4115 Blackhawk Plaza Circle, Suite 100, Danville, CA 94506 (925) 648-2008 Fax (925) 648-2797

Compliance & Closure, Inc.

RECEIVED
By Alameda County Environmental Health 10:25 am, Apr 22, 2016

April 18, 2016

Alameda County Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Attention: Mr. Keith Nowell

RE: Soil and Groundwater Investigation Work Plan
Quik Stop Market No. 51
3130 35th Avenue, Oakland, California 94619
Fuel Leak Case No. RO0003209; (Global ID No. T10000008568)
(CCI Project No. 12216-1)

Dear Mr. Nowell:

Compliance & Closure, Inc. (CCI) is pleased to present this Soil and Groundwater Investigation Work Plan for the Quik Stop Market site located at 3130 35th Avenue, Oakland, California. The soil and groundwater investigation work plan was prepared in response to Alameda County Environmental Health (ACEH)'s request for a work plan letter dated March 3, 2016.

CCI appreciates your comments and if you have any questions, please contact our office at 925-648-2008 or e-mail gary@cci-envr.com.

Sincerely,
Compliance & Closure, Inc.

Gary R. Mulkey

Gary R. Mulkey, P.G. 5842

Cc: Mr. Roger Batra, Quik Stop Markets

April 20, 2016

Quik Stop Markets, Inc.
4567 Enterprise Street
Fremont, California 94538-7605

Attn: Mr. Roger Batra

RE: Soil and Groundwater Investigation Work Plan
Quik Stop Market No. 51
3130 35th Avenue, Oakland, California 94619
Fuel Leak Case No. RO0003209; (Global ID No. T10000008568)
(CCI Project No. 12216-1)

"I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

Quik Stop Markets, Inc.

Roger Batra

Mr. Roger Batra Date April 21, 2016

Soil and Groundwater Investigation Work Plan

For

Quik Stop Market No. 51
3031 35th Avenue, Oakland, California

Introduction

Compliance & Closure, Inc. (CCI) has prepared this soil and groundwater investigation work plan on behalf of Quik Stop Markets, Inc., operator of the convenience store located at 3130 35th Avenue, Oakland, Alameda, California (Figure 1). The purpose of the investigation is to determine if a fuel leak has occurred at the site, which may be contributing to petroleum hydrocarbon contamination detected in a down-gradient monitoring well MW-5, (associated with ACEH case # RO0000271), located on 35th Avenue, near the Quik Stop Market.

Site Setting

The site is currently an operating Quik Stop convenience store located on the southwest corner of 35th Avenue and Mangels Avenue in the City of Oakland, Alameda County, California. Adjacent to the property on the northeast side of Mangels Avenue are residences; across 35th Avenue to the northwest is a liquor store and additional residential properties. Directly north of the site at the corner of Suter Street and 35th Avenue is an existing Energy Gas and Mart. Across 35th Avenue to the west and southwest of the site, are two vacant lots. One of the lots is located at 3055 35th Avenue and was the site of a former Exxon gasoline service station. The other vacant lot, located at 3101 35th Avenue was occupied by a former Texaco gasoline station.

Background Information

Currently, there are two 10,000 gallon gasoline storage tanks at the site. In June 1998, the fuel tanks were removed and replaced by new fuel tanks. During the fuel tank removal, visible staining of the soil was noted. In addition, soil samples collected from the tank excavation were reported to contain 1,100 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 5.2 mg/kg benzene, and 13 mg/kg methyl tertiary butyl ether (MTBE). A

monitoring well (MW-5), located down-gradient of the Quik Stop site and associated with a fuel investigation at 3055 35th Avenue (ACEH case # RO0000271) was reported to have detectable petroleum hydrocarbons in a sample collected on July 15, 2015. That sample was reported to contain 8,800 micrograms per liter (ug/L) TPHg, 2,200 ug/L benzene, 850 ug/L MTBE and 6,700 ug/L tertiary butyl alcohol (TBA). The contamination detected in well MW-5 may or may not be associated with a release from the Quik Stop site. Based on this information the ACEH has requested a work plan from Quik Stop to investigate the site for a potential fuel release.

