Catalina Espino Devine
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-3949
Espino@Chevron.com

February 26, 2013

RECEIVED
By Alameda County Environmental Health at 9:26 am, Feb 28, 2013

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Facility # 95542

Address: 7007 San Ramon Road, Dublin, CA

I have reviewed the attached report titled *Addendum to Case Closure Request* and dated February 26, 2013.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Catalina Espino Devine
Project Manager

Enclosure: Report

CONESTOGA-ROVERS & ASSOCIATES

10969 Trade Center Drive
Rancho Cordova, California 95670
Telephone: (916) 889-8900 Fax: (916) 889-8999
http://www.craworld.com

February 26, 2013 Reference No. 611969D

Mr. Dilan Roe, P.E.
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Addendum to Case Closure Request
Chevron Service Station 95542
7007 San Ramon Road
Dublin, California
Case No. RO0000206

Dear Mr. Roe:

Conestoga-Rovers & Associates (CRA) is submitting this *Addendum to Case Closure Request* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). As requested by ACEH, CRA performed an additional soil vapor sampling event in March 2011 to address ACEH's remaining concern (potential seasonal variations in vapor concentrations) prior to case closure consideration. The results were presented in the April 5, 2011 *Results of Additional Soil Vapor Sampling Event* (Attachment A), in which case closure was requested based on low-risk conditions. We understand the site has been under closure review since that time; however, to date a response to this request has not been received from ACEH.

The purpose of this addendum is to present the results of our evaluation of current site conditions to the general and media-specific closure criteria included in the recently adopted *Low-Threat Underground Storage Tank Case Closure Policy* (the "Low-Threat Policy"). Site data and information presented in previously submitted reports, including the August 17, 2009 *Site Conceptual Model and Additional Investigation Work Plan* (SCM/Work Plan), the December 2, 2009 *Soil Vapor Quality Evaluation, Feasibility Study, and Corrective Action Plan*, the October 6, 2010 *Second Semi-Annual 2010 Groundwater Monitoring Report and Request for Suspension of Monitoring*, and the April 5, 2011 report mentioned above, was used in the evaluation. The site meets the stated low-threat criteria; therefore, we are requesting ACEH grant case closure. A summary of the Low-Threat Policy, an evaluation of the site conditions to the case closure criteria, and our conclusions and recommendations are presented below.

PURPOSE OF THE LOW THREAT UNDERGROUND STORAGE TANK CASE CLOSURE POLICY

On August 17, 2012, the State Water Resources Control Board (SWRCB) adopted the Low-Threat Policy via Resolution 2012-0016. The intent of the Low-Threat Policy is to increase cleanup process efficiency at petroleum release sites. A benefit of improved efficiency is the preservation of limited resources for mitigation of releases posing the greatest threat to human and environmental health. Per the Low-Threat Policy, sites that meet the specified general and media-specific criteria pose a low threat to human health, safety, or the environment and are appropriate for case closure pursuant to Health and Safety Code section 25296.10. The Low-Threat Policy further states that those sites that meet the criteria for low-threat closure do not require further corrective action and shall be issued a uniform closure letter. The general and media-specific criteria are described below.

GENERAL CRITERIA

The eight general criteria that must be satisfied by all candidate sites, and the site-specific evaluation for each of these criteria, are presented below.

a. The unauthorized release is located within the service area of a public water system.

Satisfied: Drinking water for the City of Dublin is provided by Alameda County Flood Control and Water Conservation District (Zone 7), which obtains the majority of its supply from the San Francisco Bay Delta via the State Water Project.

b. The unauthorized release consists only of petroleum.

Satisfied: The unauthorized release at the site has been characterized as a release of petroleum-based products (gasoline and related constituents, motor oil).

c. The unauthorized ("primary") release from the UST system has been stopped.

Satisfied: Petroleum storage and handling facilities that were the source of the release (first-generation fuel dispensers, product piping, and USTs) have been removed from the site and replaced.

d. Free product has been removed to the maximum extent practicable.

Satisfied: No light non-aqueous phase liquid (LNAPL) has been observed at the site since 1984. Approximately 6 inches of LNAPL (what reportedly appeared to be used-oil) was observed in

well #3 two weeks following installation in 1983. In early 1984, this well was drilled out and deepened to 35 feet below grade (fbg), and no LNAPL was observed at this time. This well was monitored periodically through late 1984 and no LNAPL generally was observed with the exception of June 1984 (approximate thickness of 0.02 feet). The LNAPL was bailed from the well. Well #3 was destroyed in 1990. No LNAPL has been observed in any other of the site monitoring wells.

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed.

Satisfied: The SCM/Work Plan was submitted on August 17, 2009. Site conditions have not changed significantly since that time, thus the SCM remains valid. Copies of previously submitted figures showing the residual concentrations in soil and groundwater are included as Attachment B. The historical soil and grab-groundwater sample analytical results are presented in Tables 1 and 2, respectively.

f. Secondary source has been removed to the extent practicable.

Satisfied: Remedial excavations in 1990 and 1998 removed approximately 800 cubic yards of impacted soil from the former source areas (Figure 2). Based on decreasing concentrations in groundwater, there does not appear to be any significant secondary source material remaining that would change these trends.

g. Soil and groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code section 25296.15.

Satisfied: Soil and groundwater samples have been analyzed for MTBE (Tables 1 and 2), and reported in accordance with Health and Safety Code section 25296.15. As shown on the concentration map in Attachment B, MTBE was not detected in groundwater during the last monitoring event (September 2010).

h. Nuisance as defined by Water Code section 13050 does not exist at the site.

Satisfied: Conditions defined as a "nuisance" in Water Code section 13050 do not exist at the site.

MEDIA-SPECIFIC CRITERIA

Impacts to human health and the environment can occur due to releases from USTs through contact with contaminated media (groundwater, surface water, soil, and soil vapor) via various

exposure pathways. In the Low-Threat Policy, the most common exposure scenarios have been combined into three media-specific criteria:

1. Groundwater
2. Vapor Intrusion to Indoor Air
3. Direct Contact and Outdoor Air Exposure

Candidate sites must satisfy all three of these criteria, described further below.

Groundwater
It is a fundamental tenet of the Low-Threat Policy that if the specified closure criteria are satisfied at an unauthorized petroleum release site, attaining background water quality is not feasible, and applicable water quality objectives (WQOs) will be attained through natural attenuation within a reasonable amount of time, prior to the expected need for use of any affected groundwater. If a site has groundwater with a designated beneficial use that is affected by an unauthorized release, to satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds WQOs must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed in the Low-Threat Policy as follows:

1. a. The contaminant plume that exceeds WQOs is less than 100 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 250 feet from the defined plume boundary.
2. a. The contaminant plume that exceeds WQOs is less than 250 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   d. The dissolved concentration of benzene is less than 3,000 micrograms per liter (µg/L) and the dissolved concentration of MTBE is less than 1,000 µg/L.
3. a. The contaminant plume that exceeds WQOs is less than 250 feet in length.
   b. Free product may be present below the site but does not extend off-site.
   c. The plume has been stable or decreasing for a minimum of 5 years.
   d. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   e. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.

4. a. The contaminant plume that exceeds WQOs is less than 1,000 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   d. The dissolved concentration of benzene is less than 1,000 µg/L and the dissolved concentration of MTBE is less than 1,000 µg/L.
5. a. The regulatory agency determines, based on an analysis of site specific conditions, that under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and WQOs will be achieved within a reasonable time frame.

Satisfied: The site satisfies the characteristics of Class 4 above. The petroleum hydrocarbon plume that exceeds WQOs (Environmental Screening Levels [ESLs]) is less than 1,000 feet in length, there is no LNAPL, the nearest identified water supply well and surface water body are greater than 1,000 feet from the defined plume boundary, and dissolved benzene and MTBE concentrations are less than 1,000 µg/L (Attachment B).

Petroleum Vapor Intrusion to Indoor Air

The low-threat vapor intrusion criteria described below apply to sites where the release originated and impacted or potentially impacted adjacent parcels when: (1) existing buildings are occupied or may be reasonably expected to be occupied in the future, or (2) buildings for human occupancy are reasonably expected to be constructed in the future.

Petroleum release sites will satisfy the media-specific screening criteria for petroleum vapor intrusion if:

a. Site-specific conditions at the release site satisfy all of the characteristics and criteria of scenarios 1 through 3 as applicable, or all of the characteristics and criteria of scenario 4 as applicable; or,
b. A site-specific risk assessment for vapor intrusion is conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency; or,
c. The regulatory agency determines there is no significant risk of adversely affecting human health through the use of institutional or engineering controls.

Scenarios 1-4 of criteria (a) (existing building or future construction) are described below.

Scenario 1: Unweathered* LNAPL in Groundwater

- Depth to groundwater with unweathered* LNAPL is ≥30 feet below building foundation.
- Total TPH (TPHg + TPHd) in soil within 30 feet below building foundation is <100 milligrams per kilogram (mg/kg).

Scenario 2: Unweathered* LNAPL in Soil

- Unweathered* LNAPL in soil is ≥30 feet from building foundation in all directions, and depth to groundwater is >30 feet below building foundation.
- Total TPH in soil within 30 feet of building foundation in all directions is <100 mg/kg.

