



December 18, 2019

Alabama Department of Environmental Management 1400 Coliseum Boulevard Montgomery, AL 36110-2059

ATTENTION: Mr. J.J. Houston Groundwater Branch/Land Division

SUBJECT: **RNA CORRECTIVE ACTION PLAN** Doc's Grocery 3737 Roy Webb Road Jacksonville, Calhoun County, Alabama Facility ID # 13652-015-012698 UST Incident # UST98-02-07

Dear Mr. Houston:

On behalf of our client, The Nolen Company, Poly, Inc./Spectrum Environmental Services, Inc. (Poly/Spectrum) respectfully submits this Corrective Action Plan under CP42.

Should you have any questions or need additional information, please contact Bob White at (888) 739-0838 or Lyn Buntin (888) 793-4700.

Sincerely, POLYENGINEERING, INC./SPECTRUM ENVIRONMENTAL SERVICES, INC.

Jamie Davies Cox, P.G. Southeast Division Manager Spectrum Environmental

R. (Bob) White, P.G.

James R. (Bob) White, P.G. Senior Professional Geologist Spectrum Environmental

CORRECTIVE ACTION PLAN

Natural Attenuation with Episodic EFR and Air Sparge

DOC'S GROCERY

3737 Roy Webb Road

Jacksonville, Calhoun County, Alabama

Facility ID No. 13652-015-012698

UST Incident No. UST98-02-07

Responsible Party: The Nolen Oil Company, Inc. 600 Hillyear High Road Anniston, Alabama 36207

UST Contractor: Poly, Inc. / Spectrum Environmental Services, Inc. (Poly/Spectrum) 1935 Headland Avenue Dothan, Alabama 36303 334-793-4700

August 2019

CERTIFICATION PAGE

I certify under penalty of law that this Corrective Action Plan and all plans, 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.

PE 23087 Signature ス Name of Alabama Registered Profe Bruce A. Bradley **Registration Number** 23087

Date 1/6/2020

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SECTION 1.0 – UST RELEASE FACT SHEET AND SITE CLASSIFICATION SYSTEM CHECKLIST

UST RELEASE FACT SHEET

GENERAL INFORMATION:

SITE NAME: ADDRESS: FACILITY I.D. NO.: UST INCIDENT NO.: Doc's Grocery 3737 Roy Webb Road, Jacksonville, Alabama 13652-015-012698 UST98-02-07

RESULTS OF EXPOSURE ASSESSMENT:

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

CONTAMINATION DESCRIPTION:

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

Free product present in wells? $\{\ \}$ Yes $\{X\}$ No Maximum thickness measured:

Maximum BETX concentrations measured in soil: 33.0 mg/kg (MW-5/SB-5) during Secondary Investigation

Maximum BTEX or PAH concentrations measured in groundwater: 23.05 mg/L (RW-3) total BTEX (3/21/2019)

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

ADEM GROUNDWATER BRANCH UST SITE CLASSIFICATION SYSTEM CHECKLIST

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

SITE NAME:	Doc's Grocery
SITE ADDRESS:	3737 Roy Webb Road,
	Jacksonville, Cherokee County, Alabama
FACILITY I.D. NO.:	13652-015-012698
UST INCIDENT NO.:	UST98-02-07
OWNER NAME:	Mr. James Nolen
OWNER ADDRESS:	The Nolen Company 2559 US Highway 78 East
	Anniston, Alabama
NAME & ADDRESS OF PERSON	Jamie D. Cox, P.G.
COMPLETING THIS FORM:	Spectrum Environmental, Inc.
	85 Spectrum Cove
	Alabaster, Alabama 35007

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

CLASSIFICATION	DESCRIPTION	YES	NO
CLASS D	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
D.1	There is a potential for explosive levels, or concentrations of vapors that could cause acute effects, to accumulate in a residence or other building.		
D.2	A non-potable water supply well is impacted or immediately threatened.		
D.3	Shallow contaminated surface soils are open to public access, and dwellings, parks, playgrounds, day care centers, schools or similar use facilities are within 500 feet of those soils.		
CLASS E	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
E.1	A sensitive habitat or sensitive resources (sport fish, economically important species, threatened and endangered species, etc.) are impacted and affected.		\boxtimes
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.		\square
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.		\boxtimes

The domestic well within 1,000 feet is no longer in use. The well has not been abandoned, but is not being utilized for domestic drinking water, water for animals, or for irrigation purposes. According to the local residents the well is approximately 70 feet deep.

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

Enter the determined classification ranking:	F.2

ADEM GROUNDWATER BRANCH SITE CLASSIFICATION CHECKLIST (5/8/95)

SECTION 2.0 - INTRODUCTION

2.1 Executive Summary

Doc's Grocery is located at 3737 Roy Webb in Jacksonville, Cherokee County, Alabama, at Latitude 33° 53' 18" North and Longitude 85° 44' 36" West. The site is located in the Northeast ¹/₄ of Section 2, Township 13 South, Range 8 East, as depicted on the Piedmont Northwest, Alabama, U.S.G.S. 7.5 minute Quadrangle, 1967, Photorevised 1983 (Figure 1).

Investigative actions, as directed by the Alabama Department of Environmental Management (ADEM) have been conducted at the site since 1995. During these investigations, Benzene, Toluene, EthylBenzene, Xylene, and Methyl tert-butyl ether (BTEX/MtBE) concentrations within the boundaries of the subject site have been reported to be in excess of established Initial Screening Levels (ISLs). Subsequent to an Alabama Risk Based Corrective Action Plan (ARBCA) Assessment of the subject site, certain COCs are in excess of calculated Tier II SSTLs.

Several technologies were evaluated as to applicability and cost effectiveness, considering site-specific conditions at the former Doc's Grocery site. All of the site data was reviewed to determine the most appropriate Corrective Action to be employed at the site. Based on our review of the site data, we are recommending Remediation through Natural Attenuation (RNA) combined with mobile enhance fluid extraction (EFR) and air sparging events. On an as-needed basis, EFRs with air sparging events may prove beneficial to expedite the attenuation of contaminants at the site.

2.2 Purpose of the Plan

The purpose of this Corrective Action Plan is to compile and evaluate site data in order to select and implement an effective corrective action methodology that will expedite site cleanup and is protective of potentially impacted receptors. receptors.

SECTION 3.0 – SUMMARY OF SITE GEOLOGY AND PREVIOUSLY CONDUCT SITE ACTIVITIES

3.1 Discussion of Site Geology

The subject site is located in Northeast Calhoun County and is situated in the Weisner Ridges District of the Alabama Valley and Ridge Physiographic section (Bossong, 1989). The general topography surrounding the site is typified by broad, relatively flat, uplands dissected by well-defined stream valleys.

The subject site is situated in an area where surface gradients are generally to the Southeast. The terrain of the site is relatively flat.

Unconsolidated sedimentary deposits of the Alabama Valley and Ridge Physiographic province underlie the subject site and general site area. Sedimentary deposits occupying the valleys consist of clays, sands, silts, and gravels originating from fluvial deposition or from the weathering of the carbonate bedrock. Northeast-southwest trending ridges that are predominantly composed of Ordovician through Mississippian age Sandstones and Shales divide these valleys.

The bedrock underlying the site is classified as belonging to the Cambrian and Ordovician Age Knox Group Dolomites (Scott, Harris, & Cobb, 1987). The Knox Group Dolomites, consist of light to dark gray, thick-bedded limestone and dolomite, cherty in part. The soils encountered during field activities reflected the underlying geology with the appearance of a grayish, sandy-clay soil with the presence of small to medium sized chert rock fragments.

3.2.2 Regional Hydrogeology

The site lies in the recharge zone of the Knox-Shady Aquifers in an area that is designated as susceptible to contamination (Planert and Pritchett, 1989). This aquifer is approximately 3,900 feet thick and is composed of siliceous dolomite in the lower part to fine- to coarse-grained limestone in the upper part. Based on a potentiometric surface map of the Knox-Shady Aquifers prepared in 1989 by C.R. Bossong, the depth to the aquifer is approximately 550-600 feet below surface elevation and the general gradient is to the southwest. There are no springs or wells in the general vicinity of the site being utilized as a public water supply.

3.2 Description of Release and Past Environmental History

Doc's Grocery currently operates as a grocery store. Previously, the subject property was utilized as a retail gasoline station. These activities ceased in September 1998, subsequent to the closure of three USTs. One 4,000-gallon gasoline UST and two 1,000-gallon USTs were permanently closed by removal on December 23, 1998.

A brief chronology of the recent environmental history at the site is described below.

During the closure of one 4,000-gallon gasoline UST at the subject site in August, 1997, free product was detected within the tank pit. Based on ADEM's review of the UST Closure Report, the ADEM submitted a REQUIREMENT TO CONDUCT INVESTIGATIVE AND CORRECTIVE ACTIONS in a letter dated March 6, 1998. The location of the closed tank was in close proximity to three additional USTs, which were yet to be closed. Based on the upcoming additional closures at the site, the ADEM agreed to postpone the required Preliminary Investigation activities pending the closure of the additional USTs.

In December 1998, the closure of these additional USTs at the site was performed. Two 1,000-gallon gasoline USTs and one 4,000-gallon UST were closed by removal. The 4,000 gallon tank was located adjacent to the pit where free product was observed in August 1997. During the 1998 UST closure, soil samples were collected from the base and the sidewalls of the tank pit from which the 4,000-gallon tank was removed. These soil samples were reported as below method detection limits (BDL). In a letter dated August 4, 1999, the ADEM granted a "No Further Action" status to the tank pits involved in the 1998 UST closure. The ADEM, however, also stated that the 1997 and 1998 closures "did not adequately satisfy the Preliminary Investigation requirements as per the Department letter dated March 6, 1998." Groundwater was not sampled during either UST Closure Events as required during a Preliminary Investigation. Therefore, the ADEM, in the letter dated August 4, 1999, notified Nolen Oil Co. of the REQUIREMENT TO CONDUCT A PRELIMINARY INVESTIGATION at the Doc's Grocery site.

On January 9, 2001 Poly/Spectrum conducted groundwater monitoring event #1, which included the sampling of all wells at the site, except monitoring well MW-4, for the presence and strength of Benzene, Toluene, Ethylbenzene, Xylene (BTEX), and MtBE. Of the nine monitoring wells sampled MW-1, MW-5 MW-9, and MW-10 had at least one chemical of concern (COC) that exceeded the initial screening levels (ISLs) for groundwater at a commercial site. Groundwater Monitoring has been conducted at the site on a tri-annual basis. During the most recent sampling event conducted on March 21, 2019, Benzene concentrations ranged from BDL to 2.80 mg/L (RW-3). Four (4) wells (MW-3, MW-9, RW-1 & RW-3) reported benzene at concentrations that exceeded the site-specific target limits (0.00837 mg/L). MW-1 and MW-4, which historically have elevated Benzene levels, were not sampled during this sampling event. One well (RW-3) exceeded the SSTL for ethylbenzene (1.172 mg/L). No other COCs exceeded the SSTLs.

On October 22, 2008, Poly/Spectrum personnel mobilized to the site to install three 4-inch, Type II groundwater recovery wells. The objective for the installation of these wells was to utilize them as recovery wells to further enhance the biodegradation and removal of petroleum hydrocarbons within the subsurface. In 2009, EFR Events were introduced at the site to remove dissolved phase petroleum hydrocarbons. The first event on 2/23/2009 removed a calculated total of 130 pounds of petroleum hydrocarbons (21 equivalent gallons of gasoline). Eight-hour EFR events have been conducted at the site twice a year since 2009. The most recent event conducted on December 5, 2018, 22.90 pounds of hydrocarbons were recovered during this event; which equates to approximately 3.72 equivalent gallons of gasoline recovered.

3.3 SUMMARY OF PREVIOUS SITE INVESTIGATION RESULTS

3.3.1 UST Closure

Based on findings during the permanent closure of one UST at the site in 1997, the Alabama Department of Environmental Management (ADEM) required that a Preliminary UST Investigation be conducted. Pursuant to a request by Nolen Oil Co., the ADEM agreed to the postponing of the Preliminary Investigation until the remaining USTs at the site could be closed. Subsequent to the closure of all remaining USTs at the site, Mr. Nolen received the Notice of Requirement letter from ADEM to conduct a Preliminary Investigation of a gasoline release. Mr. Nolen received this letter on March 6, 1998 along with the Alabama Tank Trust Fund Pre-Approved Cost proposal. Poly/Spectrum was contacted to conduct the investigation and an executed contract and Pre-Approved Cost Proposal were forwarded to the ADEM on August 23, 1999.

3.3.2 Preliminary Investigation

The objective of the Preliminary UST Preliminary Investigation was to determine whether petroleum hydrocarbon contamination had migrated outside of the immediate tank pit area and furthermore whether the migration, if it had occurred, impacted soils or groundwater. To accomplish this objective, four soil borings were drilled to varying depths below surface to observe and sample subsurface soils. Soil samples were collected on 5-foot centers and were screened in the field using a Heath Model II FID. Based on field observations and the FID readings, certain soil samples were selected to be analyzed for Benzene, Ethylbenzene, Toluene, Xylene (BETX), and MtBE in the laboratory. Field screening of soil samples ranged from 5 to 12,000 parts per million. The results of the laboratory analyses of the selected soil samples indicated that BETX/MtBE values are below the Initial Screening Levels (ISLs) taken from ARBCA Guidance Manual, April 1998.

Each soil boring was converted to a 2-inch Type II groundwater monitoring well. Groundwater samples were collected on August 25, 1999, and analyzed for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), and MtBE. The results of the BTEX analyses revealed Benzene concentrations lower than laboratory detection limits (BDL) in Monitoring Wells MW-2 and MW-3. Monitoring Wells MW-1 and

MW-4 exceeded ISLs for Benzene in groundwater. Total BETX concentrations ranged from BDL (MW-3) to 38.900 mg/L (MW-1). Analytical results for MtBE were reported to range from BDL (MW-3) to 4,990 μ g/L (MW-4).

Based on the findings of the Preliminary Investigation conducted at Doc's Grocery, the extent of the petroleum hydrocarbon contaminate plume in the groundwater has not been defined. Therefore, an additional assessment was required to further delineate the horizontal and vertical extent of the petroleum hydrocarbon impact in the vicinity of subject site and to recommend appropriate corrective action

3.3.3 Secondary Investigation

The objective of the Secondary UST Investigation was to delineate the petroleum hydrocarbon plume, which was identified during Preliminary Investigation activities. To accomplish this objective, eight soil borings were drilled to depths of 25 feet below surface to observe and sample subsurface soils. One soil boring was drilled to a depth of 38.5 feet below surface. Soil samples were collected on 5-foot centers and were screened in the field using a Heath Model II FID. Based on field observations and the FID readings, certain soil samples were selected to be analyzed for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), and MtBE in the laboratory. Field screening of soil samples ranged from 0 to 100 parts per million (SB-9B). The results of the laboratory analyses of the selected soil samples indicate that BTEX/MtBE values are all below the Initial Screening Levels (ISLs) taken from ARBCA Guidance Manual, April 1998.

Each soil boring advanced during the Secondary Investigation was converted to a 2-inch Type II groundwater-monitoring well. Groundwater samples were collected on January 13, 2000, and analyzed for Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), and MtBE. The results of the BETX analyses revealed Benzene concentrations ranging from BDL to 6,600 μ g/L (MW-10). Total BETX concentrations ranged from BDL to 19,890 mg/L (MW-10). Analytical results for MtBE were reported to range from BDL to 3,100 μ g/L (MW-10).

