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November 16, 2009

Paresh C. Khatri  
ALAMEDA COUNTY ENVIRONMENTAL HEALTH  
131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Project No. 33108-008647.00

Subject: Groundwater Monitoring Report – Fourth Quarter 2009  
Former Quest Laboratory  
6511 Golden Gate Drive  
Dublin, California (Fuel Leak Case No. RO0002860)

Dear Mr. Khatri:

Bureau Veritas North America, Inc. is pleased to present the attached *Groundwater Monitoring Report – fourth Quarter 2009* for the above site in Dublin, California. The report summarizes the findings of our investigation.

Bureau Veritas is pleased to be of service to Alameda County Environmental Health and Safeway Inc. Please contact me at 925.426.2679 or by email at [don.ashton@us.bureauveritas.com](mailto:don.ashton@us.bureauveritas.com), if you have any questions or comments.

Sincerely,

Donald Ashton  
Senior Geologist  
Environmental Services

cc: Kevin Thompson – Safeway Inc.  
Jeff Brown – Safeway Inc.

**Bureau Veritas North America, Inc.**

*Health, Safety, and Environmental Services*

2430 Camino Ramon, Suite 122

San Ramon, CA 94583

Main: (925) 426.2600

Fax: (925) 426.0106

[www.us.bureauveritas.com](http://www.us.bureauveritas.com)

***Groundwater Monitoring Report  
Fourth Quarter 2009  
(Fuel Leak Case No. RO0002860)***

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Former Quest Laboratory  
6511 Golden Gate Drive  
Dublin, California

November 16, 2009  
Project No. 33108-008647.00

Prepared for  
Safeway, Inc.  
Pleasanton, California



For the benefit of business and people

**Bureau Veritas North America, Inc.**  
2430 Camino Ramon, Suite 122  
San Ramon, California 94583  
925.426.2600  
[www.us.bureauveritas.com](http://www.us.bureauveritas.com)



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## **1.0 INTRODUCTION**

Safeway Inc. (Safeway) retained Bureau Veritas North America, Inc. (Bureau Veritas) to perform groundwater monitoring at the former Quest Laboratory property located at 6511 Golden Gate Drive in Dublin, California (the Site, Figure 1). This work was performed in response to a letter from the Alameda County Environmental Health (ACEH), dated September 16, 2008, requesting technical reports for Fuel Leak Case No. RO0002860.

## **2.0 BACKGROUND**

The Site was developed with the current building in 1982 and occupied by Quest Laboratory through late 2003, when the property was acquired by Safeway. A gasoline UST formerly existed at the north property boundary and was removed in 1989, receiving closure by ACEH in 1990. Findings of petroleum hydrocarbons in groundwater are documented in *Phase II Environmental Investigation at the Former Quest Laboratory 6511 Golden Gate Drive, Dublin, California*, dated April 26, 2004 by Clayton Group Services (Clayton, now Bureau Veritas), which found the constituents in samples collected below and downgradient of the former UST. On October 7, 2004, Clayton submitted a copy of its 2004 Phase II report to ACEH disclosing the petroleum hydrocarbon findings at the request of Safeway.

In a letter dated July 3, 2008, ACEH notified Safeway that the site had been re-opened as a Fuel Leak Case (Geotracker Global ID: T06019799610) requiring additional investigation. Bureau Veritas conducted an additional investigation, installed three groundwater monitoring wells, and submitted a report of findings: *Additional Soil and Groundwater Investigation at Former Quest Laboratory*, dated March 13, 2009. Groundwater in two wells was found to contain low concentrations of petroleum hydrocarbons that slightly exceeded the Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB). However, the two successive monitoring events had no reportable petroleum hydrocarbon concentrations in the groundwater samples. Findings from the fourth quarter 2009 event are summarized in this report.

## **3.0 SCOPE OF WORK**

Bureau Veritas performed the following scope of work:

- Conducted groundwater depth monitoring and collected groundwater samples from each well.
- Analyzed groundwater samples for petroleum hydrocarbons.
- Prepared this technical report that documents the field activities, findings, and conclusions.
- Submitted data to the State Water Resources Control Board (SWRCB) GeoTracker program (following completion of final report).



### **3.1 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES**

On the day of sampling (October 7, 2009), the well casings were opened allowing the groundwater levels to stabilize. The depth to water and the total depth of the water column were measured in each casing, and the volume of the water columns calculated. The wells were then purged using a 'low-flow purging technique' and the water quality parameters were monitored. A peristaltic pump with new tubing was used to purge groundwater from each monitoring well at a 'low flow' rate of approximately 200 milliliters or less per minute. Water quality parameters (pH, specific conductivity, temperature, turbidity, oxidation-reduction potential, and dissolved oxygen) were recorded onto groundwater sampling data sheets at timed intervals. The sampling data sheets are presented in Appendix A.

Upon purging sufficient water from the monitoring wells and allowing for sufficient recovery, groundwater samples were collected for laboratory analysis. The sample container size, type, and sample preservative corresponded to the requested analytical method. Sample containers were sealed, labeled with identifying information, logged onto the chain-of custody, and temporarily stored in a chilled ice-chest for transportation to the laboratory. Groundwater removed from monitoring wells during development and purging was stored onsite in a sealed and labeled 55-gallon drum meeting Department of Transportation requirements, pending proper disposal.

### **3.2 LABORATORY ANALYSIS**

Bureau Veritas submitted three (3) groundwater samples for laboratory analysis by the following United States Environmental Protection Agency (USEPA) approved methods:

- USEPA Method 8015B Modified for Purgable Total Petroleum Hydrocarbons as gasoline (TPH-G) prepared by EPA Method 5030B, and Extractable Petroleum Hydrocarbons as diesel and motor oil (TPH-D and TPH-O) prepared by EPA Method 3520C.