Scenario 3A: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥5 feet below building foundation.
- Dissolved benzene in groundwater is <100 µg/L.
- Total TPH in soil within 5 feet below building foundation is <100 mg/kg.
- Oxygen (O_2) concentration in soil within 5 feet below building foundation is <4%, or no O_2 data.

Scenario 3B: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥10 feet below building foundation.
- Dissolved benzene in groundwater is ≥100 µg/L and <1,000 µg/L.
- Total TPH in soil within 10 feet below building foundation is <100 mg/kg.
- O_2 concentration in soil within 10 feet below building foundation is <4%, or no O_2 data.

Scenario 3C: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥5 feet below building foundation.
- Dissolved benzene in groundwater is <1,000 µg/L.
- Total TPH in soil within 5 feet below building foundation is <100 mg/kg.
- O_2 concentration in soil within 5 below building foundation is ≥4%.

Scenario 4A: Direct soil gas measurements at least 5 fbg or foundation at sites without bioattenuation zone**

	Benzene µg/m³	*Ethylbenzene µg/m³*	*Naphthalene µg/m³*
Residential	<85	<1,100	<93
Commercial	<280	<3,600	<310

µg/m³ – micrograms per cubic meter

Scenario 4B: Direct soil gas measurements at least 5 fbg or foundation at sites with bioattenuation zone**

	Benzene µg/m³	*Ethylbenzene µg/m³*	*Naphthalene µg/m³*
Residential	<85,000	<1,100,000	<93,000
Commercial	<280,000	<3,600,000	<310,000

*Unweathered LNAPL is comparable to recently dispensed fuel where product has not been subjected to significant volatilization or solubilization.
**Bioattentuation zone = total TPH <100 mg/kg in upper 5' of soil, and ≥4% oxygen in soil at 5' sample depth; a 1,000-fold bioattenuation of petroleum vapors is assumed for the zone.

Petroleum release sites shall satisfy the media-specific criteria for petroleum vapor intrusion to indoor air and be considered low-threat for the vapor intrusion to indoor air pathway if any of the above criteria are met. However, for active commercial petroleum fueling facilities, satisfaction of these criteria is not required, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.

Satisfied: As the site is an active commercial fueling station (Chevron), satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required.

However, to further support the case of no significant vapor intrusion risk, the detected concentrations in soil vapor did not exceed the commercial/industrial ESLs and the benzene and ethylbenzene concentrations (only detected in one sample each) were well below the most conservative limits (residential) shown above (Scenario 4A) (see Table 1 of Attachment A). Additionally, the site also satisfies the characteristics of Scenario 3B above.

Direct Contact and Outdoor Air Exposure

The Low-Threat Policy describes conditions where direct contact with contaminated soil or inhalation of contaminants volatized to outdoor air poses a low threat to human health. Release

sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if they meet any one of the following:

a. Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the table below for the specified depth below ground surface. The limits from 0 to 5 fbg protect from ingestion, dermal contact, and outdoor inhalation of volatile and particulate emissions. The 5 to 10 fbg limits protect from inhalation of volatile emissions only; the ingestion and dermal contact pathways are not considered significant. In addition, if exposure to construction workers or utility trench workers is reasonably anticipated, the concentration limits for Utility Worker shall also be satisfied.

	Residential		*Commercial/Industrial*		*Utility Worker*
Constituent	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air (5–10 fbg) (mg/kg)*	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air (5–10 fbg) (mg/kg)*	*0–10 fbg (mg/kg)*
Benzene	1.9	2.8	8.2	12	14
Ethylbenzene	21	32	89	134	314
Naphthalene	9.7	9.7	45	45	219
PAH*	0.063	NA	0.68	NA	4.5

* Based on the seven carcinogenic polycyclic aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent [BaPe]. The PAH screening level is only applicable where soil is affected by either waste oil and/or Bunker C fuel.
NA = not applicable

b. Maximum concentrations of petroleum constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health.

c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health.

Satisfied: The site meets the characteristics of criteria (a) above. The maximum detected concentrations of benzene and ethylbenzene in soil samples collected in the 0 to 5 fbg and 5 to 10 fbg intervals do not exceed the most conservative limits (residential) shown above (see

attached Table 1). No naphthalene or PAHs were detected in the soil sample collected at 8 fbg beneath the former used-oil UST. Given these results and as this area was subsequently excavated to approximately 10.5 fbg and replaced with clean fill, no naphthalene or PAHs are expected to be present in soil from 0 to 5 fbg.

CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this and previous reports, site conditions meet the general and media-specific criteria of a low-threat UST release case established in the policy, and therefore pose a low threat to human health, safety, and the environment. A completed SWRCB low-threat checklist is included as Attachment C. The site satisfies the case closure requirements of Health and Safety Code section 25296.10, and case closure is consistent with Resolution 92-49 that requires cleanup goals be met within a reasonable time frame. Therefore, on behalf of Chevron, CRA respectfully requests ACEH grant case closure.

We appreciate your assistance on this project and look forward to your reply. Please contact James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

James P. Kiernan, P.E.

BS/lm/11
Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Table 1	Historical Soil Sample Analytical Results
Table 2	Historical Grab-Groundwater Sample Analytical Results
Attachment A	April 5, 2011 *Results of Additional Soil Vapor Sampling Event*

Attachment B Previous Figures
Attachment C Low-Threat Checklist

cc: Ms. Catalina Espino Devine, Chevron *(electronic copy)*
Mr. Tim Johnson, property owner

FIGURES

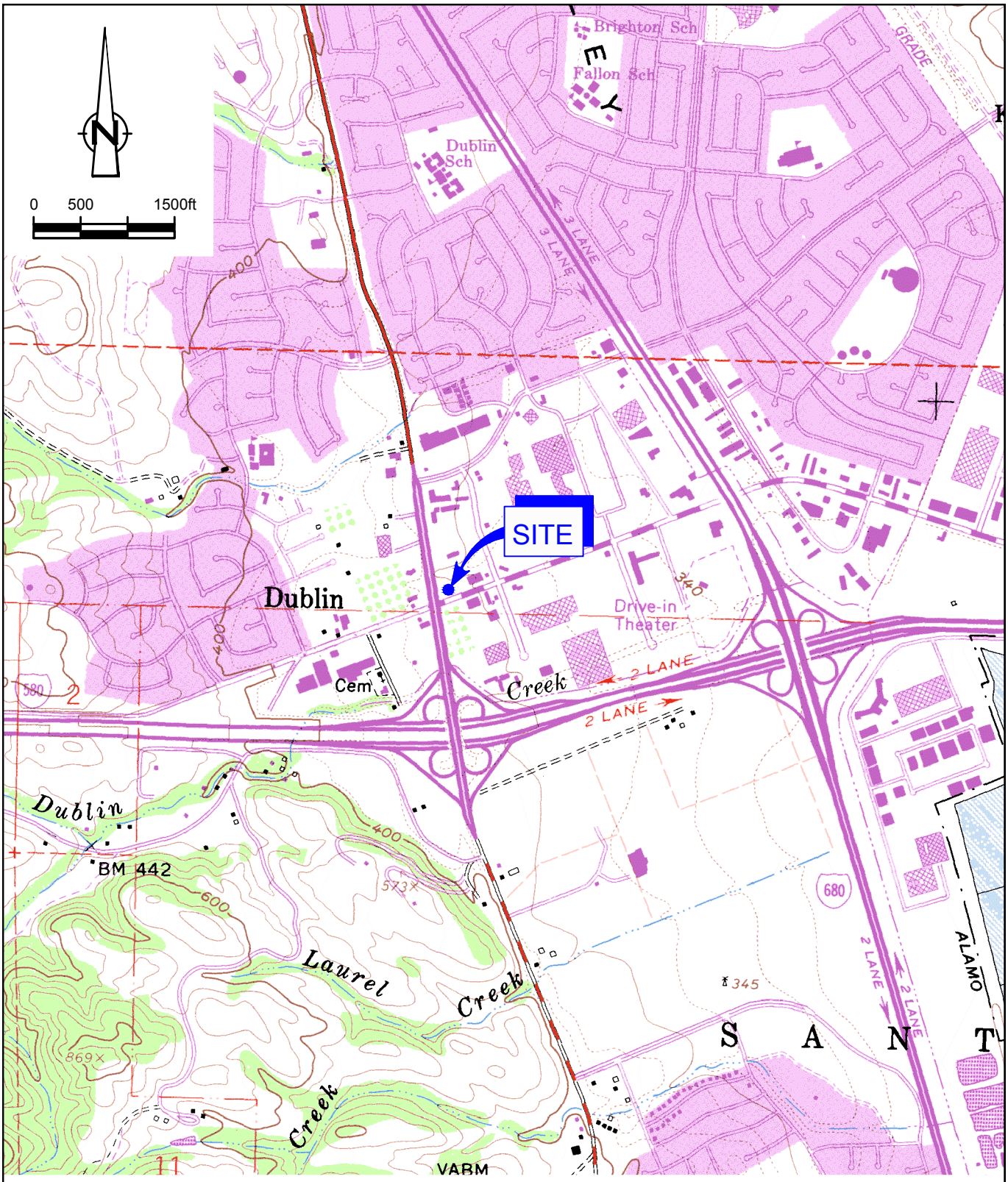


figure 1

VICINITY MAP
CHEVRON SERVICE STATION 95542
7007 SAN RAMON ROAD
Dublin, California