Based on the findings of the Secondary Investigation, Poly/Spectrum recommended that the implementation of tri-annual groundwater monitoring as well as a Tier I/Tier II evaluation to develop alternative corrective action limits for the site. Upon completion of the Tier I/Tier II evaluation, the ADEM granted approval to conduct an RNA corrective action plan.

3.3.4 Groundwater Monitoring Events

Poly/Spectrum has completed thirty-eight groundwater-monitoring events at the Doc's Grocery site. The field methods and procedures associated with the collection and analysis of the groundwater samples are

discussed below and are indicative of the methods proposed to be used in subsequent groundwater monitoring events at the subject site.

Prior to the collection of the groundwater samples, the groundwater elevation was determined using an electronic water level indicator. After the water levels were recorded, three volumes of groundwater were purged from each well and the groundwater was allowed to recharge to the pre-purging elevation. Discrete samples of purge water were collected at intervals specific to each well and analyzed using field methods for Dissolved Oxygen, Temperature, pH, Conductivity, and Oxidation-Reduction Potential.

Depths to groundwater measurements were collected from the top of casing. From this data, the potentiometric surface elevation could be calculated. Groundwater samples were collected using disposable bailers and transferred directly from the bailer to laboratory prepared containers. Filled sample containers were given a unique identification number and placed on ice in an insulated container to await shipment to the laboratory. To prevent cross-contamination, new bailer cord was used at each sampling location. Additionally, new disposable sampling gloves were worn at each sampling location and at all times while handling sampling equipment.

A total of ten groundwater samples were collected from six monitoring wells located at the Doc's Grocery site during the most recent event (3/21/2019) at the site.

The groundwater samples were analyzed for the presence of Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX) and MtBE using EPA Method 8021. From the data gathered during this event, a Benzene Isoconcentration Map is provided as Figure 3, a BTEX is provided as Figure 4, an MtBE Isoconcentration Map is provided as Figure 5 and a Naphthalene Isoconcentration map is provided as Figure 5.

Poly/Spectrum has compiled historical groundwater elevation and contaminant concentration data from the site. A brief discussion of the historical trends and most recent sampling analysis at the site is provided below:

Groundwater Elevation

Groundwater Elevation data has been collected at the site since August 25, 1999. A groundwater elevation map of the most recent sampling event is provided as Figure 2. The widely fluctuating groundwater elevation between monitoring events is most likely attributed to precipitation trends. During the most recent event, groundwater elevation data was obtained from monitoring wells MW-3, MW-5, MW-8, MW-9, MW-10, MW-12, MW-13, RW-1, RW-2 and RW-3. During the most recent event, the groundwater elevations showed a significant increase all wells averaging 8.07 feet per well.

Benzene Concentrations

Benzene data have been collected from the site since August 25, 1999. Monitoring Wells MW-2, MW-5 MW-8, MW-12, MW-13 and RW-2 have consistently been BDL for the last several groundwater sampling events. During the most recent event, Benzene concentrations ranged from BDL to 2.80 mg/L (RW-3). Four (4) wells (MW-3, MW-9, RW-1 & RW-3) reported benzene at concentrations that exceeded the SSTL (0.00837 mg/L). MW-1 and MW-4, which historically have elevated Benzene levels, were not sampled during this sampling event. Historically, monitoring wells have shown fluctuating benzene concentration trends. During this event, benzene concentrations decreased in RW-1 and MW-10; but increased in MW-3, MW-9 and RW-3.

Toluene Concentrations

Toluene concentrations have been collected from the site since August 25, 1999. Monitoring Wells MW-2, MW-5, MW-8, MW-12, MW-13 and RW-2 have consistently been BDL for the last several groundwater sampling events. During the most recent sampling event, toluene concentrations ranged from BDL to 9.21 mg/L (RW-3). Two wells (RW-1 and RW-3) exceeded the SSTL for toluene (1.67 mg/L).

Ethylbenzene Concentrations

Ethylbenzene concentrations have been collected from the site since August 25, 1999. Monitoring Wells Monitoring Wells MW-2, MW-5, MW-8, MW-12, MW-13 and RW-2 have consistently been BDL for the last several groundwater sampling events. Ethylbenzene concentrations during the most recent sampling event ranged from BDL to 2.12 mg/L (RW-3). One well (RW-3) exceeded the SSTL for ethylbenzene (1.172 mg/L).

Xylene Concentrations

Xylene concentrations have been collected from the site since August 25, 1999. During the most recent sampling event, xylene concentrations ranged from BDL to 8.92 mg/L (RW-3). No wells contained xylene at concentrations that exceeded the SSTL (16.744 mg/L). Historically, all monitoring wells have not exceeded the SSTLs allowable groundwater concentrations at source protective of the point of exposure. During the most recent sampling event, xylene concentrations ranged from BDL to 8.92 mg/L (RW-3). No wells contained xylene at concentrations that exceeded the SSTL (16.744 mg/L).

MtBE Concentrations

MtBE data has been collected at the site since August 25, 1999. During the most recent sampling event, MTBE concentrations ranged from BDL to 0.00958 mg/L (MW-9). No wells contained MTBE concentrations that exceeded the SSTL (0.033 mg/L).

Naphthalene Concentrations

Naphthalene data has been collected at the site since November 5, 2014. During this sampling event Naphthalene concentrations ranged from BDL to 0.444 mg/L (RW-1). Two wells (MW-3 and RW-1) contained Naphthalene at concentrations that exceeded the SSTL (0.033 mg/L).

Intrinsic Well Data

Intrinsic well data, which includes Nitrate, Ferrous Iron, and Sulfate was only collected at the site from 1/23/2007 to 6/28/2008 (five sampling events). During that time, Nitrate concentrations ranged from BDL to 5.82 mg/L (MW-10), Ferrous iron concentrations ranged from BDL to 72 mg/L (MW-4), and Sulfate concentrations ranged from BDL to 35.8 mg/L (MW-3).

3.4 Summary of ARBCA Report

3.4.1 TIER I ASSESSMENT

The Tier I ARBCA Assessment, led to the following conclusions:

- The site has been adequately investigated and characterized.
- There is no free product at the site nor have any utilities been threatened.
- The groundwater plume is stable or shrinking.
- On site groundwater concentrations are not protective of current and reasonable future on-site receptors.
- On site soil concentrations are protective of current and reasonable future on site receptors.
- Off-site soil and groundwater concentrations are protective of current and reasonable future offsite receptors.

3.4.2 TIER II ASSESSMENT

The Tier II ARBCA Assessment, led to the following conclusions:

• On site Benzene, Ethylbenzene, and MtBE groundwater concentrations exceeded the allowable groundwater concentrations at source, protective of point of exposure.

The results from the Tier I and Tier II Risk-Based Corrective Action Assessment for the site are important and were used to design the Corrective Action Plan and to establish remedial goals protective of human health and the environment. A summary of the Tier II SSTLs protective of human health and the environment for all receptors, chemicals of concern, and routes of exposure are provided in the attached Tables (page 3).

3.4.3 SUMMARY OF WELLS EXCEEDING SSTL'S

During the most recent sampling event conducted on March 21, 2019 groundwater concentrations for Benzene in Monitoring well MW-3, MW-9, RW-1 and RW-3 exceeded the SSTLs developed for the site. MW-1 and MW-4, which historically have elevated Benzene levels, were not sampled during this sampling event. Also, groundwater concentrations of Toluene, Ethylbenzene, and Naphthalene in monitoring well RW-1 exceeded the SSTL. Lastly, RW-3 exceeded the SSTL developed for Toluene.

Section 4.0 - Rational for Selection of Remediation by Natural Attenuation

4.1 Site Characterization

Poly/Spectrum conducted Preliminary and Secondary Investigations and groundwater monitoring at the site. Based on the evaluation of data collected from the site, the horizontal and vertical extent of soil and groundwater impact has been delineated. Since the previous Enhanced Fluid Recovery (EFR) Events have recovered a great deal of hydrocarbon it is recommended that EFRs continue at the site. Episodic Air sparging in conjunction with the EFR events is a viable method for corrective action at the Doc's Grocery site to expedite the cleanup time. Additionally, we would like to increase the frequency of EFR/Air Sparge Event and groundwater monitoring to quarterly.

4.2 Site Remedial Goals

As stated previously, Tier II SSTLs are provided in the attached Tables (page 3).

4.3 Evaluation of Plume Status

As of the latest groundwater sampling event, the plume appears to be relatively unchanged from the last four sampling events. The plume appears to be relatively stable at the present time.

4.5 Comparison of Site Remedial Goals to Estimated RNA Performance

Evaluating the stage(s) that Natural Attenuation is occurring at the site can be extremely useful in evaluating the remedial approach. However, the natural attenuation data collected at this site during groundwater monitoring events proved that Natural Attenuation alone was not a time effective method of remediating groundwater at this site. EFR events were scheduled in advance of sampling in order to monitoring the effectiveness of the events. Although EFR events have recovered additional contaminant mass, reduction of contaminants is not occurring at the rate desired.

4.6 No Active Restoration (Natural Attenuation)

4.6.1 Natural Attenuation

Attenuation refers to the reduction/weakening in force, strength, value, or amount; to lessen density of; to dilute or rarefy; or to make less virulent. Attenuation is also a descriptive term of general processes and observed effects. There are two main mechanisms by which natural attenuation occurs: non-destructive and destructive mechanisms.

Non-destructive mechanisms result in the reduction of groundwater contaminants with no loss of mass from the system. Examples of non-destructive natural attenuation are dispersion/dilution, sorption

(contaminant mass transferred to aquifer solids), and volatilization (contaminant mass transferred to air phase).

Destructive mechanisms result in the reduction of groundwater contaminants that result in a mass loss of contaminants from the system. Examples of destructive natural attenuation are biodegradation (aerobic, anaerobic, and cometabolism), abiotic oxidation/reduction reactions, and hydrolysis.

Biodegradation involves biologically mediated oxidation/reduction reactions, which is fundamentally an electron transfer process. Electrons are transferred from more reduced compounds to more oxidized compounds (e.g. Fe^{3+} to Fe^{2+}). The energy released during this process is used by microbes to sustain metabolism and growth. Electron donors are what the microbes eat and electron acceptors are what the microbes' breath. Examples of electron donors are naturally occurring carbon or groundwater contaminated with hydrocarbons. Examples of naturally occurring electron acceptors would be O_2 , NO_3 , Mn^{4+} , Fe^{3+} , SO_4 , and CO_2 .

Natural attenuation is occurring at all groundwater contaminated sites to some extent. The question is not whether natural attenuation is occurring, but whether natural attenuation is occurring to the degree needed to meet remedial goals in a workable timeframe. Natural attenuation can result in complete mineralization of contaminants to innocuous products, not just transfer compounds to another phase or location. This remedial option allows continuing use of site infrastructure, which may be more cost effective than engineered remediation systems.

Although there are many positive factors of natural attenuation, the following are some drawbacks:

- Highly subject to natural and anthropogenic changes in local hydrogeologic and hydrogeochemical conditions (groundwater gradients/velocity, changes in electron donor/acceptor concentrations),
- Degradation can result in toxic byproducts,
- Aquifer heterogeneity may complicate site characterization,
- Time frame for completion may be prohibitively long,
- Should not be considered a presumptive remedy,
- May not be appropriate for all compounds of concern at a site, and
- Cannot be *assumed* to be a viable option for a site as a sole source remedial methodology.

Depending on the contaminant of concern, Natural Attenuation will progress as follows:

$\label{eq:action} Aerobic \ degradation {\rightarrow} Nitrate-Reducing {\rightarrow} Manganogenic {\rightarrow} Ferrogenic {\rightarrow} Sulfate-Reducing {\rightarrow} Methanogenesis$

In order to demonstrate the effectiveness of Natural Attenuation as a remedial alternative, one must do the following:

• Compile and review available site data,

- Characterize the site,
- Refine the site conceptual model,
- Evaluate Natural Attenuation,
- Prepare long-term monitoring plan,
- Present results to regulatory authority, and
- Monitor and evaluate effectiveness.

4.6.2 Applicability to the Doc's Grocery Site

Since 1999, Poly/Spectrum has characterized the site to the extent possible and assimilated all data. Based on the limited natural attenuation data already collected, it appears that natural attenuation is not occurring to the degree needed to meet remedial goals in a workable timeframe at the site, but should be used as a viable remedial approach with augmentation. In addition to the RNA approach, Poly/Spectrum is recommending that EFR events be combined with air sparging techniques. Monitoring Wells RW-1 and RW-3 would be utilized as extraction points and four air sparge points would be installed within the radius of influence of RW-1 and RW-3.

The air sparge wells will be completed with a minimum of 5 feet of 0.010" slotted PVC screen and sealed with a threaded bottom cap. The air sparge wells will extend to a depth at least five feet below the lowest recovery well. The top of the screen will be set below the estimated low water elevation in the vicinity of the proposed well. PVC riser will be extended above the screen to the ground surface. All connections between well materials will be screw threaded. The annular space between the borehole wall and well screen will be backfilled with 20-40 grade silica sand as a filter pack and will be extended to at least one foot above the top of the PVC screen elevation and below the estimated low water elevation. A hydrated bentonite plug will be extended from the top of the filter pack a thickness of at least 2 feet. The remaining annular space will be backfilled with a 5-10% bentonite grout slurry using tremie methods. A well schematic is provided as Attachment 3, and a proposed air sparge well location map is provided as Figure 6 (Attachment 1).

Poly/Spectrum is proposing 24-hour EFRs with air sparging events to be conducted at quarterly intervals. An RNA groundwater monitoring event will be conducted within 14 days after each EFR with air sparge event.

4.6.3 EFR Events

In addition to the RNA approach, Poly/Spectrum is recommending that EFR with air sparging events be conducted at the site. Poly/Spectrum is proposing 24-hour EFR with air sparging augmentation events be conducted meet SSTLs developed for the site in a workable timeframe. The groundwater monitoring wells proposed for these EFR events are wells RW-1 and RW-3 is to be used as extraction wells. These wells

have demonstrated the highest contaminant concentrations during the most recent sampling events conducted at the site. Other wells, as site conditions dictate, will be used to monitor drawdown during the EFR events. The purpose of the EFR events will be to aggressively reduce source contaminants. Essentially, the EFR events are proposed to effectuate (1) the removal of free product and petroleum contaminated groundwater; (2) "strip" hydrocarbons from the surface of the soil in the source area; and (3) introduce oxygen into the subsurface of the source area to enhance the biological reduction of contaminants. Three 24-hour events, if deemed necessary, are proposed to be conducted during the initial year of quarterly RNA sampling to aggressively attack the source zone. After the initial source reduction, RNA is being proposed to monitor site contaminant trends until the SSTL's are attained.

SECTION 5.0 – GROUNDWATER MONITORING PROGRAM

5.1 Selected Wells to be Monitored

Based on historical data collected at the Doc's Grocery site, Poly/Spectrum proposes to collect groundwater samples during the proposed RNA groundwater monitoring events from the following groundwater monitoring wells:

MW-1, MW-2, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-12, MW-13, RW-1, RW-2 and RW-3

MW-1, MW-3, MW-4, MW-9, RW-1 and RW-3 are located within the contaminant plume, with all remaining wells being located outside of the plume or at the edge of the plume during the last sampling event conducted at the site and have historically been BDL or recorded small concentrations of contaminants, but are selected as RNA Monitoring Wells due to their upgradient, crossgradient or downgradient positions relative to the source area.

