA Tier 2 SSTLs protective of the GRP area. As shown in this summary, during the most recent groundwater sampling event of January 14, 2022, dissolved benzene concentrations in samples collected from MW-1, MW-2, MW-3, MW-7, and MW-8; dissolved MTBE concentrations in samples collected from MW-1 and MW-8, and; dissolved naphthalene concentrations in samples collected from MW-1, MW-2, MW-3, MW-7, and MW-8 exceeded applicable SSTLs protective of the GRP area. Free product also was detected in monitor well MW-1, at an apparent thickness of 0.02 feet.

Concentration and Distribution of Chemicals of Concern Exceeding SSTLs
The results of the Tier 2 evaluation indicated that COCs concentrations exceeding applicable SSTLs were detected in soil samples collected from the 5-foot depth interval in soil boring SB-DW1. Benzene, toluene, ethylbenzene, xylenes, and MTBE concentrations in this sample were 0.452 milligrams per kilogram (mg/kg), 20.200 mg/kg, 28.500 mg/kg, 161.000 mg/kg, and 0.068 mg/kg, respectively. Applicable SSTLs for these COCs are 0.0214 mg/kg, 9.110 mg/kg, 9.140 mg/kg, 158.000 mg/kg, and 0.0221 mg/kg, respectively.

As shown on the historical dissolved COCs summary in Appendix D, the most recently measured dissolved benzene concentrations in samples collected from MW-1, MW-2, MW-3, MW-7, and MW-8; dissolved MTBE concentrations in samples collected from MW-1 and MW-8, and; dissolved naphthalene concentrations in samples collected from MW-1, MW-2, MW-3, MW-7, and MW-8 exceeded applicable SSTLs protective of the GRP area. During the most recent gauging event, free product also was detected in monitor well MW-1, at an apparent thickness of 0.02 feet.

CORRECTIVE ACTION PLAN

Source Area Remediation
The source area appears to be located in the vicinity of monitor wells MW-1, MW-2, and MW-8. The objectives of source area remediation will be to physically recover any residual free product (if present), and to recover groundwater impacted with dissolved-phase COCs at concentrations exceeding applicable SSTLs. In an effort to achieve these objectives, quarterly Mobile-Enhanced Multiphase Extraction (MEME) events are proposed as the remedial technology. It is assumed that each MEME event will be conducted for a duration of eight hours, and will target the source area.

Two Type II recovery monitor wells will be installed, and will be utilized as extraction points during the MEME events. As shown on Figure 8, the recovery monitor wells will be installed in an effort to mirror existing monitor wells MW-1 and MW-2.

The borings for the proposed recovery monitor wells will be installed using 10.25-inch outside diameter hollow-stem auger drilling equipment, and will be terminated within unconsolidated soils. The boreholes for each recovery monitor well will be terminated at an approximate depth of 20 feet bgs. The recovery monitor wells subsequently will be constructed with 4-inch diameter schedule 40 polyvinyl chloride (PVC) materials, including 15 feet of 0.01-inch slotted well screen. A graded sand pack will be emplaced in the well annulus from the bottom of each well to approximately two feet above the top of the well screen. This sand pack will be followed by a minimum of one foot of bentonite seal, and grout to near the ground surface. The surface completion for each of the proposed Type II recovery monitor wells will include a 12-inch diameter steel manhole cover embedded within a 2-foot x 2-foot square concrete pad, poured and finished to match the existing land grade. A cross-sectional diagram of the construction of a typical Type II monitor well is provided in Appendix E.

During installation of the soil borings for the two proposed recovery monitor wells, soil samples will be collected at five-foot intervals. Each soil sample will be field-screened with a photoionization detector (PID) for volatiles. Two soil samples from each soil boring will be submitted for laboratory analyses of COCs BTEX, MTBE, and naphthalene using EPA Method 5035/8260B, and for moisture content using ASTM Method D2216.

Each proposed recovery monitor well will be allowed to equilibrate prior to development. To develop each new well, SPHERE 3 personnel will attempt to purge an equivalent of four well volumes of groundwater from each well using new, single-use disposal bailers. Actual purge volumes will depend upon the groundwater recharge rates at the time of development.

A minimum of 24 hours after development of the two proposed recovery monitor wells, each incident monitor well (including the two new recovery monitor wells) will be purged of an equivalent of three well volumes of groundwater, or until dry. Groundwater samples will then be collected from all wells. Samples collected from monitor well MW-9 will be submitted for BTEX and MTBE analysis using EPA Method 8260B and for PAH analysis using EPA Method 8270C. Samples from all other wells will be submitted for BTEX, MTBE, and naphthalene analysis using EPA Method 8260B. All purge liquids generated during the development and sampling activities will be temporarily stored on-site in a series of steel drums or a polyethylene tote, and will be evacuated and disposed during a subsequent MEME event.

All waste soils generated as part of recovery monitor well installation will be temporarily stored in a lined roll-off box container to be provided by Big Sky Environmental, LLC (Big Sky), of Adamsville, Alabama. One soil sample will be collected from the cuttings, and will be submitted for total lead analysis using EPA Method 6020B.

SPHERE 3 will prepare and submit a waste profile to the ADEM Land Division to obtain disposal approval for the waste soils. Upon receipt of disposal approval, Big Sky will pick up and transport the waste soils to their Subtitle D landfill facility in Adamsville, Alabama for disposal.

According to the ARBCA evaluation report, the maximum detected xylenes concentration (161 mg/kg) in subsurface soil at the site exceeds the applicable SSTLs for on-site commercial and

construction workers via the indoor inhalation pathway. Due to the presence of free product, the representative concentration of benzene in groundwater (31.700 milligrams per liter) also exceeds the applicable SSTLs for on-site commercial and construction workers via the indoor inhalation pathway. Nevertheless, RNA currently is recommended for the dissolved plume associated with this incident. Consequently, the objective of the CAP will be to reduce the dissolved COCs plume concentrations to levels below the SSTLs protective of the GRP area through a natural degradation process.

To confirm the natural degradation process of the dissolved COCs, a quarterly groundwater monitoring program will be implemented. Groundwater monitoring will be performed to measure the success of the MEME events and to confirm that the dissolved COCs concentrations are decreasing to levels below the applicable SSTLs.

Estimated Duration of Clean-up

The estimated time (or duration) of clean-up has been based solely on experience. The duration is estimated as four years. To estimate the duration, SPHERE 3 assumes:

- no more than 12 quarterly MEME events will be required to recover any undiscovered source area free product and significantly reduce the magnitude of the source area dissolved COCs, and;

- all dissolved COCs concentrations will be stable at or below their respective SSTL within 48 months of CAP implementation.

If, after 48 months of CAP implementation, additional groundwater re-sampling or MEME events are necessary to confirm the dissolved plume degradation, the frequency of the groundwater re-sampling/MEME events may be adjusted to a 4-month interval. If, after 24 months of CAP implementation, the dissolved COCs concentrations at the plume centroid (Type II monitor wells MW-1, MW-2, and MW-8) are not approaching or are not measured at levels below 50% of their current concentrations, an amended CAP may be submitted to propose more aggressive techniques to expedite closure.

Implementation Cost Proposals

Four quarterly ATTF Cost Proposals, CP-10 through CP-13, previously were prepared and submitted to the ADEM. Each of these Cost Proposals included groundwater sample collection and an 8-hour MEME event. As a note, PAH analysis was included for the groundwater sampling proposed under CP-10 through CP-13. As stated within this CAP, a PAH analysis is only proposed for MW-9 during the comprehensive event under CP-13. Therefore, in the authorization process of CAP Cost Proposals CP-10 through CP-13, ADEM may want to consider authorization without the PAH analysis on the other incident and recovery wells. Additionally, as directed by the ADEM, an addendum to Cost Proposal CP-10 will be submitted for activities associated with the installation and groundwater monitoring of the two proposed recovery monitor wells.

PERSONNEL AND SUBCONTRACTOR QUALIFICATIONS

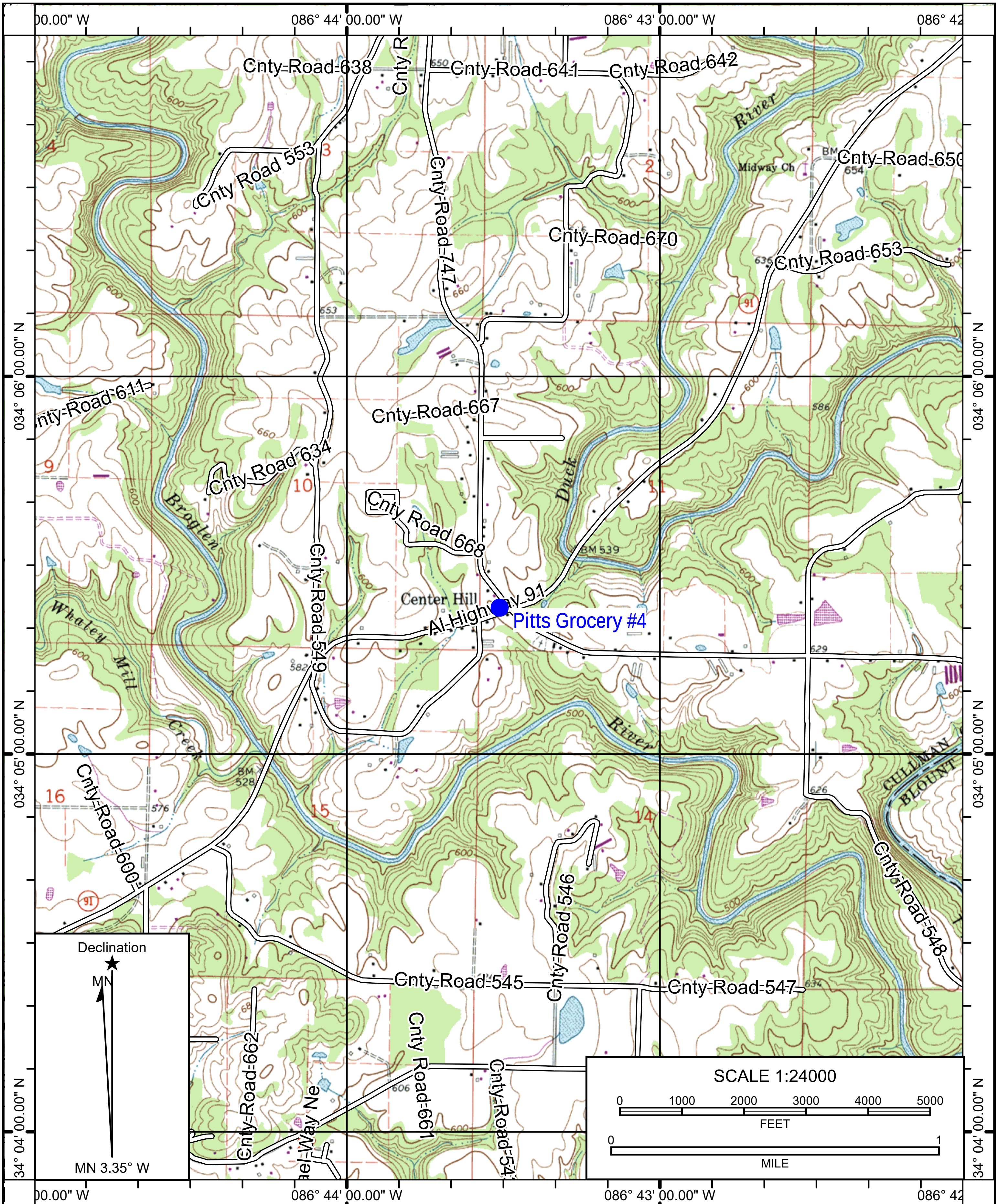
The activities associated with the CAP were completed by the following SPHERE 3 personnel/subcontractors:

Project Manager:	Greg Hoagland, P.E.
Report Preparation:	Jonathan A. Hunter, P.G. and Greg Hoagland, P.E.
Report Drafting:	Mark Pate
Report Production:	Karen Embry
Report Review:	Greg Hoagland, P.E.

The project was managed and supervised by Greg Hoagland, Professional Engineer. The report was prepared by Mr. Hoagland and Mr. Hunter. Mr. Hunter and Mr. Hoagland have conducted numerous Preliminary and Secondary Investigations, and have prepared numerous CAPs under the Alabama Tank Trust Fund (ATTF).

SPHERE 3
ENGINEERING, INC

figures



Name: GARDEN CITY
Date: 04/27/20
Scale: 1 inch = 2,000 ft.

Location: 034° 05' 23.30" N, 086° 43' 30.86" W
Caption: FIGURE 1: Pitts Grocery #4 Center Hill (UST20-02-02)

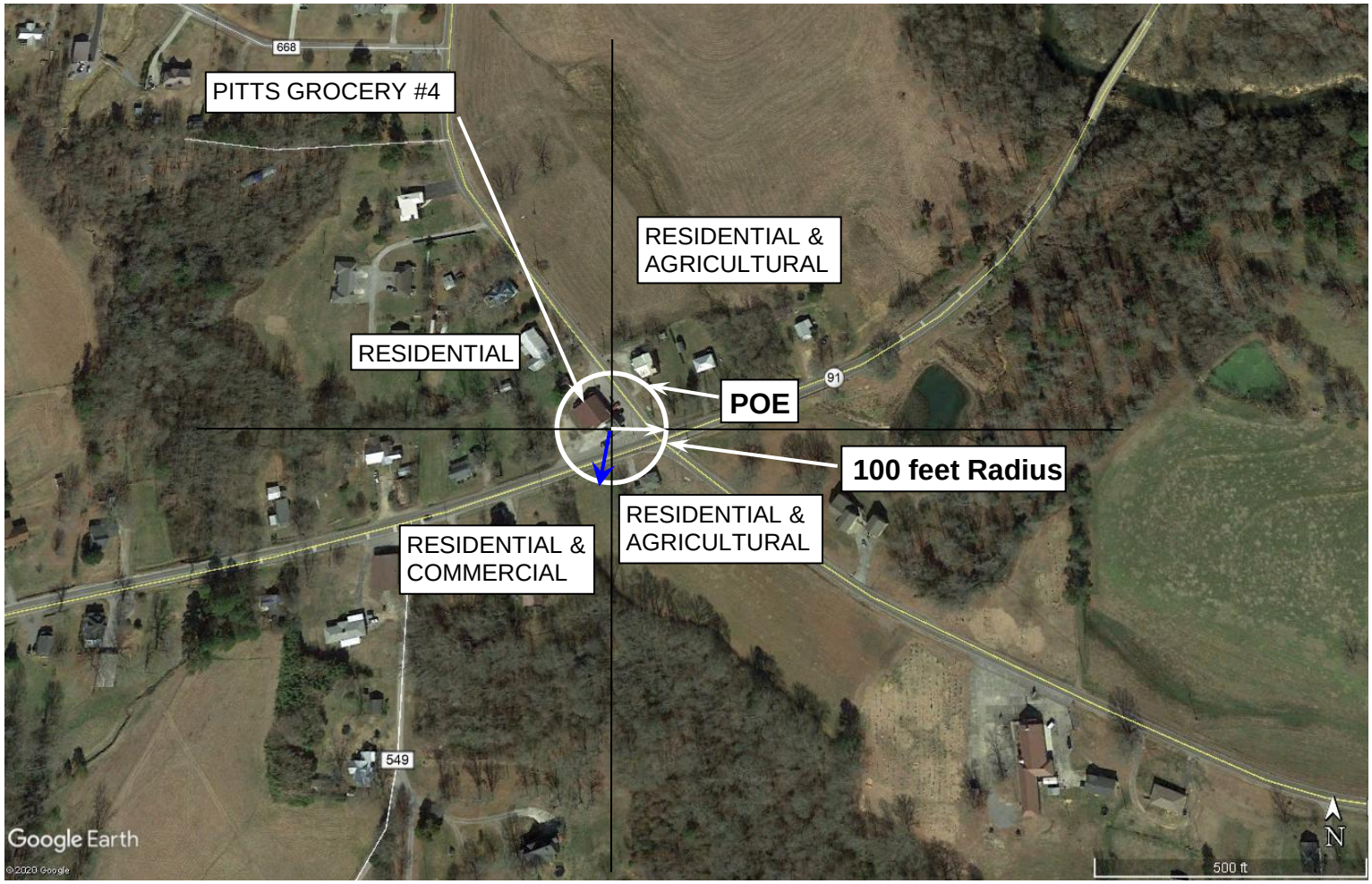
Datum: NAD27

CADD FILE NO.: PITTS.G#4

CHECKED BY

MEP

DRAWN BY



LEGEND

Source: Google Earth

POE - (Projected) Point of Exposure

Groundwater Flow Direction

DATE	NO.	REVISION	BY
04/29/20	2	Resized to 8.5"x11"	GTD
04/29/20	1	Border Adjustments	JGH