SOURCE: TOPO! MAPS

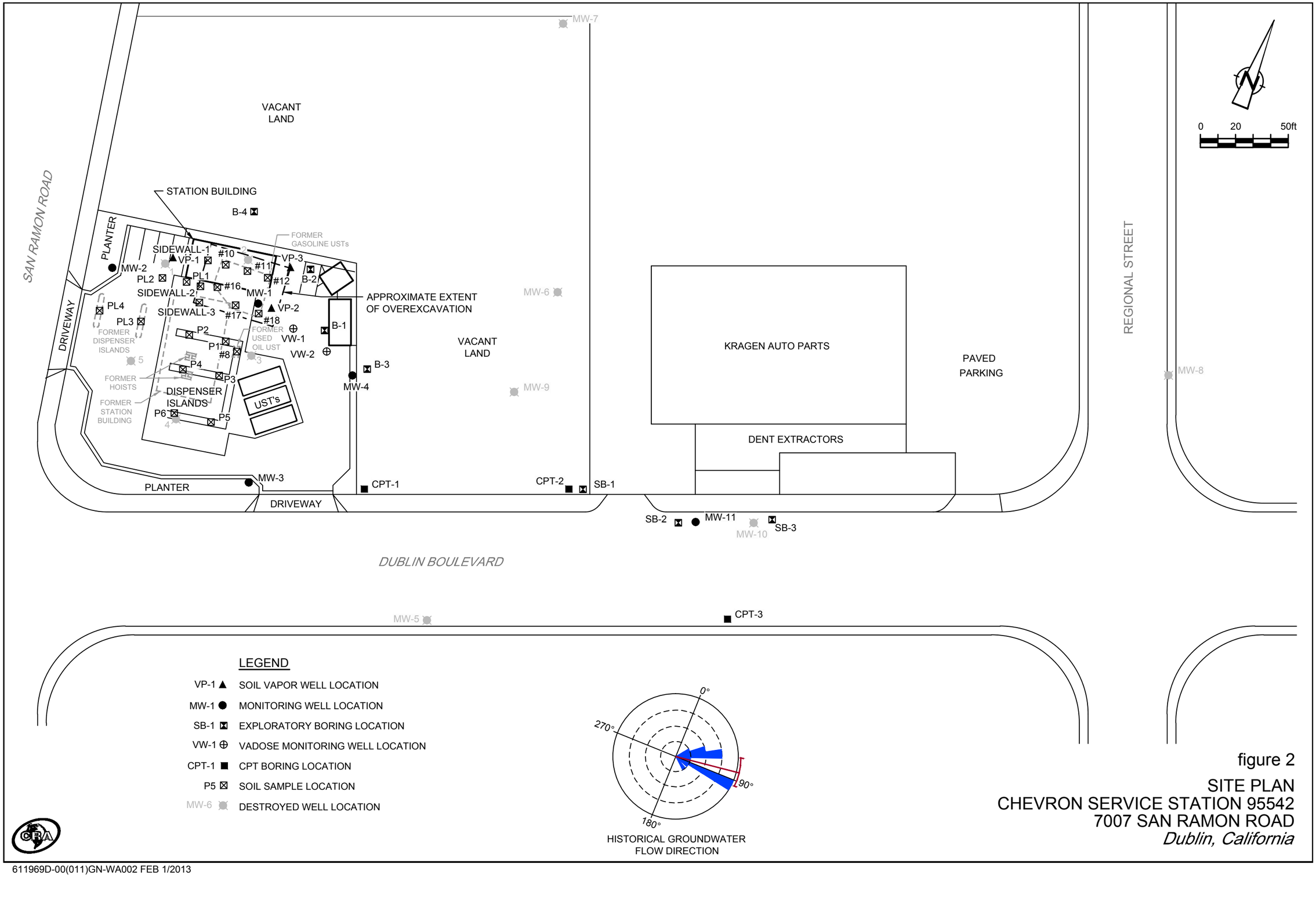


figure 2

SITE PLAN
CHEVRON SERVICE STATION 95542
7007 SAN RAMON ROAD
Dublin, California

611969D-00(011)GN-WA002 FEB 1/2013

TABLES

TABLE 1
HISTORICAL SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON SERVICE STATION 95542
7007 SAN RAMON ROAD
DUBLIN, CALIFORNIA

Boring/ Sample ID	*Depth (fbg)*	*Date Sampled*	*TPHg mg/kg*	*TPHd mg/kg*	*TOG mg/kg*	*Benzene mg/kg*	*Toluene mg/kg*	*Ethylbenzene mg/kg*	*Xylenes mg/kg*	*MTBE mg/kg*	*Semi-VOCs mg/kg*	*VOCs mg/kg*	*Pb mg/kg*	*Cd mg/kg*	*Cr mg/kg*	*Zn mg/kg*	*Sb mg/kg*	*As mg/kg*	*Be mg/kg*	*Cu mg/kg*	*Hg mg/kg*	*Ni mg/kg*	*Se mg/kg*	*Ag mg/kg*	*Tl mg/kg*
Gasoline UST and Product Line Removal																									
PL1	1.5	2/8/90	**9**	NA	NA	**0.85**	**0.017**	**0.2**	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PL2	1.5	2/8/90	<0.5	NA	NA	<0.005	<0.005	<0.005	**0.012**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PL3	3	2/8/90	**3.9**	NA	NA	**0.0095**	**0.011**	**0.16**	**0.15**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PL4	3	2/8/90	**2.8**	NA	NA	<0.005	<0.005	**0.16**	**0.072**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#1	11.5	2/13/90	**3,100**	NA	NA	**1.8**	**50**	**51**	**360**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#2	11	2/13/90	**5,000**	NA	NA	**2**	**210**	**120**	**780**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#3	11	2/13/90	**5.9**	NA	NA	**0.19**	**0.060**	**0.15**	**0.34**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#4	11.5	2/13/90	**4,800**	NA	NA	**8.8**	**430**	**130**	**690**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#5	11	2/13/90	**2.4**	NA	NA	**0.017**	**0.068**	**0.045**	**0.12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#6	12	2/13/90	**2,900**	NA	NA	**2.2**	**120**	**51**	**300**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#10	15	2/13/90	**12**	NA	NA	**0.12**	**0.4**	**0.11**	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#11	16	2/13/90	**8.6**	NA	NA	**0.046**	**0.4**	**0.13**	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#12	16	2/13/90	**190**	NA	NA	**0.26**	**2.5**	**2.5**	**15**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#13	15.5	2/13/90	**5,100**	NA	NA	**30**	**360**	**110**	**680**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#14	16	2/13/90	**2,900**	NA	NA	**23**	**150**	**45**	**240**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#16	22	2/14/90	**18**	NA	NA	**3**	**5**	**0.5**	**3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#17	22	2/14/90	**1,300**	NA	NA	**20**	**98**	**33**	**160**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
#18	22	2/14/90	**3,100**	NA	NA	**60**	**219**	**69**	**355**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sidewall-1	13.5	2/13/90	**1.1**	NA	NA	**0.022**	**0.013**	**0.023**	**0.07**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sidewall-2	8.3	2/13/90	<0.5	NA	NA	<0.005	<0.005	<0.005	**0.0068**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sidewall-3	7.5	2/13/90	**18**	NA	NA	**0.27**	**0.89**	**0.4**	**2.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P1	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P2	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P3	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P4	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P5	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P6	3	9/16/98	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Used-Oil UST Removal																									
#7	8	2/13/90	**0.55**	NA	**12**	**0.0046**	**0.019**	<0.005	**0.49**	NA	ND	ND	**15**	<3	**8**	**19**	<25	**140**	<1	**21**	**0.02**	**23**	<50	<5	**25**
#8	10.5	2/13/90	<0.5	<10	**12**	<0.005	<0.005	<0.005	**0.02**	NA	ND	ND	**12**	<3	**5**	**17**	<25	**85**	<1	**16**	<0.02	**16**	<50	<5	**20**
Exploratory Borings																									
B-1	5.5	6/8/94	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10.5	6/8/94	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	15.5	6/8/94	**2**	NA	NA	**0.081**	**0.19**	**0.02**	**0.13**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20.5	6/8/94	**1,600**	NA	NA	**5.3**	**72**	**23**	**120**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-2	20.5	6/8/94	**2**	NA	NA	**0.06**	**0.026**	**0.031**	**0.19**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	23.5	6/8/94	**8**	NA	NA	**0.13**	**0.037**	**0.12**	**0.83**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-3	18	6/12/96	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-4	12	6/12/96	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
HISTORICAL SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON SERVICE STATION 95542
7007 SAN RAMON ROAD
DUBLIN, CALIFORNIA