Groundwater samples were analyzed by Curtis & Tompkins, Ltd. of Berkeley, California, a state certified laboratory. The laboratory prepared the generated data in the required electronic deliverable data format for uploading into GeoTracker database.

## **4.0 FINDINGS**

### **4.1 GROUNDWATER ELEVATION MONITORING**

Groundwater elevation was found to range between 325.79 feet (MW-3) and 326.06 feet (MW-1) above mean sea level for this event. Groundwater elevations are presented in Table 1. This data was used to produce a groundwater elevation map with contours (Figure 3). Groundwater flow interpreted from this data is southeasterly at a gradient of 0.004 feet per foot as measured between wells MW-1 and MW-3.

The groundwater flow direction has been consistently in a southeasterly during the period of site investigation. However, a northerly gradient was reported for the initial monitoring event (January 15,



2009). Elevation data was found to be miss plotted for the January event. A corrected groundwater elevation map for January 15, 2009 is presented as Figure 4.

#### 4.2 GROUNDWATER

Analytical results for the three groundwater samples (MW-1, MW-2 and MW-3) indicate that TPH ranged compounds are not present above the laboratory reporting limits. The analytical results for the groundwater samples are summarized in Table 2.

#### 5.0 CONCLUSION

The southeasterly groundwater gradient measured over four quarterly monitoring events indicates that the groundwater gradient has consistently been following the regional topography; therefore, the well placements were appropriate for this investigation. Concentrations of TPH compounds were only detected in groundwater samples in the first monitoring event and were not reported in the last three sampling events. Since the groundwater elevation has varied by only approximately two vertical feet during the monitoring program, it appears that the on Site fuel release has degraded below detectable concentrations and no further investigation is warranted.

#### 6.0 RECOMMENDATIONS

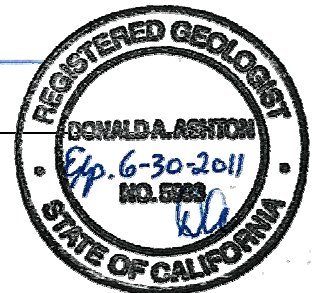
Based on the data generated during four quarters of groundwater sampling, Bureau Veritas recommends that ACEH terminate the fuel leak investigation at this site and issue a case closure letter.

#### 7.0 LIMITATIONS

The services provided by Bureau Veritas in completing this project have been provided in a manner consistent with the normal standards of the profession. No other warranty, expressed or implied, is made.

This report was prepared by:

Donald A. Ashton, P.G.  
Senior Geologist  
Environmental Services



This report was reviewed by:

Jon A. Rosso, P.E.  
Director  
Environmental Services  
San Francisco Regional Office  
November 16, 2009



## TABLES

**TABLE 1**  
**Groundwater Elevation Data**  
**6511 Golden Gate Drive, Dublin, CA**  
 Project No. 33108-0086470.00

Monitoring Well	Measurement Date	Top of Casing (TOC) Elevation * (ft) NGVD 29	Depth to Groundwater (ft) from TOC	Groundwater Elevation (ft)	Change from Previous Measurement (ft)
<b>MW-1</b>	1/15/2009	342.68	15.59	327.09	First Sampling
	4/16/2009		14.55	328.13	1.04
	7/31/2009		15.94	326.74	-1.39
	<b>10/7/2009</b>		16.62	<b>326.06</b>	-0.68
<b>MW-2</b>	1/15/2009	342.53	15.79	326.74	First Sampling
	4/16/2009		14.81	327.72	0.98
	7/31/2009		16.09	326.44	-1.28
	<b>10/7/2009</b>		16.71	<b>325.82</b>	-0.62
<b>MW-3</b>	1/15/2009	342.99	16.21	326.78	First Sampling
	4/16/2009		15.21	327.78	1.00
	7/31/2009		16.52	326.47	-1.31
	<b>10/7/2009</b>		17.20	<b>325.79</b>	-0.68

Legend

\* = Well Casing survey conducted on January 28, 2009 by Virgil Chavez Land Surveying (Geotracker ID: T06019799610)

NGVD 29 = National Geodetic Vertical Datum - 1929

Well Screen intervals: 10' to 20' bgs (installed January 8, 2009).



**TABLE 2**  
**Summary of Groundwater Analytical Results - TPH and VOCs**  
**6511 Golden Gate Drive, Dublin, CA**  
**Project No. 33108-008647.00**

Sample ID	Date	Units	TPH-g	TPH-d	TPH-mo	Aromatics BTEX	Oygenates: MTBE, TAME, DIPE, ETBE	Oxygenate TBA	EDB & 1,2-DCA	sec-Butyl benzene	4-Isobpropyl touene
<b>MW-1</b>	1/15/2009	ug/L	<b>99</b>	<b>89</b>	<250	< 0.5	< 0.5	< 2.0	< 0.5	<b>0.53</b>	<0.5
	4/16/2009	ug/L	< 50	< 50	<250	< 0.5	< 0.5	< 2.0	--	--	--
	7/31/2009	ug/L	< 50	< 50	<300	--	--	--	--	--	--
	<b>10/7/2009</b>	ug/L	< 50	< 50	<300	--	--	--	--	--	--
<b>MW-2</b>	1/15/2009	ug/L	<50	< 50	<250	< 0.5	< 0.5	< 2.0	< 0.5	<0.5	<b>0.62</b>
	4/16/2009	ug/L	<50	< 50	<250	< 0.5	< 0.5	< 2.0	--	--	--
	7/31/2009	ug/L	<50	< 50	<300	--	--	--	--	--	--
	<b>10/7/2009</b>	ug/L	<50	< 50	<300	--	--	--	--	--	--
<b>MW-3</b>	1/15/2009	ug/L	<b>140</b>	<b>85</b>	<250	< 0.5	< 0.5	< 2.0	< 0.5	<0.5	<0.5
	4/16/2009	ug/L	< 50	< 50	<250	< 0.5	< 0.5	< 2.0	--	--	--
	7/31/2009	ug/L	< 50	< 50	<300	--	--	--	--	--	--
	<b>10/7/2009</b>	ug/L	< 50	< 50	<300	--	--	--	--	--	--
ESLs - Tier 1 - Table A	ug/L	100	100	100	1	Varies	NE	Varies	NE	NE	