5.2 Frequency of Monitoring

Upon approval from the ADEM to implement the proposed Remediation by Natural Attenuation Corrective Action Plan, the groundwater shall be monitored at the site as follows:

- Four times per year for the first year with EFR/Air Sparge Event; and
- Four times per year, or less frequent based on site trends, for years 2+ with the option of conducting three 24-hour EFR events if deemed necessary.

5.3 Duration of Monitoring

Based on historic declines in contaminant levels at the site and the fact that multiple EFR with air sparging events are proposed to enhance the remedial process, it is estimated that it will take between one and three years to reach the SSTL's calculated for the site.

5.4 Proposed Monitoring Parameters and Methods

Each well will be sampled and analyzed for the presence of Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX) and MTBE using EPA Method 8021.

5.5 Field Methods and Procedures for Sampling

Prior to the collection of the groundwater samples, the groundwater elevation will be determined using an electronic water level indicator. After the water levels are recorded, groundwater will be purged from each well and the groundwater will be allowed to recharge to the pre-purging elevation.

Depths to groundwater measurements will be collected from the top of casing. From this data, the potentiometric surface elevation will be calculated and graphically depicted on the potentiometric surface map to be included as an attachment to the Natural Attenuation Monitoring Report.

Discrete samples of purge water will be collected at intervals specific to each well and analyzed using field methods for Temperature, pH, Conductivity, Dissolved Oxygen, and Oxidation-Reduction Potential (ORP). Purging will continue until three well volumes and the parameters of temperature (to within 0.5 °C), pH (to within 0.1 s.u. units) and conductivity (to within 10%) have stabilized. Samples for dissolved oxygen will be analyzed in the field using an YSI dissolved oxygen Meter and flow through cell, and measured in parts per million. The calculation for determining the appropriate volume of purge water to be removed from each monitoring well is:

$V = 0.041 d^2 h$

V = Volume of water in gallons
h = depth of water in feet
d = diameter of well in inches

Samples for Oxidation Reduction Potential will be analyzed in the field using a portable field meter and measured in mV.

Groundwater samples will be collected using disposable bailers and transferred directly from the bailer to the laboratory prepared containers. Filled sample containers will be given a unique identification number and placed on ice in an insulated container to await shipment to the laboratory. To prevent crosscontamination, new bailer cord will be used at each sampling location. Additionally, new disposable sampling gloves will be worn at each sampling location and at all times while handling sampling equipment.

Groundwater purged from the wells during sampling will be temporarily stored on site in 55 gallon drums labeled as non-hazardous petroleum contact water. The purge water will be removed and disposed by the EFR contractors during the next event following sampling. If the next EFR event will be more than 90 days, the water will be treated using Granular Activated Carbon (GAC), then discharged onsite.

Section 6.0 – Reporting

Subsequent to each quarterly groundwater-monitoring event, Poly/Spectrum will complete the ADEM's "Natural Attenuation Monitoring Report (NAMR)" forms for review by the ADEM. The NAMR for Doc's Grocery will contain the following information:

Section 1 - Site Summary
Section 2 - Site Maps
Section 3 - Well Inventory Table
Section 4 - History of Sampling
Section 5 - Sampling Methodology
Section 6 - Historical Monitoring Well Chemicals of concern Data
Section 7 - Historical Monitoring Well Intrinsic Groundwater Data
Section 8 - Groundwater Elevation Data
Section 9 - Monitoring Costs v. Time

Each NAMR submittal will be provided on the most recent forms posted on the ADEM website. As the form is changed or updated by the ADEM, the new forms will be utilized.

Natural attenuation parameters will be plotted and graphed to determine trends in the data. If natural attenuation parameters do not indicate that attenuation by natural conditions is progressing at a reasonable rate, alternate corrective actions will be reviewed. EFR events are proposed as part of the CAP, if deemed necessary of the initial year of quarterly monitoring for the site and are anticipated to reduce contaminant concentrations initially. If trends do not continue, indicating natural attenuation is effective, procedures that are more aggressive will be considered.

SECTION 7.0 – SCHEDULE OF IMPLEMENTATION

Upon approval by ADEM of the plan herein submitted, the following estimated plan on implementation is anticipated:

90 Days from approval	Initial EFR + Air Sparge event
110 Days from approval	Initial RNA Groundwater sampling event
150 Days from approval	Initial NAMR Report Submittal
180 Days from approval	Second EFR + Air Sparge event
200 Days from approval	Second RNA Groundwater sampling event
240 Days from approval	Second NAMR Report submittal
270 Days from approval	Third EFR + Air Sparge event
290 Days from approval	Third RNA Groundwater sampling event
330 Days from approval	Third NAMR Report submittal
360 Days from approval	Fourth EFR + Air Sparge event
380 Days from approval	Fourth RNA Groundwater sampling event
420 Days from approval	Forth submittal NAMR Report

Generally, the above schedule for groundwater sampling and reporting will be repeated in subsequent years until the SSTL's are achieved. Additional EFR events are not presently anticipated but may be considered in the future based on the response to the first years events and the contaminant decline curve.

SECTION 8.0 - QUALITY ASSURANCE / QUALITY CONTROL PLAN

8.1 QA/QC Requirements

Quality Assurance/Quality Control procedures and EPA required decontamination procedures will be utilized to ensure sample quality. It is the responsibility of the field sampling staff to assure that the samples collected arrives at the laboratory in the appropriate container, with the appropriate preservative, and within the holding times for each analysis.

8.2 Sample Containers & Preservation

All samples should be placed in the appropriate containers and preserved as recommended in Table 1 of Appendix G of the Alabama Investigation and Remediation Guidance document, latest revision (September 2005). All sample containers should be new, pre-cleaned or properly decontaminated with the appropriate certification.

8.3 Sample Handling

The effectiveness of sample handling techniques will be measured by collecting duplicates and trip blank samples. A description of these Quality Control techniques is described below:

8.3.4 Duplicate Sample

The purpose of a duplicate sample is to estimate the variability of a given characteristic or contaminant associated with a population. Poly/Spectrum are proposing to collect one blind duplicate sample for every 10 samples collected during any given sampling event.

8.3.5 Trip Blanks

A sample that is prepared prior to the sampling event in the actual container and is stored with the investigative samples throughout the sampling event. They are then packaged for shipment with the other samples and submitted for analysis. At no time after their preparation are trip blanks to be opened before the reach the laboratory. Trip blanks are used to determine if samples were contaminated during storage and/or transport back to the laboratory (a measure of sample handling variability resulting in positive bias in contaminant concentration). If samples are to be shipped, trip blanks are to be provided with each shipment but not for each cooler.

8.4 Sample Identification

8.4.1 Labeling

Samples collected for specific field analysis or measurement data should be recorded directly in bound field logbooks, sample collection forms, or recorded directly on the Chain-of-Custody Record. Samples collected for laboratory analyses should include sample labels or sample tags. The following information should be written on the sample labels or tags using waterproof, non-erasable ink:

- (a) Project number;
- (b) Field identification or sample station number;
- (c) Date and time of sample collection;
- (d) Designation of the sample as a grab or composite;
- (e) Type of sample (water, wastewater, leachate, soil, sediment, etc.);
- (f) The preservative used (if any); and
- (g) The general types of analyses to be performed.
- 8.4.2 Information to be retained in a bound logbook or sample collection form should include:
 - (a) Project number;
 - (b) Field identification or sample station number;
 - (c) Date and time of sample collection;
 - (d) Designation of the sample as a grab or composite;
 - (e) The signature of either the sampler(s) or the designated sampling team leader and the field sample custodian;
 - (f) Whether the sample was preserved or unpreserved, and if preserved, identify the preservative used;
 - (g) The general types of analyses to be performed;
 - (h) All field measurements collected during the purging of monitoring wells (pH, Specific Conductivity, Temperature, and Turbidity);
 - (i) Water levels and total well depths measured during the sampling event; and,
 - (j) Any relevant comments (such as readily detectable or identifiable odor, color, or known toxic properties).

8.5 CHAIN-OF-CUSTODY

The original or copies of the chain-of-custody forms should be submitted with all the original laboratory reports to the Department. If copies are submitted, the copies should represent the same data and

information, which are present on the original chain-of-custody forms. All information on the chain-ofcustody forms should be recorded in a legible manner. Chain-of-custody forms should originate in the field immediately upon sampling soils or groundwater. The chain-of-custody forms should stay with the samples at all times until properly relinquished to the laboratory for analysis. Information which should be present on all chain-of-custody forms include the following:

- 1. Site name and address.
- 2. Date and time of sampling of each sample.
- 3. Sample identification numbers.
- 4. Name of sampler(s).
- 5. Analytical laboratory to be utilized.
- 6. Analytical methods to be used.
- 7. Type of sample (*i.e.*, composite, grab, etc.).
- 8. Matrix sampled (soil, water sludge, etc.).
- 9. Number and type of sample container.
- 10. Remarks regarding sampling, if applicable.
- 11. Preservatives used for each sample (also indicate if placed on ice).
- 12. Personnel relinquishing samples; times and dates.
- 13. Personnel receiving samples; times and dates.

FIGURES

TABLES

HEALTH & SAFETY PLAN

UST Corrective Action Site Health & Safety Plan

A. Project Identification and Schedule

Client: James Nolen / ADEM Telephone No.:

Planned Start Date: <u>9/2019</u> Expected Completion Date: <u>9/2022</u>

Site Name: Doc's Grocery

Site Address: 3737 Roy Webb Road, Jacksonville, Calhoun County, Alabama

B. Planned Activity

New Tank Installation	Tank/Piping Upgrade
Tank Removal and Soil Sampling	Tank Abandonment and Soil Sampling
Carbon Treatment	DPVE
Thermal Oxidation	X_Other (describe) RNA / MEME

C. Emergency Telephone Numbers and Addresses

Make sure:

_____ You know where the nearest telephone is located

_____ You have change if it's a pay phone, or

_____ The battery is charged or you have an adapter if it's a cellular phone

Attach a map to plan showing route to nearest hospital or emergency facility.

Fire/Explosion	Telephone: <u>911</u>
Leak/Release	Telephones: <u>ADEM 334-271-7700</u>
	CHEMTREC 800-424-9300

Medical

Jacksonville Medical Center 1519 Pelham Road South Jacksonville, Alabama (256) 435-4970

Utilities

Note: Alabama One Call 1-800-292-8525 "Call Before You Dig" will be notified prior to any underground investigations and are responsible for locating the utilities listed below:

Electric	Telephone:
Gas	Telephone:
Water	Telephone:
Sewer	Telephone:
Telephone	Telephone:
TV Cable	Telephone:

D. Job Functions

Project Manager:	Oversees planning, scheduling and excavation of project; meets with the owner; serves as the contact person for all public media.	
Project Supervisor:	: Oversees the whole project on-site; is responsible for quality assurance/quality control; may perform sampling and monitoring.	
Safety Officer:	Implements site safety plan; authorized to make changes, if necessary; trains on-site personnel in safety procedures.	
Science Advisor:	Directs and coordinates scientific studies, sample collection, field monitoring, analysis of samples and interpretation of results; recommends remedial action plans and corrective actions; provides technical guidance to project manager.	

Extraction Truck	Responsible for hook-up of equipment, operation of equipment, and transporting fluids off site for disposal. Operator must review, sign and comply with this plan.
Technician:	Responsible for O & M of site equipment; collecting samples; site housekeeping.

E. Site Description

Provide directions that are sufficiently detailed so a person unfamiliar with the site can get here by following these directions.

Go east on Interstate 20 towards Atlanta. Take the AL-21 exit 185 towards Oxford/Anniston. Turn left onto Quintard Drive/AL-21 North/Jacksonville State University Highway and continue to follow for 18 miles. Turn Left onto CR-19/Roy Webb Road and site is 3.8 miles on CR-19/Roy Webb Road on the left.

F. Release History

No evidence of a tank leak or soil contamination

<u>X</u> Suspected or known leak or soil contamination.

<u>X</u> Suspected or known ground-water contamination.

G. Weather Conditions

Note and record in a daily field log the general weather conditions at the site, including the wind direction and the wind speed.

H. Security On-Site

Identify the edge of the work area with, for example, a 4-ft. safety barricade, emergency tape or safety cones, post signs stating "No Smoking" and "Do Not Enter" around the perimeter. Only personnel activity involved in the project should be allowed inside the work area.

Chemical Hazards

	List all chemicals present on the site. Attach Material Safety Data Sheets (MSDS).				
	1BTEX, MtBE				
	2HCl (preservative in VOA vials) and ferrous iron bottles				
	3.				
	4				
I.	. Potential Health and Safety Hazards				
	<u>X</u> Fire/explosion	<u>X</u> Noise			
	Excavation cave-ins	\underline{X} Underground utilities			
	Trips and falls	Oxygen deficiency			
	Confined space entry	\underline{X} Heat/cold			
	Falling objects from backhoe	<u>X</u> Biological hazards (poisonous plants, snakes, rodents)			
-	Backhoe falling into excavation	onX Eye hazards (sample splashing; high pressure lines)			
J. Personal Protective Equipment (PPE)					
	X Hard hat	Cotton clothing to minimize static electricity			
	<u>X</u> Safety glasses	<u>X</u> Liquid-proof gloves for sampling or cleaning equipment			
	Chemical resistant safety boots	Flashlight (explosion proof)			
	<u>X</u> Hearing protection	Face shields			
	Respirators within 25 feet	<u>X</u> Latex gloves			
	of all on-site personnel when work is in progress.				
K. Decontamination Procedures

Gloves shall be disposed of after each use. If other equipment becomes contaminated, notify Safety Officer, who will determine whether to clean or dispose.

L. Standing Orders

No smoking, no eating, no drinking in the work area. No matches, lighters or other open fires allowed in the work area.

M.Air Monitoring Equipment

None required during this phase of work.

N. Emergency Equipment

_____ First aid/splint kit _____ Absorbents with a salvage drum

<u>X</u> Fire extinguishers (2) Stretcher

_____ At least one person trained in First Aid and CPR should be on-site at all times.

Note: Do not give oxygen to any person who has been overcome by explosive vapors.

O. Affirmations

The Safety Officer will review the contents of this plan with all on-site personnel before the start of work on the first day of the project. Each on-site person will be afforded the opportunity to have all his or her questions answered by the Safety Officer. Each on-site person must read this plan, sign below and enter the date before he or she will be allowed inside the work area.

CAP – NATURAL ATTENUATION WITH EPISODE EFR & AIR SPAGE DOC'S GROCERY – JACKSONVILLE, ALABAMA

6		
7		
8		
9.		
10.		
	-	

This Safety Plan has been reviewed, approved and explained to all on-site personnel.