SPHERE 3
ENGINEERING, INC

MR. ROGER PITTS
HANCEVILLE, ALABAMA 35077

CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077

SITE VICINITY MAP

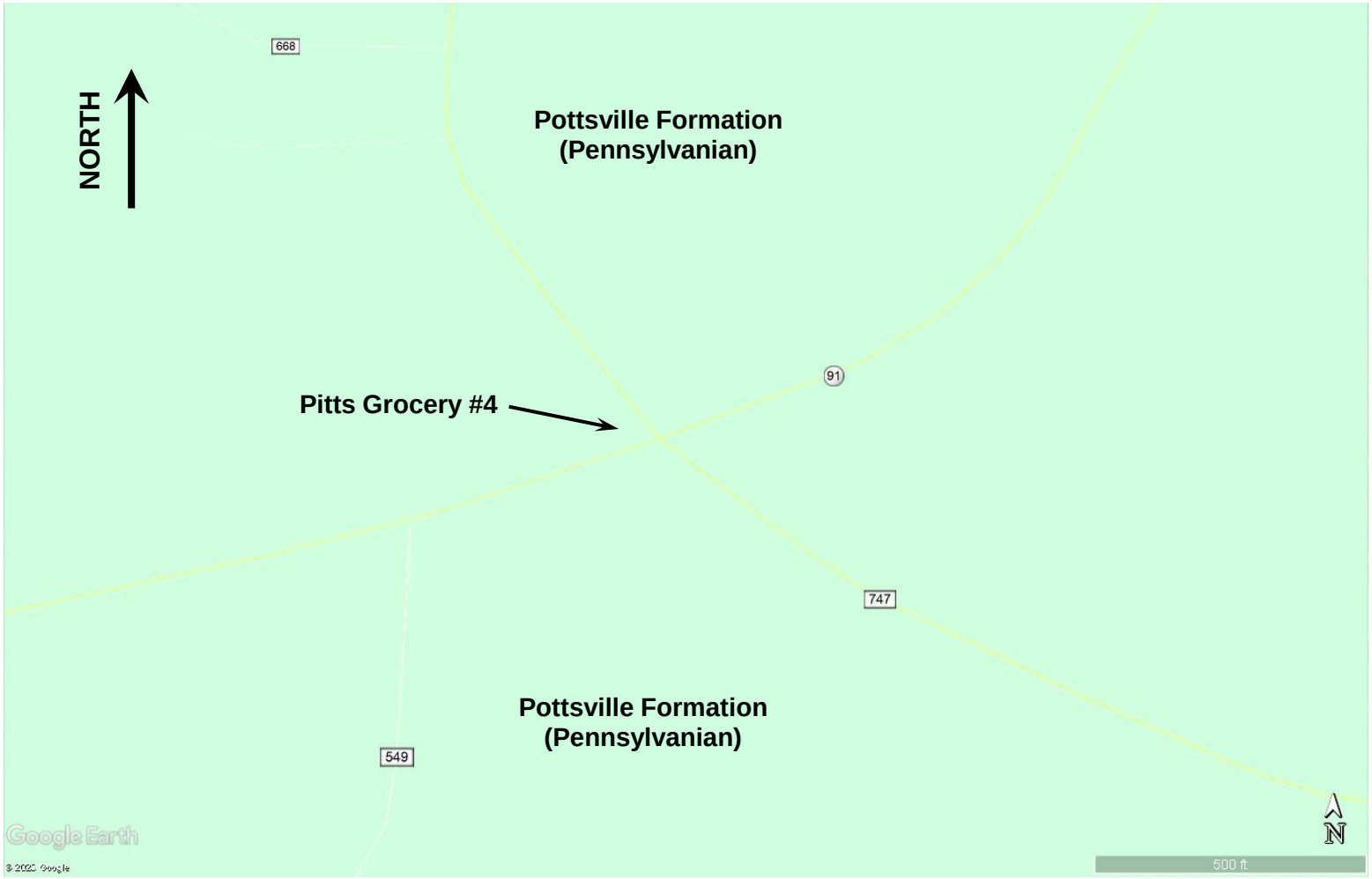
2
Figure

CADD FILE NO.: PITTS.G#4

CHECKED BY

MEP

DRAWN BY



LEGEND

Source: Google Earth

DATE	NO.	REVISION	BY
04/29/20	1	Border Adjustments	JGH

SPHERE 3
ENGINEERING, INC

MR. ROGER PITTS
HANCEVILLE, ALABAMA 35077

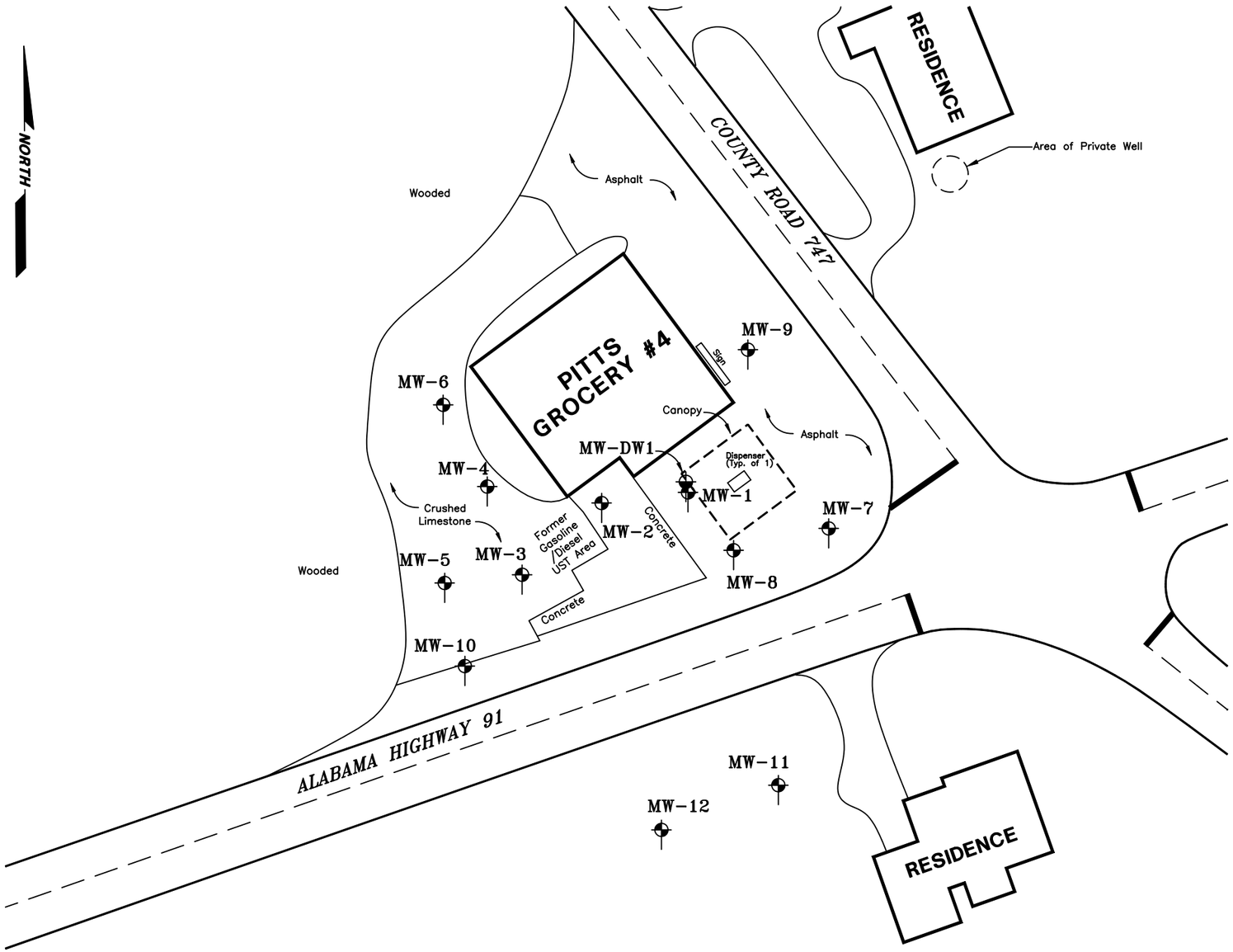
CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077

GEOLOGIC MAP

3
Figure

DRAWN BY | M.E.P. | CHECKED BY | | CADD FILE NO. PITTS.G#4

NORTH



LEGEND

- Soil Exploration Boring
- Soil Exploration Boring/Type II Monitor Well
- Soil Exploration Boring/Type III Monitor Well

0 Feet 40
Scale

SPHERE 3 ENGINEERING, I NC

DATE	NO.	REVISION	BY

MR. ROGER PITTS
HANCEVILLE, ALABAMA
Client

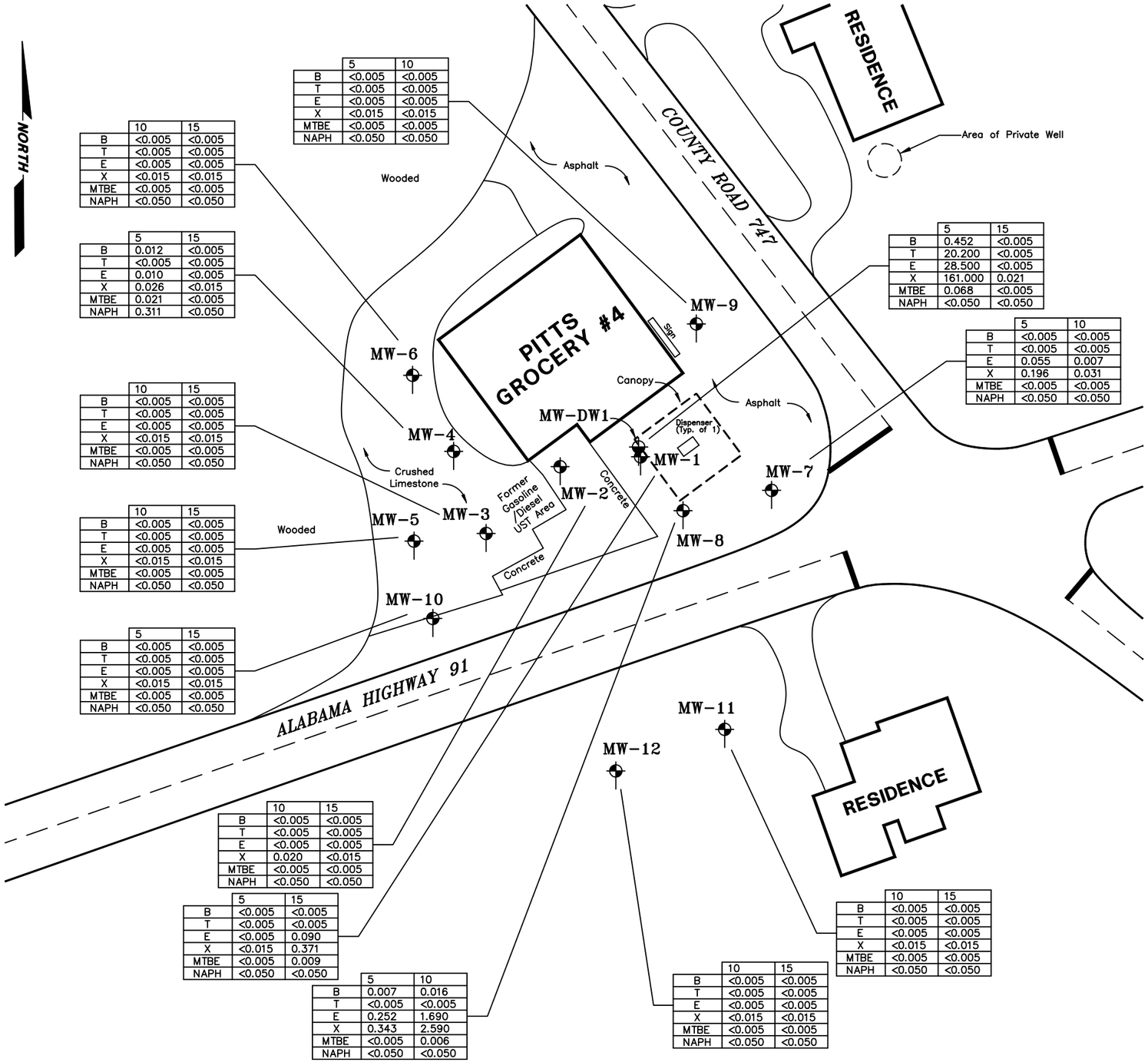
CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077
Project Title

SITE PLAN

Fig. No. 4

CADD FILE NO. PITTS.G#4

DRAWN BY | M.E.P. | CHECKED BY



	5	10
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	5	15
B	0.012	<0.005
T	<0.005	<0.005
E	0.010	<0.005
X	0.026	<0.015
MTBE	0.021	<0.005
NAPH	0.311	<0.050

	5	15
B	0.452	<0.005
T	20.200	<0.005
E	28.500	<0.005
X	161.000	0.021
MTBE	0.068	<0.005
NAPH	<0.050	<0.050

	5	10
B	<0.005	<0.005
T	<0.005	<0.005
E	0.055	0.007
X	0.196	0.031
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	5	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	0.020	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	5	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	0.090
X	<0.015	0.371
MTBE	<0.005	0.009
NAPH	<0.050	<0.050

	5	10
B	0.007	0.016
T	<0.005	<0.005
E	0.252	1.690
X	0.343	2.590
MTBE	<0.005	0.006
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

	10	15
B	<0.005	<0.005
T	<0.005	<0.005
E	<0.005	<0.005
X	<0.015	<0.015
MTBE	<0.005	<0.005
NAPH	<0.050	<0.050

LEGEND

- Soil Exploration Boring
- Soil Exploration Boring/Type II Monitor Well
- Soil Exploration Boring/Type III Monitor Well

	Sample Collection Depth (feet bgs)
B	Benzene Concentration (mg/kg)
T	Toluene Concentration (mg/kg)
E	Ethylbenzene Concentration (mg/kg)
X	Total Xylenes Concentration (mg/kg)
MTBE	Methyl-Tertiary-Butyl-Ether Concentration (mg/kg)
NAPH	Naphthalene Concentration (mg/kg)

bgs below the ground surface

(mg/kg) Milligrams per Kilogram

SPHERE 3 ENGINEERING, INC

DATE	NO.	REVISION	BY

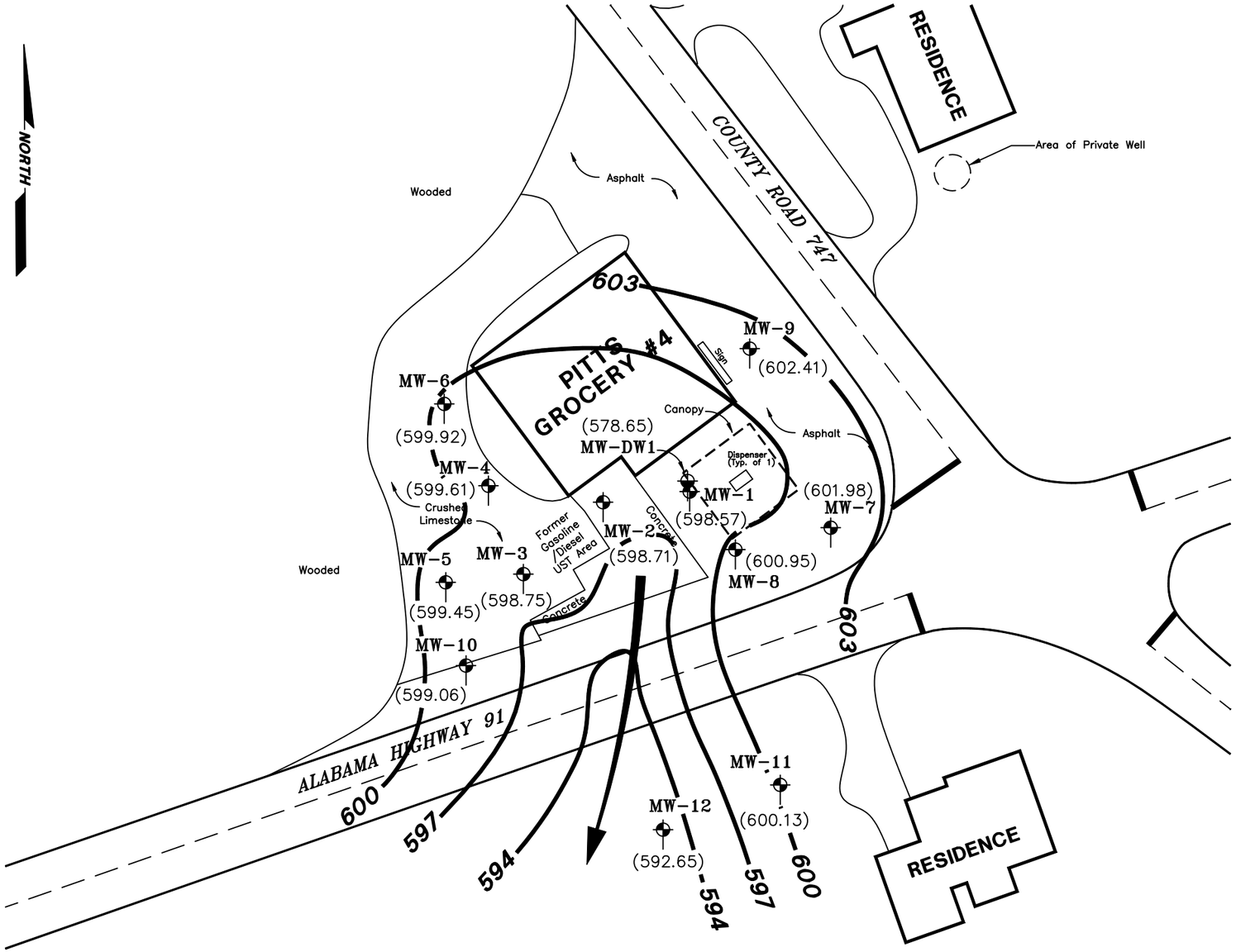
MR. ROGER PITTS
HANCEVILLE, ALABAMA
Client

CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077
Project Title

SOILS COCs CONCENTRATIONS MAP

Fig. No. 5

DRAWN BY	M.E.P.	CHECKED BY	CADD FILE NO. PITTS.G#4



LEGEND

- Soil Exploration Boring
- Soil Exploration Boring/Type II Monitor Well
- Soil Exploration Boring/Type III Monitor Well
- (598.57) Potentiometric Surface Elevation (feet a.m.s.l.)
- —603— Isopotentiometric Surface Elevation Contour (feet a.m.s.l.)
- Groundwater Flow Direction (1/14/2022)

0 Feet 40
Scale

SPHERE 3 ENGINEERING, INC

DATE	NO.	REVISION	BY

MR. ROGER PITTS
HANCEVILLE, ALABAMA
Client

CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077
Project Title

POTENTIOMETRIC SURFACE ELEVATION MAP (1/14/2022)

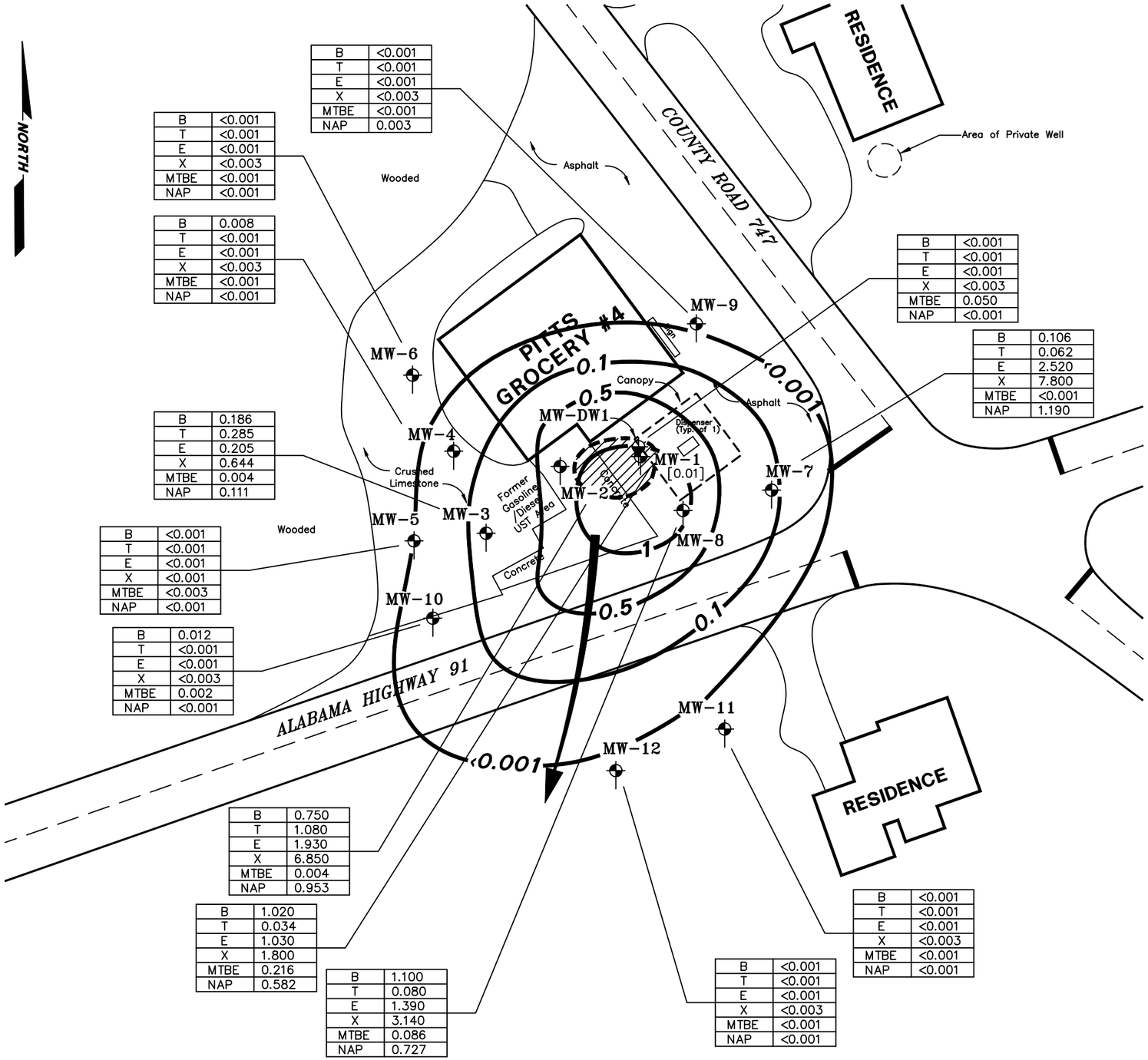
6
Fig. No.

CADD FILE NO. PITTS.G#4

M.E.P.

CHECKED BY

DRAWN BY



LEGEND

- Soil Exploration Boring
- Soil Exploration Boring/Type II Monitor Well
- Soil Exploration Boring/Type III Monitor Well

B	Dissolved Benzene Concentration (mg/L)
T	Dissolved Toluene Concentration (mg/L)
E	Dissolved Ethylbenzene Concentration (mg/L)
X	Dissolved Total Xylenes Concentration (mg/L)
MTBE	Dissolved Methyl–Tertiary–Butyl–Ether Concentration (mg/L)
NAP	Dissolved Naphthalene Concentration (mg/L)

- —1— Dissolved Benzene Isoconcentration Contour (mg/L)
- Groundwater Flow Direction (1/14/2022)
- (mg/L) Milligrams per Liter
- [0.02] Free Product Thickness (feet)
- Estimated Aerial Extent of Free Product

SPHERE 3 ENGINEERING, INC

DATE	NO.	REVISION	BY

MR. ROGER PITTS
HANCEVILLE, ALABAMA
Client

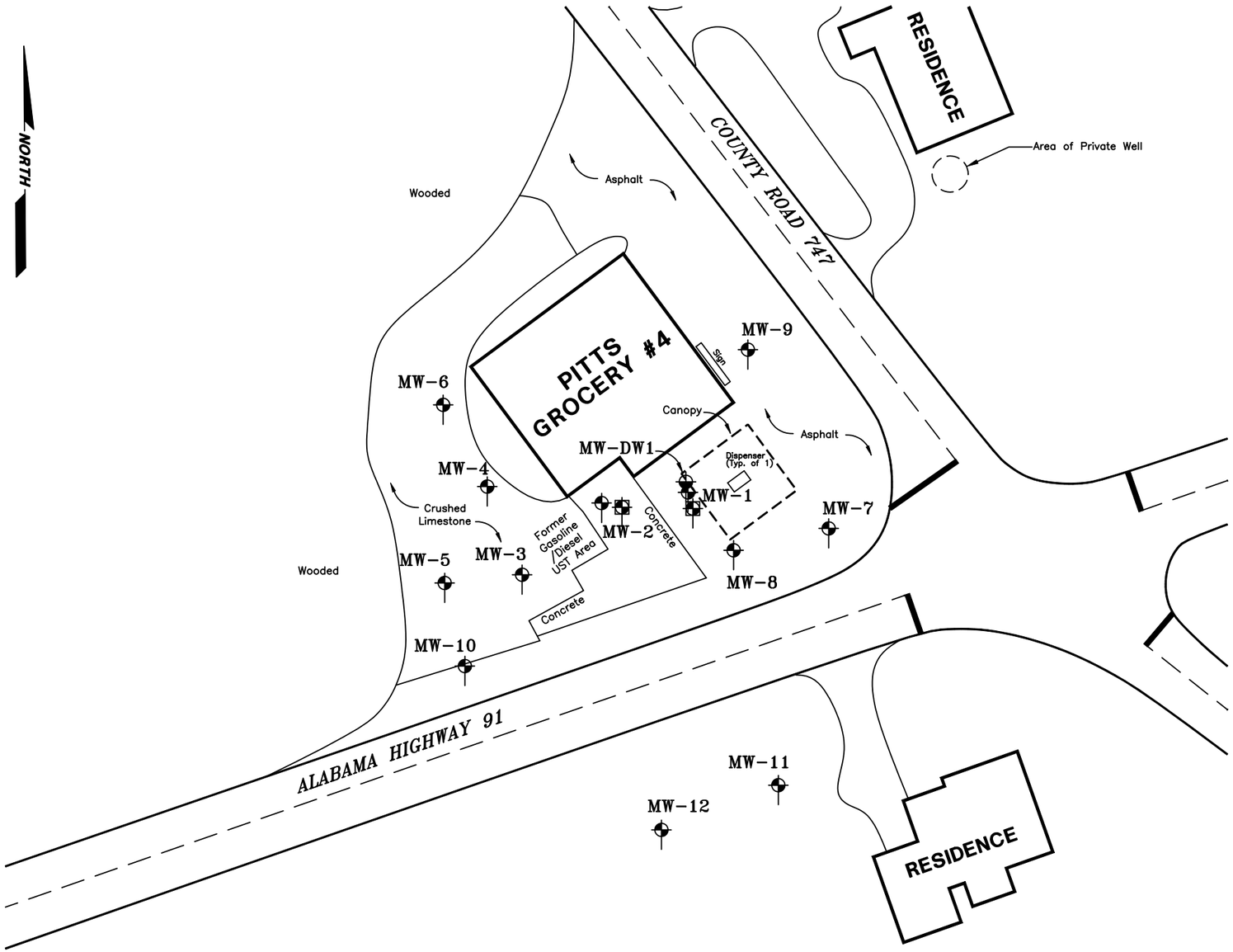
CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077
Project Title

DISSOLVED COCs CONCENTRATIONS MAP (1/14/2022)

Fig. No. 7

DRAWN BY | M.E.P. | CHECKED BY | | CADD FILE NO. PITTS.G#4

NORTH



LEGEND

- Soil Exploration Boring
- Soil Exploration Boring/Type II Monitor Well
- Soil Exploration Boring/Type III Monitor Well
- Proposed Soil Exploration Boring/Type II Recovery Monitor Well

0 Feet 40
Scale

SPHERE 3 ENGINEERING, I NC

DATE	NO.	REVISION	BY

MR. ROGER PITTS
HANCEVILLE, ALABAMA
Client

CORRECTIVE ACTION PLAN
PITTS GROCERY #4 (UST20-02-02)
28705 HIGHWAY 91
HANCEVILLE, ALABAMA 35077
Project Title

PROPOSED MONITOR WELL LOCATION MAP

8
Fig. No.

SPHERE 3
ENGINEERING, INC

appendix a

SPHERE 3 ENGINEERING, INC

WATER/ FREE PRODUCT LEVEL DATA

CLIENT: Mr. Roger Pitts
LOCATION: Pitts Grocery #4 Center Hill (UST20-02-02)
28705 Highway 91
Hanceville, Alabama 35077

Page: 1 of 1
File Number: PITTS.G#4CH.01
Event Date: 5/4/2020
Field Personnel: HTB

Pre - MEME Event	☐	**Sampling Event**	■
Post - MEME Event	☐	**Free Product Recovery**	☐

Monitor Well Identification	Casing Elevation (feet)	Depth to Free Product (feet)	Depth to Water (feet)	Free Product Surface Elevation (feet)	Water Surface Elevation (feet)	Free Product Thickness (feet)	Potentiometric Surface Elevation (feet)
MW-1	605.76	ND	6.67	NA	599.09	NA	599.09
MW-2	605.28	ND	6.50	NA	598.78	NA	598.78
MW-3	604.73	ND	6.72	NA	598.01	NA	598.01
MW-4	604.64	ND	5.70	NA	598.94	NA	598.94

Notes:
Elevations are referenced to a mean-sea-level elevation estimated at 606.00 feet.
Water and Free Product depths were measured and recorded to the nearest 0.01 foot.
Potentiometric Surface Elevation = Water Surface Elevation + 75% of the Free Product Thickness

SPHERE 3 ENGINEERING, INC

WATER/ FREE PRODUCT LEVEL DATA

CLIENT: Mr. Roger Pitts
LOCATION: Pitts Grocery #4 Center Hill (UST20-02-02)
28705 Highway 91
Hanceville, Alabama 35077

Page: 1 of 1
File Number: PITTS.G#4CH.02
Event Date: 10/16/2020
Field Personnel: HTB; JWJ

Pre - MEME Event	☐	**Sampling Event**	■
Post - MEME Event	☐	**Free Product Recovery**	☐

Monitor Well Identification	Casing Elevation (feet)	Depth to Free Product (feet)	Depth to Water (feet)	Free Product Surface Elevation (feet)	Water Surface Elevation (feet)	Free Product Thickness (feet)	Potentiometric Surface Elevation (feet)
MW-1	605.76	10.61	10.68	595.15	595.08	0.07	595.13
MW-2	605.28	12.03	12.41	593.25	592.87	0.38	593.16
MW-3	604.73	ND	10.50	NA	594.23	NA	594.23
MW-4	604.64	ND	8.14	NA	596.50	NA	596.50
MW-5	604.37	ND	8.39	NA	595.98	NA	595.98
MW-6	604.66	ND	7.61	NA	597.05	NA	597.05
MW-7	605.30	ND	7.10	NA	598.20	NA	598.20
MW-8	605.41	ND	8.68	NA	596.73	NA	596.73
MW-9	605.90	ND	6.16	NA	599.74	NA	599.74
MW-10	605.21	ND	9.44	NA	595.77	NA	595.77
MW-11	605.31	ND	16.85	NA	588.46	NA	588.46
MW-12	603.15	ND	17.97	NA	585.18	NA	585.18
MW-DW1	605.73	ND	34.07	NA	571.66	NA	571.66

Notes:
Elevations are referenced to a mean-sea-level elevation estimated at 606.00 feet.
Water and Free Product depths were measured and recorded to the nearest 0.01 foot.
Potentiometric Surface Elevation = Water Surface Elevation + 75% of the Free Product Thickness

SPHERE 3 ENGINEERING, INC

WATER/ FREE PRODUCT LEVEL DATA

CLIENT: Mr. Rodger Pitts
LOCATION: Pitts Grocery #4 Center Hill (UST20-02-02)
28705 Highway 91
Hanceville, Alabama 35077

Page: 1 of 1
File Number: PITTS.G#4CH.05
Event Date: 7/15/2021
Field Personnel: GAK

Pre - MEME Event	☐	**Sampling Event**	■
Post - MEME Event	☐	**Free Product Recovery**	☐

Monitor Well Identification	Casing Elevation (feet)	Depth to Free Product (feet)	Depth to Water (feet)	Free Product Surface Elevation (feet)	Water Surface Elevation (feet)	Free Product Thickness (feet)	Potentiometric Surface Elevation (feet)
MW-1	605.76	8.87	8.88	596.89	596.88	0.01	596.89
MW-2	605.28	6.89	6.92	598.39	598.36	0.03	598.38
MW-3	604.73	ND	6.32	NA	598.41	NA	598.41
MW-4	604.64	ND	5.04	NA	599.60	NA	599.60
MW-5	604.37	ND	4.93	NA	599.44	NA	599.44
MW-6	604.66	ND	5.09	NA	599.57	NA	599.57
MW-7	605.30	ND	3.64	NA	601.66	NA	601.66
MW-8	605.41	ND	4.96	NA	600.45	NA	600.45
MW-9	605.90	ND	3.82	NA	602.08	NA	602.08
MW-10	605.21	ND	6.01	NA	599.20	NA	599.20
MW-11	605.31	ND	6.54	NA	598.77	NA	598.77
MW-12	603.15	ND	11.51	NA	591.64	NA	591.64
MW-DW1	605.73	ND	28.87	NA	576.86	NA	576.86

Notes:
Elevations are referenced to a mean-sea-level elevation estimated at 606.00 feet.
Water and Free Product depths were measured and recorded to the nearest 0.01 foot.
Potentiometric Surface Elevation = Water Surface Elevation + 75% of the Free Product Thickness

SPHERE 3 ENGINEERING, INC

WATER/ FREE PRODUCT LEVEL DATA

CLIENT: Mr. Rodger Pitts
LOCATION: Pitts Grocery #4 Center Hill (UST20-02-02)
28705 Highway 91
Hanceville, Alabama 35077

Page: 1 of 1
File Number: PITTS.G#4CH.06
Event Date: 10/12/2021
Field Personnel: JGH; GAK

Pre - MEME Event	☐	**Sampling Event**	■
Post - MEME Event	☐	**Free Product Recovery**	☐