Boring/ Sample ID	*Depth (fbg)*	*Date Sampled*	*TPHg mg/kg*	*TPHd mg/kg*	*TOG mg/kg*	*Benzene mg/kg*	*Toluene mg/kg*	*Ethylbenzene mg/kg*	*Xylenes mg/kg*	*MTBE mg/kg*	*Semi-VOCs mg/kg*	*VOCs mg/kg*	*Pb mg/kg*	*Cd mg/kg*	*Cr mg/kg*	*Zn mg/kg*	*Sb mg/kg*	*As mg/kg*	*Be mg/kg*	*Cu mg/kg*	*Hg mg/kg*	*Ni mg/kg*	*Se mg/kg*	*Ag mg/kg*	*Tl mg/kg*
Monitoring, Remedial, and Soil Vapor Well Borings																									
MW-1	25	3/27/90	**1,300**	NA	NA	**38**	**150**	**34**	**180**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	3/27/90	**270**	NA	NA	**1**	**4**	**4**	**18**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	15	3/26/90	<10	NA	NA	<0.005	<0.005	<0.005	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	15	3/26/90	<10	NA	NA	<0.005	<0.005	<0.005	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	3/26/90	<10	NA	NA	<0.005	**0.01**	**0.01**	**0.12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	3/26/90	**51**	NA	NA	<0.005	**0.02**	**0.05**	**0.28**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	15	3/28/90	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	37	<3	26	39	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	3/28/90	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	41	<3	25	44	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	3/28/90	<10	<10	**39**	**2.7**	**23**	**5.6**	**46**	NA	NA	ND[1]	26	<3	13	28	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	28.5	6/11/91	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	26	6/11/91	**5**	NA	NA	**0.006**	**0.006**	**0.06**	**0.12**	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	26	6/11/91	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	20	12/6/91	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	24.5	6/8/94	**57**	NA	NA	**0.07**	**0.11**	**0.58**	**3.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	33.5	6/9/94	<1.0	NA	NA	**0.038**	<0.005	<0.005	**0.008**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VW-1	5	11/24/92	<1.0	NA	NA	<0.005	**0.006**	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	14	11/24/92	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	14.5	11/24/92	**2**	NA	NA	<0.005	**0.058**	**0.029**	**1.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	19.5	11/24/92	**250**	NA	NA	**0.081**	**5.6**	**3.4**	**20**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	24	11/24/92	**990**	NA	NA	**2.4**	**60**	**15**	**99**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	27	11/24/92	**230**	NA	NA	**2**	**15**	**5.4**	**27**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	31	11/24/92	**130**	NA	NA	<0.05	**0.73**	**1**	**3.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VW-2	5	11/25/92	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	11/25/92	<1.0	NA	NA	**0.006**	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	15	11/25/92	<1.0	NA	NA	<0.005	<0.005	<0.005	**0.009**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	11/25/92	**220**	NA	NA	**0.65**	**8.1**	**26**	**13**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	11/25/92	**650**	NA	NA	**2.7**	**23**	**9**	**49**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	11/25/92	**1**	NA	NA	**0.07**	**0.01**	**0.012**	**0.025**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VP-1	5	10/15/09	<1.0	NA	NA	<0.0005	<0.001	<0.001	<0.001	<0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VP-2	4.5	10/15/09	<1.0	NA	NA	<0.0005	<0.001	<0.001	<0.001	<0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VP-3	5	10/15/09	<1.0	NA	NA	<0.0009	<0.0009	<0.0009	<0.0009	<0.0005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations and Notes:

TPHg and TPHd = Total petroleum hydrocarbons as gasoline and diesel, respectively.
TOG = Total oil and grease
MTBE = Methyl tertiary butyl ether.
VOCs = Volatile organic compounds
Semi-VOCs = Semi volatile organic compounds

Note: Shaded samples were collected from soil that was later over-excavated
mg/kg = milligrams per kilogram.
NA = Not analyzed
< = Not detected at or above stated laboratory reporting limit
ND = Not detected; reporting limits vary

1 VOCs not detected except BTEX

TABLE 2
HISTORICAL GRAB-GROUNDWATER SAMPLE ANALYTICAL RESULTS
CHEVRON SERVICE STATION 95542
7007 SAN RAMON ROAD
DUBLIN, CALIFORNIA

Boring	*Sample Depth (fbg)*	*Date*	*TPHg µg/L*	*Benzene µg/L*	*Toluene µg/L*	*Ethylbenzene µg/L*	*Xylenes µg/L*	*MTBE µg/L*	*DIPE µg/L*	*ETBE µg/L*	*TAME µg/L*	*TBA µg/L*	*1,2-DCA µg/L*	*EDB µg/L*
SB-1	--	7/12/95	**65,000**	**470**	**200**	**210**	**2,100**	NA	NA	NA	NA	NA	NA	NA
SB-2	--	7/12/95	**2,900**	<5.0	<5.0	**72**	**52**	NA	NA	NA	NA	NA	NA	NA
SB-3	--	7/12/95	<50	<0.5	**3.1**	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA
B-3	--	6/12/96	**63,000**	**5,600**	**2,900**	**1,800**	**7,900**	NA	NA	NA	NA	NA	NA	NA
B-4	--	6/12/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA
CPT-1	46	1/20/06	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
	55	1/20/06	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
	65	1/20/06	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
CPT-2	52	1/20/06	**1,000**	**1**	<0.5	**22**	**120**	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
	63	1/20/06	**170**	<0.5	<0.5	**1**	**2**	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
CPT-3	42	1/17/06	<50	<3	<3	<3	<3	<3	<3	<3	<3	<25	**3**	<3
	55	1/17/06	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5
	65	1/17/06	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5

Abbreviations/Notes
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary butyl ether
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
<x = not detected at or above stated laboratory reporting limit
fbg = feet below grade
ug/L = micrograms per liter
NA = Not analyzed

ATTACHMENT A

APRIL 5, 2011 RESULTS OF ADDITIONAL SOIL VAPOR SAMPLING EVENT

Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

April 5, 2011
(date)

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Facility #_9-5542_____

Address: 7007 San Ramon Road, Dublin, California_____

I have reviewed the attached report titled *Results of Additional Soil Vapor Sampling Event*_ and dated April 5, 2011.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SH Frerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

CONESTOGA-ROVERS & ASSOCIATES

10969 Trade Center Drive, Suite 107
Rancho Cordova, California 95670
Telephone: (916) 889-8900 Fax: (916) 889-8999
www.CRAworld.com

April 5, 2011 Reference No. 611969

Mr. Paresh Khatri
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Results of Additional Soil Vapor Sampling Event
Chevron Service Station 9-5542
7007 San Ramon Road
Dublin, California
LOP Case #RO0000206

Dear Mr. Khatri:

Conestoga-Rovers & Associates (CRA) has prepared this *Results of Additional Soil Vapor Sampling Event* report on behalf of Chevron Environmental Management Company (Chevron) documenting the results of the recent soil vapor sampling at the site referenced above. In a letter dated August 26, 2010 (Attachment A), Alameda County Environmental Health (ACEH) requested an additional soil vapor sampling event at the site to evaluate possible seasonal variations in petroleum hydrocarbon concentrations prior to consideration of case closure. The previous sampling event was performed in October 2009. The details and results of the additional event are presented below.

ADDITIONAL SOIL VAPOR SAMPLING

On March 15, 2011, CRA collected soil vapor samples from soil vapor wells VP-1 through VP-3 in 1-liter Summa™ canisters. A field duplicate sample (DUPE) was also collected from VP-2 at the same time as the original sample. The samples were collected in general accordance with the Department of Toxic Substances Control (DTSC) January 28, 2003 *Advisory-Active Soil Gas Investigations* guidance document. CRA's standard field procedures are included as Attachment B.

In accordance with the DTSC guidance, leak testing was performed during sampling. Helium was used as the leak check compound to evaluate if significant ambient air was entering the canisters during sampling. To perform the leak testing, a plastic shroud was placed over the sampling apparatus and wellhead and was filled with helium during sample collection. The helium concentration within the shroud was monitored using a helium detector and was maintained between 10 and 20 percent.

The soil vapor samples were kept at ambient temperature and submitted under chain-of-custody to Air Toxics Ltd. in Folsom, California, for analysis. The three soil vapor samples and the duplicate sample were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3, and benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), and 2,2,4-Trimethylpentane (iso-octane) by EPA Method TO-15. To evaluate the data quality, the samples were additionally analyzed for helium (leak check compound), oxygen, methane, and carbon dioxide by ASTM Method D-1946.

ANALYTICAL RESULTS

The soil vapor sample analytical results from the previous and current event are presented in Table 1. Copies of the laboratory reports and chain-of-custody documentation are included in Attachment C. As mentioned above, a field duplicate sample was collected simultaneously with the original sample from VP-2 to further evaluate data quality. The duplicate sample analytical results are not included in the following discussion, as similar concentrations within an acceptable range were detected in both samples. Please refer to Table 1 or Attachment C for the duplicate sample analytical results.

TPHg was only detected in the samples collected from VP-1 (280 micrograms per cubic meter [$\mu g/m^3$]) and VP-2 (250 $\mu g/m^3$). No BTEX, MTBE, or iso-octane was detected in any of the soil vapor samples. The detected TPHg concentrations were well below the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) of 29,000 $\mu g/m^3$ associated with vapor intrusion concerns at commercial/industrial sites.

No helium was detected in any of the samples and the detected oxygen and carbon dioxide concentrations were consistent with subsurface levels. Furthermore, a leak test on the aboveground sampling connections was initially performed by creating a test vacuum using the purge canister. A constant vacuum was maintained for at least 10 minutes prior to sample collection, indicating significant leaks were not occurring. Therefore, the samples appear to be representative of subsurface conditions and the results are assumed to be valid.