**Notes:**

ug/L = micrograms per liter

TPH = Total Petroleum Hydrocarbons, compound range as gasoline (-g) by EPA Method 8015B

TPH = Total Petroleum Hydrocarbons, compound ranges as diesel (-d) and motor oil (-mo) by EPA Method 8015B with Silica Gel Cleanup

Aromatic volatiles = BTEX: benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B

Oxygenates: MTBE (methyl tert-butyl ether), TAME (tert-Amyl methyl ether), DIPE (Diisopropyl ether), & ETBE (Ethyl tert-butyl ether) by EPA Method 8260B

Oxygenate: TBA (Tert-butyl alcohol)

EDB & 1,2-DCA = Lead scavengers: ethylene dibromide & 1,2-dichloroethane

< 0.05 = Analyte concentration below the indicated laboratory reporting level

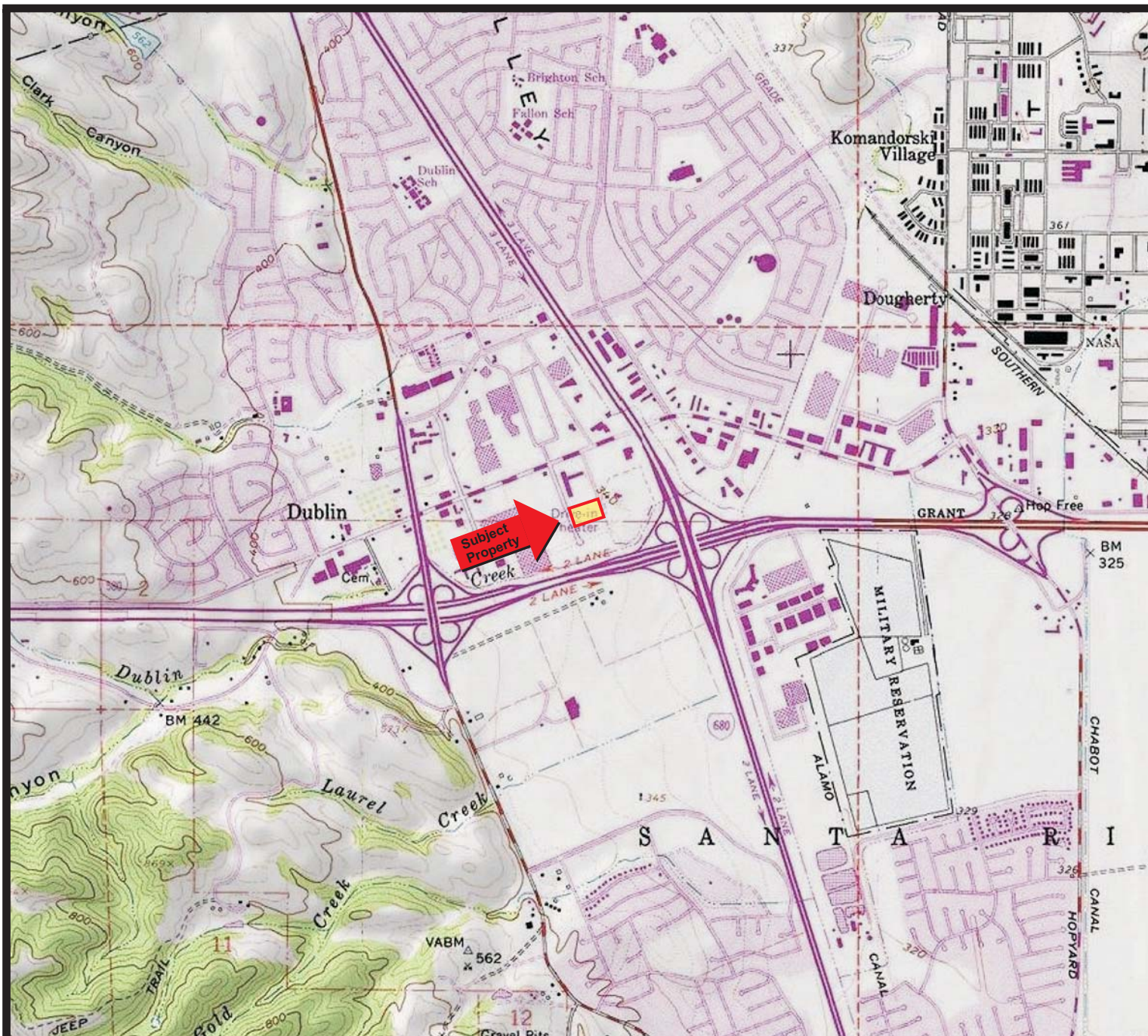
-- = Not Analyzed

NE = Not established

ESLs = Environmental Screening Level: Screening For Environmental Concerns At Sites with Contaminated Soil and Groundwater, RWQCB  
Interim Final - November 2007; Table A: Groundwater (<3 meter bgs) is a potential source of drinking water