Monitor Well Identification	Casing Elevation (feet)	Depth to Free Product (feet)	Depth to Water (feet)	Free Product Surface Elevation (feet)	Water Surface Elevation (feet)	Free Product Thickness (feet)	Potentiometric Surface Elevation (feet)
MW-1	605.76	8.17	8.18	597.59	597.58	0.01	597.59
MW-2	605.28	ND	7.21	NA	598.07	NA	598.07
MW-3	604.73	ND	6.24	NA	598.49	NA	598.49
MW-4	604.64	ND	5.37	NA	599.27	NA	599.27
MW-5	604.37	ND	5.10	NA	599.27	NA	599.27
MW-6	604.66	ND	4.94	NA	599.72	NA	599.72
MW-7	605.30	ND	3.83	NA	601.47	NA	601.47
MW-8	605.41	ND	5.06	NA	600.35	NA	600.35
MW-9	605.90	ND	3.92	NA	601.98	NA	601.98
MW-10	605.21	ND	6.22	NA	598.99	NA	598.99
MW-11	605.31	ND	5.72	NA	599.59	NA	599.59
MW-12	603.15	ND	10.94	NA	592.21	NA	592.21
MW-DW1	605.73	ND	28.53	NA	577.20	NA	577.20

Notes:
Elevations are referenced to a mean-sea-level elevation estimated at 606.00 feet.
Water and Free Product depths were measured and recorded to the nearest 0.01 foot.
Potentiometric Surface Elevation = Water Surface Elevation + 75% of the Free Product Thickness

SPHERE 3 ENGINEERING, INC

WATER/ FREE PRODUCT LEVEL DATA

CLIENT: Mr. Rodger Pitts
LOCATION: Pitts Grocery #4 Center Hill (UST20-02-02)
28705 Highway 91
Hanceville, Alabama 35077

Page: 1 of 1
File Number: PITTS.G#4CH.07
Event Date: 1/14/2022
Field Personnel: JGH; GAK

Pre - MEME Event	☐	**Sampling Event**	■
Post - MEME Event	☐	**Free Product Recovery**	☐

Monitor Well Identification	Casing Elevation (feet)	Depth to Free Product (feet)	Depth to Water (feet)	Free Product Surface Elevation (feet)	Water Surface Elevation (feet)	Free Product Thickness (feet)	Potentiometric Surface Elevation (feet)
MW-1	605.76	7.19	7.21	598.57	598.55	0.02	598.57
MW-2	605.28	ND	6.57	NA	598.71	NA	598.71
MW-3	604.73	ND	5.98	NA	598.75	NA	598.75
MW-4	604.64	ND	5.03	NA	599.61	NA	599.61
MW-5	604.37	ND	4.92	NA	599.45	NA	599.45
MW-6	604.66	ND	4.74	NA	599.92	NA	599.92
MW-7	605.30	ND	3.32	NA	601.98	NA	601.98
MW-8	605.41	ND	4.46	NA	600.95	NA	600.95
MW-9	605.90	ND	3.49	NA	602.41	NA	602.41
MW-10	605.21	ND	6.15	NA	599.06	NA	599.06
MW-11	605.31	ND	5.18	NA	600.13	NA	600.13
MW-12	603.15	ND	10.50	NA	592.65	NA	592.65
MW-DW1	605.73	ND	27.08	NA	578.65	NA	578.65

Notes:
Elevations are referenced to a mean-sea-level elevation estimated at 606.00 feet.
Water and Free Product depths were measured and recorded to the nearest 0.01 foot.
Potentiometric Surface Elevation = Water Surface Elevation + 75% of the Free Product Thickness

SPHERE 3
ENGINEERING, INC

appendix b

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 7, 2020
Attention:	Mr. Greg Hoagland	Reference #	42900
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	4/30/20	Analyst:	Hageman/Heard
Date Collected:	4/28/20	Date of Analysis:	5/1-4/20
Sample Collector:	G. Karstens	Method:	***EPA Method 5035/8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-1 5'	SB-1 15'	SB-2 10'	SB-2 15'	SB-3 10'	SB-3 15'	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, ppm	214354	214355	214356	214357	214358	214359	Limit, ppm
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	0.005
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	0.005
Ethylbenzene	BDL	**0.090**	BDL	BDL	BDL	BDL	0.005
Xylenes, o,m,p	BDL	**0.371**	**0.020**	BDL	BDL	BDL	0.015
MTBE	BDL	**0.009**	BDL	BDL	BDL	BDL	0.005

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm of analyte, dry basis

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 7, 2020
Attention:	Mr. Greg Hoagland	Reference #	42900
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	4/30/20	Analyst:	Hageman/Heard
Date Collected:	4/28/20	Date of Analysis:	5/1-4/20
Sample Collector:	G. Karstens	Method:	***EPA Method 5035/8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID					
	SB-4 5'	SB-4 15'					
Volatile	LAB ID	LAB ID					Detection
Organic, ppm	214360	214361					Limit, ppm
Benzene	**0.012**	BDL					0.005
Toluene	BDL	BDL					0.005
Ethylbenzene	**0.010**	BDL					0.005
Xylenes, o,m,p	**0.026**	BDL					0.015
MTBE	**0.021**	BDL					0.005

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm of analyte, dry basis

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 7, 2020
Attention:	Mr. Greg Hoagland	Reference #	42900
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	4/30/20	Analyst:	CR
Date Collected:	4/28/20	Date of Analysis:	5/4/20
Sample Collector:	G. Karstens	Method:	***ASTM D2216***

Moisture Content

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-1 5'	SB-1 15'	SB-2 10'	SB-2 15'	SB-3 10'	SB-3 15'	
Moisture Content by %	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection Limit, %
	214354	214355	214356	214357	214358	214359	
Moisture Content	19.8%	17.8%	20.2%	17.3%	14.3%	20.5%	0.1%

	FIELD ID	FIELD ID					
	SB-4 5'	SB-4 15'					
Moisture Content by %	LAB ID	LAB ID					Detection Limit, %
	214360	214361					
Moisture Content	26.5%	17.0%					0.1%

BDL = Below Detection Limit

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 7, 2020
Attention:	Mr. Greg Hoagland	Reference #	42900
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Extraction Date:	5/5/20
Date Received:	4/30/20	Analyst:	Hageman/Heard
Date Collected:	4/28/20	Date of Analysis:	5/6/20
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-1 5'	SB-1 15'	SB-2 10'	SB-2 15'	SB-3 10'	SB-3 15'	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	214354	214355	214356	214357	214358	214359	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPM (mg/kg)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 7, 2020
Attention:	Mr. Greg Hoagland	Reference #	42900
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Extraction Date:	5/5/20
Date Received:	4/30/20	Analyst:	Hageman/Heard
Date Collected:	4/28/20	Date of Analysis:	5/6/20
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID					
	SB-4 5'	SB-4 15'					
Polynuclear	LAB ID	LAB ID					Detection
Aromatics, ppm	214360	214361					Limit, ppm
Acenaphthene	BDL	BDL					0.050
Acenaphthylene	BDL	BDL					0.050
Anthracene	BDL	BDL					0.050
Benzo(a)anthracene	BDL	BDL					0.050
Benzo(b)fluoranthene	BDL	BDL					0.050
Benzo(k)fluoranthene	BDL	BDL					0.050
Benzo(ghi)perylene	BDL	BDL					0.050
Benzo(a)pyrene	BDL	BDL					0.050
Chrysene	BDL	BDL					0.050
Dibenzo(ah)anthracene	BDL	BDL					0.050
Fluoranthene	BDL	BDL					0.050
Fluorene	BDL	BDL					0.050
Indeno(1,2,3-cd)pyrene	BDL	BDL					0.050
Naphthalene	**0.311**	BDL					0.050
Phenanthrene	BDL	BDL					0.050
Pyrene	BDL	BDL					0.050

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPM (mg/kg)

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly? ok not EX, PAT	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES

***Initial*:** MJH KD

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter, Karstens

Notes: _____

Invoice # 42900

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 4/30/20 **Invoice #** 42900

Method of Delivery: Hand **Client:** Sphere 3

1. Did any containers arrive broken?	YES	(NO)	
* If so, please state field ID with analysis of broken sample(s) _____			
2. Were cooler(s) sealed upon arrival?	(YES)	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	(YES)	NO	NA
4. Did a chain of custody accompany the samples?	(YES)	NO	
* Was it properly filled out?	(YES)	NO	
5. Were correct containers used for the analysis requested?	(YES)	NO	
6. Were all containers properly preserved?	(YES)	NO	NA
7. Were all water samples received at the proper pH?	YES	NO	(NA)
8. If VOA vials were present, was there any head space?	YES	NO	(NA)
* If so, please state field ID of deficient sample(s): _____			
9. Were all containers properly labeled and match chain of custody?	(YES)	NO	
10. Did containers arrive within holding time of analysis?	(YES)	NO	
* If not, please state field ID and analysis of sample(s) out of holding time: _____			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	(NA)
12. Were any samples rejected?	YES	(NO)	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): _____

42900

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KARSTENS
Sampler Signature:

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.01
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 5035/8260	PAH 8270C	MOISTURE CONTENT	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
SB-1 5' 214354	4/29/20	0930	5	X			1	2						2					X		X	X	X			N	Y	
SB-1 15' 214355	4/28/20	0955	5	X			1	2						2					X		X	X	X			N	Y	
SB-2 10' 214356	4/28/20	1035	5	X			1	2						2					X		X	X	X			N	Y	
SB-2 15' 214357	4/28/20	1105	5	X			1	2						2					X		X	X	X			N	Y	
SB-3 10' 214358	4/28/20	1230	5	X			1	2						2					X		X	X	X			N	Y	
SB-3 15' 214354	4/28/20	1255	5	X			1	2						2					X		X	X	X			N	Y	
SB-4 5' 214360	4/28/20	1345	5	X			1	2						2					X		X	X	X			N	Y	
SB-4 15' 214361	4/28/20	1420	5	X			1	2						2					X		X	X	X			N	Y	
TEMPERATURE BLANK			1											1						X				X		N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.5°C
Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y N (NA)

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	4/30/20	1248			
Relinquished by:	Date	Time	Received by:	Date	Time
				4/30/20	1250

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 11, 2020
Attention:	Mr. Greg Hoagland	Reference #	42901
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	4/30/20	Analyst:	Kevin Doriety
Date Collected:	4/29/20	Date of Analysis:	5/11/20
Sample Collector:	G. Karstens	Method:	***EPA Method 6010B***

METALLIC ANALYTES

	FIELD ID						
	SOIL COMP-1						
Analyte, mg/Kg as Total	LAB ID						Detection Limit, mg/Kg
	214362						
Lead	10						1.0

BDL = Below Detection Limit
Detection Limit is Reporting Limit
All results expressed as PPM of total analyte

/ QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 11, 2020
Attention:	Mr. Greg Hoagland	Reference #	42901
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	4/30/20	Analyst:	R. Currence
Date Collected:	4/29/20	Date of Analysis:	4/30/20
Sample Collector:	G. Karstens	Method:	***EPA Method 418.1 Modified for soils***

TOTAL PETROLEUM HYDROCARBONS

FIELD ID	LAB ID	TPH, PPM	D.L., PPM
SOIL COMP-1	**214362**	**18**	10

BDL = Below Detection Limit
D.L. = Detection Limit, Practical
All results expressed as PPM (mg/Kg)

/ QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES

Initial*: MJH KD

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: G. Karstens, Hoagland, Hunter

Notes:

Invoice # 42901

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 4/30/20 **Invoice #** 42901

Method of Delivery: Hand **Client:** Sphere 3

1. Did any containers arrive broken?	YES	(NO)	
* If so, please state field ID with analysis of broken sample(s) _____			
2. Were cooler(s) sealed upon arrival?	(YES)	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	(YES)	NO	NA
4. Did a chain of custody accompany the samples?	(YES)	NO	
* Was it properly filled out?	(YES)	NO	
5. Were correct containers used for the analysis requested?	(YES)	NO	
6. Were all containers properly preserved?	YES	NO	(NA)
7. Were all water samples received at the proper pH?	YES	NO	(NA)
8. If VOA vials were present, was there any head space?	YES	NO	(NA)
* If so, please state field ID of deficient sample(s): _____			
9. Were all containers properly labeled and match chain of custody?	(YES)	NO	
10. Did containers arrive within holding time of analysis?	(YES)	NO	
* If not, please state field ID and analysis of sample(s) out of holding time: _____			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	(NA)
12. Were any samples rejected?	YES	(NO)	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): _____

Pitt's Grocery; UST200202; Soil Comp-1; Lab I.D. 214362

#42901

From: Greg Hoagland, P.E. (greg@sphere3.com)

To: suthlab@bellsouth.net

Cc: gregkarstens@bellsouth.net; jon@sphere3.com; karen@sphere3.com

Date: Thursday, April 30, 2020, 04:24 PM CDT

Michael:

Thank you for taking the time to speak with me today by telephone regarding our project at Pitt's Grocery in Hanceville, Alabama (UST200202). As per our conversation, please accept this email as our request to correct the collection date of sample I.D. "Soil Comp-1" (Lab I.D. 214362) from 4/30/20 to 4/29/20. I apologize for the inconvenience.

If any additional information or clarification is needed, please advise. Thank you very much.

Greg Hoagland, P.E.

SPHERE 3 ENGINEERING, INC

3433 Sierra Drive

Hoover, Alabama 35216

Phone: (205) 403-3317

Facsimile: (205) 403-3318

Mobile: (205) 288-4896

Email: greg@sphere3.com

42901

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KARSTENS
Sampler Signature: Karstens

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.01
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: TOTAL LEAD 6010	TPH 418.1	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
SOIL COMP-1 214362	4/30/20	1530	1		X									X					X		X	X			N	Y	
TEMPERATURE BLANK	—	—	1											X						X			X		N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.5°C
Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y N (NA)

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	4/30/20	1248			
Relinquished by:	Date	Time	Received by:	Date	Time
				4/30/20	1250

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 26, 2020
Attention:	Mr. Greg Hoagland	Reference #	43881
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil/TerraCore	Analytical	
Date Received:	10/15/20	Analyst:	Hageman/Heard
Date Collected:	10/12-13/20	Date of Analysis:	10/18-19/20
Sample Collector:	G. Karstens	Method:	***EPA Method 5035/8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	**FIELD ID**	**FIELD ID**	**FIELD ID**	**FIELD ID**	**FIELD ID**	
	SB-5 @ 10'	**SB-5 @15'**	**SB-6 @ 10'**	**SB-6 @ 15'**	**SB-7 @ 5'**	**SB-7 @ 10'**	
Volatile	**LAB ID**	**LAB ID**	**LAB ID**	**LAB ID**	**LAB ID**	**LAB ID**	Detection
Organic, ppm	**219966**	**219967**	**219968**	**219969**	**219970**	**219971**	Limit, ppm
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	0.005
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	0.005
Ethylbenzene	BDL	BDL	BDL	BDL	**0.055**	**0.007**	0.005
Xylenes, o,m,p	BDL	BDL	BDL	BDL	**0.196**	**0.031**	0.015
MTBE	BDL	BDL	BDL	BDL	BDL	BDL	0.005

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm of analyte, dry basis

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 26, 2020
Attention:	Mr. Greg Hoagland	Reference #	43881
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil/TerraCore	Analytical	
Date Received:	10/15/20	Analyst:	Hageman/Heard
Date Collected:	10/13-14/20	Date of Analysis:	10/18-19/20
Sample Collector:	G. Karstens	Method:	***EPA Method 5035/8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-8 @ 5'	SB-8 @ 10'	SB-9 @ 5'	SB-9 @ 10'	SB-10 @ 5'	SB-10 @ 15'	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, ppm	219972	219973	219974	219975	219976	219977	Limit, ppm
Benzene	**0.007**	**0.016**	BDL	BDL	BDL	BDL	0.005
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	0.005
Ethylbenzene	**0.252**	**1.690**	BDL	BDL	BDL	BDL	0.005
Xylenes, o,m,p	**0.343**	**2.590**	BDL	BDL	BDL	BDL	0.015
MTBE	BDL	**0.006**	BDL	BDL	BDL	BDL	0.005

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm of analyte, dry basis

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 26, 2020
Attention:	Mr. Greg Hoagland	Reference #	43881
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil/TerraCore	Analytical	
Date Received:	10/15/20	Analyst:	Hageman/Heard
Date Collected:	10/12-14/20	Date of Analysis:	10/18-20/20
Sample Collector:	G. Karstens	Method:	***EPA Method 5035/8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-11 @ 10'	SB-11 @ 15'	SB-12 @ 10'	SB-12 @ 15'	DW1 @ 5'	DW1 @ 15'	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, ppm	219978	219979	219980	219981	219982	219983	Limit, ppm
Benzene	BDL	BDL	BDL	BDL	**0.452**	BDL	0.005
Toluene	BDL	BDL	BDL	BDL	**20.200**	BDL	0.005
Ethylbenzene	BDL	BDL	BDL	BDL	**28.500**	BDL	0.005
Xylenes, o,m,p	BDL	BDL	BDL	BDL	**161.000**	**0.021**	0.015
MTBE	BDL	BDL	BDL	BDL	**0.068**	BDL	0.005