Sign

Date

ATTACHMENT 1

FIGURES



Figure 1 - Site Location Map



Jacksonville, Alabama Doc's Grocery CP41 Project Number: 1081-012-41 Project Manager: Jamie Cox Date: 3-21-2019





Date: 3-21-19









ATTACHMENT 2

TABLES

Facility Name:Doc's GroceryFacility I. D. No.:13652-015-012698Incident No.:UST98-02-07Consulting Firm:Poly/Spectrum

Year:2018/2019Sample Frequency:TriannualReporting period:3 of 3Project Manager:Jamie Cox

	Section 1 - Site Summary
Purpose of Monitoring:	Site Status:
No Plume Characterization	YES Assessment Complete
Yes Confirmation Monitoring	YES ARBCA Evaluation Conducted
Yes Remediation by Natural Attenuation (Approved Corrective Action Plan)	NO Active UST's
Number of Groundwater Monitoring Wells	YES Free Product ever present
Number of Groundwater Monitoring Wens	Number of Water Supply Wells:
0 Piezometers	
13 Type II	0 Public (within 1 mile radius of site) 1 Private (within 1000 foot radius of site)
0 Type III	
0 Other	0 Other (Explain)
Status of Waste Water Disposal:	126 Quantity (gallons) GAC Disposal Method Stored On-site Disposal Documents
Comments:	
As part of the approved corrective action plan.	Poly/Spectrum conducted a groundwater
monitoring event and a MEME event for the y	ear 2019 at the above referenced site.
This report covers the results of sampling of th	ne approved wells.

ARBCA EVALUATION INCLUDING THE SSTL'S DEVELOPED FOR THE SITE AND THE LOCATION OF THE POINT OF COMPLIANCE.

ARBCA Tier II Evaluation Summary

- **1)** Benzene concentrations in monitoring wells MW-3, MW-9, RW-1 and RW-3 exceeded the SSTLs developed for the site.
- **2)** Toluene concentration in monitoring well RW-1 and RW-3 exceeded the SSTLs developed for the site.
- Naphthalene concentrations in monitoring well RW-1 exceeded the exceeded the SSTLs developed for this site.
- **4)** Ethylbenzene concentrations in monitoring well RW-1 exceeded the exceeded the SSTLs developed for this site.

Media/Area	Applicable Tier II Media-Pathway Comparison	Benzene	Toluene	hylbenze	Xylenes	MtBE
	Indoor Inhalation of Vapor From Subsurface Soil	9.13	1837.07	2435.01	2792.52	13841.95
Subsurface Soils	Outdoor Inhalation of Vapor From Subsurface Soil	449.21	5219.84	2435.01	3071.95	45149.70
	Onsite Tier II Target Level - Subsurface Soil	9.13	1837.07	2435.01	2792.52	13841.9
	Onsite Indoor Inhalation of Vapor from Groundwater	30.60	526.00	169.00	175.00	48000.00
	Onsite Outdoor Inhalation of Vapor from Groundwater	1750.00	526.00	169.00	175.00	48000.00
	Onsite Ingestion of Groundwater	NA	NA	NA	NA	NA
Croundwatar	Onsite Tier II Target Level for Groundwater	30.60	526.00	169.00	175.00	48000.0
Groundwater	Offsite Indoor Inhalation of Vapor from Groundwater	4.67	285.13	169.00	175.00	5661.03
	Offsite Outdoor Inhalation of Vapor from Groundwater	1750.00	526.00	169.00	175.00	48000.00
	Offsite Ingestion of Water	NA	NA	NA	NA	NA
	Offsite Tier II Target Level for Groundwater	4.67	285.13	169.00	175.00	5661.03
	Allowable Soil Concentration at Source Protective of POE	0.04673	20.89378	21.23529	369.59166	0.03961
	Allowable Groundwater Concentration at Source Protective of the POE	0.00837	1.67442	1.17209	16.74419	0.03349
	Allowable GW concentration at POC 25 feet from source (MW-2)	0.0083	1.6599	1.1619	16.5990	0.0332
Complex for December	Allowable GW concentration at POC 42 feet from source (MW-5)	0.0074	1.4762	1.0334	14.7625	0.0295
Groundwater Resource Protection	Allowable GW concentration at POC 26 feet from source (MW-8)	0.008	1.655	1.158	16.550	0.033
Trotection	Allowable GW concentration at POC 15 feet from source (MW-9)	0.008	1.674	1.172	16.744	0.033
	Allowable GW Concentration at POC 30 feet from source (MW-10)	0.008	1.626	1.138	16.263	0.033
	Allowable GW Concentration at POC 75 feet from source (MW-12)	0.005	1.000	0.700	10.000	0.020
	Allowable GW Concentration at POC 65 feet from source (MW-13)	0.006	1.134	0.794	11.340	0.023

Contaminant concentrations presented in mililgrams per liter (mg/L) Domain for Source Groundwater: Monitoring Wells MW-1, MW-3, MW-4, RW-1, RW-2, RW-3



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm:	Doc's Gro 13652-015 UST98-02 Poly/Spec	cery 5-012698 2-07 trum		action 2 Sita Mans	Year: Sample Fro Reporting Project Ma	2018/2019 Triannual 3 of 3 Jamie Cox		
Attach site map(s) il current and most li	llustrating a kely future	all well location land use of site maps s	s, location of and adjacen hould contai Section	f former and/or curre t properties, Point of n a north arrow and s 3 - Well Inventory	nt UST syst Complianc should be to Tables	tem(s), utilities e, buildings ar scale.	s, adjacent prop nd other pertine	perties, receptors, ent features. All
			Moni	itoring Wells				
	Well ID	Date Installed	Diameter (inches)	Screened Interval ((Feet bgs)	*Depth to Water (feet bgs)	3/21/2019	
	MW-1	8/24/1999	2.000	634.87-644	.87	NM		
	MW-2	8/24/1999	2.000	635.23-645	.23	NM		
	MW-3	8/24/1999	2.000	634.80-644	.80	4.12		
	MW-4	8/24/1999	2.000	635.73-645	.73	NM		
	MW-5	1/11/2000	2.000	629.57-644	.57	7.58		
	MW-8	1/12/2000	2.000	629.76-644	.76	6.20		
	MW-9	1/12/2000	2.000	629.24-644	.24	4.53		
	MW-10	1/12/2000	2.000	629.15-644	.15	3.67		
	MW-12	1/13/2000	2.000	629.13-644	.13	4.96		
	MW-13	1/13/2000	2.000	628.58-643	.58	3.35		
	RW-1	10/22/2008	4.000	636.16-646	.16	3.93		
	RW-2	10/22/2008	4.000	631.38-646	.38	3.72		
	RW-3	10/22/2008	4.000	634.90-644	.90	5.33		
								_
				Water Supply Wel	ls			
	Well ID	Date Installed	Diameter (inches)	Screened Interval ((Feet bgs)	Depth to Water (feet bgs)	Well Use	
	P-1	Unknown	UK.	UK		UK	None]
]

IFacility Name:DoIFacility I. D. No.:13IIncident No.:US(Consulting Firm:Po

Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum

Year: Sample Frequency: Reporting period: Project Manager: 2018/2019 Triannual 3 of 3 Jamie Cox

Section 4 - History of Sampling														
Date				_	Sampli	ing Param	eters			-	-	S	ampled By	
Sampled	BTEX	MTBE	PAH	methane	D.O.	Nitrate	Fe^{+2}	Sulfate				Name	Company	Title
8/25/1999	Х	Х			Х							Grinder	Spectrum	TECH
1/13/2000	Х	Х			Х							Grinder	Spectrum	TECH
1/9/2001	Х	Х			Х							Grinder	Spectrum	TECH
5/8/2001	Х	Х			Х							Self	Spectrum	TECH
9/25/2001	Х	Х			Х							Moore	Spectrum	TECH
9/18/2003	Х	Х			Х							Horner	Spectrum	TECH
4/20/2004	Х	Х			Х							White	Spectrum	TECH
6/22/2004	Х	Х			Х							White	Spectrum	TECH
8/2/2005	Х	Х			Х							White	Spectrum	TECH
1/23/2007	Х	Х			Х	Х	Х	Х				Wade	Spectrum	TECH
4/24/2007	Х	Х			Х	Х	Х	Х				Wade	Spectrum	TECH
10/31/2007	Х	Х			Х	Х	Х	Х				Moore	Spectrum	TECH
2/25/2008	Х	Х			Х	Х	Х	Х				Moore	Spectrum	TECH
6/25/2008	Х	Х			Х	Х	Х	Х				Moore	Spectrum	TECH
11/10/2008	Х	Х			Х							Moore	Spectrum	TECH
12/3/2009	Х	Х			Х							Moore	Spectrum	TECH
5/20/2010	Х	Х			Х							Moore	Spectrum	TECH
10/6/2010	Х	Х			Х							Moore	Spectrum	TECH
12/7/2011	Х	Х										Moore	Spectrum	TECH
1/11/2012	Х	Х										Moore	Spectrum	TECH
9/14/2012	Х	Х										Moore	Spectrum	TECH
6/12/2013	Х	Х										Cox	Spectrum	Geologist
8/28/2013	Х	Х										McCormick	Spectrum	TECH
12/3/2013	Х	Х										McCormick	Spectrum	TECH
7/24/2014	Х	Х			Х							McCormick	Spectrum	TECH
11/5/2014	Х	Х			Х							McCormick	Spectrum	TECH
2/17/2015	Х	Х			Х							McCormick	Spectrum	TECH
9/17/2015	Х	Х			Х							McCormick	Spectrum	TECH
2/11/2016	Х	Х			Х							McCormick	Spectrum	TECH
6/21/2016	Х	Х			Х							McCormick	Spectrum	TECH
2/1/2017	Х	Х			Х							Abbott	Spectrum	TECH
6/21/2017	Х	Х										Abbott	Spectrum	TECH
11/14/2017	Х	X										Abbott	Spectrum	TECH
7/26/2018	Х	X										Abbott	Spectrum	TECH
11/27/2019	Х	X										Abbott	Spectrum	TECH
3/21/2019	Х	X										Abbott	Spectrum	TECH

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Section 5 - Sampling Methodology													
Date					Ana	lytical Me	ethods				 	Sampled By	r
Sampled	BTEX	MTBE	PAH	methane	D.O.	Nitrate	Fe ⁺²	Sulfate			Name	Company	Title
8/25/1999	602	602			Field						Grinder	Spectrum	TECH
1/13/2000	602	602			Field						Grinder	Spectrum	TECH
1/9/2001	602	602			Field						Grinder	Spectrum	TECH
5/8/2001	602	602			Field						Self	Spectrum	TECH
9/25/2001	602	602			Field						Moore	Spectrum	TECH
9/18/2003	602	602			Field						Horner	Spectrum	TECH
4/20/2004	602	602			Field						White	Spectrum	TECH
6/22/2004	602	602			Field						White	Spectrum	TECH
8/2/2005	602	602			Field						White	Spectrum	TECH
1/23/2007	8021	8021			Field	9210	3500	375.4			Wade	Spectrum	TECH
4/24/2007	8021	8021			Field	9210	3500	375.4			Wade	Spectrum	TECH
10/31/2007	8021	8021			Field	9210	3500	375.4			Moore	Spectrum	TECH
2/25/2008	8021	8021			Field	9210	3500	375.4			Moore	Spectrum	TECH
6/25/2008	8021	8021			Field	9210	3500	375.4			Moore	Spectrum	TECH
11/10/2008	8021	8021			Field						Moore	Spectrum	TECH
12/3/2009	8021	8021			Field						Moore	Spectrum	TECH
5/20/2010	8021	8021			Field						Moore	Spectrum	TECH
10/6/2010	8021	8021			Field						Moore	Spectrum	TECH
12/7/2011	8021	8021									Moore	Spectrum	TECH
1/11/2012	8021	8021									Moore	Spectrum	TECH
9/14/2012	8021	8021									Moore	Spectrum	TECH
6/12/2013	8021	8021									Cox	Spectrum	Geologist
8/28/2013	8021	8021									McCormick	Spectrum	TECH
12/3/2013	8021	8021									McCormick	Spectrum	TECH
7/24/2014	8021	8021			Field						McCormick	Spectrum	TECH
11/5/2014	8021	8021			Field						McCormick	Spectrum	TECH
2/17/2015	8021	8021			Field						McCormick	Spectrum	TECH
9/17/2015	8021	8021			Field						McCormick	Spectrum	TECH
2/11/2016	8021	8021			Field						McCormick	Spectrum	TECH
6/21/2016	8021	8021			Field						McCormick	Spectrum	TECH
2/1/2017	8021	8021			Field						Abbott	Spectrum	TECH
6/21/2017	8021	8021			Field						Abbott	Spectrum	TECH
11/14/2017	8021	8021			Field						Abbott	Spectrum	TECH
7/26/2018	8021	8021			Field						Abbott	Spectrum	TECH
11/27/2018	8021	8021			Field						Abbott	Spectrum	TECH
3/21/2019	8021	8021			Field						Abbott	Spectrum	TECH

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	Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)												
				Well ID	MW-1								
				Historica	al Chemical	s of Concern	n Data						
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene							
8/25/1999		2.000	14.900	10.200	2.170			not sar	npled				
1/13/2000	1.200	0.038	0.680	0.850	1.500			miss	ing				
1/9/2001	2.900	0.020	2.400	0.600	0.620			not exi	isting				
5/8/2001	4.100	0.800	9.700	6.100	0.400			Dr	у				
9/25/2001	6.800	0.800	6.600	5.800	0.600			exceeded	SSTLs				
9/18/2003	4.100	0.350	3.500	1.360	0.340								
4/20/2004	3.300	0.360	2.500	3.200	0.240								
6/22/2004	2.000	0.550	3.000	5.600	0.140								
8/2/2005	1.500	0.150	0.900	0.480	0.140								
1/23/2007	1.700	0.530	3.300	5.200	0.060								
4/24/2007	0.360	0.010	0.100	0.680	0.020								
10/31/2007													
2/25/2008	0.990	0.070	1.040	2.360	< 0.01								
6/25/2008	0.440	0.010	0.100	0.170	0.030								
11/10/2008	2.200	0.100	1.600	0.500	0.090								
3/10/2009	0.440	0.02	0.29	0.94	0.02								
7/29/2009	1.020	0.080	0.060	0.100	0.040								
12/3/2009	0.550	0.040	0.030	0.030	0.020								
5/20/2010	0.750	0.050	0.060	0.050	0.040								
10/6/2010	1.600	0.160	0.010	0.020	0.110								
12/7/2011	1.700	0.120	0.240	0.150	0.080								
1/11/2012	2.000	0.140	0.420	0.199	0.100								
9/14/2012	0.880	0.040	0.040	0.110	<.01								
6/12/2013	0.420	0.040	0.050	0.160	0.020								
8/28/2013	0.600	0.110	0.180	0.270	0.030								
12/3/2013	1.200	0.110	0.100	0.150	0.050								
7/24/2014	0.720	0.160	0.240	0.440	0.037								
11/5/2014	1.400	0.330	2.200	1.600	0.056	0.200							
2/17/2015	0.410	0.079	0.079	0.270	0.018	0.062							
9/17/2015	0.133	0.052	0.040	0.177	0.008	0.045							
2/11/2016	0.153	0.037	0.048	0.064	0.020	0.063							
6/21/2016	0.111	0.016	< 0.005	0.011	0.012	0.022							
2/1/2017	0.531	0.140	0.368	0.426	< 0.0250	< 0.125							
6/21/2017	0.151	0.055	0.003	0.003	0.003	0.012							
11/14/2017	0.058	0.015	0.039	0.099	0.004	0.013							
7/28/2018	0.111	0.051	0.008	0.024	0.013	0.026							
11/27/2018													
3/21/2019													
				Well ID	MW-1			I					