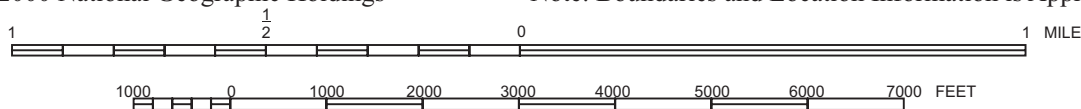


## FIGURES



Map Source: TOPO! © 2000 National Geographic Holdings

Note: Boundaries and Location Information is Approximate



Portion of the 7.5-Minute Series Dublin, California  
 Quadrangle Topographic Map (Datum: NAD 83)  
 United States Department of the Interior  
 Geological Survey  
 1980 Photorevised from 1979

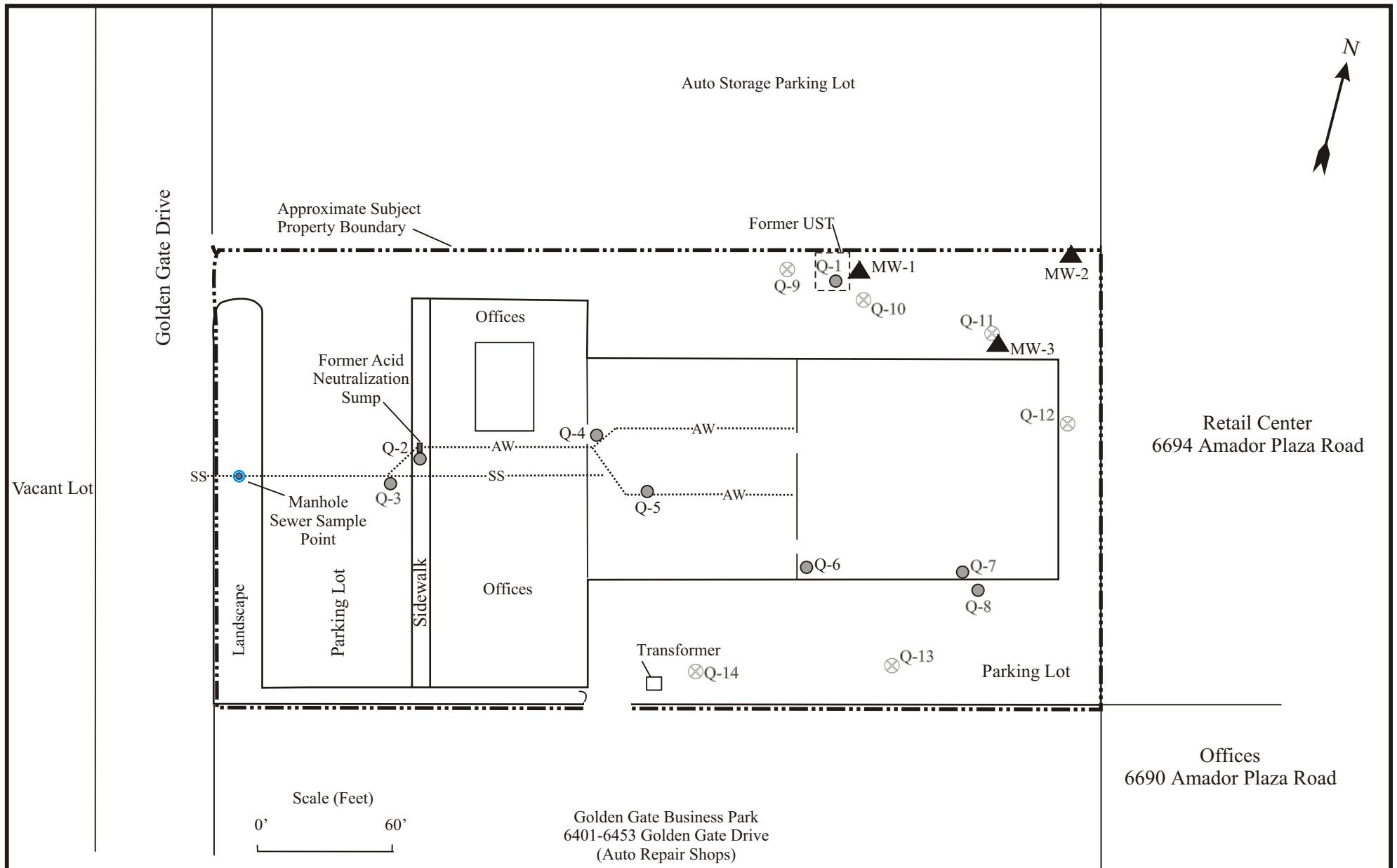


PROPERTY LOCATION MAP  
 Former Quest Laboratory  
 6511 Golden Gate Drive  
 Dublin, California  
 Project No. 33108-008647.00