Scope of Work

In response to the ACEH directive, CCI proposes to use a GeoProbe shallow soil sampling rig to collect soil and grab water samples from six locations at the subject site (Figure 2). The following will be conducted prior and during the investigation:

1) Notify Underground Service Alert (USA) of all boring locations;

2) Retain a private line location firm to "clear" the boring locations;

3) Use a GeoProbe soil sampling rig to log subsurface lithology and collected soil and grab water samples from six locations at the subject site. Request access to sample monitoring well MW-5;

4) Analyze up to 18 soil and 7 water samples for TPHg, BTEX and fuel oxygenates and naphthalene using EPA Test Method 8260B;

5) Present the results of the investigation in a report. Up load the report to the ACEH ftp site and state geotracker data base.

Pre-Field Work

Prior to the start of field work, CCI will obtain boring permits from the Alameda County Public Works Agency. Underground Service Alert (USA) well also be notified of the drilling activity. CCI will also retain Cal West Concrete coring to cut two 4-inch diameter holes in the concrete slab prior to drilling.

GeoProbe Soil and Groundwater Sampling

CCI will retain Vironex /Cascade Drilling, Inc. of Richmond, California to perform the GeoProbe field work. Subsurface soils well be explored to a depth of 15 to 20 feet. Continuous "direct push" cores well be collected at all six sample locations by pushing a small diameter drive casing (2.5-inch outside diameter) from the surface to the total depth of each borehole.

In the six borings, continuous soil cores samples well be collected using a 3-foot long, small diameter inner sample barrel lined with acetate tubing. The soil inside the transparent tubing well be

logged using the Unified Soil Classification System. Soil samples for laboratory analysis well be collected from depths of 5, 10 and 15 feet. A small section of the sample tubing well be cut, and the ends of the tubing well be sealed with Teflon sheets and plastic caps. The samples well be labeled, logged on a chain of custody form and placed into a cooler containing water ice for transport to a state certified laboratory. Vironex will then extend the boring to 20 and install twenty feet of ¾-inch diameter PVC tubing with 10 to 15 feet of machined slots. The exact length of the temporary well will be determined in the field, once the depth to groundwater is known.

Groundwater Sampling

Groundwater samples well be collected from each boring by inserting 3/8-inch diameter Teflon tubing into the temporary well. The Teflon tubing well be connected to a peristaltic pump and groundwater well be pumped into laboratory supplied sample containers.

Upon completion of the sampling, the six borings well be grouted with Portland cement under the oversight of a representative from the Alameda County Public Works Agency. Vironex will use a tremie pipe installed to the bottom of the boring and poured grout down the pipe into each boring. Any water that is displaced from the hole will be collected with a wet/dry vacuum. The excess water well be placed into a 55-gallon drum and left at the site, pending laboratory analysis.

CCI will also request to sample well MW-5. CCI will contact Weber Hayes & Associates and request authorization to sample monitoring well MW-5, which is located on 35th Avenue, adjacent to the Quik Stop driveway on the southwest side of the Quik Stop site (Figure 2).

Laboratory Analysis

A total of 18 soil and 7 water samples well be collected during the investigation. The samples will be submitted to SGS Accutest Laboratories (Accutest), a state-certified laboratory located in San Jose, California, for chemical analysis. Accutest will employ methods approved by the California Regional Water Quality Control Board (CRWQCB) and the EPA. The samples well be analyzed for the presence of TPHg, BTEX, naphthalene and fuel oxygenates using EPA Test Method 8260B.

Report

At the conclusion of all field activity, a report of the findings of the investigation will be prepared. The report will include a summary of the investigation activities and results, a description of the nature and extent of soil and groundwater contamination, maps indicating the distribution of detectable petroleum hydrocarbons in the subsurface, and CCI's conclusion and recommendations for any further work.