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	Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)												
				Well ID	MW-2								
				Historical	Chemicals of	of Concern I	Data						
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalen	not sampled						
8/25/1999	0.004	0.0005	0.0015	0.0212	0.0016		missing						
1/13/2000	0.0005	0.0005	0.0005	0.0015	0.0005		not existing						
1/9/2001	0.0005	0.0005	0.0005	0.0015	0.0005		Dry						
5/8/2001	0.0005	0.0005	0.0005	0.0015	0.0005		exceeded SSTLs						
9/25/2001	0.0005	0.0005	0.0005	0.0015	0.0005								
9/18/2003	0.0005	0.0005	0.0005	0.0015	0.0005								
4/20/2004	0.0005	0.0005	0.0005	0.0015	0.0005								
6/22/2004	0.0005	0.0005	0.0005	0.0015	0.0005								
8/2/2005	0.0005	0.0005	0.0005	0.0015	0.0005								
1/23/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
4/24/2007													
10/31/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
2/25/2008													
6/25/2008													
11/10/2008	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
3/10/2009													
7/29/2009													
12/3/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
5/20/2010													
6/10/2011													
12/7/2011	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
1/11/2012	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
9/14/2012	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
6/12/2013													
8/28/2013													
10/3/2003													
7/24/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001								
11/5/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005							
2/17/2015	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005							
9/17/2015	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
2/11/2016													
6/21/2016	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
2/1/2017													
6/21/2017	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
11/14/2017	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
7/27/2018	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
11/27/2018	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005							
3/28/2019													



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Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)											
				Well ID	MW-3						
				Historical	Chemicals	of Concern	n Data				
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Japhthalen	not sampled				
8/25/1999	0.0005	0.0005	0.0005	0.0015	0.0005		missing				
1/13/2000	0.0032	0.0036	0.012	0.022	0.0005		not existing				
1/9/2001	0.00637	0.0005	0.0005	0.0176	0.0005		Dry				
5/8/2001	0.081	0.012	0.14	0.1	0.0005		exceeded SSTLs				
9/25/2001	0.16	0.02	0.14	0.14	0.0005						
9/18/2003	0.0274	0.0005	0.0005	0.0132	0.0005						
4/20/2004											
6/22/2004											
8/2/2005	0.0201	0.0005	0.0005	0.00635	0.0033						
1/23/2007	0.00656	< 0.001	< 0.001	< 0.003	0.00107						
4/24/2007	0.00574	< 0.001	< 0.001	< 0.003	0.00109						
10/31/2007											
2/25/2008	0.003	< 0.001	0.003	< 0.003	< 0.001						
6/25/2008	0.049	0.007	0.032	0.049	< 0.001						
12/3/2009	0.003	< 0.001	< 0.001	0.010	< 0.001						
3/10/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
7/29/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
11/10/2008	0.043	0.005	0.017	0.022	< 0.001						
5/20/2010	0.003	< 0.001	< 0.001	< 0.003	< 0.001						
10/6/2010	0.002	< 0.001	< 0.001	< 0.003	< 0.001						
12/7/2011	0.002	< 0.001	< 0.001	0.0076	< 0.001						
1/11/2012	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
9/14/2012	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
6/12/2013											
8/28/2013	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
12/3/2013											
7/24/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001						
11/5/2014											
2/17/2015	0.0026	< 0.001	< 0.005	< 0.003	< 0.005	< 0.005					
9/17/2015	0.0028	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005					
2/11/2016	0.00394	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
6/21/2016											
2/11/2016	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
6/21/2017	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
11/14/2017											
7/26/2018											
11/27/2018											
3/21/2019	0.198	0.1500	0.1530	0.5150	0.007	0.036					
				Wall ID	MW 2		1		I		



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Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)										
				Well ID	MW-4		`			
				Historical	Chemicals	of Concern	Data			
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalen	e			
8/25/1999	4.34	0.21	4.13	1.46	4.99		not sa	mpled		
1/13/2000	2.4	0.84	2	2.8	3		mis	sing		
1/9/2001							not ex	isting		
5/8/2001	18.7	2.7	35.5	15.4	0.6		D	ry		
9/25/2001	19.9	2.8	30.2	16.5	2		exceede	d SSTLs		
9/18/2003	12.6	2.7	36.7	15.7	0.69					
4/20/2004	11.3	1.6	25.8	9.2	1.3					
6/22/2004	6.5	1.4	18.5	8.3	0.4					
8/2/2005	13.6	2.4	26	11.1	1.9					
1/23/2007	9.3	2	18.4	9.9	0.6					
4/24/2007	8.7	2	20	9.4	1.2					
10/31/2007										
2/25/2008										
6/25/2008	8.20	1.20	15.00	8.60	0.80					
11/10/2008										
3/10/2009	5.3000	1.0000	12.0000	6.8000	0.5000					
7/29/2009	Sample Bro	ken in shipm	ent						-	
12/3/2009	5.00	1.50	12.60	8.40	0.20					
5/20/2010	5.10	0.60	8.50	3.20	0.30					
10/6/2010										
12/7/2011										
1/11/2012										
9/14/2012										
6/12/2013	1.00	0.3	1.6	2.3	< 0.1					
8/28/2013	0.62	0.17	0.62	1.07	0.03					
12/3/2013		-								
7/24/2014	0.70	0.24	0.36	1.60	0.02					
11/5/2014			DI	RY						
2/17/2015			DI	RY						
9/17/2015			FP S	heen						
2/11/2016	1.50	0.82	0.77	2.47	0.01	0.54				
6/21/2016	0.72	0.53	0.24	1.63	0.01	0.39				
2/1/2017										
6/21/2017										
1/14/2017	0.98	0.82	0.12	1.54	0.01	0.63				
7/26/2018	1.34	1.45	0.11	2.76	< 0.05	0.92				
11/27/2018										
3/21/2019										



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Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)												
				Well ID	MW-5							
				Historical	Chemicals	of Concern	Data					
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene	2					
8/25/1999							not sa	mpled				
1/13/2000	0.100	0.290	0.220	0.160	0.001		mis	sing				
1/9/2001	0.001	0.001	0.001	0.002	0.001		not ex	tisting				
5/8/2001	0.001	0.001	0.001	0.002	0.001		D	ry				
9/25/2001	0.001	0.001	0.001	0.002	0.001		exceede	d SSTLs				
9/18/2003	0.001	0.001	0.001	0.002	0.001							
4/20/2004												
6/22/2004												
8/2/2005	0.003	0.001	0.001	0.002	0.003							
1/23/2007	0.003	< 0.001	< 0.001	< 0.003	0.001							
4/24/2007	0.001	< 0.001	< 0.001		< 0.001							
10/31/2007	0.002	< 0.001	0.002	< 0.003	0.002							
2/25/2008	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001							
6/25/2008												
11/10/2008	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001							
3/10/2009												
7/29/2009	0.001	0.001	0.001		0.001							
12/3/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001							
5/20/2010												
10/6/2010	-0.001	-0.001	-0.001	10,000	-0.001							
12///2011	<0.001	< 0.001	<0.001	< 0.003	<0.001							
1/11/2012												
9/14/2012	<0.001	<0.001	<0.001	<0.002	<0.001							
6/12/2013	<0.001	<0.001	<0.001	< 0.003	<0.001							
8/28/2013	<0.001	<0.001	<0.001	<0.002	<0.001							
7/24/2014	<0.001	<0.001	<0.001	<0.003	<0.001							
11/5/2014	<0.001	<0.001	<0.001	<0.003	<0.001	<0.005						
2/17/2014	~0.001	~0.001	~0.001	~0.005	~0.001	~0.005						
9/17/2015	<0.001	< 0.001	<0.005	<0.003	<0.001	<0.005						
2/11/2015	~0.001	~0.001	~0.005	~0.005	~0.001	~0.005						
6/21/2016												
2/1/2017	0.004	0.007	0.012	0.217	< 0.001	< 0.005						
6/21/2017	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005						
11/14/2017	0.001	0.001	0.001	0.000	0.001	0.000						
7/26/2018	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005						
11/27/2018	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005						
3/21/2019	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005						
	0.001	0.001	0.001			0.005						





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	Sec	tion 6 - His	torical Mo	nitoring W	ell Chemic	als of Conc	ern Data (mg/L)	
				Well ID	MW-8			
				Historica	l Chemicals	s of Concern	Data	
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalen	not sampled	
8/25/1999							missing	
1/13/2000	0.016	0.0072	0.063	0.045	0.0005		not existing	
1/9/2001	0.0005	0.0005	0.0005	0.0015	0.0005		Dry	
5/8/2001	0.0005	0.0005	0.0005	0.0015	0.0005		exceeded SSTLs	
9/25/2001	0.0005	0.0005	0.0005	0.0015	0.0005			
9/18/2003	0.0005	0.0005	0.0005	0.0015	0.0005			
4/20/2004								
6/22/2004								
8/2/2005	0.00697	0.0005	0.0005	0.00362	0.00168			
1/23/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
4/24/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
10/31/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
2/25/2008								
6/25/2008								
11/10/2008	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
3/10/2009								
7/29/2009								
12/3/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
5/20/2010								
10/6/2010								
12/7/2011	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
1/11/2012								
9/14/2012								
6/12/2013								
8/28/2013								
12/3/2013	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
7/24/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001			
11/5/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005		
2/17/2015	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005		
9/17/2015	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005		
2/11/2016								
6/21/2016								
2/21/2016								
6/21/2017	< 0.001	< 0.001	0.00984	< 0.003	< 0.001	< 0.005		
11/14/2017								
7/26/2018	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005		
1/27/2018	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005		
3/21/2019	< 0.001	< 0.001	0.00144	< 0.003	< 0.001	< 0.005		
		-		Well ID	MW-8	,	4	



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year: Sample Frequency: Reporting period: Project Manager:

	Sec	tion 6 - His	torical Mo	nitoring W	ell Chemic	als of Conc	ern Data ((mg/L)	
				Well ID	MW-9		Ň		
				Historica	l Chemicals	s of Concern	n Data		
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene	e		
8/25/1999						<u>^</u>	not sa	mpled	
1/13/2000	0.026	0.01	0.064	0.054	0.0005		mis	sing	
1/9/2001	0.45	0.08	1.2	0.83	0.0005		not ex	xisting	
5/8/2001	0.0293	0.00245	0.051	0.0227	0.004		D	ry	
9/25/2001	0.00326	0.00107	0.0022	0.0055	0.00164		exceede	d SSTLs	
9/18/2003	0.109	0.0079	0.0477	0.0431	0.0005				
4/20/2004	0.00136	0.0005	0.0005	0.0015	0.0005				
6/22/2004	0.00283	0.0005	0.00276	0.0015	0.0005				
8/2/2005	0.0005	0.0005	0.0005	0.0015	0.0005				
1/23/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
4/24/2007									
10/31/2007	0.060	0.007	0.080	0.045	< 0.001				
2/25/2008	0.070	0.011	0.100	0.077	< 0.001				
6/25/2008	0.035	0.003	0.031	0.018	< 0.001				
11/10/2008	0.012	< 0.001	0.003	< 0.003	< 0.001				
3/10/2009	0.008	0.001	0.002	0.009	0.001				
7/29/2009	0.050	0.009	0.025	0.039	0.006				
12/3/2009	0.039	0.007	0.002	0.033	0.003				
5/20/2010	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
10/6/2010									
12/7/2011	0.00355	< 0.001	< 0.001	< 0.003	< 0.001				
1/11/2012	0.015	< 0.001	< 0.001	< 0.003	< 0.001				
9/14/2012	0.0025	< 0.001	< 0.001	< 0.003	< 0.001				
6/12/2013									
8/28/2013	0.0524	0.0113	0.01	0.0988	0.00333				
12/3/2013	0.0741	0.00425	0.00777	0.150	0.004				
7/24/2014	0.042	< 0.001	< 0.001	0.020	0.003				
11/5/2014									
2/17/2015									
9/17/2015	0.0213	< 0.001	< 0.005	0.006	0.002	< 0.005			
2/11/2016	0.0607	< 0.001	< 0.005	0.004	< 0.001	< 0.005			
6/21/2016	0.0326	0.00301	< 0.005	0.006	0.003	< 0.005			
2/1/2017	0.0814	< 0.01	0.0178	< 0.03	< 0.01	< 0.05			
6/21/2017	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005			
11/14/2017	0.00886	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005			
7/26/2018	0.00421	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005			
11/27/2018	0.00525	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005			
3/21/2019	0.0869	0.0216	0.00397	0.0302	0.00958	0.006			
				Well ID	MW-9				



Facility Name:	Doc's Grocery	Year:	2018/2019
Facility I. D. No.:	13652-015-012698	Sample Frequency:	Triannual
Incident No.:	UST98-02-07	Reporting period:	3 of 3
Consulting Firm:	Poly/Spectrum	Project Manager:	Bob White

Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)										
				Well ID	MW-10					
				Historic	al Chemical	s of Concern	Data			
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene				
8/25/1999								exceeded s	SSTLs	
1/13/2000	6.6	0.59	9	3.7	3.1			not sam	pled	
1/9/2001	6.1	0.77	6.4	4.6	0.77			missir	ıg	
5/8/2001	1.3	0.3	2.5	1.84	0.06			not exis	ting	
9/25/2001	5.5	1	10.1	5.6	0.3			Dry		
9/18/2003	0.23	0.09	0.3	0.4	0.0266					
4/20/2004	1.4	0.453	3.6	1.9	0.7					
6/22/2004	0.8	0.6	4.2	3	0.07					
8/2/2005	0.65	0.15	1.1	0.94	0.05					
1/23/2007	0.62	0.29	2.6	1.74	0.02					
4/24/2007	1.9	0.5	6.3	3.2	0.1					
10/31/2007	6.100	1.300	18.300	7.400	0.490					
2/25/2008	0.17	0.07	0.82	0.48	< 0.01					
6/25/2008	0.080	0.200	1.010	1.440	< 0.01					
11/10/2008	1.800	1.600	15.200	9.200	0.060					
3/10/2009	0.030	0.04	0.28	0.320	< 0.01					
7/29/2009	0.180	0.220	2.400	1.190	< 0.01					
12/3/2009	< 0.001	0.001	0.007	0.012	0.002					
5/20/2010										
10/6/2010	0.120	0.055	0.250	0.230	0.025					
12/7/2011	0.150	0.080	0.600	0.470	0.0197					
1/11/2012	0.019	0.016	0.035	0.183	< 0.001					
9/14/2012	0.180	0.840	0.170	0.980	.00971					
6/12/2013	0.030	0.060	0.450	0.510	<.01					
8/28/2013	0.260	0.390	3.000	2.180	0.020					
12/3/2013	0.060	0.120	0.370	0.610	< 0.01					
7/24/2014	0.320	0.250	1.500	1.600	.042					
11/5/2014	0.540	0.460	2.000	2.500	0.069	0.150				
2/17/2015	0.045	0.038	0.200	0.230	< 0.005	0.011				
9/17/2015	0.803	0.418	2.700	2.380	0.0596	< 0.250				
2/11/2016	0.198	0.125	0.714	0.763	0.0199	0.051				
6/21/2016	1.100	0.596	3.470	3.150	0.0986	0.218				
2/1/2017	0.567	0.631	2.720	3.280	< 0.250	0.148				
6/21/2017	< 0.001	< 0.001	< 0.001	<0.003	< 0.001	<0.005				
11/14/2017	0.036	0.057	0.153	0.352	<0.001	0.024				
7/26/2019	0.050	0.007	0.100	0.002	-0.001	0.024				
11/27/2019	0.130	0.022	0.030	0.026	0172	0.010				
2/21/2010	<0.001	<0.022	<0.030	<0.020	<0.001	0.010				
5/21/2019	~0.001	<u>∼0.001</u>	~0.001	~0.003	~0.001	<0.005				





Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year: Sample Frequency: Reporting period: Project Manager:

	Sec	tion 6 - His	torical Mo	nitoring W	ell Chemic	als of Conce	ern Data (mg/L)		
				Well ID	MW-12				
				Historical	Chemicals	of Concern	Data		
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalen	not sampled		
8/25/1999							missing		
1/13/2000	0.0084	0.0048	0.037	0.029	0.0005		not existing		
1/9/2001	0.0005	0.0005	0.0005	0.0015	0.0005		Dry		
5/8/2001	0.0005	0.0005	0.0005	0.0015	0.0005		exceeded SSTLs		
9/25/2001	0.0005	0.0005	0.0005	0.0015	0.0005				
9/18/2003	0.0005	0.0005	0.0005	0.0015	0.0005				
4/20/2004									
6/22/2004									
8/2/2005	0.0005	0.0005	0.0005	0.0015	0.0005				
1/23/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
4/24/2007									
10/31/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
2/25/2008									
6/25/2008									
11/10/2008	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
3/10/2009									
7/29/2009							-		
12/3/2009	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
5/20/2010									
10/6/2010									
12/7/2011	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
1/11/2012									
9/14/2012									
6/12/2013	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
8/28/2013									
12/3/2013									
7/24/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001				
11/5/2014									
2/17/2015									
9/17/2015	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005			
2/11/2016									
6/21/2016									
2/1/2017									
6/21/2017	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005			
11/14/2017									
7/26/2018	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005			
11/27/2018	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005			
3/21/2019	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005			
				Well ID	MW-12		1	•	



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year: Sample Frequency: Reporting period: Project Manager: 2018/2019 Triannual 3 of 3 Bob White

S	Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)											
				Well ID	MW-13							
			Histori	cal Chemica	als of Conce	ern Data						
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene	e					
8/25/1999							not sa	mpled				
1/13/2000	0.029	0.11	0.089	0.059	0.0005		miss	sing				
1/9/2001	0.0005	0.0005	0.00268	0.0059	0.0005		not ex	isting				
5/8/2001	0.0005	0.0005	0.0005	0.0015	0.0005		D	ry				
9/25/2001	0.0005	0.0005	0.0005	0.0015	0.0005		exceede	1 SSTLs				
9/18/2003	0.0005	0.0005	0.0005	0.0015	0.0005							
4/20/2004												
6/22/2004												
8/2/2005	0.0005	0.0005	0.0005	0.0015	0.0005							
1/23/2007	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001							
4/24/2007												
10/31/2007												
2/25/2008												
6/25/2008												
11/10/2008												
3/10/2009												
7/29/2009												
12/3/2009												
5/20/2010												
10/6/2010												
12/7/2011												
1/11/2012												
9/14/2012												
6/12/2013												
8/28/2013												
12/3/2013												
7/24/2014	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001							
11/5/2014												
2/17/2015												
9/17/2015	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005						
2/11/2016												
6/21/2016												
2/1/2017	< 0.001	< 0.001	0.003	0.005	< 0.001	< 0.005						
6/21/2017												
11/14/2017												
7/26/2018												
11/27/2018	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005						
3/21/2019	< 0.001	< 0.001	< 0.005	< 0.003	< 0.001	< 0.005						

Well ID MW-13

COC Concentration v. Time	
× 0.0 0.0 0.0 0.0 0.0 0.0	06 05 Benzene 0.029 0.0005 03 0.0005



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year: Sample Frequency: Reporting period: Project Manager: 2018/2019 Triannual 3 of 3 Bob White

S	Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)										
				Well ID	RW-1						
			Historic	cal Chemica	als of Conc	ern Data					
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	Naphthalene	e				
11/10/2008							not sa	ampled			
3/10/2009	4.8	1.3	11	6.9	0.3		mis	ssing			
7/29/2009	9	2.2	22	11.7	0.8		not e	xisting			
12/3/2009	2.4	0.8	6.8	5.1	0.1						
5/20/2010	1.6	1.1	7.3	6.5	< 0.001		Γ	Dry			
10/6/2010		FREE PREDUCT (0.04 ft) exceeded SSTLs									
12/7/2011	1.4	1	5.9	5.9	< 0.1						
1/11/2012	0.6	0.1	1.4	2.4	< 0.1						
9/14/2012	1.2	0.5	2.4	3.6	< 0.1						
6/12/2013	1.7	1.4	6.2	6.2	< 0.1						
8/28/2013	2.1	1.2	5.8	4.8	< 0.1						
12/3/2013	1.6	1.6	5.9	6.3	< 0.1						
7/24/2014	1.6	1.4	5.1	5.4	0.033						
11/5/2014	1.4	1.2	3.6	4.7	0.077	0.370					
2/17/2015	0.59	0.290	0.72	1.30	0.020	0.230					
9/17/2015	1.33	1.020	3.70	3.50	0.059	0.346					
2/11/2016	1.16	1.300	5.25	5.43	0.047	<1.00					
6/21/2016	1.24	0.619	2.79	2.01	0.037	0.422					
2/1/2017	1.14	1.680	3.31	6.28	0.048	0.388					
6/21/2017	2.69	2.320	11.2	11.00	0.075	0.913					
11/14/2017	3.35	2.370	4.5	10.60	0.064	0.618					
7/26/2018	3.02	2.160	10.6	7.68	<0.5	0.661					
11/27/2018	0.99	1.170	2.89	3.83	< 0.001	0.755					
3/21/2019	0.44	0.962	1.84	3.01	< 0.001	0.444					
				W/ II ID	DW/ 1						



*Concentrations with Yellow Background exceed the applicable Tier II SSTL.

Facility Name:	Doc's Grocery	Year:	2018/2019
Facility I. D. No.:	13652-015-012698	Sample Frequency:	Triannual
Incident No.:	UST98-02-07	Reporting period:	3 of 3
Consulting Firm:	Poly/Spectrum	Project Manager:	Bob White

S	Section 6 - Historical Monitoring Well Chemicals of Concern Data (mg/L)										
				Well ID	RW-2						
]	Historical C	themicals of	f Concern D	Data					
Date	Benzene	EthylBen	Toluene	Xylenes	MTBE	aphthaler	ne				
11/10/2008	0.2	0.09	0.79	0.48	10.5		not sa	mpled			
3/10/2009	0.017	0.018	0.08	0.16	< 0.001		mis	sing			
7/29/2009	0.043	0.033	0.152	0.173	0.004		not ex	kisting			
12/3/2009	0.00263	0.0465	0.0807	0.205	< 0.001						
5/20/2010	0.0329	0.0234	0.12	0.294	0.00344		D	ry			
10/6/2010	0.0134	0.018	0.07	0.128	< 0.001		exceede	d SSTLs			
12/7/2011	0.0227	0.0204	0.11	0.0909	< 0.001						
1/11/2012	0.089	0.0186	0.3	0.36	< 0.001						
9/14/2012	0.0145	0.0196	0.0824	0.181	< 0.001						
6/12/2013	0.0094	0.00356	0.0149	0.033	< 0.001						
8/28/2013	0.00868	0.00416	0.00772	0.0676	< 0.001						
12/3/2013	0.150	0.090	0.22	0.58	0.00208						
7/24/2014	0.011	0.002	0.007	0.021	< 0.001						
11/5/2014	0.010	0.003	< 0.001	0.011	< 0.001	< 0.001					
2/17/2015	0.0039	0.0029	< 0.005	0.009	< 0.005	< 0.005					
9/17/2015	0.038	0.020	0.019	0.037	0.002	0.029					
2/11/2016	0.279	0.331	1.060	1.720	0.013	0.140					
6/21/2016	0.003	0.002	< 0.005	0.009	< 0.001	0.005					
2/1/2017											
6/21/2017	0.00729	< 0.001	< 0.001	0.006	< 0.001	< 0.005					
11/14/2017	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
7/26/2018											
11/27/2018	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
3/21/2019	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.005					
				Wall ID	DW 2						



*Concentrations with Yellow Background exceed the applicable Tier II SSTL.

Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum

Year: Sample Frequency: Reporting period: Project Manager: 2018/2019 Triannual 3 of 3 Bob White

	Section 6	- Historical	Monitorin	ig Well Ch	emicals of C	oncern Data (1	mg/L)		
				Well ID	RW-3				
			Histo	rical Chemi	icals of Conc	ern Data			
Date	Benzene	Ithylbenzen	Toluene	Xylenes	MTBE	Naphthalene			
11/10/2008	7.8	2.6	24.7	14.6	1.5		not sa	mpled	
3/10/2009	10.6	1.3	21	6.83	0.8		mis	sing	
7/29/2009	16.5	1.7	27.4	8.6	2		not ex	kisting	
12/3/2009	8.4	1.5	18.2	6.8	0.6				
5/20/2010							D	ry	
10/6/2010							exceede	d SSTLs	
12/7/2011	3.7	1.4	16.4	7.9	< 0.1				
1/11/2012	1.7	0.7	6.6	4.1	< 0.1				
9/14/2012	2.0	0.4	5.0	2.4	<.1				
6/12/2013	4.8	1.5	11	7.2	<.1				
8/28/2013	5.9	1.5	12	6.3	0.2				
12/3/2013	5.7	1.9	13	8.1	0.1				
7/24/2014	5.6	1.7	12	8.7	0.16				
11/5/2014	5.6	2	12	9.7	0.15	0.620			
2/17/2015	4.7	1.8	12.0	9.0	0.052	0.520			
9/17/2015	3.970	2.140	11.000	9.230	0.061	0.676			
2/11/2016	2.020	1.310	7.080	5.510	0.031	< 0.500			
6/21/2016	3.590	2.090	6.920	8.350	0.050	0.772			
2/1/2017	2.170	2.410	8.350	9.560	< 0.0250	0.485			
6/21/2017	2.860	2.250	8.610	10.100	0.046	0.672			
11/14/2017	2.330	1.770	8.070	7.470	< 0.100	0.510			
7/26/2018									
11/21/2018									
3/21/2019	2.800	2.120	9.210	8.920	< 0.100	< 0.500			
				Well ID	RW-3				



*Concentrations with Yellow Background exceed the applicable Tier II SSTL.

Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

	Section 7 - Historical Monitoring Well Intrinsic Groundwater Data										
				Well ID	MW-1						
				Histori	cal Intrinsic	Groundwa	ter Data				
	Temp		ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	C 1			
Date	(^{0}C)	pH (su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.			
8/25/1999									not samp	led	
1/13/2000	17.6	7.18	165	4.5					missin	g	
1/9/2001	6.6	6.18	100	1.39					not exist	ing	
5/8/2001	16.9	6.61	80	1.47					Dry		
9/25/2001	21.1	6.29		2.79					no data	a	
9/18/2003	22.2	5.97	-6	0.84							
4/20/2004	19.2	5.85	51	0.7							
6/22/2004	25	6.66	78	0.53							
8/2/2005	22.9	6.44		1.6							
1/23/2007	16.4	5.69	8	1.15	8.19	2.9	11.2				
4/24/2007	17	5.67	158	0.75	4.09	0.61	14.3				
10/31/2007											
2/25/2008	17.20	5.69	204	3.110	5.090		26.100				
6/25/2008	22.06	6.12	56	2.070	< 0.5	22.0	19.700				
11/10/2008		initially p	ourged dry								
3/10/09	18.50	6.69	-43.0	2.300							
7/29/09	20.04	8.73	121.0	3.020							
12/3/09	18.00	8.69	130.0	1.770							
5/20/10	17.43	9.61	-44.0	1.870							
10/6/10	19.56	9.50	-50.0	1.100							
12/7/11	11.40	7.44						0.224			
1/11/12	13.80	6.66						0.282			
9/12/12											
6/12/13	25.70	5.88						0.149			
8/28/13	24.90	6.15						0.248			
12/3/13	19.41	6.08	-127.3					0.384			
7/22/14	21.83	5.93	-37.3					0.277			
11/5/14	20.85	6.05	-12.9	1.520				0.398			
2/17/15	13.15	7.60	-123.6	5.610				0.328			
9/17/15	22.34	6.46	-121.8	0.140				0.331			
2/11/16	15.78	6.69	-156.5	3.180				0.381			
6/21/16	20.88	6.69	-53.5	1.030				0.364			
2/1/17	18.61	8.43	-101.7	2.460				0.221			
6/21/17				Int	ristic Parame	ter Meter Fa	iled				
11/14/17	20.81	6.73	-7.5	2.470				0.154			
7/26/18	22.88	7.22	59.0	2.620				0.133			
11/27/18											
3/21/19											



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager: 2017 Triannual 3 of 3 Bob White

	Section 7 - Historical Monitoring Well Intrinsic Groundwater Data										
				Well ID	MW-2						
				Histor	ical Intrinsic	c Groundwa	ter Data				
	Temp		ORP	D.O.	Nitrate	Fe^{+2}	Sulfate	G 1			
Date	(^{0}C)	pH (su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.			
8/25/1999									not sa	mpled	
1/13/2000	19.3	6.46	150	2.5					miss	sing	
1/9/2001	12.3	5.36	55	1.56					not ex	isting	
5/8/2001	19.4	6.17	25	2.89					D	ry	
9/25/2001	23.2	5		2.31					no c	lata	
9/18/2003	25.6	5.1	166	1.12							
4/20/2004	25	5.03	259	0.88							
6/22/2004	25	4.22	170	0.92							
8/2/2005	23.1	4.54	175	2.07							
1/23/2007	17.5	4.73	160	3.29	2.11	0.073	70.2				
4/24/2007											
10/31/2007	24.05	4.41	212.00	1.11	1.38	14.00	65.80				
2/25/2008											
6/25/2008											
11/10/2008	23.09	4.230	338.000	3.910							
3/10/2009											
7/29/2009											
12/3/2009	19.84	7.360	498.000	1.810							
5/20/2010											
12/7/2011	15.70	6.970						0.02			
1/11/2012	14.80	6.560						0.18			
9/14/2012		5.890						0.18			
6/12/2013											
8/28/2013											
12/3/2013											
7/24/2014	23.66	4.370	83.400	2.350				0.20			
11/5/2014	22.83	4.620	86.500	4.630				0.25			
2/17/2015	14.24	5.770	8.800	5.810				0.19			
9/17/2015	25.07	6.100	-90.900	0.940				0.22			
2/11/2016											
6/21/2016	18.51	6.550	-106.200	3.530				0.24			
2/1/2017											
6/21/17				In	tristic Paramo	eter Meter Fa	iled				
11/14/2017	23.590	4.690	2.740	2.740				0.121			
7/26/2018	22.020	6.140	169.100	2.770				0.154			
11/27/2018	17.850	5.750	69.900	3.710				0.101			
3/21/2019											





Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager: 2017 Triannual 3 of 3 Bob White