Figure

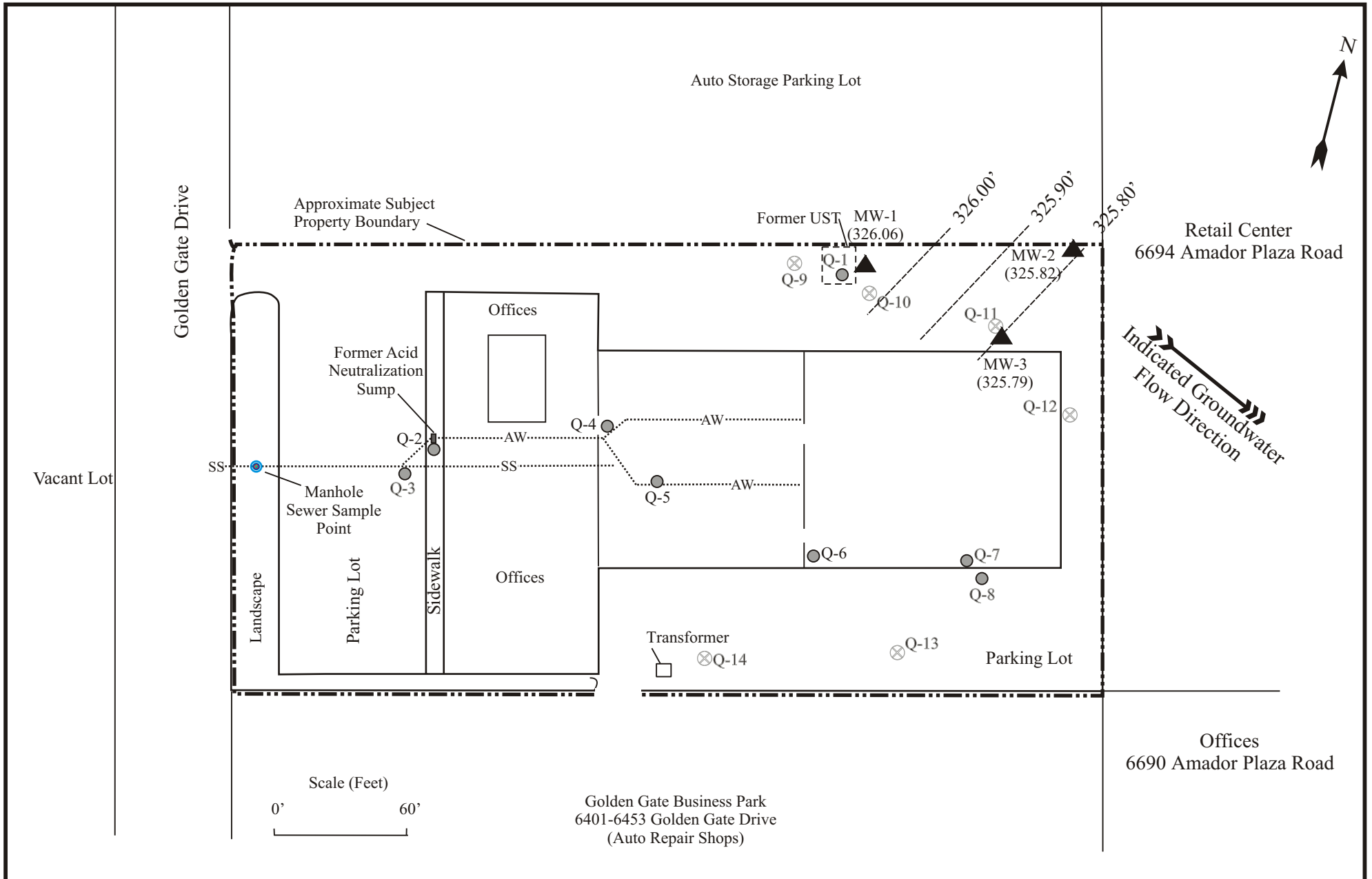
1




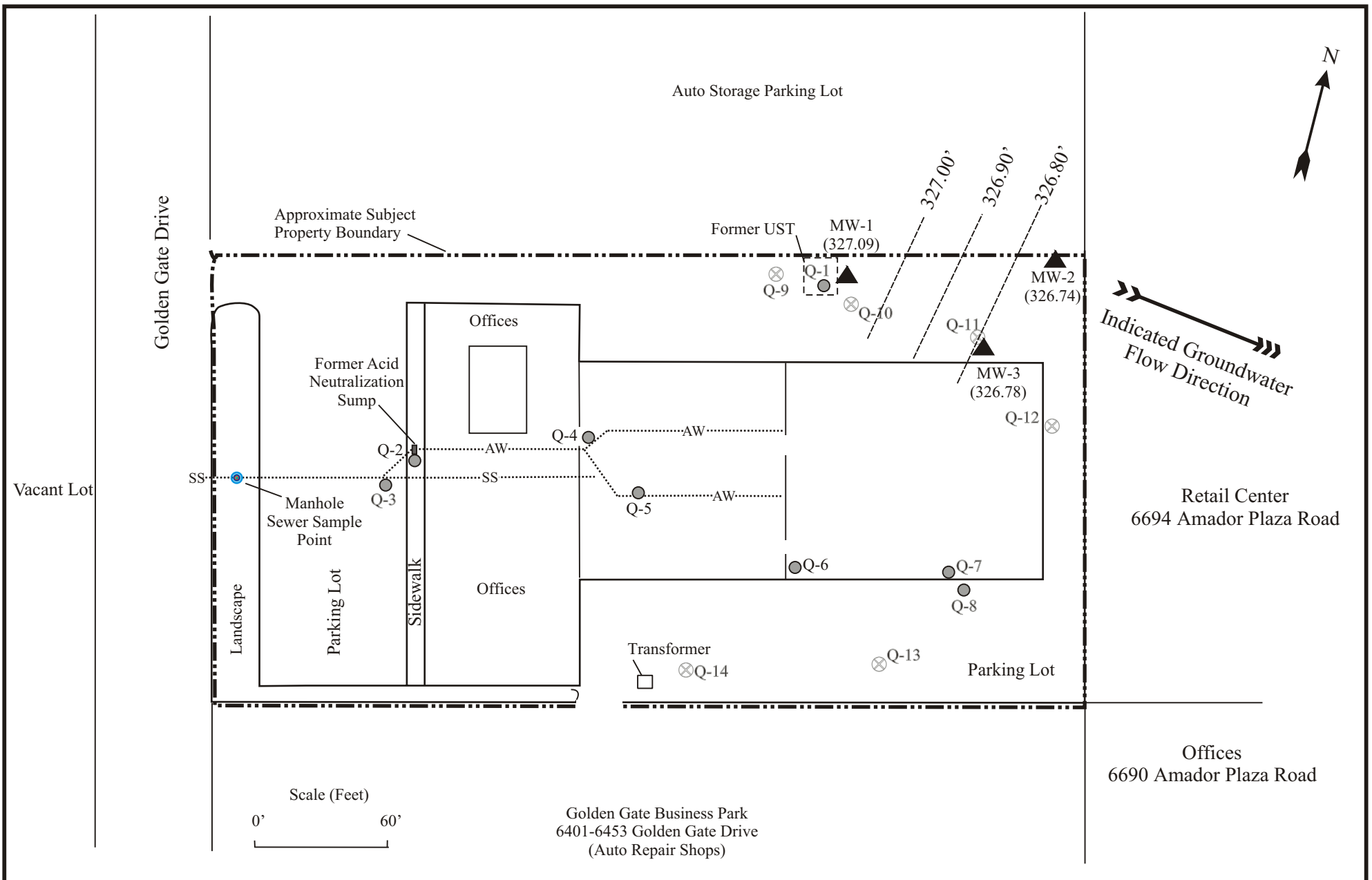


LEGEND	SITE PLAN WITH SAMPLE LOCATIONS	FIGURE	 <b>BUREAU VERITAS</b>
<p>▲ MW-1 Monitoring Well &amp; ID, installed January 8, 2009</p> <p>● Q-2 Borehole/Sample Location 12-19-03      SS Sanitary Sewer Line</p> <p>⊗ Q-9 Borehole/Sample Location 1-22-04      AW Acid Waste Sewer Line</p>	<p>Former Quest Laboratory            Randall Foods            6511 Golden Gate Drive            Dublin, California            Project No. 33108-008647.00</p>	<p>2</p>	





<p><b>LEGEND</b></p> <p>▲ Monitoring Well &amp; ID with Groundwater Elevation in Feet (NGVD 29) 325.90'----- Groundwater Elevation Contour for October 7, 2009</p> <p>Q-2● Borehole/Sample Location 12-19-03      SS Sanitary Sewer Line Q-9⊗ Borehole/Sample Location 1-22-04      AW Acid Waste Sewer Line</p>	<p><b>GROUNDWATER ELEVATION MAP 10-7-2009</b></p> <p>Former Quest Laboratory Randall Foods 6511 Golden Gate Drive Dublin, California Project No. 33108-008647.00</p>	<p><b>FIGURE</b></p> <p>3</p>	 <p><b>BUREAU VERITAS</b></p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------	------------------------------------------------------------------------------------------------------------------------



LEGEND	
▲	Monitoring Well & ID with Groundwater Elevation in Feet (NGVD 29)
326.90'	----- Groundwater Elevation Contour for January 15, 2009
Q-2 ●	Borehole/Sample Location 12-19-03
Q-9 ⊗	Borehole/Sample Location 1-22-04
SS	Sanitary Sewer Line
AW	Acid Waste Sewer Line

**GROUNDWATER ELEVATION MAP 1-15-2009**

Former Quest Laboratory  
 Randall Foods  
 6511 Golden Gate Drive  
 Dublin, California  
 Project No. 33108-008647.00