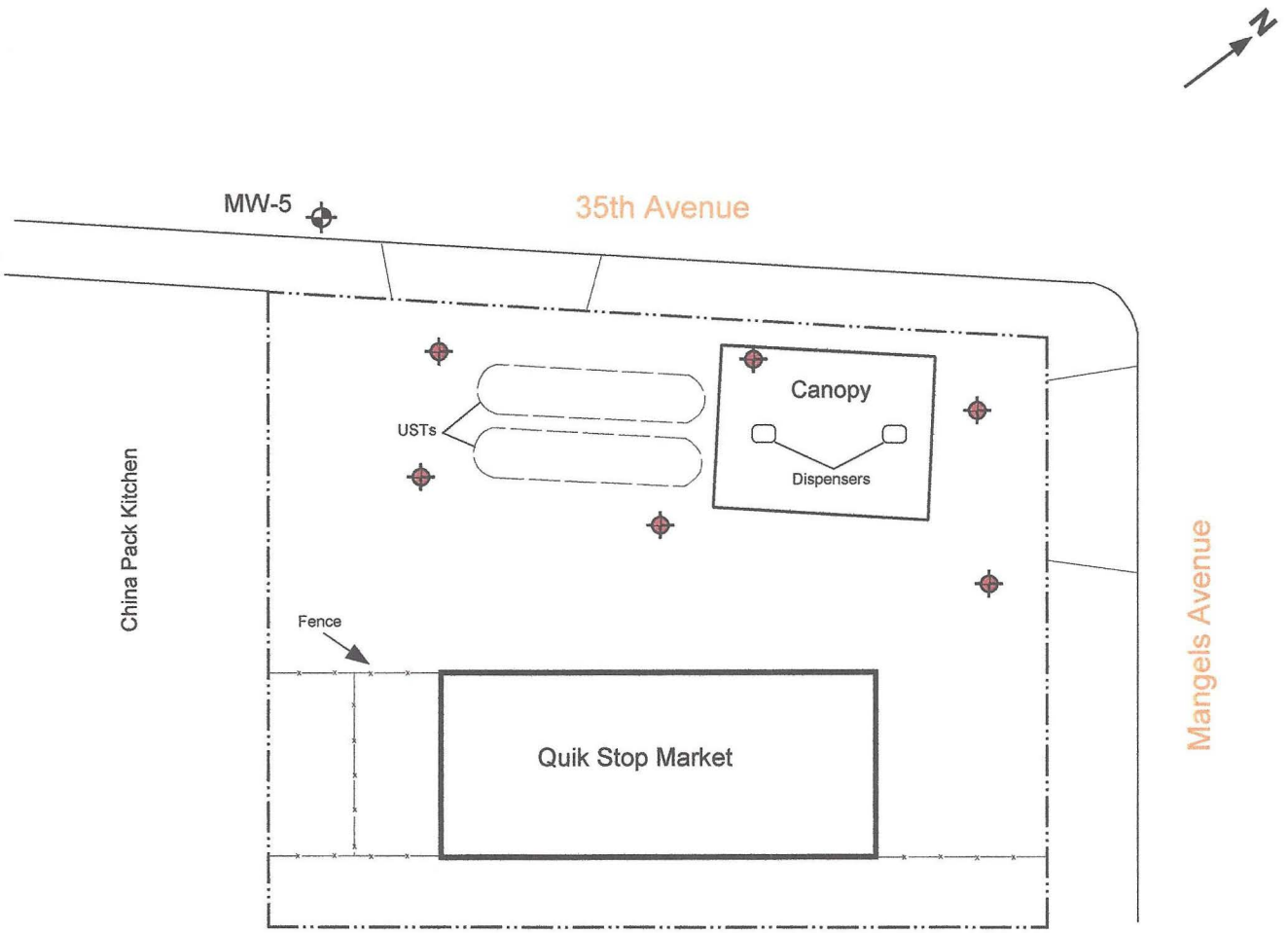
SOURCE: USGS 1:24,000 SCALE SERIES OAKLAND EAST, CA QUAD

APPROX. SCALE

0 1.5 3.0 MI

N

Reviewed By: GM	**VICINITY MAP**	**Compliance & Closure, Inc.**
Approved By: GM	**Quik Stop Market No. 51** **3130 35th Avenue** **Oakland, California**	Job No.: 12216.1 / Drawn By: GM Date: 4/20/2016 / Fig. No.: 1



Legend

- Proposed GeoProbe Boring Location
- Existing Monitoring Well from former Exxon Service Station at 3055 35th Ave

0 15 30 60

Approximate Scale
1"=30'

Base: RHL Group Inc., 1998

Job No.: 12216-1	**Site Plan** Quik Stop Market #51 3130 35th Avenue Oakland, California	**Compliance & Closure, Inc.**
Date: 4/15/2016		Drawn by: NLN Figure No.:: **2**