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm of analyte, dry basis

_____ / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 26, 2020
Attention:	Mr. Greg Hoagland	Reference #	43881
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil/TerraCore	Analytical	
Date Received:	10/15/20	Analyst:	CRR
Date Collected:	10/12-14/20	Date of Analysis:	10/16/20
Sample Collector:	G. Karstens	Method:	***ASTM D2216***

Moisture Content

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-5 @ 10'	SB-5 @15'	SB-6 @ 10'	SB-6 @ 15'	SB-7 @ 5'	SB-7 @ 10'	
Moisture Content by %	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection Limit, %
	219966	219967	219968	219969	219970	219971	
Moisture Content	17.8%	20.8%	17.1%	13.2%	15.7%	13.4%	0.1%

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-8 @ 5'	SB-8 @ 10'	SB-9 @ 5'	SB-9 @ 10'	SB-10 @ 5'	SB-10 @ 15'	
Moisture Content by %	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection Limit, %
	219972	219973	219974	219975	219976	219977	
Moisture Content	10.8%	18.0%	13.8%	17.4%	14.5%	17.7%	0.1%

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-11 @ 10'	SB-11 @ 15'	SB-12 @ 10'	SB-12 @ 15'	DW1 @ 5'	DW1 @ 15'	
Moisture Content by %	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection Limit, %
	219978	219979	219980	219981	219982	219983	
Moisture Content	19.9%	15.3%	16.6%	21.1%	18.8%	11.9%	0.1%

BDL = Below Detection Limit

_____ / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**		MJH		

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter

Notes: Dont send w/o #43918

Invoice # 43881

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/15/20 **Invoice #** 43881

Method of Delivery: Hand **Client:** Sphere3

1. Did any containers arrive broken?	YES	✓NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓YES	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	✓YES	NO	NA
4. Did a chain of custody accompany the samples?	✓YES	NO	
* Was it properly filled out?	✓YES	NO	
5. Were correct containers used for the analysis requested?	✓YES	NO	
6. Were all containers properly preserved?	✓YES	NO	NA
7. Were all water samples received at the proper pH?	✓YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	✓NO	NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓YES	NO	
10. Did containers arrive within holding time of analysis?	✓YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓NA
12. Were any samples rejected?	YES	✓NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): 

43881

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) K A R R E N S
Sampler Signature:

Page #: Page 1 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 5035/8260	PAH 8270C	MOISTURE CONTENT	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
SB-5 @ 10' 219966	10/12/20	0935	4	X			1	2						2					X		X	X	X			N	Y	
SB-5 @ 15' 219967	"	0950	4	X			1	2						2					X		X	X	X			N	Y	
SB-6 @ 10' 219968	"	1040	4	X			1	2						2					X		X	X	X			N	Y	
SB-6 @ 15' 219969	"	1058	4	X			1	2						2					X		X	X	X			N	Y	
SB-7 @ 5' 219970	10/13/20	0950	4	X			1	2						2					X		X	X	X			N	Y	
SB-7 @ 10' 219971	10/13/20	1015	4	X			1	2						2					X		X	X	X			N	Y	
SB-8 @ 5' 219972	10/13/20	1130	4	X			1	2						2					X		X	X	X			N	Y	
SB-8 @ 10' 219973	10/13/20	1152	4	X			1	2						2					X		X	X	X			N	Y	
SB-9 @ 5' 219974	10/14/20	1030	4	X			1	2						2					X		X	X	X			N	Y	
SB-9 @ 15' 219975	10/14/20	1050	4	X			1	2						2					X		X	X	X			N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.10C
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
K Karsten	10/15/20	1250			
Relinquished by:	Date	Time	Received by:	Date	Time
				10/15/20	1250

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

43881

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KAITLYN
Sampler Signature:

Page #: Page 2 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 5035/8260	PAH 8270C	MOISTURE CONTENT	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
SB-10 (2) 5' 219976	10/14/20	0915	4	X			1	2						2					X		X	X	X				N	Y	
SB-10 (2) 15' 219977	10/14/20	0955	4	X			1	2						2					X		X	X	X				N	Y	
SB-11 (2) 10' 219978	10/14/20	1420	4	X			1	2						2					X		X	X	X				N	Y	
SB-11 (2) 15' 219979	10/14/20	1435	4	X			1	2						2					X		X	X	X				N	Y	
SB-12 (2) 10' 219980	10/14/20	1315	4	X			1	2						2					X		X	X	X				N	Y	
SB-12 (2) 15' 219981	10/14/20	1340	4	X			1	2						2					X		X	X	X				N	Y	
SB-DW1 (2) 5' 219982	10/12/20	1345	4	X			1	2						2					X		X	X	X				N	Y	
SB-DW1 (2) 15' 219983	10/12/20	1410	4	X			1	2						2					X		X	X	X				N	Y	
TEMPERATURE BLANK	—	—	1											1						X				X			N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.1°C
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N

Relinquished by:	Date	Time	Received by:	Date	Time
	10/15/20	1250			
Relinquished by:	Date	Time	Received by:	Date	Time
				10/15/20	1250

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 29, 2020
Attention:	Mr. Greg Hoagland	Reference #	43918
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Extraction Date:	10/26/20
Date Received:	10/22/20	Analyst:	Hageman/Heard
Date Collected:	10/12-13/20	Date of Analysis:	10/28/20
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-5 @ 10'	SB-5 @15'	SB-6 @ 10'	SB-6 @ 15'	SB-7 @ 5'	SB-7 @ 10'	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	220167	220168	220169	220170	220171	220172	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPM (mg/kg)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 29, 2020
Attention:	Mr. Greg Hoagland	Reference #	43918
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Extraction Date:	10/26/20
Date Received:	10/22/20	Analyst:	Hageman/Heard
Date Collected:	10/13-14/20	Date of Analysis:	10/28/20
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-8 @ 5'	SB-8 @ 10'	SB-9 @ 5'	SB-9 @ 10'	SB-10 @ 5'	SB-10 @ 15'	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	220173	220174	220175	220176	220177	220178	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Chrysene	BDL	BDL	**0.052**	BDL	BDL	BDL	0.050
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluoranthene	BDL	BDL	**0.055**	BDL	BDL	BDL	0.050
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Pyrene	BDL	BDL	**0.050**	BDL	BDL	BDL	0.050

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPM (mg/kg)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 29, 2020
Attention:	Mr. Greg Hoagland	Reference #	43918
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Extraction Date:	10/26/20
Date Received:	10/22/20	Analyst:	Hageman/Heard
Date Collected:	10/12-14/20	Date of Analysis:	10/28-29/20
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	SB-11 @ 10'	SB-11 @ 15'	SB-12 @ 10'	SB-12 @ 15'	DW1 @ 5'	DW1 @ 15'	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	220179	220180	220181	220182	220183	220184	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.050

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPM (mg/kg)

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES

Initial*: MJH _____ KH _____

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hunter, Hoagland

43918

Invoice # 43881

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/22/20 **Invoice #** 43918

Method of Delivery: Hand **Client:** Sphere 3

1. Did any containers arrive broken?	YES	✓NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓YES	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	✓YES	NO	NA
4. Did a chain of custody accompany the samples?	✓YES	NO	
* Was it properly filled out?	✓YES	NO	
5. Were correct containers used for the analysis requested?	✓YES	NO	
6. Were all containers properly preserved?	YES	NO	✓NA
7. Were all water samples received at the proper pH?	YES	NO	✓NA
8. If VOA vials were present, was there any head space?	YES	NO	✓NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓YES	NO	
10. Did containers arrive within holding time of analysis?	✓YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓NA
12. Were any samples rejected?	YES	✓NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed):

Sutherland
Environmental Company, Inc.
2515 5th Avenue South
Birmingham, AL 35233
PHONE: (205)581-9500
E-mail: suthlab@bellsouth.net

CHAIN OF CUSTODY
ANALYSIS REQUEST

Client P.O. #

SEND REPORT TO:
Name:
Company: SPHERE 3 ENG, INC
Address: 3433 SIERRA RIDGE
HOOVER AL 35216
Phone#: 205 403-3317 Cell #
E-mail(s):

Invoice # 43918

Page ____ of ____

PDF: yes no

CLIENT: ROGER PITTS

PROJECT NAME/#: PITTS GRO #4

SAMPLER(S): (print) KARSTENS

DATE DELIVERED: 10/22/20

ANALYSIS REQUESTED / METHOD

LAB ID	FIELD ID	DATE Collected	TIME Collected	SAMPLE DESCRIPTION (matrix)	PAH 8270C								Number of sample containers
220167	SB5@10'	10/12/20	0935	SOIL BORING	✓								1
220168	SB5@15'	10/12/20	0950		✓								1
220169	SB6@10'	10/12/20	1040		✓								1
220170	SB6@15'	10/12/20	1058		✓								1
220171	SB7@5'	10/13/20	0930		✓								1
220172	SB7@10'	10/13/20	1015		✓								1
220173	SB8@5'	10/13/20	1130		✓								1
220174	SB8@10'	10/13/20	1150		✓								1
220175	SB9@5'	10/14/20	1030		✓								1
220176	SB9@10'	10/14/20	1050		✓								1
220177	SB10@5'	10/14/20	0920		✓								1
220178	SB10@15'	10/14/20	0935		✓								1
220179	SB11@10'	10/14/20	1420		✓								1
220180	SB11@15'	10/14/20	1435		✓								1

Preservative: (a)HCL, (b)HNO_3, (c)H_2SO_4, (d)NaOH, (e) $Na_2S_2O_3$, (f) H_3PO_4, (g)Zn Acetate **Preservative:** ON ICE
Container type: (a) Amber, (g) Glass, (p) Plastic, (v) VOC Vial, (air) air bag **Container:** 4oz GLASS

Last revised 12/13/19

	Date	Time		Date	Time
Relinquished by Sampler: Signed:			Received by: Signed:		
Relinquished by: Signed:	10/22/20	1:44	Received by: Signed:		
Relinquished by: Signed:			Received in Lab by: Signed:	10/22/20	1:44

Turn Around Time
Standard: X **RUSH:** 3-DAY 1-DAY 2-DAY SAME DAY

Remarks:

Refrigerated upon receipt: yes no

CHAIN OF CUSTODY
ANALYSIS REQUEST

Sutherland

Environmental Company, Inc.

2515 5th Avenue South

Birmingham, AL 35233

PHONE: (205)581-9500

E-mail: suthlab@bellsouth.net

Client P.O. #

SEND REPORT TO:

Name:

Company: SOUTHERN ENVIRONMENTAL, INC.

Address:

Phone#: Cell #

E-mail(s): PDF: yes no

Invoice # 43918

Page ____ of ____

CLIENT: ROGER PITTS

PROJECT NAME/#: PITTS GAS #4

SAMPLER(S): (print) KARSTEN S

DATE DELIVERED:

ANALYSIS REQUESTED / METHOD

LAB ID	FIELD ID	DATE Collected	TIME Collected	SAMPLE DESCRIPTION (matrix)	PAH 8270C								Number of sample containers
220181	SB12 @ 10'	10/14/20	1315	SOIL BORING	✓								1
220182	SB12 @ 15'	10/14/20	1340		✓								1
220183	DW1 @ 5'	10/12/20	1345		✓								1
220184	DW1 @ 15'	10/12/20	1410		✓								1

Preservative: (a)HCL, (b)HNO_3, (c)H_2SO_4, (d)NaOH, (e) $Na_2S_2O_3$, (f) H_3PO_4, (g)Zn Acetate **Preservative:**

Container type: (a) Amber, (g) Glass, (p) Plastic, (v) VOC Vial, (air) air bag **Container:**

Last revised 12/13/19

Relinquished by Sampler: Signed:	Date	Time	Received by: Signed:	Date	Time
	10/22/20	1:44			
Relinquished by: Signed:	Date	Time	Received by: Signed:	Date	Time
Relinquished by: Signed:	Date	Time	Received in Lab by: Signed:	Date	Time
				10/22/20	1:44

Turn Around Time

Standard: X **RUSH:** _____ 3-DAY 1-DAY 2-DAY SAME DAY

Remarks:

Refrigerated upon receipt: yes no

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	November 2, 2020
Attention:	Mr. Greg Hoagland	Reference #	43880
Address	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	10/15/20	Analyst:	Kevin Doriety/D. Brown
Date Collected:	10/14/20	Date of Analysis:	10/16/20-11/2/20
Sample Collector:	G. Karstens	Method:	***(Listed Below)***

PHYSICAL CHARACTERISTICS OF SOIL

Field ID	Lab ID	Gravimetric Moisture Content g-water/ g-soil (1)	Volumetric Moisture Content cc-water/ cc-soil (1a)	Dry Bulk Density pcf (2)	Dry Bulk Density g/cc (2)	Specific Gravity @ 20° C (3)	Porosity cc /cc-soil (4)	Fractional Organic Matter Content g-ash/ g-soil (5)	Fractional Organic Carbon Content g-carbon/ g-soil (6)
Shelby Tube	**219965**	**0.2330**	**0.4665**	**125**	**2.00**	**2.70**	**0.2584**	**0.0127**	**0.0074**

Test Methods/Calculations:

MC = Moisture Contect DBD = Dry Bulk Density SG = Specific Gravity

(1) ASTM D2216

(1a) Volumetric MC = Gravimetric MC x DBD (g/cc)

(2) ASTM D2937

(3) ASTM D854

(4) Porosity = 1 - [DBD (g/cc) / SG (g/cc)]

(5) ASTM D2974

(6) Fractional Organic Carbon Content = Fractional Organic Matter Content / 1.724

Method References

ASTM D04.08

ADEM, 2001, UST ARBCA Guidance Manual (pgs 5-11 - 5-13)

MH / QAQC

EPA Laboratory ID AL01084
ADEM #41470

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**		MH		KD

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter

Invoice # 43880

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/15/20 **Invoice #** 43880

Method of Delivery: Hand **Client:** Sphere3

1. Did any containers arrive broken?	YES	✓NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	YES	NO	✓NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	YES	NO	✓NA
4. Did a chain of custody accompany the samples?	✓YES	NO	
* Was it properly filled out?	✓YES	NO	
5. Were correct containers used for the analysis requested?	✓YES	NO	
6. Were all containers properly preserved?	YES	NO	✓NA
7. Were all water samples received at the proper pH?	YES	NO	✓NA
8. If VOA vials were present, was there any head space?	YES	NO	✓NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓YES	NO	
10. Did containers arrive within holding time of analysis?	✓YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓NA
12. Were any samples rejected?	YES	✓NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): [signature]

43880

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3
ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) [signature]
Sampler Signature:

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com/jon@sphere3.com/mail original
Project #: PITTS.G#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: Gravimetric Moisture Content	Volumetric Moisture Content	Dry Bulk Density (pcf)	Dry Bulk Density (g/cc)	Specific Gravity @ 20 C	Porosity	Fractional Organic Matter Content	Fractional Organic Carbon Content				RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
SHELBY TUBE 219965	10/14/20	0910	1	X										X					X		X	X	X	X	X	X	X	X					N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N NA

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10/15/20	1250			
Relinquished by:	Date	Time	Received by:	Date	Time
			[signature]	10/15/20	1250

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 20, 2020
Attention:	Mr. Greg Hoagland	Reference #	43879
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	10/15/20	Analyst:	Kevin Doriety
Date Collected:	10/15/20	Date of Analysis:	10/19/20
Sample Collector:	G. Karstens	Method:	***EPA Method 6020B***

METALLIC ANALYTES

	FIELD ID						
	SOIL COMP-1						
Analyte, mg/Kg as Total	LAB ID						Detection Limit, mg/Kg
	219964						
Lead	33						1.0

BDL = Below Detection Limit
Detection Limit is Reporting Limit
All results expressed as PPM of total analyte

/ QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/15/20 **Invoice #** 43879

Method of Delivery: Hand **Client:** Sphere3

1. Did any containers arrive broken?	YES	~~NO~~	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	YES	NO	~~NA~~
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	YES	NO	NA
4. Did a chain of custody accompany the samples?	YES	NO	
* Was it properly filled out?	YES	NO	
5. Were correct containers used for the analysis requested?	YES	NO	
6. Were all containers properly preserved?	YES	NO	~~NA~~
7. Were all water samples received at the proper pH?	YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	NO	NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	YES	NO	
10. Did containers arrive within holding time of analysis?	YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	~~NA~~
12. Were any samples rejected?	YES	NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed):

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**		MH		LD

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland/Hunter

Invoice # 43879

Notes: _____

Sutherland Environmental Co., Inc.