**FIGURE**

**4**





**APPENDIX A**  
**SAMPLING DATA SHEETS**



### GROUNDWATER SAMPLING DATA SHEET

Project Name:	Safeway	Well ID Number:	MW-1
Project No.:	33108-008647.00	Sample ID Number:	MW-1
Project Location:	Dublin, CA	Date Gauged:	10/7/2009
Field Technician:	Jesse Orta	Date Purged:	10/7/2009
Weather Conditions:	Sunny, Clear	Date Sampled:	10/7/2009

Top of Casing Elevation (ft, msl):	342.68	Casing Diameter (inches):	1.0
Depth to Water (ft, btoc):	16.62	Wellhead Condition:	OK
Groundwater Elevation (ft, msl):	326.06	Presence of Wellhead Gases:	none
Depth to Well Bottom (ft, btoc):	25.13	Vapor Reading (ppm):	---
Water Column Height (ft):	8.51	Presence of SPH:	---
Calculated Purge Volume (gal):	0.34 (1288 mL)	Thickness of SPH (ft):	---
Actual Purge Volume (gal):	3000 mL	Comments:	OK

Gallons Per Foot: 1"=0.04, 2"=0.17, 3"=0.37, 4"=0.66, 6"=1.5, other= r2 x 0.163

#### PURGING MEASUREMENTS

Time	Volume Removed (gal) mL	Specific Conductivity (Range: mS/cm - uS/cm)	Temp (°C)	Dissolved Oxygen (mg/L) (%)	pH (STD units)	Turbidity (NTUs) or TDS g/L	ORP (mV)	Odor/Comments
1426								
1432	500 mL	- Water Quality Meter - Failed - error Message						No Odor
1434	500	No Data						↓
1436	500							
1440	500							
1444	500							
1448	500							

Water Level Indicator Model & No.:	WLI - Enviro supply	Purge Method:	Peristaltic Pump / Flows Through Cell
pH/Cond/Temp Meter Model:	Horiba - U22	Purge Equipment Used:	Peristaltic Pump
Turbidity Meter Model:	1	Purge Rate (gpm):	

Acceptable GW recovery = 0.80 x water column height: DTW at sampling:

Sample Collection Time:	1455	Chemical Laboratory:	McCampbell Analytical 925-252-9262
Sample Collection Method:	Peristaltic Pump	Chemical Analysis:	TPH-d, g, mo,
Sample Containers Used:	1L hcl amber, 2 VOAs hcl		