		Section	7 - Histori	cal Monito	ring Well I	ntrinsic Gr	oundwater	· Data		
		Section		Well ID	MW-3		ounaviator	Dutu		
				Histor	ical Intrinsi	c Groundwa	ater Data			
	Temp		ORP	D.O.	Nitrate	Fe^{+2}	Sulfate			
Date	(^{0}C)	pH (su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.		
8/25/1999	~ /								not sa	mpled
1/13/2000	20.1	6.56	130	1					mis	sing
1/9/2001	13.7	6.06	70	0.64					not ex	xisting
5/8/2001	19.6	6.42	5	1.2					D	Prv
9/25/2001	22.3	5.11		1.99					no	data
9/18/2003	22.7	5.67	60	0.59						
4/20/2004										
6/22/2004										
8/2/2005	28.2	4.77		1.95						
1/23/2007	18.8	4.87	132	1.46	3.96	0.45	36			
4/24/2007	19.8	4.7	176	0.84	3.18	0.16	35.2			
10/31/2007										
2/25/2008	20.50	5.680	169.000	3.290						
6/25/2008	25.02	5.31	159	1.59	0.59	6.20	35.80			
11/10/2008		initially	ourged dry							
3/10/2009	17.02	5.150	298.0	3.27						
7/29/2009	24.53	8.000	281.0	1.92						
12/3/2009	20.20	7.880	319.0	1.59						
5/20/2010	20.03	8.870	319.0	1.59						
10/6/2010	25.04	10.010	170.0	1.13						
12/7/2011	14.10	7.010						0.145		
1/11/2012										
9/14/2012										
6/12/2013										
8/28/2013	28.100	5.190						0.090		
12/3/2013										
7/24/2014	24.840	4.480	95.6	2.21				0.124		
11/5/2014										
2/17/2015	16.610	5.160	41.9	3.74				0.125		
9/17/2015	26.060	6.240	-143.6	0.63				0.145		
2/11/2016	17.690	6.510	-130.5	2.36				0.175		
6/21/2016										
2/1/2017	20.450	7.960	-113.0	2.63				0.145		
6/21/2017				In	tristic Param	eter Meter F	ailed			
11/14/2017										
7/26/2018										
11/27/2018										
3/21/2018	15.430	6.910	108.9	2.33				0.037		



Well ID MW-3

Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager: 2017 Triannual 3 of 3 Bob White

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data										
	2		motorrear	Well ID	<u>MW-4</u>		Junarrat	. Dutu		
				Historica	1 Intrinsic	Groundwa	ter Data			
	Temp	nН	ORP	DO	Nitrate	Fe ⁺²	Sulfate	Conductiv		
Date	$\begin{pmatrix} 0 \\ C \end{pmatrix}$	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	ity		
8/25/1999	(C)	(54)	()	(1116/22)	(iiig/2)	(IIIg/L)	(ing E)	ny	not sa	mnled
1/13/2000	21	6.48	155	2					mis	sing
1/9/2001	21	0.40	155	2					not e	vistino
5/8/2001	20.3	6 34	0	1 32						rv
9/25/2001	22.4	5.96	0	2.67						data
9/18/2003	27.6	6.01	-5	0.46					по	aana
4/20/2004	25.5	5.42	60	1						
6/22/2004	22.5	6.09	43	0.77						
8/2/2005	25.4	6.5	_	1.61						
1/23/2007	18.3	5.73	-76	1.37	< 0.50	51	1.49			
4/24/2007	19.5	5.86	-60	1.14	<1.0	43	<1.0			
10/31/2007										
2/25/2008										
6/25/2008	25.64	6.44	-64	1.68	< 0.50	72.0	<5.0			
11/10/2008										
3/10/2009	17.74	7.05	-67	1.87						
7/29/2009	24.02	8.730	126.000	2.240						
12/3/2009										
5/20/2010	23.88	9.080	-74.000	0.850						
10/6/2010				DRY		-				
12/7/2011				DRY						
1/11/2012										
9/14/2012				DRY						
6/12/2013	28.400	6.170						0.107		
8/28/2013	27.600	6.430						0.230		
12/3/2013				DR	Y					
7/24/2014	24.200	5.820	-16.500	1.490				0.224		
11/5/2014				DR	Y					
2/17/2015		DRY								
9/17/2015			Not Sa	mpled - Fre	ee Product	Sheen				
2/11/2016	17.660	6.640	-148.300	1.290				0.399		
6/21/2016	21.420	6.670	-117.800	2.450				0.371		
2/1/2017										
6/21/17				Intris	tic Paramet	er Meter Fa	iled			
11/14/2017	23.630	6.960	-1.800	1.300				0.223		
7/26/2018	24.330	7.190	55.600	1.660				0.187		
11/27/2018										
3/21/2019										

Well ID MW-4



Facility Name:	Doc's Grocery
Facility I. D. No.:	13652-015-012698
Incident No.:	UST98-02-07
Consulting Firm:	Poly/Spectrum

Year:(7th) Sample Frequency: Reporting period: Project Manager: 2017 Triannual 1st of 3 Bob White

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data										
				Well ID	MW-5					
				Historica	l Intrinsic	Groundwa	iter Data			
	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	C 1		
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.		
8/25/1999									not sar	npled
1/13/2000	17.1	6.71	115	2					miss	ing
1/9/2001	15.8	5.69	55	0.91					not ex	isting
5/8/2001	22	6.02	20	1.27					Dr	У
9/25/2001	22.2	5.57		1.98					no d	ata
9/18/2003	23.3	4.93	278	2.46						
4/20/2004										
6/22/2004										
8/2/2005	24.6	4.94		2.74						
1/23/2007	19.7	5.04	123	1.63	2.13	0.11	< 0.001			
4/24/2007	20.2	4.76	92	1.61	2.12	< 0.050	1.81			
10/31/2007	22.85	4.52	272	1.49	1.27	4.8	<1.0			
2/25/2008	20.60	5.07	169.0	2.00	0.760	0.610	< 0.005			
6/25/2008										
11/10/2008	22.11	5.110	235.0	3.340						
3/10/2009										
7/29/2009										
12/3/2009	20.96	7.830	445.00	1.02						
5/20/2010										
10/6/2010										
12/7/2011	11.700	7.790						0.06		
1/11/2012										
9/14/2012										
6/12/2013	30.000	5.140						0.07		
8/28/2013	23.020	5.240	-3.00					0.105		
7/24/2014	22.070	5.690	16.00	1.07				0.121		
11/5/2014	22.410	4.750	156.40	1.39				0.101		
2/17/2015										
9/17/2015	23.540	6.190	-87.20	4.32				0.087		
2/11/2016										
6/21/2016										
2/1/2017	20.04	8.240	-80.3	2.65				0.07		
6/21/2017				Intris	stic Paramet	er Meter Fa	iled			
11/14/2017										
7/26/2018	24.72	6.790	79.6	2.25				0.07		
11/27/2018	20.68	6.520	35.9	2.89				0.730		
3/21/2019	15.38	6.670	111.6	1.89				0.019		
				Well ID	MW-5					



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager: 2017 Triannual 1st of 3 Bob White

Section 7 Historical Monitoring Well Intrinsis Course devotor Data										
	5	ection 7	- Historica	Monitorii	ng Well In	trinsic Gi	roundwat	er Data		
				Well ID	MW-8	~ 1				
		1		Historica	al Intrinsic	Groundwa	ater Data			
Date	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	Cond		
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.		
8/25/1999									not sa	mpled
1/13/2000	19.6	6.28	110	1.75					mis	sing
1/9/2001	17.1	5.58	70	0.81					not ex	tisting
5/8/2001	19.8	6.23	35	1.57					D	ry
9/25/2001	22.5	4.92		1.98					no	data
9/18/2003	25.9	4.85	242	1.2						
4/20/2004										
6/22/2004										
8/2/2005	24.3	4.94	50	1.55						
1/23/2007	20.1	5.13	84	1.55	1.26	0.18	< 0.001			
4/24/2007	20.3	4.64	134	1.66	1.21	< 0.050	<1.0			
10/31/2007	23.53	4.38	272.00	1.22	0.77	1.10	1.11			
2/25/2008										
6/25/2008										
11/10/2008	22.19	4.51	305.0	1.7						
3/10/2009										
7/29/2009										
12/3/2009	20.85	7.59	507.000	1.52						
5/20/2010										
10/6/2010										
12/7/2011	12.900	7.02						0.089		
1/11/2012										
9/14/2012										
6/12/2013	26.00	3.97						0.03		
8/28/2013										
12/3/2013	23.360	5.05	34.4					0.094		
7/24/2014	23.090	4.33	101.3	1.45				0.088		
11/5/2014	23.120	4.46	158.3	1.10				0.114		
2/17/2015	16.110	4.60	103.1	3.57				0.089		
9/17/2015	24.520	6.06	-86.3	1.62				0.097		
2/11/2016										
6/21/2016										
2/1/2017										
6/21/2017				Intris	stic Parame	ter Meter F	ailed			
11/14/2017										
7/26/2018	24.56	6.510	94.3	1.9				0.052		
11/27/2018	19.31	6.250	49.9	2.8				0.059		
3/21/2019	16.40	7.050	103.0	4.8				0.049		
				Well ID	MW-8					



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data										
Well ID MW-9										
				Historic	al Intrinsio	c Groundw	ater Data			
_	Temp	pН	ORP	D.O.	Nitrate	Fe^{+2}	Sulfate	~ 1		
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.		
8/25/1999	. ,								not sa	npled
1/13/2000	19.6	7.12	165	0.5					miss	sing
1/9/2001	12.1	5.47	190	0.96					not ex	isting
5/8/2001	17.6	6.13	155	2.59					Dı	ry
9/25/2001	21.6	5.38		2.48					no c	lata
9/18/2003	23.7	4.14	277	1.72						
4/20/2004	24.5	4.01	172	0.83						
6/22/2004	20.1	4	168	0.46						
8/2/2005	21.3	4.39		1.96						
1/23/2007	17.8	4.63	185	2.09	5.85	0.13	32.7			
4/24/2007										
10/31/2007	21.16	4.01	361	3.77	3.41	0.53	48.2			
2/25/2008	18.40	5.06	258	1.67	2.08	< 0.05	53.30			
6/25/2008	20.06	4.47	357	2.19	4.58	0.33	40.50			
11/10/2008	20.08	4.01	336	3.04						
3/10/2009	16.22	4.56	291	3.26						
7/29/2009	19.51	7.84	394	4.50						
12/3/2009	18.16	7.21	543	1.53						
5/20/2010	18.52	9.29	155	1.19						
10/6/2010										
12/7/2011	17.3	7.66						0.117		
1/11/2012	17.00	6.780						0.175		
9/14/2012	25.40	6.000						0.183		
6/12/2013										
8/28/2013	24.1	4.11						0.217		
12/3/2013	20.69	3.47	75.3					0.243		
7/24/2014	20.53	4.84	35.6	3.44				0.193		
11/5/2014										
2/17/2015										
9/17/2015	21.67	6.31	-123.1	0.29				0.211		
2/11/2016	18.4	6.61	-157.3	1.84				0.263		
6/21/2016	21.4	6.58	-6.9	2.55				0.242		
2/1/2017	19.72	8.35	-206.4	2.77				0.193		
6/21/17				Intri	stic Param	eter Meter I	Failed			
11/14/2017	21.21	6.13	-1.00	1.54				0.125		
7/26/2018	22.66	7.49	54.60	2.93				0.040		
11/27/2018	17.47	6.08	56.10	3.77				0.098		
3/21/2019	15.23	6.99	114.40	6.73				0.043		
				Well ID	MW-9					


Facility Name: Facility I. D. No.: Incident No.: Consulting Firm:

Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data													
				Well ID	MW-10								
]	Historical	Intrinsic	Groundw	ater Data	ı					
Date	Temp (⁰ C)	pH (su)	ORP (mv)	D.O. (mg/L)	Nitrate (mg/L)	Fe ⁺² (mg/L)	Sulfate (mg/L)	Cond.					
8/25/1999									not sar	npled			
1/13/2000	18.5	7.8	180	2.5					miss	ing			
1/9/2001	11.8	5.59	185	1.14					not ex	isting			
5/8/2001	16.6	6.15	185	1.36					Dr	y			
9/25/2001	18.8	5.87		2.38					no d	ata			
9/18/2003	22.4	4.81	209	1.96									
4/20/2004	23.5	4.83	123	0.7									
6/22/2004	21.4	4.14	119	3.34									
8/2/2005	20.4	5.52		1.9									
1/23/2007	16.5	5.46	103	2.11	4.28	0.29	22.1						
4/24/2007	16.6	5.13	274	2.57	5.02	0.05	22.9						
10/31/2007	19.24	4.81	111		1.73	0.75	38.10						
2/25/2008	17.5	5.48	209	2.3	3.38	0.52	21.60						
6/25/2008	19.93	5.35	260	2.95	5.82	0.30	18.70						
11/10/2008	19.13	5.130	203	3.250									
3/10/2009	15.57	5.43	251	3.34									
7/29/2009	18.21	8.23	374	3.960									
12/3/2009	17.38	8.14	443	1.510									
5/20/2010													
10/6/2010	18.340	9.58	161.000	1.540									
12/7/2011	11.000	7.39						0.100					
1/11/2012	13.600	6.37						0.209					
9/13/2012	25.60	69.40						0.176					
6/12/2013	25.30	5.65						0.131					
8/28/2013	24.60	5.12						0.152					
12/3/2013	19.79	5.55	-34.40					0.185					
7/24/2014	19.52	5.87	-0.20	3.50				0.211					
11/5/2014	20.11	6.35	-8.50	3.04				0.219					
2/17/2015	15.20	6.72	-47.10	5.21				0.133					
9/17/2015	20.51	6.39	-110.40	3.89				0.183					
2/11/2016	17.16	6.63	-146.70	3.43				0.280					
6/21/2016	18.50	6.85	-68.10	3.00				0.235					
2/1/2017	18.75	8.38	117.20	2.54				0.144					
6/21/17				er Meter F	Failed								
11/14/2017	20.17	6.30	13.0	1.97				0.105					
7/26/2018													
11/27/2018	17.65	6.15	56.0	2.31				0.147					
3/21/2019	15.80	6.97	112.6	3.08				0.029					
				Well ID	MW-10								



Facility Name:	Doc's Grocery	Year:(7th)	2017
Facility I. D. No.:	13652-015-012698	Sample Frequency:	Triannual
Incident No.:	UST98-02-07	Reporting period:	3 of 3
Consulting Firm:	Poly/Spectrum	Project Manager:	Bob White

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data														
	Well ID MW-12													
				Histor	rical Intrins	sic Groundw	ater Data							
	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	C 1						
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.						
8/25/1999									not sar	npled				
1/13/2000	14.4	7.1	105	1.5					miss	ing				
1/9/2001	12.1	5.59	90	3.08					not ex	isting				
5/8/2001	17.1	6.55	115	2.25					Dr	y				
9/25/2001	19	6.21		4.83					no d	ata				
9/18/2003	21.2	5.32	212	4.8										
4/20/2004														
6/22/2004														
8/2/2005	19.4	5.65		5.37										
1/23/2007	15.6	6	96	6.55	1.31	1.6	28.2							
4/24/2007														
10/31/2007	18.0	4.95	167	2.36	0.960	1.400	24.800							
2/25/2008														
6/25/2008														
11/10/2008	17.5	5.04	283	7.08										
3/10/2009														
7/29/2009														
12/3/2009	16.5	8.14	414	2.29										
5/20/2010														
10/6/2010														
12/7/2011	11.1	7.550						0.121						
1/11/2012														
9/13/2012														
6/12/2013	22.0	5.45						0.161						
8/28/2013														
12/3/2013														
7/24/2014	18.61	4.8	78.4	3.72				0.218						
11/5/2014														
2/17/2015														
9/17/2015														
2/11/2016														
6/21/2016														
2/1/2017														
6/21/17				Ir	tristic Para	meter Meter F	ailed							
11/14/2017														
7/26/2018	20.49	7.26	71.1	4.52				0.087						
11/27/2019	16.83	4.70	154	4.79				0.103						
3/21/2019	14.64	6.90	116.3	7.62				0.031						
				Well ID	MW-12									



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm:

Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data												
				Well ID	MW-13							
				Histori	cal Intrinsi	c Ground	water Da	ta				
Data	Temp	pН	ORP	D.O.	Nitrate	Fe^{+2}	Sulfate	Cond.				
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	$(\mu S/m)$				
8/25/1999									not sai	npled		
1/13/2000	15	6.2	110	1.75					miss	ing		
1/9/2001	11.6	5.69	90	0.99					not ex	isting		
5/8/2001	17.3	6.5	110	3.37					Dı	у		
9/25/2001	19.6	6.01		2.2					no c	lata		
9/18/2003	21	4.74	216	3.27								
4/20/2004												
6/22/2004												
8/2/2005	19.8	3.86		2.06								
1/23/2007	16.2	5.16	155	3.88	0.76	0.16	65.6					
4/24/2007												
10/31/2007												
2/25/2008												
6/25/2008												
11/10/2008												
3/10/2009												
7/29/2009												
12/3/2009												
5/20/2010												
10/6/2010												
12/7/2011												
1/11/2012												
9/13/2012												
6/12/2013												
8/28/2013												
12/3/2013												
7/24/2013	19.21	5.61	19	3.07								
2/17/2015												
9/17/2015	21.02	6.4	-99.9	1.11				0.202				
2/11/2016												
9/17/2015												
2/1/2017	17.48	8.160	-64.0	2.97				0.117				
6/21/17				Int	ristic Param	eter Meter	Failed					
11/14/2017												
7/26/2018	20.49	7.26	71.1	4.52				0.087				
11/27/2018	16.83	4.70	154.0	4.79				0.103				
3/21/2019	15.31	3.88	120.0	5.91				0.032				
				Well ID	MW-13							



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

	Section 7 - Historical Monitoring Well Intrinsic Groundwater Data													
				Well ID	RW-1									
				Histor	rical Intri	nsic Groundv	vater Data	a						
Date	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	Cond.						
2	(⁰ C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	00110						
11/10/2008									not sampled					
3/10/2009	16.72	6.06	67	2.29					not sa	mpled				
7/29/2009	21.07	8.65	303	3.95					not ex	isting				
12/3/2009	19.27	8.48	223	1.67										
5/20/2010	18.37	9.46			Di	ry								
10/6/2010					no c	lata								
12/7/2011	16.3	7.29		0.131										
1/19/2012	14.8	6.7						0.164						
9/13/2012		6.35						0.103						
6/12/2013	24.3	6.05						0.105						
8/28/2013	24.8	6.9						0.1955						
12/3/2013	21.67	6.06	-103.9					0.224						
7/24/2014	21.66	6.07	-43.3	2.44				0.203						
11/5/2014	21.88	2.29	-32.9	2.290				0.259						
2/17/2015	15.9	5.71	19	4.640				0.751						
9/17/2015	24.24	6.65	-157.9	0.280				0.239						
2/11/2016	17.06	6.83	-142.8	2.46				0.349						
6/21/2016	20.75	7.03	60.8	2.46				0.315						
2/1/2017	19.20	8.34	-84.2	2.28				0.142						
6/21/17	Intristic Parameter Meter Failed													
11/14/2017	22.50	6.70	-14.7	1.39				0.169						
7/26/2018	22.90	7.19	58.8	2.64				0.176	76					
11/27/2018	20.31	6.69	18.4	2.84				0.107						
3/21/2019	16.55	6.91	126.3	6.56				0.046						
				Wall ID	DW/1									



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

	Section 7 - Historical Monitoring Well Intrinsic Groundwater Data													
				Well ID	RW-2									
				Histor	rical Intrin	nsic Groundy	water Data	a						
Dete	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	C 1						
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.						
11/10/2008	20.39	4.16	340	2.7					not sa	mpled				
3/10/2009	17.56	4.76	237	3.25					not ex	isting				
7/29/2009	23.01	8.23	390	5.57					dr	у				
12/3/2009	20.19	7.36	544	2.53					no c	lata				
5/20/2010	19.61	8.9	182	1.37										
10/6/2010	23.16	9.36	255	1.73										
12/7/2011	16.2	6.18						0.135						
1/11/2012	15.4	6.52						0.165						
9/13/2012		5.78						0.162						
6/12/2013	24.3	4.32						0.9						
8/28/2013	25.4	4.44						0.1529						
12/3/2013	22.63	4.33	44.9					0.214						
7/24/2014	22.24	4.48	115.3	1.91				0.175						
11/5/2014	22.93	4.77	112.1	2.45				0.234						
2/17/2015	15.6	5.13	60.3	5.460				0.178						
9/17/2015	25.11	6.54	-148.9	0.250				0.205						
2/11/2016	17.00	6.72	137.2	4.00				0.662						
6/21/2016	21.45	6.75	-62.5	3.31				0.205						
2/1/2017														
6/21/17				Ir	ntristic Par	ameter Meter	Failed							
11/14/2017	23.80	5.70	-2.8	2.11				0.108	}					
7/26/2018														
11/27/2018	15.45	6.33	169.3	4.01				0.048						
					DW1									



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum Year:(7th) Sample Frequency: Reporting period: Project Manager:

	Section 7 - Historical Monitoring Well Intrinsic Groundwater Data													
				Well ID	RW-3									
				Histor	ical Intrin	sic Groundw	ater Data							
	Temp	pН	ORP	D.O.	Nitrate	Fe ⁺²	Sulfate	C 1						
Date	(^{0}C)	(su)	(mv)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Cond.						
11/10/2008		initially j	ourged dry	y					not sa	mpled				
3/10/2009	17.87	7	-49	2.07					not sa	mpled				
7/29/2009	23.01	8.74	189	3.12					not ex	isting				
12/3/2009	20.1	8.71	131	1.87										
5/20/2010									D	ry				
10/6/2010									no c	lata				
12/7/2011	15.1	7.13						0.166						
1/11/2012	15.7	6.37						0.172						
9/13/2012		7.69						0.239						
6/12/2013	31.5	6.23						0.115						
8/28/2013	26.3	6.28						0.24						
12/3/2013	22.88	6.35	-37.6					0.319						
7/24/2014	23.01	5.91	-21.7	1.84				0.244						
11/5/2014	23.28	6.12	-30.6	1.21				0.362						
2/17/2015	15.7	5.97	-35	3.9				0.259						
9/17/2015	18.39	6.55	-163.5	0.26				0.365						
2/11/2016	18.35	6.75	-169.5	6.65				0.403						
6/21/2016	23.08	6.62	-110.90	2.26				0.359						
2/1/2017	20.80	8.520	-131.5	2.55				0.188						
2/1/2017	20.80	8.520	-131.5	2.55				0.188						
6/21/17				In	tristic Para	meter Meter I	Failed							
11/14/2017	23.71	6.430	-10.8	2.01				0.174						
7/26/2018														
11/27/2018														
3/21/2019	15.88	7.160	95.6	4.49				0.048						
				Well ID	RW-3									



Facility Name: Facility I. D. No.: Incident No.: Consulting Firm: Doc's Grocery 13652-015-012698 UST98-02-07 Poly/Spectrum

Year:(7th) Sample Frequency: Reporting period: Project Manager:

Section 8 - Groundwater Elevation Data Well ID/Corrected Groundwater Elevation (feet)														
Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-8	MW-9	MW-10	MW-12	MW-13	RW-1	RW-2	RW-3	
8/25/1999	641.7	643.69	643.59	642.63										not samp
1/13/2000	637.42	640.63	639.65	638.55	637.63	639.06	638.64	636.64	636.53	646.12				missing
1/9/2001	635.84	640.18	637.37		635.55	636.85	636.88	634.10	634.56	636.55				not existi
5/8/2001	643.95	646.02	644.94	644.15	643.37	644.46	644.26	642.20	642.17	643.86				Dry
9/25/2001	642.23	644.61	643.36	642.52	640.70	642.85	642.19	640.16	640.27	641.70				
9/18/2003	645.88	647.33	646.08	646.42	645.86	646.42	645.81	644.73	644.94	645.16				
4/20/2004	644.49	647.60		644.55			645.43	643.03						
6/22/2004	643.06	645.91		642.67			643.01	640.72						
8/2/2005	647.89	649.30	648.00	644.06	646.97	647.46	647.24	646.55	646.43	647.58				
1/23/2007	639.95	645.41	643.25	640.66	639.82	641.36	642.41	639.17	639.05	642.06				
4/24/2007	640.57	643.71	642.75	640.91	640.22	641.46	641.19	638.96	638.93	640.68				
10/31/2007		638.19	636.16		633.77	634.86	633.58	632.13	632.22					
2/25/2008	636.58		637.11		634.73	636.20	638.47	634.70						
6/25/2008	637.21	642.30	640.50	638.75	637.82	639.34	638.28	635.96	635.98					
11/10/2008	635.09	639.78	636.55		634.32	635.51	634.53	632.77	632.78			638.30	637.00	
3/10/2009	641.46	646.93	644.80	642.11	640.54	642.16	644.61	640.90	640.86	644.58	645.01	645.77	642.71	
7/29/2009	640.84	643.74	642.65	641.76	640.90	641.86	641.19	639.25	639.32		641.81	643.18	642.12	
12/3/2009	642.99	646.58	644.15	642.66	641.57	642.86	644.14	641.15	641.08		644.86	645.48	643.20	
5/20/2010	647.76	649.28	648.35	647.96	646.89	647.38	648.19	646.55	646.58		648.86	648.96	648.07	
10/6/2010	639.14	642.33	641.80		639.96	640.74	640.14	638.35	638.68		FP	641.98	641.19	
12/7/2011	636.39	642.03	638.00		636.77	637.26	637.99	636.15	637.13		638.81	640.18	638.55	
1/11/2012	638.59	643.83	640.35		638.02	639.31	639.99	637.35	637.23		640.71	642.33	639.50	
9/13/2012	634.96	640.33		636.66	635.32	636.96	635.94	633.65	633.68	635.05	636.81	639.13	637.10	
6/12/2013	645.00	647.43	645.93	645.21	643.96	644.89	645.41	642.21	643.13	644.95	646.41	646.93	645.48	
8/28/2013	642.15	644.93	642.66	642.51	641.57	643.48	642.24	640.09	640.03	641.46	642.98	644.22	642.87	
12/3/2013	636.74	641.58	639.40	DRY	635.32	638.66	637.92	635.70	635.68	636.93	639.01	640.50	639.27	
7/24/2014	645.14	647.48	646.30	645.51	644.43	645.36	645.56	643.45	643.28	643.88	646.60	646.99	645.87	
11/5/2014	639.15	642.68		645.41	635.66	638.86	640.01	638.05	637.92	639.34	640.86	642.08	640.90	
2/17/2015	643.09	646.69	644.46	642.94	641.83	647.16	644.29	641.29	639.01	643.88	645.21	645.54	643.48	
9/17/2015	641.64	644.78	644.46	642.94	641.01	642.20	641.27	639.15	638.85	640.02	642.26	644.18	643.20	
2/11/2016	646.45	649.18	644.46	642.94	644.42	645.66	647.94	644.61	644.13	644.48	648.76	649.03	647.58	
6/21/2016	643.46	644.58	644.46	642.94	642.87	643.84	644.49	641.53	641.33	642.9	644.22	645.26	645.00	
2/1/2017	636.82	637.43	644.46	642.94	636.15	637.01	637.82	635.68	NM	637.08	638.86	638.27	638.29	
6/21/2017	643.57	645.57	643.4	642.9	642.25	643.27	643.34	639.73	640.57	NM	644.16	644.49	643.39	
11/14/2017	642.45	645.93	NM	642.15	NM	643.3	NM	640.14	NM	NM	643.5	645.12	642.64	
7/26/2018	642.39	645.84	NM	643.11	642.73	643.35	642.97	NM	640.6	NM	643.8	NM	NM	
11/27/2018	NM	645.76	NM	641.45	640.31	641.66	642.37	640.22	638.87	641.68	643.34	644.64	641.39	
3/21/2018	NM	NM	650.68	NM	646.99	648.56	649.71	650.48	649.17	650.23	651.23	651.16	649.57	



	GROUNDWATER ELEVAT	FION DATA -11/27/20)18	
WELL	TOC ELEVATION	Screened Interval	DTGW	GWE
IDENTIFICATION	Feet (NGVD)	Feet NGVD	(Feet)	(Feet NGVD)
MW-1	654.59	634.87-644.87	NM	NM
MW-2	654.68	635.23-645.23	NM	NM
MW-3	654.8	634.80-644.80	4.12	NM
MW-4	654.96	635.73-645.73	NM	NM
MW-5	654.57	629.57-644.57	7.58	646.99
MW-8	654.76	629.76-644.76	6.20	648.56
MW-9	654.24	629.24-644.24	4.53	649.71
MW-10	654.15	629.15-644.15	3.67	650.48
MW-12	654.13	629.13-644.13	4.96	649.17
MW-13	653.58	628.58-643.58	3.35	650.23
RW-1	655.16	636.16-646.16	3.93	651.23
RW-2	654.88	631.38-646.38	3.72	651.16
RW-3	654.90	634.90-644.90	5.33	649.57

Facility Name:Doc's GroceryFacility I. D. No.:13652-015-012698Incident No.:UST98-02-07Consulting Firm:Poly/Spectrum								Yea San Rej Pro	ar:(7th) mple Frequency: porting period: oject Manager:	:		2017 Triannual 3 of 3 Bob White						
Section 9 - Monitoring Costs v. Time																		
Date		4/24/2007		10/31/2007		2/25/2008		6/25/2008		11/10/2008	8/3/2009	12/3/2009	5/20/2010	10/6/2010	12/7/2011	1/11/2012	9/13/2012	6/25/2013
Cost	\$	7,103.25	\$	3,089.75	\$	2,845.50	\$	2,917.00	\$	16,014.34	\$8,100.88	\$9,647.51	\$8,886.16	\$8,467.02	9720.20	9187.90	8943.70	9324.50
Cumulativ	\$	7,103.25	\$	10,193.00	\$	13,038.50	\$	15,955.50	\$	31,969.84	\$40,070.72	\$41,617.35	\$50,503.51	\$58,970.53	\$68,690.73	\$77,878.63	\$86,822.33	\$96,146.83
		9/28/2013		12/3/2013		3/30/2015		9/25/2015		3/25/2016	7/27/2016	4/30/2017	7/28/2017	11/14/2017	7/26/2018	11/27/2018	3/21/2019	
		9103.55		3614.25		3096.25		8943.40		8713.00	3446.25	8,653.78	8962.78	3429.00	8654.2	8802.32	4863.1	
		\$105,250.38	5	\$108,864.63	\$	5141,579.10		\$150,522.50	\$	159,235.50	\$162,681.75	\$171,335.53	\$180,298.31	\$183,727.31	\$192,381.51	\$201,183.83	\$206,046.93	

Please Note: Cumulative costs do not match values on latest PR's for unknown reasons.



ATTACHMENT 3

WELL CONSTRUCTION SCHEMATIC