CONCLUSIONS AND RECOMMENDATIONS

As requested by ACEH, CRA collected additional soil vapor samples from wells VP-1 through VP-3 to evaluate potential seasonal variations in petroleum hydrocarbon concentrations. TPHg was only detected in two of the soil vapor samples, and the concentrations (up to 280 $\mu g/m^3$) were significantly lower than those detected during the previous event and well below the ESL (see Table 1). No BTEX or MTBE was detected in the soil vapor samples.

Based on the current and previous analytical results, seasonal variation of the detected petroleum hydrocarbon concentrations in soil vapor does occur; however, the detected concentrations during both events did not exceed the ESLs and thus do not pose a significant threat to human health; vapor intrusion does not appear to be a concern at the site. No further investigation appears warranted and we recommend low-risk case closure.

We appreciate your assistance on this project. Please contact Mr. James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

James P. Kiernan, P.E.

JK/kw/10
Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Table 1	Soil Vapor Sample Analytical Results
Attachment A	ACEH Letter Dated August 26, 2010
Attachment B	Standard Field Procedures and Vapor Sampling Field Data Sheets
Attachment C	Laboratory Reports

cc: Ms. Stacie Frerichs, Chevron (electronic copy only)
Mr. T.W. Johnson
Ms Mary Diamond, See's Candy Shops, Inc.

FIGURES

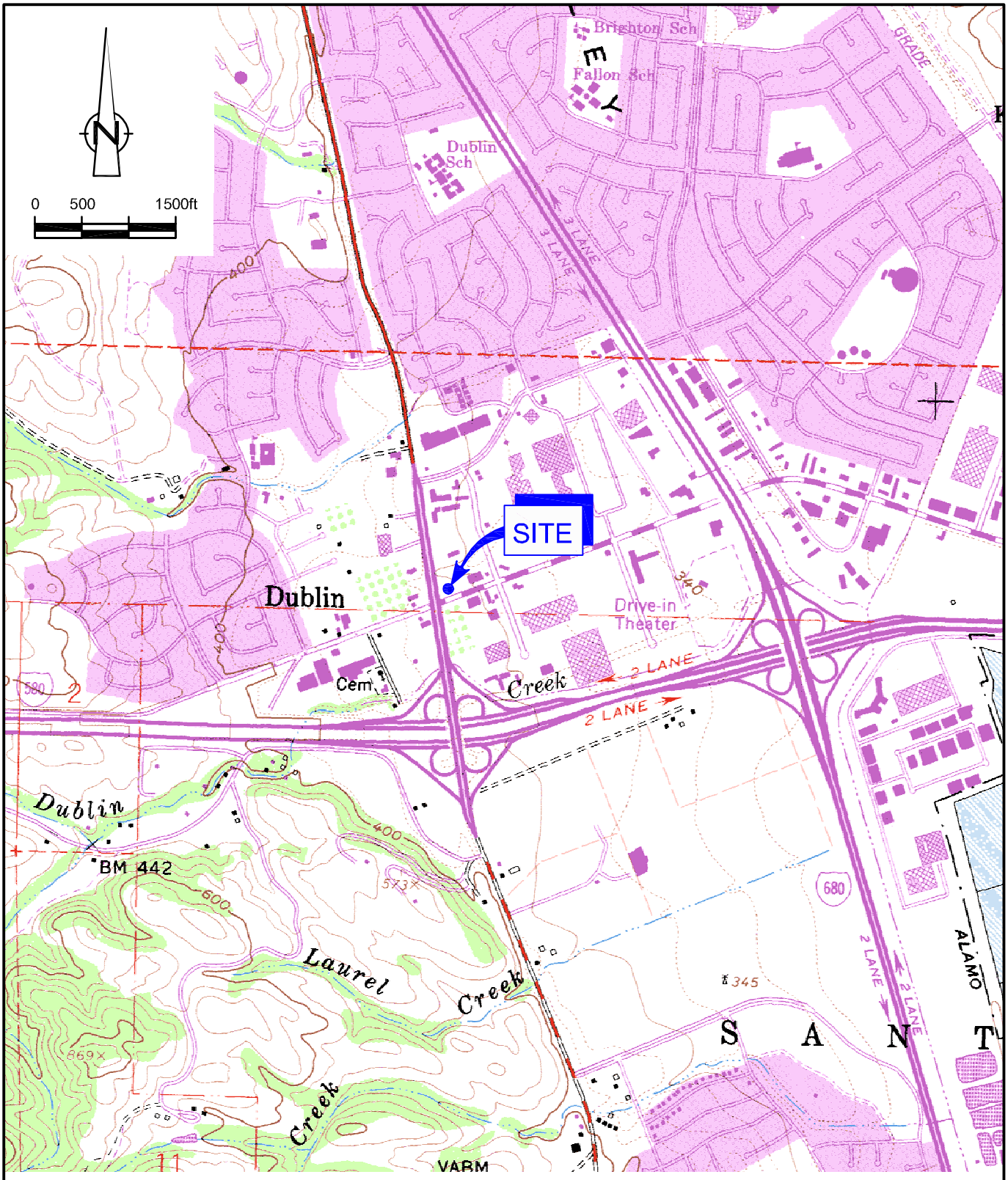


figure 1

VICINITY MAP
CHEVRON SERVICE STATION 9-5542
7007 SAN RAMON ROAD
Dublin, California