Other Field Observations:  
 DTW 16.75 1440





### GROUNDWATER SAMPLING DATA SHEET

Project Name:	Safeway	Well ID Number:	MW-2
Project No.:	33108-008647.00	Sample ID Number:	MW-2
Project Location:	Dublin, CA	Date Gauged:	10/7/2009
Field Technician:	Jesse Orta	Date Purged:	10/7/2009
Weather Conditions:	Sunny, Clear	Date Sampled:	10/7/2009

Top of Casing Elevation (ft. ms):	342.53	Casing Diameter (inches):	1.0
Depth to Water (ft. btoc):	16.71	Wellhead Condition:	OK
Groundwater Elevation (ft. ms):	325.82	Presence of Wellhead Gases:	none
Depth to Well Bottom (ft. btoc):	19.06	Vapor Reading (ppm):	—
Water Column Height (ft):	2.35	Presence of SPH:	—
Calculated Purge Volume (gal):	0.094	Thickness of SPH (ft):	—
Actual Purge Volume (gal):	1350 mL	Comments:	OK

Gallons Per Foot: 1"=0.04, 2"=0.17, 3"=0.37, 4"=0.66, 6"=1.5, other= r2 x 0.163

#### PURGING MEASUREMENTS

Time	Volume Removed (gal) <i>mL</i>	Specific Conductivity (Range: <i>mS/cm</i> uS/cm)	Temp (°C)	Dissolved Oxygen (%) <i>mg/L</i>	pH (STD units)	Turbidity (NTUs) of <i>TDS</i> g/L	ORP (mV)	Odor/Comments	
1234									
1237	450	0.82	22.45	0.0	6.71	54.4	0.8	143	No odor
1245	350	0.99	23.31	0.0	6.54	33.8	0.7	136	↓ Dried
1248	350	0.98	22.42	0.0	6.53	91.0	0.7	132	
1250	200	0.99	22.60	0.0	6.58	72.5	0.7	132	

Water Level Indicator Model & No.:	WLI - Enviro supply	Purge Method:	Peristaltic Pump / Flow through cell
pH/Cond/Temp Meter Model:	Horiba - U22	Purge Equipment Used:	Peristaltic Pump
Turbidity Meter Model:	1	Purge Rate (gpm):	

Acceptable GW recovery = 0.80 x water column height: DTW at sampling:			
Sample Collection Time:	1305	Chemical Laboratory:	McC Campbell Analytical 925-252-9262
Sample Collection Method:	Peristaltic Pump	Chemical Analysis:	TPH-d, g, mo,
Sample Containers Used:	1L hcl amber, 2 VOA's hcl		

Other Field Observations:

12:50 well dried

12:58 DTW 16.8'



### GROUNDWATER SAMPLING DATA SHEET

Project Name:	Safeway	Well ID Number:	MW-3
Project No.:	33108-008647.00	Sample ID Number:	MW-3
Project Location:	Dublin, CA	Date Gauged:	10/7/2009
Field Technician:	Jesse Orta	Date Purged:	10/7/2009
Weather Conditions:	Sunny, clear	Date Sampled:	10/7/2009

Top of Casing Elevation (ft. msl):	342.99	Casing Diameter (inches):	1.0
Depth to Water (ft. btoc):	17.20	Wellhead Condition:	OK
Groundwater Elevation (ft. msl):	325.79	Presence of Wellhead Gases:	none
Depth to Well Bottom (ft. btoc):	19.29	Vapor Reading (ppm):	—
Water Column Height (ft):	2.09	Presence of SPH:	—
Calculated Purge Volume (gal):	0.084	Thickness of SPH (ft):	—
Actual Purge Volume (gal):	450 mL	Comments:	OK

Gallons Per Foot: 1"=0.04, 2"=0.17, 3"=0.37, 4"=0.66, 6"=1.5, other= r2 x 0.163

#### PURGING MEASUREMENTS

Time	Volume Removed (gall/m <sup>h</sup> )	Specific Conductivity (Range: mS/cm uS/cm)	Temp (°C)	Dissolved Oxygen (mg/L %)	pH (STD units)	Turbidity (NTUs) or TDS (g/L)	ORP (mV)	Odor/Comments
1150								
1153	450 ml/h	0.9	21.3	0.0	6.42	20.4 0.6	135	No Odor, Clear Well dried

Water Level Indicator Model & No.:	WLI - Enviro supply	Purge Method:	Peristaltic Pump Flow → Cell
pH/Cond/Temp Meter Model:	Horiba - U22	Purge Equipment Used:	Peristaltic Pump
Turbidity Meter Model:	1	Purge Rate (gpm):	

Acceptable GW recovery = 0.80 x water column height: DTW at sampling:

Sample Collection Time:	1410	Chemical Laboratory:	McCampbell Analytical 925-252-9262
Sample Collection Method:	Peristaltic Pump	Chemical Analysis:	TPH-d, g, mo,
Sample Containers Used:	1L hcl amber, 2 VOA's hcl,		

Other Field Observations: well dried @ 1153  
 1200 DTW 19.15 Ft  
 1212 DTW 18.25 Start sample 200 mL collected  
 1214 DTW well dried  
 1410 End Sample 750 mL collected and equets sent to Lab.



## **APPENDIX B**

### **LABORATORY ANALYTICAL DATA SHEETS AND CHAIN-OF-CUSTODY RECORD**





**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878







Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

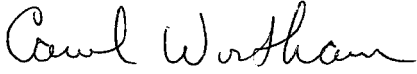
**Laboratory Job Number 215564  
ANALYTICAL REPORT**

Bureau Veritas North America  
2430 Camino Ramon  
San Ramon, Ca 94583

Project : 33108-008647.  
Location : Gateway Blvd.  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	215564-001
MW-2	215564-002
MW-3	215564-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 10/20/2009

NELAP # 01107CA

**CASE NARRATIVE**

Laboratory number: 215564  
Client: Bureau Veritas North America  
Project: 33108-008647.  
Location: Gateway Blvd.  
Request Date: 10/08/09  
Samples Received: 10/08/09

This data package contains sample and QC results for three water samples, requested for the above referenced project on 10/08/09. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

215564

# CHAIN OF CUSTODY



**BUREAU  
VERITAS**

Lab: Curtis & Tompkins

510-486-0900

TAT: Standard

### Report results to:

Name Don Ashton  
 Company Bureau Veritas  
 Mailing Address 2430 Camino Ramon #122  
 City, State, Zip San Ramon, California 94583  
 Telephone No. (925) 426-2679 Cell: 260-3102  
 Fax No. (925) 426-0106  
 Email: don.ashton @us.bureauveritas.com

### Project Information

Project No. 33108-008647.00  
 Name Gateway Blvd.  
 Location Dublin, CA

### Analyses Requested

8015B TPH g, d, mo (SGCU)

Special instructions and/or specific regulatory requirements:  
 SGCU: Silica Gel Cleanup prior to 8015C analysis  
 GeoTracker Global ID: **T06019799610**

EDD Format for Geotracker if checked:  X

Sample Identification	Date Sampled	Time Sampled	Matrix/Media	No. of Conts.																			Preservative
1 MW-1	10/7/2009	14 55	Water	1 Amb L	X																		HCl
	10/7/2009	14 55	Water	2 VOA	X																		HCl
2 MW-2	10/7/2009	13 05	Water	1 Amb L	X																		HCl
	10/7/2009	13 05	Water	2 VOA	X																		HCl
3 MW-3	10/7/2009	14 10	Water	1 Amb L	X																		HCl
	10/7/2009	14 10	Water	2 VOA	X																		HCl

Collected by: Jesse Orta  
 Relinquished by: [Signature] Date/Time 10-8-09 16:15  
 Relinquished by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: \_\_\_\_\_  
 Received by: [Signature] Date/Time 10/8/09 - 16:15  
 Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_

COOLER RECEIPT CHECKLIST



Login # 215564 Date Received 10/8/09 Number of coolers 1
Client BUREAU VERITAS Project GATEWAY BLVD.

Date Opened 10/8/09 By (print) M. Villanueva (sign) [Signature]
Date Logged in 10/9/09 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 4.2

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.



**Total Volatile Hydrocarbons**

Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	10/07/09
Units:	ug/L	Received:	10/08/09
Diln Fac:	1.000		

Field ID: MW-1 Batch#: 156139  
 Type: SAMPLE Analyzed: 10/17/09  
 Lab ID: 215564-001

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	68	64-147
Bromofluorobenzene (FID)	71	71-138

Field ID: MW-2 Batch#: 156139  
 Type: SAMPLE Analyzed: 10/17/09  
 Lab ID: 215564-002

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	65	64-147
Bromofluorobenzene (FID)	72	71-138

Field ID: MW-3 Batch#: 156228  
 Type: SAMPLE Analyzed: 10/19/09  
 Lab ID: 215564-003

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	64-147
Bromofluorobenzene (FID)	92	71-138

ND= Not Detected  
 RL= Reporting Limit

Total Volatile Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	10/07/09
Units:	ug/L	Received:	10/08/09
Diln Fac:	1.000		

Type: BLANK Batch#: 156139  
 Lab ID: QC516945 Analyzed: 10/16/09

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	71	64-147
Bromofluorobenzene (FID)	71	71-138

Type: BLANK Batch#: 156228  
 Lab ID: QC517285 Analyzed: 10/19/09

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	64-147
Bromofluorobenzene (FID)	94	71-138

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC516948	Batch#:	156139
Matrix:	Water	Analyzed:	10/16/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	939.0	94	77-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	85	64-147
Bromofluorobenzene (FID)	75	71-138

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	156139
MSS Lab ID:	215490-001	Sampled:	10/06/09
Matrix:	Water	Received:	10/07/09
Units:	ug/L	Analyzed:	10/16/09
Diln Fac:	1.000		

Type: MS Lab ID: QC516949

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	681.0	2,000	2,325	82	66-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	64-147
Bromofluorobenzene (FID)	101	71-138

Type: MSD Lab ID: QC516950

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,252	79	66-120	3	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	64-147
Bromofluorobenzene (FID)	97	71-138

RPD= Relative Percent Difference

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC517286	Batch#:	156228
Matrix:	Water	Analyzed:	10/20/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,031	102	77-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	64-147
Bromofluorobenzene (FID)	108	71-138

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33108-008647.	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	156228
MSS Lab ID:	215505-003	Sampled:	10/07/09
Matrix:	Water	Received:	10/07/09
Units:	ug/L	Analyzed:	10/20/09
Diln Fac:	1.000		

Type: MS Lab ID: QC517287

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.05	2,000	1,802	89	66-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	64-147
Bromofluorobenzene (FID)	105	71-138

Type: MSD Lab ID: QC517288

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,844	92	66-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	64-147
Bromofluorobenzene (FID)	103	71-138

RPD= Relative Percent Difference



## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	215564	Location:	Gateway Blvd.
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33108-008647.	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	155950
Units:	ug/L	Prepared:	10/12/09
Diln Fac:	1.000	Analyzed:	10/13/09

Type: BS Cleanup Method: EPA 3630C  
 Lab ID: QC516230

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,322	93	53-122

Surrogate	%REC	Limits
o-Terphenyl	100	60-130

Type: BSD Cleanup Method: EPA 3630C  
 Lab ID: QC516231

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,524	101	53-122	8	36

Surrogate	%REC	Limits
o-Terphenyl	109	60-130

RPD= Relative Percent Difference