43879

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print)
Sampler Signature:

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: TOTAL LEAD 6010	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
SOIL COMP-1 219964	10/15/20	0900	1		X									X					X		X			N	Y	
TEMPERATURE BLANK	—	—	1											X						X		X		N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: NA
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N NA

Relinquished by:	Date	Time	Received by:	Date	Time
	10/15/20	1250			
Relinquished by:	Date	Time	Received by:	Date	Time
				10/15/20	1250

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 26, 2020
Attention:	Mr. Greg Hoagland	Reference #	43910
Address:	3433 Sierra Drive	P.O. #	PITTSG#4CH.02
	Hoover, AL 35216	Project ID:	Pitt's Grocery #4 Center Hill

Sample Matrix:	soil	Analytical	
Date Received:	10/21/20	Analyst:	M. Heard
Date Collected:	10/16/20	Date of Analysis:	10/26/20
Sample Collector:	J. Johnson/G. Hoagland	Method:	***EPA Method 418.1 Modified for soils***

TOTAL PETROLEUM HYDROCARBONS

FIELD ID	LAB ID	TPH, PPM	D.L., PPM
UST-1	**220114**	**117**	10
UST-2	**220115**	**116**	10

BDL = Below Detection Limit
D.L. = Detection Limit, Practical
All results expressed as PPM (mg/Kg)

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**	MJH		KH	

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter

Invoice # 43910

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/21/20 **Invoice #** 43910

Method of Delivery: Hand **Client:** Sphere 3

1. Did any containers arrive broken?	~~YES~~	✓NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓YES	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	✓YES	NO	NA
4. Did a chain of custody accompany the samples?	✓YES	NO	
* Was it properly filled out?	✓YES	NO	
5. Were correct containers used for the analysis requested?	✓YES	NO	
6. Were all containers properly preserved?	✓YES	NO	NA
7. Were all water samples received at the proper pH?	YES	NO	✓NA
8. If VOA vials were present, was there any head space?	YES	NO	✓NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓YES	NO	
10. Did containers arrive within holding time of analysis?	✓YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓NA
12. Were any samples rejected?	YES	✓NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): [signature]

43910

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) Greg Hoagland, Jimmy Johnson
Sampler Signature:

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTSG#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: TPH 418.1	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
UST-1 220114	10/16/2020	14:35	1		X									1					X		1			N	Y	
UST-2 220115	10/16/2020	14:50	1		X									1					X		1			N	Y	
TEMPERATURE BLANK			1											1						X		1				

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.9°
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N N/A
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	10/20/2020	18:15		10/20/20	18:15
	10/21/2020	08:3		10/21/20	0831

SPHERE 3
ENGINEERING, INC

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 11, 2020
Attention:	Mr. Greg Hoagland	Reference #	42931
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	5/5/20	Analyst:	Hageman/Heard
Date Collected:	5/4/20	Date of Analysis:	5/7/20
Sample Collector:	T. Bond	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE/NAPHTHALENE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID		
	MW-1	MW-2	MW-3	MW-4	DUP-1		
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID		Detection
Organic, mg/L	214538	214539	214540	214541	214542		Limit, ppm
Benzene	**1.630**	**0.848**	**0.232**	**0.011**	**0.884**		0.001
Toluene	**0.078**	**0.520**	**0.086**	BDL	**0.572**		0.001
Ethylbenzene	**1.260**	**2.620**	**0.155**	BDL	**2.680**		0.001
Xylenes, o,m,p	**2.980**	**7.750**	**0.325**	BDL	**8.480**		0.003
MTBE	**0.288**	***0.016***	**0.013**	BDL	***0.016***		0.001
Naphthalene					**0.848**		0.005

Result is above method detection limit and below reporting limit
BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

/ QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	May 11, 2020
Attention:	Mr. Greg Hoagland	Reference #	42931
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.01
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	5/7/20
Date Received:	5/5/20	Analyst:	Hageman/Heard
Date Collected:	5/4/20	Date of Analysis:	5/8/20
Sample Collector:	T. Bond	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID			
	MW-1	MW-2	MW-3	MW-4			
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID			Detection
Aromatics, ppm	214538	214539	214540	214541			Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL			0.001
Acenaphthylene	BDL	BDL	BDL	BDL			0.001
Anthracene	BDL	BDL	BDL	BDL			0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL			0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL			0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL			0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL			0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL			0.0001
Chrysene	BDL	BDL	BDL	BDL			0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL			0.001
Fluoranthene	BDL	BDL	BDL	BDL			0.001
Fluorene	BDL	BDL	BDL	BDL			0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL			0.001
Naphthalene	**0.167**	**0.381**	**0.015**	BDL			0.001
Phenanthrene	BDL	BDL	BDL	BDL			0.001
Pyrene	BDL	BDL	BDL	BDL			0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

_____ / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	~~YES~~	NO	YES
2. Do all dates match the COC on the report?	NO	~~YES~~	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	~~YES~~	NO	YES
4. Are all methods and method references correct on report?	NO	~~YES~~	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	~~YES~~	NO	YES
6. Is the report formatted correctly?	NO	~~YES~~	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	~~YES~~	NO	YES
Analyst	NO	~~YES~~	NO	YES
Analysis Date/Time	NO	~~YES~~	NO	YES
Analyte concentration	NO	~~YES~~	NO	YES
Units	NO	~~YES~~	NO	YES
Dilution Factors/Conversions	NO	~~YES~~	NO	YES
Detection/Reporting/Quant. Limits	NO	~~YES~~	NO	YES
QC Reviewed:		~~YES~~		YES
***Initial*:**		MJH		KD

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter

Invoice # 42931

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 5-5-20 **Invoice #** 42931

Method of Delivery: Hand **Client:** Sphere 3

1. Did any containers arrive broken?	YES	(NO)	
* If so, please state field ID with analysis of broken sample(s) _____			
2. Were cooler(s) sealed upon arrival?	(YES)	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	(YES)	NO	NA
4. Did a chain of custody accompany the samples?	(YES)	NO	
* Was it properly filled out?	(YES)	NO	
5. Were correct containers used for the analysis requested?	(YES)	NO	
6. Were all containers properly preserved?	(YES)	NO	NA
7. Were all water samples received at the proper pH?	(YES)	NO	NA
8. If VOA vials were present, was there any head space?	YES	(NO)	NA
* If so, please state field ID of deficient sample(s): _____			
9. Were all containers properly labeled and match chain of custody?	(YES)	NO	
10. Did containers arrive within holding time of analysis?	(YES)	NO	
* If not, please state field ID and analysis of sample(s) out of holding time: _____			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	(NA)
12. Were any samples rejected?	YES	(NO)	
* If so, please state field ID of rejected sample(s): _____			

Sample Custodian (signed): _____

42931

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3
ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) Tres Bond
Sampler Signature:

Page #: Page 1 of 1
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com, mail original
Project #: PITTS.G#4CH.01
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260B	PAH 8270C	BTEX/MTBE/NAPH 8260B	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
MW-1 214538	5/4/2020	16:07	4	X											X						X	X				N	Y	
MW-2 214539	5/4/2020	15:33	4	X											X						X	X				N	Y	
MW-3 214540	5/4/2020	14:22	4	X											X						X	X				N	Y	
MW-4 214541	5/4/2020	14:58	4	X											X						X	X				N	Y	
DUP-1 214542	5/4/2020		3	X											X								X			N	Y	
TEMPERATURE BLANK			1																	X				X				

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 1.0°C
Sample Containers Intact? Y
VOCs Free of Headspace? Y

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-
Project Manager or attach spec

Relinquished by:	Date	Time	Received by:	Date	Time
	5/5/2020	10:05			
Relinquished by:	Date	Time	Received by:	Date	Time
				5/5/20	1008

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 28, 2020
Attention:	Mr. Greg Hoagland	Reference #	43911
Address:	3433 Sierra Drive	P.O. #	PITTSG#4CH.02
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	10/21/20	Analyst:	Hageman/Heard
Date Collected:	10/16/20	Date of Analysis:	10/23-26/20
Sample Collector:	J. Johnson/G. Hoagland	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE/NAPHTHALENE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, mg/L	220116	220117	220118	220119	220120	220121	Limit, ppm
Benzene	**0.233**	**0.024**	**0.001**	BDL	**0.161**	**0.212**	0.001
Toluene	**0.299**	BDL	BDL	BDL	**0.079**	**0.008**	0.001
Ethylbenzene	**0.264**	**0.005**	BDL	BDL	**1.350**	**0.518**	0.001
Xylenes, o,m,p	**0.712**	**0.009**	BDL	BDL	**5.140**	**1.090**	0.003
MTBE	**0.007**	BDL	BDL	BDL	***0.004***	**0.080**	0.001

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-9	MW-10	MW-11	MW-12	MW-DW1	DUP-1	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, mg/L	220122	220123	220124	220125	220126	220127	Limit, ppm
Benzene	BDL	**0.001**	**0.012**	**0.141**	BDL	**0.244**	0.001
Toluene	BDL	BDL	**0.003**	BDL	BDL	**0.316**	0.001
Ethylbenzene	**0.002**	BDL	**0.106**	**0.096**	BDL	**0.284**	0.001
Xylenes, o,m,p	**0.006**	BDL	**0.147**	**0.028**	BDL	**0.790**	0.003
MTBE	BDL	**0.003**	**0.007**	**0.041**	**0.092**	***0.008***	0.001
Naphthalene						**0.107**	0.005

Result is above method detection limit and below reporting limit
BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

Respectfully submitted,

Kevin Doriety
Analytical Chemist

MH / QAQC

EPA Laboratory ID AL01084

Quality Environmental Analytical Services

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 28, 2020
Attention:	Mr. Greg Hoagland	Reference #	43911
Address:	3433 Sierra Dr.	P.O. #	PITTSG#4CH.02
	Hoover, AL 35216	Project ID:	Pitt's Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	10/22/20
Date Received:	10/21/20	Analyst:	Hageman/Heard
Date Collected:	10/16/20	Date of Analysis:	10/23/20
Sample Collector:	J. Johnson/G. Hoagland	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	220116	220117	220118	220119	220120	220121	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.040**	BDL	BDL	BDL	**0.226**	**0.093**	0.001
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 28, 2020
Attention:	Mr. Greg Hoagland	Reference #	43911
Address:	3433 Sierra Dr.	P.O. #	PITTSG#4CH.02
	Hoover, AL 35216	Project ID:	Pitt's Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	10/22/20
Date Received:	10/21/20	Analyst:	Hageman/Heard
Date Collected:	10/16/20	Date of Analysis:	10/23/20
Sample Collector:	J. Johnson/G. Hoagland	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID		
	MW-9	MW-10	MW-11	MW-12	MW-DW1		
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID		Detection
Aromatics, ppm	220122	220123	220124	220125	220126		Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL		0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL		0.001
Anthracene	BDL	BDL	BDL	BDL	BDL		0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL		0.001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL		0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL		0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL		0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL		0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL		0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL		0.001
Fluorene	BDL	BDL	BDL	BDL	BDL		0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL		0.001
Naphthalene	BDL	BDL	**0.031**	**0.011**	BDL		0.001
Phenanthrene	BDL	BDL	BDL	BDL	BDL		0.001
Pyrene	BDL	BDL	BDL	BDL	BDL		0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**	MJH			

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter

Invoice # 43911

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/21/20 **Invoice #** 43911

Method of Delivery: Hand **Client:** Sphere3

1. Did any containers arrive broken?	~~YES~~	✓ NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓ YES	NO	NA
3. Were the samples received at the proper teamperature (4°C +/- 2°C)?	✓ YES	NO	NA
4. Did a chain of custody accompany the samples?	✓ YES	NO	
* Was it properly filled out?	✓ YES	NO	
5. Were correct containers used for the analysis requested?	✓ YES	NO	
6. Were all containers properly preserved?	✓ YES	NO	NA
7. Were all water samples received at the proper pH?	✓ YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	✓ ~~NO~~	NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓ YES	NO	
10. Did containers arrive within holding time of analysis?	✓ YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓ NA
12. Were any samples rejected?	YES	✓ NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): [signature]

43911

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) Greg Hoagland, Jimmy Johnson
Sampler Signature:

Page #: Page 1 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTSG#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	BTEX/MTBE/ NAPHTHALENE 8260B	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
MW-3 220116	10/16/2020	10:05	4	X					3					1	X						3	1				N	Y	
MW-4 220117	10/16/2020	11:44	4	X					3					1	X						3	1				N	Y	
MW-5 220118	10/16/2020	12:08	4	X					3					1	X						3	1				N	Y	
MW-6 220119	10/16/2020	8:42	4	X					3					1	X						3	1				N	Y	
MW-7 220120	10/16/2020	10:41	4	X					3					1	X						3	1				N	Y	
MW-8 220121	10/16/2020	11:07	4	X					3					1	X						3	1				N	Y	
MW-9 220122	10/16/2020	12:53	4	X					3					1	X						3	1				N	Y	
MW-10 220123	10/16/2020	13:07	4	X					3					1	X						3	1				N	Y	
MW-11 220124	10/16/2020	14:10	4	X					3					1	X						3	1				N	Y	
MW-12 22025	10/16/2020	13:48	4	X					3					1	X						3	1				N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.9°
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N

Relinquished by:	Date	Time	Received by:	Date	Time
	10/20/2020	18:15		10/20/20	18:15
	10/21/2020	08:31		10/21/20	0831

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

43911

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) Greg Hoagland, Jimmy Johnson
Sampler Signature:

Page #: Page 2 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTSG#4CH.02
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	BTEX/MTBE/ NAPHTHALENE 8260B	TEMPERATURE						RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
MW-DW1 220126	10/16/2020	9:38	4	X					3					1	X						3	1									N	Y	
DUP-1 220127	10/16/2020		3	X					3						X								3								N	Y	
TEMPERATURE BLANK			1																	X				1									

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.9°
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	10/20/2020	18:15		10/23/20	18:15
	10/21/2020	08:31		10/21/20	0831

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	July 29, 2021
Attention:	Mr. Greg Hoagland	Reference #	45369
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.05
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	7/22/21	Analyst:	Hageman/Heard
Date Collected:	7/15/21	Date of Analysis:	7/23/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	PG4 MW1	PG4 MW2	PG4 MW3	PG4 MW4	PG4 MW5	PG4 MW6	
Volatile Organic, mg/L	LAB ID 228190	LAB ID 228191	LAB ID 228192	LAB ID 228193	LAB ID 228194	LAB ID 228195	Detection Limit, ppm
Benzene	1.600	0.774	0.158	0.016	BDL	BDL	0.001
Toluene	0.070	1.020	0.229	BDL	BDL	BDL	0.001
Ethylbenzene	1.360	2.120	0.193	BDL	BDL	BDL	0.001
Xylenes, o,m,p	2.160	8.160	0.548	BDL	BDL	BDL	0.003
MTBE	0.374	*0.008*	0.005	BDL	BDL	BDL	0.001

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	PG4 MW7	PG4 MW8	PG4 MW9	PG4 MW10	PG4 MW11	PG4 MW-12	
Volatile Organic, mg/L	LAB ID 228196	LAB ID 228197	LAB ID 228198	LAB ID 228199	LAB ID 228200	LAB ID 228201	Detection Limit, ppm
Benzene	0.153	0.768	BDL	0.058	BDL	BDL	0.001
Toluene	0.197	0.058	BDL	BDL	BDL	BDL	0.001
Ethylbenzene	3.920	1.190	BDL	0.004	0.002	BDL	0.001
Xylenes, o,m,p	13.200	2.730	BDL	0.004	BDL	BDL	0.003
MTBE	*0.002*	0.086	BDL	0.005	BDL	BDL	0.001

Result is above method detection limit and below reporting limit
BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	July 29, 2021
Attention:	Mr. Greg Hoagland	Reference #	45369
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.05
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	7/22/21	Analyst:	Hageman/Heard
Date Collected:	7/15/21	Date of Analysis:	7/23/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE/NAPHTHALENE

	FIELD ID	FIELD ID					
	MWDW1	Duplicate					
Volatile	LAB ID	LAB ID					
Organic, mg/L	228202	228203					Detection Limit, ppm
Benzene	BDL	**0.062**					0.001
Toluene	BDL	BDL					0.001
Ethylbenzene	BDL	**0.004**					0.001
Xylenes, o,m,p	BDL	**0.004**					0.003
MTBE	**0.010**	**0.005**					0.001
Naphthalene		**0.006**					0.005

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	July 29, 2021
Attention:	Mr. Greg Hoagland	Reference #	45369
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.05
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	7/26/21
Date Received:	7/22/21	Analyst:	Hageman/Heard
Date Collected:	7/21/21	Date of Analysis:	7/27/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	PG4 MW1	PG4 MW2	PG4 MW3	PG4 MW4	PG4 MW5	PG4 MW6	
Polynuclear Aromatics, ppm	LAB ID 228190	LAB ID 228191	LAB ID 228192	LAB ID 228193	LAB ID 228194	LAB ID 228195	Detection Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.329**	**0.088**	**0.046**	BDL	BDL	BDL	0.001
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	July 29, 2021
Attention:	Mr. Greg Hoagland	Reference #	45369
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.05
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	7/26/21
Date Received:	7/22/21	Analyst:	Hageman/Heard
Date Collected:	7/21/21	Date of Analysis:	7/27/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear Aromatics, ppm	FIELD ID PG4 MW7 LAB ID 228196	FIELD ID PG4 MW8 LAB ID 228197	FIELD ID PG4 MW9 LAB ID 228198	FIELD ID PG4 MW10 LAB ID 228199	FIELD ID PG4 MW11 LAB ID 228200	FIELD ID PG4 MW-12 LAB ID 228201	Detection Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.560**	**0.499**	BDL	BDL	BDL	BDL	0.001
Phenanthrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
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Client:	Sphere 3 Engineering, Inc.	Report Date:	July 29, 2021
Attention:	Mr. Greg Hoagland	Reference #	45369
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.05
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	7/26/21
Date Received:	7/22/21	Analyst:	Hageman/Heard
Date Collected:	7/21/21	Date of Analysis:	7/27/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID						
	MWDW1						
Polynuclear Aromatics, ppm	LAB ID						Detection Limit, ppm
	228202						
Acenaphthene	BDL						0.001
Acenaphthylene	BDL						0.001
Anthracene	BDL						0.001
Benzo(a)anthracene	BDL						0.001
Benzo(b)fluoranthene	BDL						0.0001
Benzo(k)fluoranthene	BDL						0.0001
Benzo(ghi)perylene	BDL						0.0005
Benzo(a)pyrene	BDL						0.0001
Chrysene	BDL						0.0005
Dibenzo(ah)anthracene	BDL						0.001
Fluoranthene	BDL						0.001
Fluorene	BDL						0.001
Indeno(1,2,3-cd)pyrene	BDL						0.001
Naphthalene	BDL						0.001
Phenanthrene	BDL						0.001
Pyrene	BDL						0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

MKJ / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Re: Confirmation for COC

From: GREG KARSTENS (gregkarstens@bellsouth.net)

To: suthlab@bellsouth.net

Date: Friday, July 23, 2021, 09:52 AM CDT

Confirmed. Wells were sampled for BTEX/MTBE on the original date, not realizing that PAHs were also required. I returned to the site on July 21 with one liter amber bottles to obtain PAH samples from those same wells. PAH was not requested on the duplicate.

> On Thursday, July 22, 2021, 09:34:18 AM PDT, Sutherland Env <suthlab@bellsouth.net> wrote:
>
> Hey Greg,
>
> Please confirm for project 'Pitts Grocery #4 Center Hill' that the BTEX was sampled on 7/15/21 and the PAH was sampled on 7/21/21.
>
> Thanks,
> Molly
>
> Sutherland Environmental Co.
>
> 2515 5th Ave. South
>
> Birmingham, AL 35233
>
> (205) 581-9500

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES
***Initial*:**	MJH			

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter, Karen

Notes: _____

Invoice # 45369

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 7/22/21 **Invoice #** 45369

Method of Delivery: hand **Client:** Sphere 3

1. Did any containers arrive broken?	YES	✓ NO	
* If so, please state field ID with analysis of broken sample(s) _____			
2. Were cooler(s) sealed upon arrival?	✓ YES	NO	NA
3. Were the samples received at the proper temperature (4°C +/- 2°C)?	✓ YES	NO	NA
4. Did a chain of custody accompany the samples?	✓ YES	NO	
* Was it properly filled out?	✓ YES	NO	
5. Were correct containers used for the analysis requested?	✓ YES	NO	
6. Were all containers properly preserved?	✓ YES	NO	NA
7. Were all water samples received at the proper pH?	✓ YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	✓ NO	NA
* If so, please state field ID of deficient sample(s): _____			
9. Were all containers properly labeled and match chain of custody?	✓ YES	NO	
10. Did containers arrive within holding time of analysis?	✓ YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time: _____			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓ NA
12. Were any samples rejected?	YES	✓ NO	
* If so, please state field ID of rejected sample(s): _____			

Sample Custodian (signed): M. Watt

SUTHERLAND ENVIRONMENTAL COMPANY, INC.

2515 5th Avenue South
Birmingham, AL 35233

Phone: 205 581 9500
Fax: 205 581 9504

45369

SPHERE 3
ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KRISTEN S
Sampler Signature:

Page #: Page 1 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.05
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
PG4 MW1 228190	7/15/21	1100	3	X											X						X	X			N	Y	
MW2 228191		1120	3	X											X						X	X			N	Y	
MW3 228192		1200	3	X											X						X	X			N	Y	
MW4 228193		1230	3	X											X						X	X			N	Y	
MW5 228194		1330	3	X											X						X	X			N	Y	
MW6 228195		1300	3	X											X						X	X			N	Y	
MW7 228196		1500	3	X											X						X	X			N	Y	
MW8 228197		1430	3	X											X						X	X			N	Y	
MW9 228198		1530	3	X											X						X	X			N	Y	
MW10 228199		1400	3	X											X						X	X			N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.5
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	7/22/2021	1040			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. Wood	7/22	1040

SUTHERLAND ENVIRONMENTAL COMPANY, INC.

2515 5th Avenue South
Birmingham, AL 35233

Phone: 205 581 9500
Fax: 205 581 9504

45369

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Roger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KARSTENS
Sampler Signature:

Page #: Page 2 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.05
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
PG4 MW11 228200	7/15/21	1660	3	X											X						X	X			N	Y	
MW12 228201	"	1710	3	X											X						X	X			N	Y	
228202 MW DW1	"	1600	3	X											X						X	X			N	Y	
TEMPERATURE BLANK		—	1																	X			X		N	Y	
228203 DUPLICATE	7/15/21	—	3 2																								

Comments/Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/22/2021	1040			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. Wann	7/22	1040

Laboratory Comments:
Temperature Upon Receipt: 2.5
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 18, 2021
Attention:	Mr. Greg Hoagland	Reference #	45764
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.06
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	10/13/21	Analyst:	Hageman/Heard
Date Collected:	10/12/21	Date of Analysis:	10/15-16/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	
Organic, mg/L	230229	230230	230231	230232	230233	230234	Detection Limit, ppm
Benzene	**1.100**	**0.652**	**0.199**	**0.012**	BDL	BDL	0.001
Toluene	**0.041**	**1.340**	**0.413**	BDL	BDL	BDL	0.001
Ethylbenzene	**1.100**	**1.940**	**0.301**	BDL	BDL	BDL	0.001
Xylenes, o,m,p	**1.520**	**6.700**	**0.920**	BDL	BDL	BDL	0.003
MTBE	**0.262**	***0.008***	**0.006**	BDL	BDL	BDL	0.001

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	
Organic, mg/L	230235	230236	230237	230238	230239	230240	Detection Limit, ppm
Benzene	**0.087**	**0.585**	BDL	**0.026**	BDL	BDL	0.001
Toluene	**0.069**	**0.089**	BDL	BDL	BDL	BDL	0.001
Ethylbenzene	**2.030**	**1.080**	BDL	BDL	BDL	BDL	0.001
Xylenes, o,m,p	**5.970**	**2.310**	BDL	**0.003**	BDL	BDL	0.003
MTBE	BDL	**0.109**	BDL	**0.003**	BDL	BDL	0.001

Result is above method detection limit and below reporting limit
BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 18, 2021
Attention:	Mr. Greg Hoagland	Reference #	45764
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.06
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	10/13/21	Analyst:	Hageman/Heard
Date Collected:	10/12/21	Date of Analysis:	10/16/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE/NAPHTHALENE

Volatile Organic, mg/L	FIELD ID MW-DW1 LAB ID 230241	FIELD ID DUP-1 LAB ID 230242	Detection Limit, ppm
Benzene	BDL	**0.525**	0.001
Toluene	BDL	**0.081**	0.001
Ethylbenzene	BDL	**0.985**	0.001
Xylenes, o,m,p	BDL	**2.100**	0.003
MTBE	**0.019**	**0.097**	0.001
Naphthalene		**0.620**	0.005

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 18, 2021
Attention:	Mr. Greg Hoagland	Reference #	45764
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.06
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	10/14/21
Date Received:	10/13/21	Analyst:	Hageman/Heard
Date Collected:	10/12/21	Date of Analysis:	10/14/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear Aromatics, ppm	FIELD ID MW-1 LAB ID 230229	FIELD ID MW-2 LAB ID 230230	FIELD ID MW-3 LAB ID 230231	FIELD ID MW-4 LAB ID 230232	FIELD ID MW-5 LAB ID 230233	FIELD ID MW-6 LAB ID 230234	Detection Limit, ppm
Acenaphthene	BDL	**0.001**	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	**0.003**	BDL	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.128**	**0.341**	**0.072**	BDL	BDL	BDL	0.001
Phenanthrene	BDL	**0.004**	BDL	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

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Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 18, 2021
Attention:	Mr. Greg Hoagland	Reference #	45764
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.06
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	10/14/21
Date Received:	10/13/21	Analyst:	Hageman/Heard
Date Collected:	10/12/21	Date of Analysis:	10/14/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear Aromatics, ppm	FIELD ID MW-7 LAB ID 230235	FIELD ID MW-8 LAB ID 230236	FIELD ID MW-9 LAB ID 230237	FIELD ID MW-10 LAB ID 230238	FIELD ID MW-11 LAB ID 230239	FIELD ID MW-12 LAB ID 230240	Detection Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	BDL	BDL	**0.002**	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.697**	**0.256**	**0.003**	BDL	**0.003**	BDL	0.001
Phenanthrene	BDL	BDL	BDL	**0.001**	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	October 18, 2021
Attention:	Mr. Greg Hoagland	Reference #	45764
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.06
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	10/14/21
Date Received:	10/13/21	Analyst:	Hageman/Heard
Date Collected:	10/12/21	Date of Analysis:	10/14/21
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID						
	MW-DW1						
Polynuclear Aromatics, ppm	LAB ID						Detection Limit, ppm
	230241						
Acenaphthene	BDL						0.001
Acenaphthylene	BDL						0.001
Anthracene	BDL						0.001
Benzo(a)anthracene	BDL						0.001
Benzo(b)fluoranthene	BDL						0.0001
Benzo(k)fluoranthene	BDL						0.0001
Benzo(ghi)perylene	BDL						0.0005
Benzo(a)pyrene	BDL						0.0001
Chrysene	BDL						0.0005
Dibenzo(ah)anthracene	BDL						0.001
Fluoranthene	BDL						0.001
Fluorene	BDL						0.001
Indeno(1,2,3-cd)pyrene	BDL						0.001
Naphthalene	BDL						0.001
Phenanthrene	BDL						0.001
Pyrene	BDL						0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

MN / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES

Initial*: MJH KH

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Greg H. / Jon H. / Karen E.

Notes: _____ **Invoice #** 45764

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 10/13/21 **Invoice #** 45764

Method of Delivery: hand **Client:** Sphere 3

1. Did any containers arrive broken?		YES	✓NO
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓YES	NO	NA
3. Were the samples received at the proper temperature (4°C +/- 2°C)?	✓YES	NO	NA
4. Did a chain of custody accompany the samples?	✓YES	NO	
* Was it properly filled out?	✓YES	NO	
5. Were correct containers used for the analysis requested?	✓YES	NO	
6. Were all containers properly preserved?	✓YES	NO	NA
7. Were all water samples received at the proper pH?	✓YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	✓NO	NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓YES	NO	
10. Did containers arrive within holding time of analysis?	✓YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓NA
12. Were any samples rejected?	YES	✓NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): M. Watts

45764

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Rodger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) [signature]
Sampler Signature:

Page #: Page 1 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.06
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
MW1 230229	10/12/21	1040	3	X											X						X	X			N	Y	
2 230230		1130	3	X											X						X	X			N	Y	
3 230231		1155	3	X											X						X	X			N	Y	
4 230232		1220	3	X											X						X	X			N	Y	
5 230233		1300	3	X											X						X	X			N	Y	
6 230234		1330	3	X											X						X	X			N	Y	
7 230235		1425	3	X											X						X	X			N	Y	
8 230236		1455	3	X											X						X	X			N	Y	
9 230237		1520	3	X											X						X	X			N	Y	
10 230238		1400	3	X											X						X	X			N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.5
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10/13/2021	1107			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. Watts	10/13	1107

45764

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Rodger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) [illegible]
Sampler Signature:

Page #: Page 2 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.06
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID		Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	NAPHTHALENE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	.PDF Results (yes or no)	Due Date of Report
MW-1	230239	10/12/21	1555	3	X											X						X		X			N	Y	
12	230240		1620	3	X											X						X		X			N	Y	
DUP-1	230241		1105	3	X											X						X		X			N	Y	
DUP-1	230242		—	2	X											X						X		X			N	Y	
TEMPERATURE BLANK		—	—	1																	X	X			X		N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.5
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10/13/202	1107			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. Watts	10/13	1107

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	January 24, 2022
Attention:	Mr. Greg Hoagland	Reference #	46270
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.07
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	1/17/22	Analyst:	Hageman/Heard
Date Collected:	1/14/22	Date of Analysis:	1/18/22
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, mg/L	232967	232968	232969	232970	232971	232972	Limit, ppm
Benzene	**1.020**	**0.750**	**0.186**	**0.008**	BDL	BDL	0.001
Toluene	**0.034**	**1.080**	**0.285**	BDL	BDL	BDL	0.001
Ethylbenzene	**1.030**	**1.930**	**0.205**	BDL	BDL	BDL	0.001
Xylenes, o,m,p	**1.800**	**6.850**	**0.644**	BDL	BDL	BDL	0.003
MTBE	**0.216**	***0.004***	***0.004***	BDL	BDL	BDL	0.001

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	
Volatile	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Organic, mg/L	232973	232974	232975	232976	232977	232978	Limit, ppm
Benzene	**0.106**	**1.100**	BDL	**0.012**	BDL	BDL	0.001
Toluene	**0.062**	**0.080**	BDL	BDL	BDL	BDL	0.001
Ethylbenzene	**2.520**	**1.390**	BDL	BDL	BDL	BDL	0.001
Xylenes, o,m,p	**7.800**	**3.140**	BDL	BDL	BDL	BDL	0.003
MTBE	BDL	**0.086**	BDL	**0.002**	BDL	BDL	0.001

Result is above method detection limit and below reporting limit
BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	January 24, 2022
Attention:	Mr. Greg Hoagland	Reference #	46270
Address:	3433 Sierra Drive	P.O. #	PITTS.G#4CH.07
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Analytical	
Date Received:	1/17/22	Analyst:	Hageman/Heard
Date Collected:	1/14/22	Date of Analysis:	1/18/22
Sample Collector:	G. Karstens	Method:	***EPA Method 8260B***

VOLATILE ORGANICS - BTEX/MTBE/NAPHTHALENE

	FIELD ID	FIELD ID					
	DW-1	DUP-1					
Volatile	LAB ID	LAB ID					Detection
Organic, mg/L	232979	232980					Limit, ppm
Benzene	BDL	**0.106**					0.001
Toluene	BDL	**0.060**					0.001
Ethylbenzene	BDL	**2.520**					0.001
Xylenes, o,m,p	BDL	**7.740**					0.003
MTBE	**0.050**	BDL					0.001
Naphthalene		**0.762**					0.005

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as ppm (mg/L) of analyte
Samples preserved with HCL and refrigerated at 4 degrees C

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	January 24, 2022
Attention:	Mr. Greg Hoagland	Reference #	46270
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.07
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	1/19/22
Date Received:	1/17/22	Analyst:	Hageman/Heard
Date Collected:	1/14/22	Date of Analysis:	1/20-21/22
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Polynuclear	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
Aromatics, ppm	232967	232968	232969	232970	232971	232972	Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	**0.003**	BDL	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**0.582**	**0.953**	**0.111**	BDL	BDL	BDL	0.001
Phenanthrene	**0.004**	**0.005**	BDL	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	January 24, 2022
Attention:	Mr. Greg Hoagland	Reference #	46270
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.07
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	1/19/22
Date Received:	1/17/22	Analyst:	Hageman/Heard
Date Collected:	1/14/22	Date of Analysis:	1/21/22
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	
Polynuclear Aromatics, ppm	LAB ID 232973	LAB ID 232974	LAB ID 232975	LAB ID 232976	LAB ID 232977	LAB ID 232978	Detection Limit, ppm
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Acenaphthylene	BDL	BDL	**0.002**	BDL	BDL	BDL	0.001
Anthracene	BDL	BDL	**0.003**	BDL	BDL	BDL	0.001
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Benzo(b)fluoranthene	BDL	BDL	**0.0002**	BDL	BDL	BDL	0.0001
Benzo(k)fluoranthene	BDL	BDL	**0.0003**	BDL	BDL	BDL	0.0001
Benzo(ghi)perylene	BDL	BDL	BDL	BDL	BDL	BDL	0.0005
Benzo(a)pyrene	BDL	BDL	**0.0007**	BDL	BDL	BDL	0.0001
Chrysene	BDL	BDL	**0.0006**	BDL	BDL	BDL	0.0005
Dibenzo(ah)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluoranthene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Fluorene	BDL	BDL	**0.003**	BDL	BDL	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	BDL	0.001
Naphthalene	**1.190**	**0.727**	**0.003**	BDL	BDL	BDL	0.001
Phenanthrene	BDL	BDL	**0.004**	BDL	BDL	BDL	0.001
Pyrene	BDL	BDL	**0.002**	BDL	BDL	BDL	0.001

BDL = Below Detection Limit, Method
Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

Sutherland

Environmental Company, Inc.

2515 5th Avenue South
Birmingham, AL 35233
205-581-9500

Client:	Sphere 3 Engineering, Inc.	Report Date:	January 24, 2022
Attention:	Mr. Greg Hoagland	Reference #	46270
Address:	3433 Sierra Dr.	P.O. #	PITTS.G#4CH.07
	Hoover, AL 35216	Project ID:	Pitts Grocery #4 Center Hill

Sample Matrix:	water	Extraction Date:	1/19/22
Date Received:	1/17/22	Analyst:	Hageman/Heard
Date Collected:	1/14/22	Date of Analysis:	1/21/22
Sample Collector:	G. Karstens	Method:	***EPA Method 8270C***

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear Aromatics, ppm	FIELD ID: DW-1 / LAB ID: 232979	Detection Limit, ppm
Acenaphthene	BDL	0.001
Acenaphthylene	BDL	0.001
Anthracene	BDL	0.001
Benzo(a)anthracene	BDL	0.001
Benzo(b)fluoranthene	BDL	0.0001
Benzo(k)fluoranthene	BDL	0.0001
Benzo(ghi)perylene	BDL	0.0005
Benzo(a)pyrene	BDL	0.0001
Chrysene	BDL	0.0005
Dibenzo(ah)anthracene	BDL	0.001
Fluoranthene	BDL	0.001
Fluorene	BDL	0.001
Indeno(1,2,3-cd)pyrene	BDL	0.001
Naphthalene	BDL	0.001
Phenanthrene	BDL	0.001
Pyrene	BDL	0.001

BDL = Below Detection Limit, Method Detection Limit is Method Detection Limit
All results expressed as PPM (mg/L)

MH / QAQC

EPA Laboratory ID AL01084

Respectfully submitted,

Kevin Doriety

Kevin Doriety
Analytical Chemist

Quality Environmental Analytical Services

Sutherland Environmental Read and Review Checklist

1. Is the client and the sample collector(s) accurately noted on report?	NO	YES	NO	YES
2. Do all dates match the COC on the report?	NO	YES	NO	YES
3. Is the purchase order ID (PO) and project ID accurately noted on report?	NO	YES	NO	YES
4. Are all methods and method references correct on report?	NO	YES	NO	YES
5. Do the Field ID(s) and the Lab ID(s) correspond to the COC?	NO	YES	NO	YES
6. Is the report formatted correctly?	NO	YES	NO	YES
7. Does the following information on report correspond to the printout information from the analytical instrumentation:				
Sample Matrix	NO	YES	NO	YES
Analyst	NO	YES	NO	YES
Analysis Date/Time	NO	YES	NO	YES
Analyte concentration	NO	YES	NO	YES
Units	NO	YES	NO	YES
Dilution Factors/Conversions	NO	YES	NO	YES
Detection/Reporting/Quant. Limits	NO	YES	NO	YES
QC Reviewed:		YES		YES

Initial*: MJH

* MJH = Michael Heard, KD = Kevin Doriety, MSH = Matt Hageman, KH = Kelly Hester

PDF: Hoagland, Hunter, Karen

Invoice # 46270

Notes: _____

Sutherland Environmental Co., Inc.

Sutherland Environmental Company Inc.

Sample Check-in Form

Date Received: 1/17/22 **Invoice #** 46270

Method of Delivery: hand **Client:** Sphere 3

1. Did any containers arrive broken?		✓ NO	
* If so, please state field ID with analysis of broken sample(s)			
2. Were cooler(s) sealed upon arrival?	✓ YES	NO	NA
3. Were the samples received at the proper temperature (4°C +/- 2°C)?	✓ YES	NO	NA
4. Did a chain of custody accompany the samples?	✓ YES	NO	
* Was it properly filled out?	✓ YES	NO	
5. Were correct containers used for the analysis requested?	✓ YES	NO	
6. Were all containers properly preserved?	✓ YES	NO	NA
7. Were all water samples received at the proper pH?	✓ YES	NO	NA
8. If VOA vials were present, was there any head space?	YES	✓ NO	NA
* If so, please state field ID of deficient sample(s):			
9. Were all containers properly labeled and match chain of custody?	✓ YES	NO	
10. Did containers arrive within holding time of analysis?	✓ YES	NO	
* If not, please state field ID and analysis of sample(s) out of holding time:			
11. Was client informed of any/all deficiencies in sample check-in?	YES	NO	✓ NA
12. Were any samples rejected?	YES	✓ NO	
* If so, please state field ID of rejected sample(s):			

Sample Custodian (signed): M. Watts

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

46270

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Rodger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) K Sutherland
Sampler Signature:

Page #: Page 1 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.07
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
MW1 232967	1/14/22	0945	3	X											X						X	X			N	Y	
MW2 232968		1015	3	X											X						X	X			N	Y	
MW3 232969		1415	3	X											X						X	X			N	Y	
MW4 232970		1345	3	X											X						X	X			N	Y	
MW5 232971		1245	3	X											X						X	X			N	Y	
MW6 232972		1315	3	X											X						X	X			N	Y	
MW7 232973		1215	3	X											X						X	X			N	Y	
MW8 232974		1145	3	X											X						X	X			N	Y	
MW9 232975		1115	3	X											X						X	X			N	Y	
MW10 232976		1445	3	X											X						X	X			N	Y	

Comments/Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 2.2
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

Relinquished by:	Date	Time	Received by:	Date	Time
	1/17/22	1335			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. W.	1/17	1335

46270

SUTHERLAND ENVIRONMENTAL COMPANY, INC.
2515 5th Avenue South
Birmingham, AL 35233
Phone: 205 581 9500
Fax: 205 581 9504

SPHERE 3 ENGINEERING, INC

Consultant Name: SPHERE 3 Engineering, Inc.
Address: 3433 Sierra Drive
City/State/Zip: Hoover, Alabama 35216
Client: Mr. Rodger Pitts
Consultant Project Mgr: Greg Hoagland
Consultant Telephone Number: (205) 403.3317 **Fax No.:** (205) 403.3318
Sampler Name: (Print) KARSTEN S
Sampler Signature:

Page #: Page 2 of 2
Invoice To: SPHERE 3 Engineering, Inc.
Report To: greg@sphere3.com; jon@sphere3.com
Project #: PITTS.G#4CH.07
UST Incident No.: UST20-02-02
Facility ID #: Pitts Grocery #4 Center Hill
Site Address: 28705 Highway 91
City, County, State: Hanceville, Cullman, AL

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	HNO_3 (Red Label)	None (Black Label)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify): WATER	Analyze For: BTEX/MTBE 8260	NAPHTHALENE 8260	PAH 8270C	TEMPERATURE	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	PDF Results (yes or no)	Due Date of Report
MW 11 232977	1/14/22	1530	3	X											X						X		X			N	Y	
MW12 232978		1600	3	X											X						X		X			N	Y	
DW 1 232979		1045	3	X											X						X		X			N	Y	
DUP-1 232980		—	2	X											X						X	X				N	Y	
TEMPERATURE BLANK	—	—	1																	X				X		N	Y	

Comments/Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
K Karsten	1/17/22	1335			
Relinquished by:	Date	Time	Received by:	Date	Time
			M. W.	1/17	1335

Laboratory Comments:
Temperature Upon Receipt: 22
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please pre-schedule w/ SUTHERLAND Project Manager or attach specifc instructions

SPHERE 3
ENGINEERING, INC

appendix d

HISTORICAL DISSOLVED COCs ANALYTICAL SUMMARY PITTS GROCERY #4 CENTER HILL (UST20-02-02)							
MONITOR WELL	**DATE**	**BENZENE (mg/L)**	**TOLUENE (mg/L)**	**ETHYL-BENZENE (mg/L)**	**TOTAL XYLENES (mg/L)**	**MTBE (mg/L)**	**NAPH-THALENE (mg/L)**
MW-1	5/4/2020	**1.630**	0.078	1.260	2.980	**0.288**	**0.167**
	10/16/2020	**Not sampled – 0.07 feet of free product**					
	7/15/2021	**1.600**	0.070	1.360	2.160	**0.374**	**0.329**
	10/12/2021	**1.100**	0.041	1.100	1.520	**0.262**	**0.128**
	1/14/2022	**1.020**	0.034	1.030	1.800	**0.216**	**0.582**
SSTLs GRP		*0.0190*	*3.810*	*2.660*	*38.100*	*0.0761*	*0.0761*
MW-2*	5/4/2020	**0.848**	0.520	2.620	7.750	0.016	**0.381**
	DUP-1	***0.884***	*0.572*	***2.680***	*8.480*	*0.016*	***0.848***
	10/16/2020	**Not sampled – 0.38 feet of free product**					
	7/15/2021	**0.774**	1.020	2.120	8.160	0.008	**0.088**
	10/12/2021	**0.652**	1.340	1.940	6.700	0.008	**0.341**
	1/14/2022	**0.750**	1.080	1.930	6.850	0.004	**0.953**
SSTLs GRP		*0.0190*	*3.810*	*2.660*	*38.100*	*0.0761*	*0.0761*
MW-3	5/4/2020	**0.232**	0.086	0.155	0.325	0.013	0.015
	10/16/2020	**0.233**	0.299	0.264	0.712	0.007	0.040
	DUP-1	***0.244***	*0.316*	*0.284*	*0.790*	*0.008*	***0.107***
	7/15/2021	**0.158**	0.229	0.193	0.548	0.005	0.046
	10/12/2021	**0.199**	0.413	0.301	0.920	0.006	0.072
	1/14/2022	**0.186**	0.285	0.205	0.644	0.004	**0.111**
SSTLs GRP		*0.0190*	*3.810*	*2.660*	*38.100*	*0.0761*	*0.0761*
MW-4	5/4/2020	0.011	<0.001	<0.001	<0.003	<0.001	<0.001
	10/16/2020	**0.024**	<0.001	0.005	0.009	<0.001	<0.001
	7/15/2021	0.016	<0.001	<0.001	<0.003	<0.001	<0.001
	10/12/2021	0.012	<0.001	<0.001	<0.003	<0.001	<0.001
	1/14/2022	0.008	<0.001	<0.001	<0.003	<0.001	<0.001
SSTLs GRP		*0.0190*	*3.800*	*2.660*	*38.000*	*0.0761*	*0.0761*
MW-5	10/16/2020	0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	7/15/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	1/14/2022	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
SSTLs GRP		*0.0187*	*3.740*	*2.620*	*37.400*	*0.0749*	*0.0749*
MW-6	10/16/2020	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	7/15/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	1/14/2022	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
SSTLs GRP		*0.0143*	*2.870*	*2.010*	*28.700*	*0.0573*	*0.0573*
MW-7	10/16/2020	**0.161**	0.079	1.350	5.140	0.004	**0.226**
	7/15/2021	**0.153**	0.197	**3.920**	13.200	0.002	**0.560**
	10/12/2021	**0.087**	0.069	2.030	5.970	<0.001	**0.697**
	1/14/2022	**0.106**	0.062	2.520	7.800	<0.001	**1.190**
	DUP-1	***0.106***	*0.060*	*2.520*	*7.740*	*<0.001*	***0.762***
SSTLs GRP		*0.0177*	*3.530*	*2.470*	*35.300*	*0.0707*	*0.0707*
MW-8	10/16/2020	**0.212**	0.008	0.518	1.090	**0.080**	**0.093**
	7/15/2021	**0.768**	0.058	1.190	2.730	**0.086**	**0.499**
	10/12/2021	**0.585**	0.089	1.080	2.310	**0.109**	**0.256**
	DUP-1	***0.525***	*0.081*	*0.985*	*2.100*	***0.097***	***0.620***
	1/14/2022	**1.100**	0.080	1.390	3.140	**0.086**	**0.727**
SSTLs GRP		*0.0190*	*3.800*	*2.660*	*38.000*	*0.0761*	*0.0761*
MW-9	10/16/2020	<0.001	<0.001	0.002	0.006	<0.001	<0.001
	7/15/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	<0.001	0.003
	1/14/2022	<0.001	<0.001	<0.001	<0.003	<0.001	0.003
SSTLs GRP		*0.0170*	*3.400*	*2.380*	*34.000*	*0.0680*	*0.0680*

HISTORICAL DISSOLVED COCs ANALYTICAL SUMMARY - Concluded PITTS GROCERY #4 CENTER HILL (UST20-02-02)							
MONITOR WELL	**DATE**	**BENZENE (mg/L)**	**TOLUENE (mg/L)**	**ETHYL-BENZENE (mg/L)**	**TOTAL XYLENES (mg/L)**	**MTBE (mg/L)**	**NAPH-THALENE (mg/L)**
MW-10	10/16/2020	0.001	<0.001	<0.001	<0.003	0.003	<0.001
	7/15/2021	**0.058**	<0.001	0.004	0.004	0.005	<0.001
	DUP-1	***0.062***	*<0.001*	*0.004*	*0.004*	*0.005*	*0.006*
	10/12/2021	**0.026**	<0.001	<0.001	0.003	0.003	<0.001
	1/14/2022	0.012	<0.001	<0.001	<0.003	0.002	<0.001
SSTLs GRP		*0.0170*	*3.400*	*2.380*	*34.000*	*0.0680*	*0.0680*
MW-11	10/16/2020	**0.012**	0.003	0.106	0.147	0.007	**0.031**
	7/15/2021	<0.001	<0.001	0.002	<0.003	<0.001	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	<0.001	0.003
	1/14/2022	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
SSTLs GRP		*0.00618*	*1.240*	*0.865*	*1.240*	*0.0247*	*0.0247*
MW-12	10/16/2020	**0.141**	<0.001	0.096	0.028	**0.041**	0.011
	7/15/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
	1/14/2022	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
SSTLs GRP		*0.00719*	*1.440*	*1.010*	*14.400*	*0.0287*	*0.0287*
MW-DW1	10/16/2020	<0.001	<0.001	<0.001	<0.003	**0.092**	<0.001
	7/15/2021	<0.001	<0.001	<0.001	<0.003	0.010	<0.001
	10/12/2021	<0.001	<0.001	<0.001	<0.003	0.019	<0.001
	1/14/2022	<0.001	<0.001	<0.001	<0.003	0.050	<0.001
SSTLs GRP		*0.0190*	*3.810*	*2.660*	*38.100*	*0.0761*	*0.0761*

Note:

mg/L – milligrams per liter
COCs – Chemicals of Concern
SSTLs GRP – Site Specific Target Levels protective of the Groundwater Resource Protection area
Concentrations highlighted in **bold** type exceed applicable SSTLs.
* - source well

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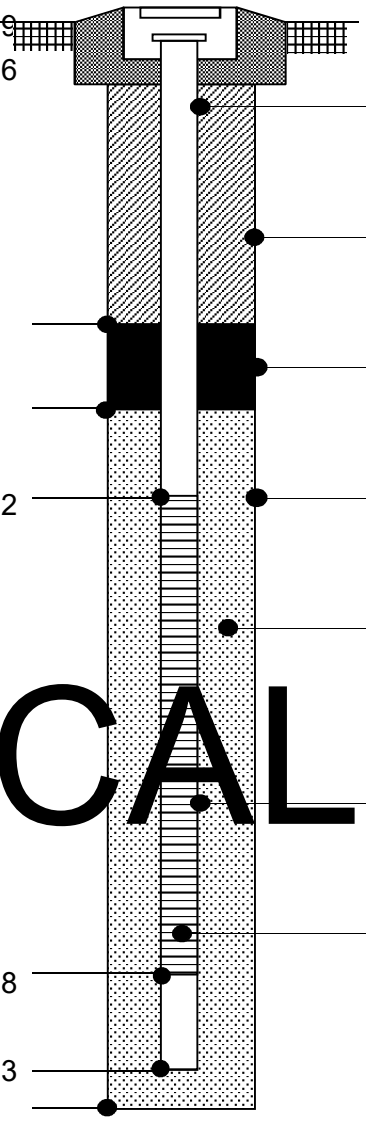
MONITOR WELL CROSS SECTION

MW-5

CLIENT:	Joe Smith Oil Company	**Project No.:**	ABC.XYZ.02
LOCATION:	Joe's UST Facility	**Top of Riser Elevation:**	1024.36 feet
	1234 Main Street	**Ground Surface Elevation:**	1024.89 feet
	Anytown, Alabama	**Screened Interval:**	1022.32-1012.58 ft.
		Date Installed:	11/25/09



ELEVATION* (feet)

GROUND SURFACE: 1024.89

TOP OF RISER PIPE: 1024.36

TOP OF SEAL: 1022.9

BOTTOM OF SEAL: 1022.6

TOP OF SCREEN: 1022.32

BOTTOM OF SCREEN: 1012.58

BOTTOM OF WELL SUMP: 1012.13

BOTTOM OF BOREHOLE: 1012.0

FLUSH MOUNTED COVER
PVC CLEAN-OUT CAP

RISER PIPE:
4" Diameter Sch. 40 PVC

GROUT:
Cement-Bentonite Mixture

WELL SEAL:
1/4" Bentonite Pellets

BOREHOLE DIAMETER:
8.25"

GRADED SAND PACK:
20/40

SCREEN PIPE:
4" Diameter Sch. 40 PVC

SCREEN SLOT SIZE:
0.01"

TYPICAL

NOT TO SCALE

REMARK: Monitor well constructed in soil boring B-5

***-Elevations are referenced to:** mean sea level of 1025.00 feet.