SOURCE: TOPO! MAPS

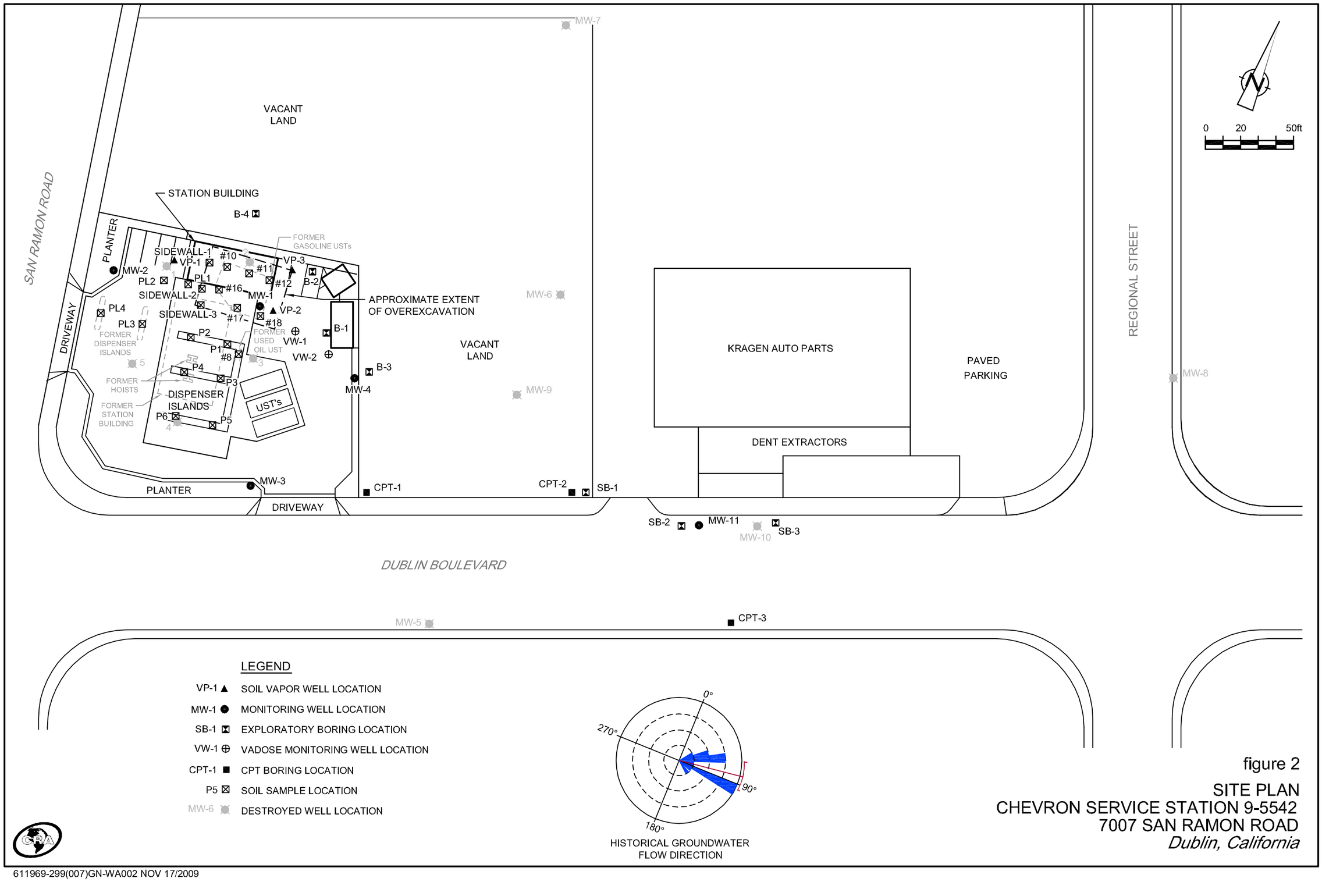


figure 2

SITE PLAN
CHEVRON SERVICE STATION 9-5542
7007 SAN RAMON ROAD
Dublin, California

611969-299(007)GN-WA002 NOV 17/2009

TABLE

TABLE 1

SOIL VAPOR SAMPLE ANALYTICAL RESULTS
CHEVRON STATION 9-5542
7007 SAN RAMON ROAD, DUBLIN, CALIFORNIA

Sample ID	*Date Sampled*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*m,p-Xylenes*	*o-Xylenes*	*MTBE*	*2,2,4-Trimethylpentane*	*Oxygen*	*Helium*	*Carbon Dioxide*	*Methane*
		← Concentrations reported in micrograms per cubic meter (µg/m^3) →								← Reported as percent →			
VP-1	10/15/09	**1,900**	<4.1	**24**	**12**	**49**	**13**	<4.6	<6.0	**8.8**	<0.13	**8.7**	<0.00026
	3/15/11	**280**	<3.8	<4.5	<5.1	<5.1	<5.1	<4.3	<5.5	**9.7**	<0.12	**7.9**	<0.00024
VP-2	10/15/09	**22,000**	<4.2	**13**	<5.7	**17**	**5.6**[a]	<4.7	**11**	**17**	<0.13	**0.83**	<0.00026
	3/15/11	**250**	<3.7	<4.4	<5.0	<5.0	<5.0	<4.2	<5.4	**15**	<0.12	**3.2**	<0.00023
VP-3	10/15/09	**3,800**	**16**	**8.7**	<4.9	**17**	**5.2**	<4.1	**30**	**14**	<0.11	**8.3**	<0.00023
	3/15/11	<230	<3.6	<4.3	<4.9	<5.0	<5.0	<4.1	<5.3	**7.6**	<0.11	**9.4**	<0.00023
Dupe*	10/15/09	**23,000**	<29	<34	<40	<40	<40	<33	<42	**17**	<0.14	**0.86**	<0.00027
DUPE*	3/15/11	**540**	<3.7	<4.4	<5.0	<5.0	<5.0	<4.2	<5.4	**15**	<0.12	**3.2**	<0.00023
Commercial/Industrial ESL		29,000	280	180,000	3,300	58,000[b]		31,000	NE				

Notes/Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method TO-3
Benzene, toluene, ethylbenzene, and xylenes by EPA Method TO-15
MTBE = Methyl tertiary butyl ether by EPA Method TO-15
Oxygen, helium, carbon dioxide, and methane by ASTM Method D-1946
* = Field duplicate sample of VP-2
ESL = Environmental Screening Level for shallow soil gas associated with vapor intrusion concerns at commercial/industrial sites-RWQCB May 2008 (Table E)
< = Not detected at or above stated laboratory reporting limit
a = Estimated value
b = ESL is for total xylenes
NE = Not established

ATTACHMENT A

ACEH LETTER DATED AUGUST 26, 2010

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 26, 2010

Stacie H. Frerichs (*Sent via E-mail to: staciehf@chevron.com*)
Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583

T.W. Johnson
7007 San Ramon Road
Dublin, CA 94568-3239

Subject: Soil Vapor Sampling and Groundwater Monitoring for Fuel Leak Case No. RO0000206 and GeoTracker Global ID T0600100354, Chevron #9-5542, 7007 San Ramon Road, Dublin, CA 94568

Dear Ms. Frerichs and Mr. Johnson:

Thank you for the recently submitted document entitled, "Soil Vapor Quality Evaluation, Feasibility Study, and Corrective Action Plan," dated December 2, 2009, which was prepared by Conestoga-Rovers & Associates (CRA) for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned report for the above-referenced site. CRA has determined that monitored natural attenuation "appears to be the most cost-effective and technically feasible remedial alternative to achieve the cleanup goals at the site within a reasonable timeframe." To that end, CRA has proposed one additional year of groundwater monitoring.

ACEH generally concurs with CRA's proposed scope of work. However, to adequately evaluate potential subsurface vapor intrusion, ACEH requests that you address the following technical comments, perform the proposed work, and send us the technical reports described below.

TECHNICAL COMMENTS

1. **Soil Vapor Sampling** – Soil vapor sampling analytical results detected TPH-g and benzene at concentrations of 23,000 µg/m^3 and 16 µg/m^3, respectively, collected in October 2009. Although the results are below their respective Environmental Screening Levels, it difficult to determine from one sampling event whether the analytical results are representative of subsurface conditions due to possible seasonal or temporal variations. Consequently, due to the uncertainty, it appears that there may be a potential for contaminant vapor intrusion at the site. To alleviate such concerns, an additional round of soil vapor sampling is necessary to

adequately evaluate the potential risk, prior to case closure consideration. It is recommended that soil vapor samples are collected over two seasonal events so that samples collected are adequately representative of actual site conditions. Therefore, please conduct the second soil vapor sampling event in the spring of 2011 and submit a report due by the date specified below

Case closure evaluation will be considered based on the pending additional soil vapor sampling data.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **Due within 30 Days of Sampling** – Semi-annual Monitoring Report (3rd Quarter 2010)
- **May 31, 2011** – Soil and Water Investigation Report (Soil Vapor Sampling Results)

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Paresh C. Khatri
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: James P. Kiernan, Conestoga-Rovers & Associates, 10969 Trade Center Drive, Suite 107, Rancho Cordova, CA 95670 (*Sent via E-mail to: jkiernan@craworld.com*)
Cheryl Dizon (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551 (*Sent via e-mail to: cdizon@zone7water.com*)
Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Paresh Khatri, ACEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
GeoTracker
File

Responsible Party(ies) Legal Requirements/Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** July 20, 2010
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

ATTACHMENT B

STANDARD FIELD PROCEDURES AND VAPOR SAMPLING FIELD DATA SHEETS

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR SOIL VAPOR PROBE INSTALLATION AND SAMPLING

VAPOR POINT METHODS

This document describes Conestoga-Rovers & Associates' standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Shallow Soil Vapor Point Installation

The shallow soil vapor point method for soil vapor sampling utilizes a hand auger or drill rig to advance a boring for the installation of a soil vapor sampling point. Once the boring is hand augered to the final depth, a probe, connected with Swagelok fittings to nylon or Teflon tubing of ¼-inch outer-diameter, is placed within 12-inches of number 2/16 filter sand (Figure A). A 12-inch layer of dry granular bentonite is placed on top of the filter pack. Pre-hydrated granular bentonite is then poured to fill the borehole. The tube is coiled and placed within a wellbox finished flush to the surface. Soil vapor samples will be collected no sooner than 48 hours after installation of the soil vapor points to allow adequate time for representative soil vapors to accumulate. Soil vapor sample collection will not be scheduled until after a minimum of three consecutive precipitation-free days and irrigation onsite has ceased. Figure B shows the soil vapor sampling apparatus. A measured volume of air will be purged from the tubing using a different Summa purge canister. Immediately after purging, soil vapor samples will be collected using the appropriate size Summa canister with attached flow regulator and sediment filter. The soil vapor points will be preserved until they are no longer needed for risk evaluation purposes. At that time, they will be destroyed by extracting the tubing, hand augering to remove the sand and bentonite, and backfilling the boring with neat cement. The boring will be patched with asphalt or concrete, as appropriate.

Sampling of Soil Vapor Points

Samples will be collected using a SUMMA™ canister connected to sampling tubing at each vapor point. Prior to collecting soil vapor samples, the initial vacuum of the canisters is measured and recorded on the chain-of-custody. The vacuum of the SUMMA™ canister is used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg is observed on the vacuum gauge and recorded on

the chain-of-custody. The flow controllers should be set to 100-200 ml/minute. Field duplicates should be collected for every day of sampling and/or for every 10 samples collected.

Prior to sample collection, stagnant air in the sampling apparatus should be removed by purging approximately 3 purge volumes. The purge volume is defined as the amount of air within the probe and tubing.

In accordance with the DTSC Advisory-Active Soil Gas Investigations guidance document, dated January 28, 2003, leak testing needs to be performed during sampling. Helium is recommended, although shaving cream is acceptable.

Vapor Sample Storage, Handling, and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-1 **Date:** 3/15/11

Job/Site Name: 9-5542 DUBLIN **Technician:** C. Benedict

Project No. 661969 **PM:** J. KIBEAN

Site Address: 7007 SAN RAMON RD. DUBLIN, CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
938	-27	in/Hg	
948	-27		

Purge Volume

Calculated Purge Volume: ~ 100 mL

Time	Flow	Volume	PID Reading
948	167 mL/min	~100 mL	

Sample Collection

Flow Control Orifice Setting: 167 mL/min Summa Canister ID: 36397

Summa Canister Size: 1L Analysis:

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
950	-29	1000	-5

Notes: [He] ≈ 16%

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-2/DUPE **Date:** 3/15/11

Job/Site Name: 9-5542 DUBLIN **Technician:** C. Benedict

Project No. 611969 **PM:** J. KIERNAN

Site Address: 7007 SAN RAMON RD., DUBLIN, CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1033	-27	"/Hg	
1043	-27		

Purge Volume

Calculated Purge Volume: ~100mL

Time	Flow	Volume	PID Reading
1044	167 mL/min	~100mL	

Sample Collection

Flow Control Orifice Setting: 167 mL/min Summa Canister ID: 2152/36420

Summa Canister Size: 1L Analysis:

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1055	-30	1110	-5

Notes: [He] ~ 18%

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-3 **Date:** 3/15/11

Job/Site Name: CHEVRON 9-5542 **Technician:** C. Benedict

Project No. 611969 **PM:** J. KIERNAN

Site Address: 7007 SAN RAMON RD. DUBLIN, CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1007	-27.5	in/Hg	
1017	-27.5		PASS

Purge Volume

Calculated Purge Volume: ~100 mL

Time	Flow	Volume	PID Reading
1018	167 mL/min	~100 mL	

Sample Collection

Flow Control Orifice Setting: 167 mL/min Summa Canister ID: 37360

Summa Canister Size: 1L Analysis:

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1022	-30	1024	-5

Notes: [He] ~ 15%

ATTACHMENT C

LABORATORY REPORTS

Air Toxics LTD.
Laboratory Services Since 1989

3/22/2011
Mr. Chris Benedict
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 9-5542
Project #: 611969
Workorder #: 1103349B

Dear Mr. Chris Benedict

The following report includes the data for the above referenced project for sample(s) received on 3/16/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-3 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1103349B

Work Order Summary

CLIENT:	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8925	**P.O. #**	40-4025462
FAX:	916-889-8999	**PROJECT #**	611969 Chevron 9-5542
DATE RECEIVED:	03/16/2011	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	03/22/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-1	Modified TO-3	4.4 "Hg	15 psi
02A	VP-2	Modified TO-3	3.8 "Hg	15 psi
03A	VP-3	Modified TO-3	3.4 "Hg	15 psi
04A	DUPE	Modified TO-3	4.0 "Hg	15 psi
05A	Lab Blank	Modified TO-3	NA	NA
06A	LCS	Modified TO-3	NA	NA
06AA	LCSD	Modified TO-3	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 03/22/11

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 1103349B

Four 1 Liter Summa Canister (100% Certified) samples were received on March 16, 2011. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-3***	***ATL Modifications***
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch </= 20 samples
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-3 GC/FID

Client Sample ID: VP-1

Lab ID#: 1103349B-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH (Gasoline Range)	240	280

Client Sample ID: VP-2

Lab ID#: 1103349B-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH (Gasoline Range)	240	250

Client Sample ID: VP-3

Lab ID#: 1103349B-03A

No Detections Were Found.

Client Sample ID: DUPE

Lab ID#: 1103349B-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH (Gasoline Range)	240	540

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-1

Lab ID#: 1103349B-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031809**	**Date of Collection: 3/15/11 10:00:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 3/18/11 03:35 PM**	

Compound	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
TPH (Gasoline Range)	240	280

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	107	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-2

Lab ID#: 1103349B-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031810**	**Date of Collection: 3/15/11 11:10:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 3/18/11 04:17 PM**	

Compound	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
TPH (Gasoline Range)	240	250

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	104	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-3

Lab ID#: 1103349B-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031811**	**Date of Collection: 3/15/11 10:28:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 3/18/11 04:55 PM**	

Compound	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
TPH (Gasoline Range)	230	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	106	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: DUPE

Lab ID#: 1103349B-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031812**	**Date of Collection: 3/15/11**	
Dil. Factor:	**2.33**	**Date of Analysis: 3/18/11 05:28 PM**	

Compound	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
TPH (Gasoline Range)	240	540

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	105	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1103349B-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031807**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 12:33 PM**	

Compound	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
TPH (Gasoline Range)	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	103	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1103349B-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 08:14 AM**	

Compound	**%Recovery**
TPH (Gasoline Range)	93

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	112	75-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1103349B-06AA

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d031813**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 08:24 PM**	

Compound	**%Recovery**
TPH (Gasoline Range)	89

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	108	75-150

Air Toxics LTD.
Laboratory Services Since 1989

3/23/2011
Mr. Chris Benedict
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 9-5542
Project #: 611969
Workorder #: 1103349A

Dear Mr. Chris Benedict

The following report includes the data for the above referenced project for sample(s) received on 3/16/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1103349A

Work Order Summary

CLIENT:	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8925	**P.O. #**	40-4025462
FAX:	916-889-8999	**PROJECT #**	611969 Chevron 9-5542
DATE RECEIVED:	03/16/2011	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	03/23/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-1	Modified TO-15	4.4 "Hg	15 psi
02A	VP-2	Modified TO-15	3.8 "Hg	15 psi
03A	VP-3	Modified TO-15	3.4 "Hg	15 psi
04A	DUPE	Modified TO-15	4.0 "Hg	15 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 03/23/11

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Conestoga-Rovers Associates (CRA)
Workorder# 1103349A

Four 1 Liter Summa Canister (100% Certified) samples were received on March 16, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-1

Lab ID#: 1103349A-01A

No Detections Were Found.

Client Sample ID: VP-2

Lab ID#: 1103349A-02A

No Detections Were Found.

Client Sample ID: VP-3

Lab ID#: 1103349A-03A

No Detections Were Found.

Client Sample ID: DUPE

Lab ID#: 1103349A-04A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-1

Lab ID#: 1103349A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031717**	**Date of Collection: 3/15/11 10:00:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 3/18/11 07:37 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	119	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-2

Lab ID#: 1103349A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031718**	**Date of Collection: 3/15/11 11:10:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 3/18/11 08:05 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-3

Lab ID#: 1103349A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031721**	**Date of Collection: 3/15/11 10:28:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 3/18/11 11:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: DUPE

Lab ID#: 1103349A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031726**	**Date of Collection: 3/15/11**	
Dil. Factor:	**2.33**	**Date of Analysis: 3/18/11 01:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1103349A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031707**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 12:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	128	70-130
4-Bromofluorobenzene	89	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1103349A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/17/11 10:45 PM**	

Compound	%Recovery
Methyl tert-butyl ether	107
Benzene	112
Toluene	115
Ethyl Benzene	112
m,p-Xylene	110
o-Xylene	112
2,2,4-Trimethylpentane	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	121	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1103349A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/17/11 11:15 PM**	

Compound	%Recovery
Methyl tert-butyl ether	118
Benzene	117
Toluene	117
Ethyl Benzene	115
m,p-Xylene	113
o-Xylene	114
2,2,4-Trimethylpentane	111

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	123	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1103349A-07AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**6031704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/17/11 11:57 PM**	

Compound	%Recovery
Methyl tert-butyl ether	121
Benzene	113
Toluene	110
Ethyl Benzene	115
m,p-Xylene	115
o-Xylene	116
2,2,4-Trimethylpentane	111

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	123	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

3/23/2011
Mr. Chris Benedict
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 9-5542
Project #: 611969
Workorder #: 1103349C

Dear Mr. Chris Benedict

The following report includes the data for the above referenced project for sample(s) received on 3/16/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1103349C

Work Order Summary

CLIENT:	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Chris Benedict Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8925	**P.O. #**	40-4025462
FAX:	916-889-8999	**PROJECT #**	611969 Chevron 9-5542
DATE RECEIVED:	03/16/2011	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	03/22/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-1	Modified ASTM D-1946	4.4 "Hg	15 psi
02A	VP-2	Modified ASTM D-1946	3.8 "Hg	15 psi
03A	VP-3	Modified ASTM D-1946	3.4 "Hg	15 psi
04A	DUPE	Modified ASTM D-1946	4.0 "Hg	15 psi
05A	Lab Blank	Modified ASTM D-1946	NA	NA
05B	Lab Blank	Modified ASTM D-1946	NA	NA
06A	LCS	Modified ASTM D-1946	NA	NA
06AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 03/23/11

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 1103349C

Four 1 Liter Summa Canister (100% Certified) samples were received on March 16, 2011. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VP-1

Lab ID#: 1103349C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	9.7
Carbon Dioxide	0.024	7.9

Client Sample ID: VP-2

Lab ID#: 1103349C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Carbon Dioxide	0.023	3.2

Client Sample ID: VP-3

Lab ID#: 1103349C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	7.6
Carbon Dioxide	0.023	9.4

Client Sample ID: DUPE

Lab ID#: 1103349C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Carbon Dioxide	0.023	3.2

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-1

Lab ID#: 1103349C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031815**	**Date of Collection: 3/15/11 10:00:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 3/18/11 09:40 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.24	9.7
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	7.9
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-2

Lab ID#: 1103349C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031816**	**Date of Collection: 3/15/11 11:10:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 3/18/11 10:04 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	3.2
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-3

Lab ID#: 1103349C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031817**	**Date of Collection: 3/15/11 10:28:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 3/18/11 10:35 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.23	7.6
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	9.4
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: DUPE

Lab ID#: 1103349C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031818**	**Date of Collection: 3/15/11**	
Dil. Factor:	**2.33**	**Date of Analysis: 3/18/11 11:05 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	3.2
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1103349C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031807**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 03:54 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1103349C-05B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031806b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 03:32 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1103349C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 01:26 AM**	

Compound	%Recovery
Oxygen	98
Methane	97
Carbon Dioxide	99
Helium	94

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1103349C-06AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9031833**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/18/11 10:02 PM**	

Compound	%Recovery
Oxygen	99
Methane	93
Carbon Dioxide	99
Helium	95

Container Type: NA - Not Applicable

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager JAMES KIERNAN

Collected by: (Print and Sign) CHRIS BENEDICT

Company CRA Email jkiernan@craworld.com

Address 10969 TRADE CENTER #107 City RANCHO CORDOVA State CA Zip 95670

Phone 916 889 8900 Fax 916 889 8999

Project Info:
P.O. #
Project # 611969
Project Name CHEVRON 9-5542

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	VP-1	36397	3/15/11	1000	• TPHg by TO-3	-29	-5		
02A	VP-2	2152		1110	• BTEX + MTBE BY TO-15	-30	-5		
03A	VP-3	37360		1028	• H_2, O_2, CO_2, CH_4	-30	-5		
04A	DUP2	36420		—	by ASTM D1946	-30	-5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	3/16/11 752	B. Whitelaw ATC	3/16/11 0752
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
REPORT IN µg/m3

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Hand Del.		N/A	Good	Yes No (None)	1103349

Form 1293 rev.11

ATTACHMENT B

PREVIOUS FIGURES

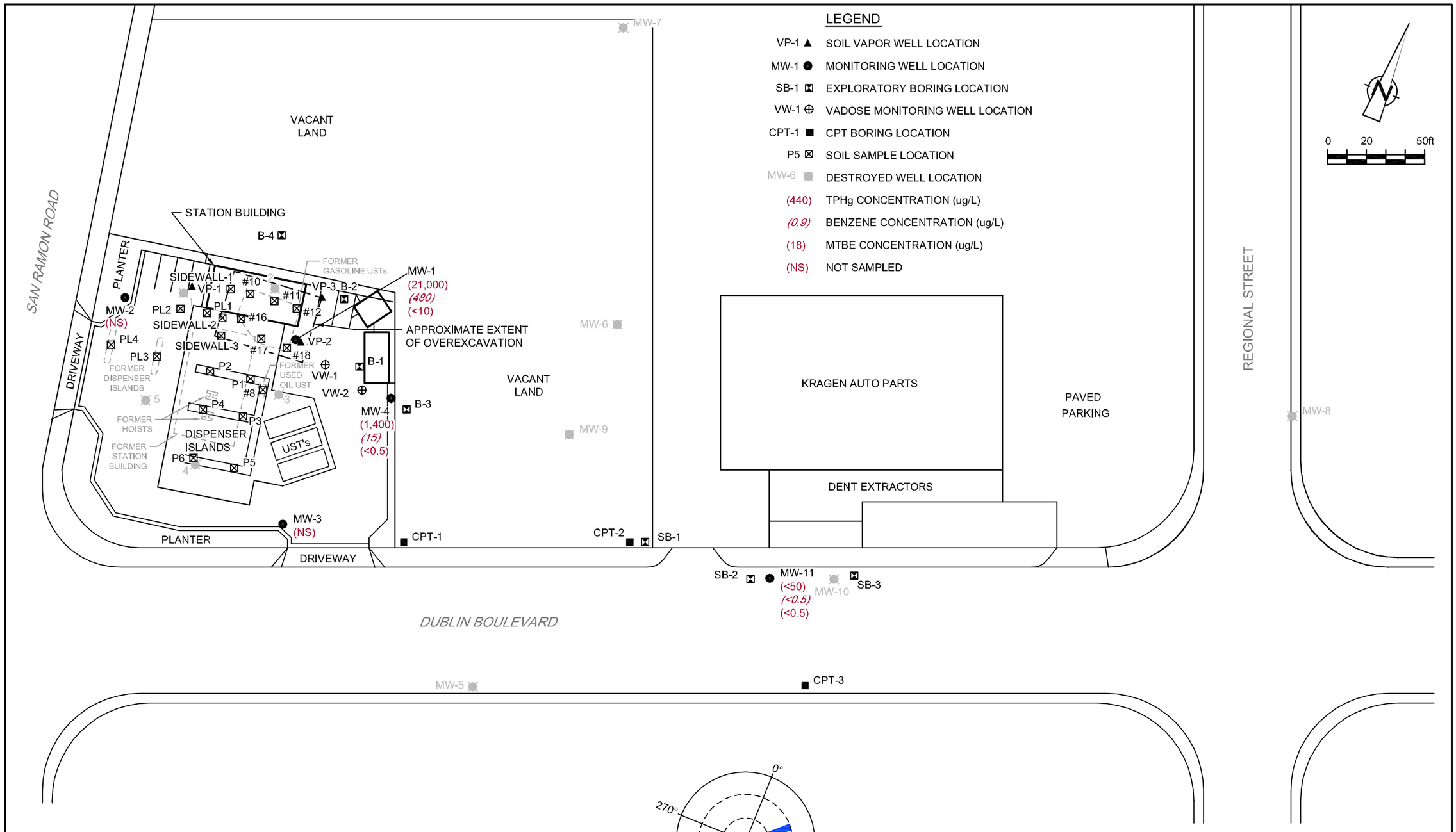


figure 2

CONCENTRATION MAP - SEPTEMBER 8, 2010
CHEVRON SERVICE STATION 9-5542
7007 SAN RAMON ROAD
Dublin, California

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-2	15	<10	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
PL2	1.5	<0.5	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
PL1	1.5	**9**	**0.85**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
SIDEWALL-2	8.3	<0.5	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
B-4	12	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
SIDEWALL-1	13.5	**1.1**	**0.022**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#10	15	**12**	**0.12**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-7	26	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#11	16	**8.6**	**0.046**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#16	22	**18**	**3**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#12	16	**190**	**0.25**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
B-2	20.5	**2**	**0.06**
	23.5	**8**	**0.13**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#17	22	**1,300**	**20**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-1	25	**1,300**	**38**
	30	**270**	**1**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#18	22	**3,100**	**60**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-6	26	**5.0**	**0.006**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
VW-1	5	<1.0	<0.005
	14	<1.0	<0.005
	14.5	**2**	<0.005
	19.5	**250**	**0.081**
	24	**990**	**2.4**
	27	**230**	**2**
	31	**130**	<0.05

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
B-3	18	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
VW-2	5	<1.0	<0.005
	10	<1.0	**0.006**
	15	<1.0	<0.005
	20	**220**	**0.65**
	25	**650**	**2.7**
	30	**1**	**0.07**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
B-1	5.5	<1.0	<0.005
	10.5	<1.0	<0.005
	15.5	**2**	**0.081**
	20.5	**1,600**	**5.3**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-4	15	<10	–
	20	<10	–
	25	<10	**2.7**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-9	24.5	**57**	**0.07**
	33.5	<1.0	**0.038**

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-8	20	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
SIDEWALL-3	7.5	18	0.27

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P1	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
#8	10.5	<0.5	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P6	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P3	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P4	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P5	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
P2	3	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-3	15	<10	<0.005
	20	<10	<0.005
	25	**51**	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
MW-5	28.5	<1.0	<0.005

Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
PL3	3	**3.9**	0.0095

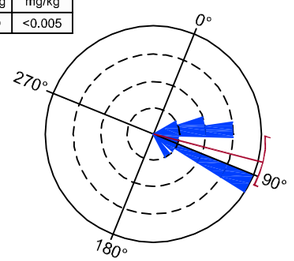
Sample ID	Depth	TPHg	Benzene
	(feet below grade)	mg/kg	mg/kg
PL4	3	**2.8**	<0.005

SAN RAMON ROAD
PLANTER
DRIVEWAY
FORMER PIPING
VACANT LAND
APPROXIMATE EXTENT OF OVEREXCAVATION
PAVED PARKING
FORMER GASOLINE USTs
FORMER DISPENSER ISLANDS
FORMER HOISTS
FORMER STATION BUILDING
FORMER USED OIL UST
DISPENSER ISLANDS
UST's
STATION BUILDING
SIDEWALL-1
SIDEWALL-2
SIDEWALL-3
DUBLIN BOULEVARD
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
VW-1
VW-2
B-1
B-2
B-3
B-4
CPT-1
CPT-3
SB-2
SB-3
#8
#10
#11
#12
#16
#17
#18
P1
P2
P3
P4
P5
P6
PL1
PL2
PL3
PL4

0 20 50ft

LEGEND

MW-1 ●	MONITORING WELL LOCATION
SB-1 ⊠	EXPLORATORY BORING LOCATION
VW-1 ⊕	VADOSE MONITORING WELL LOCATION
CPT-1 ■	CPT BORING LOCATION
P5 ⊠	SOIL SAMPLE LOCATION
MW-6	DESTROYED WELL LOCATION
<	NOT DETECTED AT OR ABOVE STATED REPORTING LIMIT



HISTORICAL GROUNDWATER FLOW DIRECTION

figure 5

HISTORICAL TPHg AND BENZENE CONCENTRATIONS IN SOIL
CHEVRON SERVICE STATION 9-5542
7007 SAN RAMON ROAD
Dublin, California

ATTACHMENT C

LOW-THREAT CHECKLIST

Site Name: Chevron 95542
Site Address: 7007 San Ramon Road, Dublin

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

General Criteria General criteria that must be satisfied by all candidate sites:	
Is the unauthorized release located within the service area of a public water system?	☒Yes ☐ No
Does the unauthorized release consist only of petroleum?	☒ Yes ☐ No
Has the unauthorized ("primary") release from the UST system been stopped?	☒ Yes ☐ No
Has free product been removed to the maximum extent practicable?	☒ Yes ☐ No ☐NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code section 13050 exist at the site?	☐ Yes ☒ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☒ **4** ☐ **5**	☒ Yes ☐ No ☐ NA

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☐ No ☒ NA
2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies. **Is the site an active commercial petroleum fueling facility?** Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk. **a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4?** If YES, check applicable scenarios: ☐ **1** ☐ **2** ☒ **3** ☐ **4** **b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?**	☒ Yes ☐ No ☒Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c). **a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?** **b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?**	☒ Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA