Aaron Costa
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acosta@chevron.com

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

Re: Chevron Service Station No. 9-0917
5280 Hopyard Road
Pleasanton, CA

I have reviewed the attached report dated December 15, 2009.

I agree with the conclusions and recommendations presented in the referenced report. This 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 who 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 to the best of my knowledge.

Sincerely,

Aaron Costa
Project Manager

Attachment: Report

CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
http://www.craworld.com

December 16, 2009 Reference No. 060057

Mr. Jerry Wickham
Alameda County Environmental Health Services (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Work Plan for Soil Excavation and Well Destruction
Chevron Service Station 9-0917
5280 Hopyard Road
Pleasanton, California
Fuel Leak Case RO0000439

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *Work Plan for Soil Excavation and Well Destruction* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. Chevron Global Marketing plans to expand the current station building, and CRA has identified elevated soil vapor concentrations adjacent to the planned station building expansion and proposes to excavate this soil. In addition to AECH approval of this excavation, CRA also requests approval to destroy wells IW-1 and VP1, which are located within the area of the station expansion. Destruction of wells IW-1 and VP1 was previously proposed in CRA's *Work Plan for Well Destructions* submitted to ACEH on October 19, 2009. Presented below are a summary of the site background and the proposed scope of work.

SITE BACKGROUND

The site is an active Chevron station located at the southern corner of the intersection of Hopyard Road and Owens Drive in Pleasanton, California (Figure 1). Site facilities include a station building, car wash, four underground storage tanks (USTs) and three dispenser islands under a common canopy (Figure 2). A Shell-branded service station is located across Hopyard Road to the east of the site and has an open case with ACEH. Land use surrounding the site is primarily commercial.

A total of 9 soil borings, 9 groundwater monitoring wells, 1 extraction well, 4 soil vapor wells and 2 sub-slab vapor probes have been advanced or installed at the site. A summary of environmental investigations conducted to date at the site is included as Attachment A.

SITE GEOLOGY AND HYDROGEOLOGY

The site is located in the Dublin Sub-Basin (DSB) of the Livermore Valley Groundwater Basin. Soils in this sub-basin consist mainly of Holocene age valley-fill deposits with a surficial clay layer cap up to 40 feet thick. Alluvial fan and stream deposits consisting of unconsolidated sand, gravel, silt and clay have been encountered below the clay cap in this sub-basin.

The upper, unconfined groundwater in the DSB generally flows southward. Aquifers in the DSB are generally flat lying, but there is a drop in groundwater elevation of approximately 50 feet across the Parks Fault (Evaluation of Groundwater Resources: Livermore and Sunol Valleys, Department of the Water Resources Bulletin Number 118-2, June 1974). The Parks Fault trends east-northeast approximately 1 mile south of the site (Pacific Environmental Group, Inc., *Soil and Groundwater Investigation*, dated August 11, 1997).

Based on historic and recent boring logs, soils observed immediately beneath the site consist of interbedded clay, silty clay, clayey silt, sandy silt and silt to the maximum explored depth of 60 feet below grade (fbg). Depth to groundwater ranges between approximately 5 and 10 fbg and groundwater flows generally southward at a gradient of 0.004 to 0.009.

PROPOSED SCOPE OF WORK

EXCAVATION

CRA proposes limited remedial excavation to remove soil in an area with elevated soil vapor concentrations to facilitate service station building expansion. The objective of this remedial excavation is to remove the potential risk associated with vapor intrusion into the planned building expansion. To accomplish the scope of work, CRA proposes to conduct the following:

Health and Safety Plan: CRA will prepare a health and safety plan to protect site workers, the station employees and the public. The plan will be reviewed and signed by all site workers and visitors. The plan will remain onsite during all field activities.

Permits: A grading permit has been issued by the City of Pleasanton for the station building expansion.

Notifications: Prior to the excavation, a written notification will be issued to the Bay Area Air Quality Management District.

***Underground Utility Locations*:** CRA will contact Underground Services Alert (USA) to identify underground utilities in the planned excavation area. An underground utility map obtained from the previous private utility mark out will be used to plan and complete the proposed excavation. Multiple utilities have been identified in the proposed excavation area, including site lighting electrical conduits, the site storm drain laterals and the sanitary sewer lateral. These utilities will be either preserved in-place, or removed and replaced as necessary.

Soil Profiling: Based on previous soil investigation data throughout the proposed excavation area, there are no elevated petroleum hydrocarbons in shallow soil. CRA will use the previous soil profiling information to dispose of the generated soils. If hydrocarbon impacted soil is observed, either from staining or from field screening soils with a photo-ionization detector, the soil will be segregated, underlain and covered with plastic, sampled, properly analyzed and profiled for disposal under manifest at a Chevron and state-approved facility.

Excavation: CRA will oversee the removal of soil to just above groundwater (approximately 8 fbg) beneath the planned service station building expansion. The excavation will also expand approximately 5 lateral feet beyond the new planned building footprint in the north and northeast directions (Figure 3). CRA has retained a Chevron-approved excavation contractor to perform the activities. A temporary chain-linked fence will be installed for the duration of the excavation process for site security and safety. Appropriate pollution prevention practices will be used to ensure all soil and water does not leave the site boundaries. Though no groundwater removal is anticipated, if storm water or groundwater needs to be removed from the excavation, the groundwater will be pumped into an onsite holding tank or directly removed from the excavation, transported and disposed under profile to a Chevron and state-approved-disposal facility under manifest. Appropriate traffic control measures will be used as needed to assist the coordination and safe mobilization/removal of all equipment and transportation of impacted soils. Engineering controls will be available to suppress any dust and potential odors during all soil handling activities.

Confirmation samples will be collected every 20 linear feet at the horizontal and vertical limits of the excavation. The soil samples will be analyzed for: total petroleum hydrocarbons as gas (TPHg) by EPA Method 8015; benzene, toluene, ethylbenzene and total xylenes (BTEX), and 5 oxygenates by EPA Method 8260. If hydrocarbon impacts are observed in soil, the soil will be stockpiled and analyzed for TPHg by EPA Method 8015, BTEX and methyl-tertiary butyl ether by EPA Method 8021 and total lead by EPA Method 6010B.

Once complete, the excavation will be backfilled with clean fill and compacted to suit the proposed building expansion. CRA's standard operating procedures for excavation sampling is presented as Attachment B.

WELL DESTRUCTIONS

CRA proposes to destroy extraction well IW-1 and vapor well VP1 during the remedial excavation to accommodate the expansion of the station building. To accomplish the scope of work, CRA proposes to conduct the following:

Health and Safety Plan: CRA will prepare a health and safety plan to protect site workers, the station employees and the public. The plan will be reviewed and signed by all site workers and visitors. The plan will remain onsite during all field activities.

Permits: CRA will obtain the necessary permits from Zone 7 Water Agency prior to beginning field operations.

***Underground Utility Location*:** CRA will contact USA to confirm that no utilities are present at or near the well locations.

Well Destructions: CRA will excavate out to total depth both well IW-1 and vapor well VP1. The borings will be backfilled with clean fill and compacted to suit the proposed building expansion. CRA's standard operating procedures for monitoring well destruction are included as Attachment C.

Reporting: Following the remedial excavation, CRA will prepare a report that will include information documenting the well destructions, analytical data, confirmation sample locations, excavation area, and total amount of soil removed. Presently, there is an ongoing soil vapor investigation at the site due to elevated soil gas concentrations in the subsurface primarily in the vicinity of vapor well VP1. Since the source of these soil gas concentrations has yet to be determined, CRA proposes to reinstall a vapor probe outside of the excavation area and in native material, as close to the original probe as possible. Historically, extraction well IW-1 was solely used for batch groundwater extraction. Previously, it was determined that little hydrocarbon mass could be removed through groundwater extraction at this site. Since this well will not be used for future batch extraction, and the well is not used in the groundwater monitoring program, well IW-1 will not be replaced. Additional information related to well

CONESTOGA-ROVERS & ASSOCIATES

December 16, 2009 Reference No. 060057

IW-1 is available in Cambria Environmental Technology's March 12, 2007 *Groundwater Batch Extraction Results.*

Due to the construction schedule of the project, CRA is requesting expedited review and approval of this work plan. If you have any questions or comments, please contact Ms. Charlotte Evans at (510) 420-3351 or Mr. Aaron Costa at (925) 543-2961.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Charlotte Evans

Brandon S. Wilken, P.G. # 7564

PROFESSIONAL GEOLOGIST BRANDON S. WILKEN No. 7564 STATE OF CALIFORNIA

CE/doh/11
Enc.

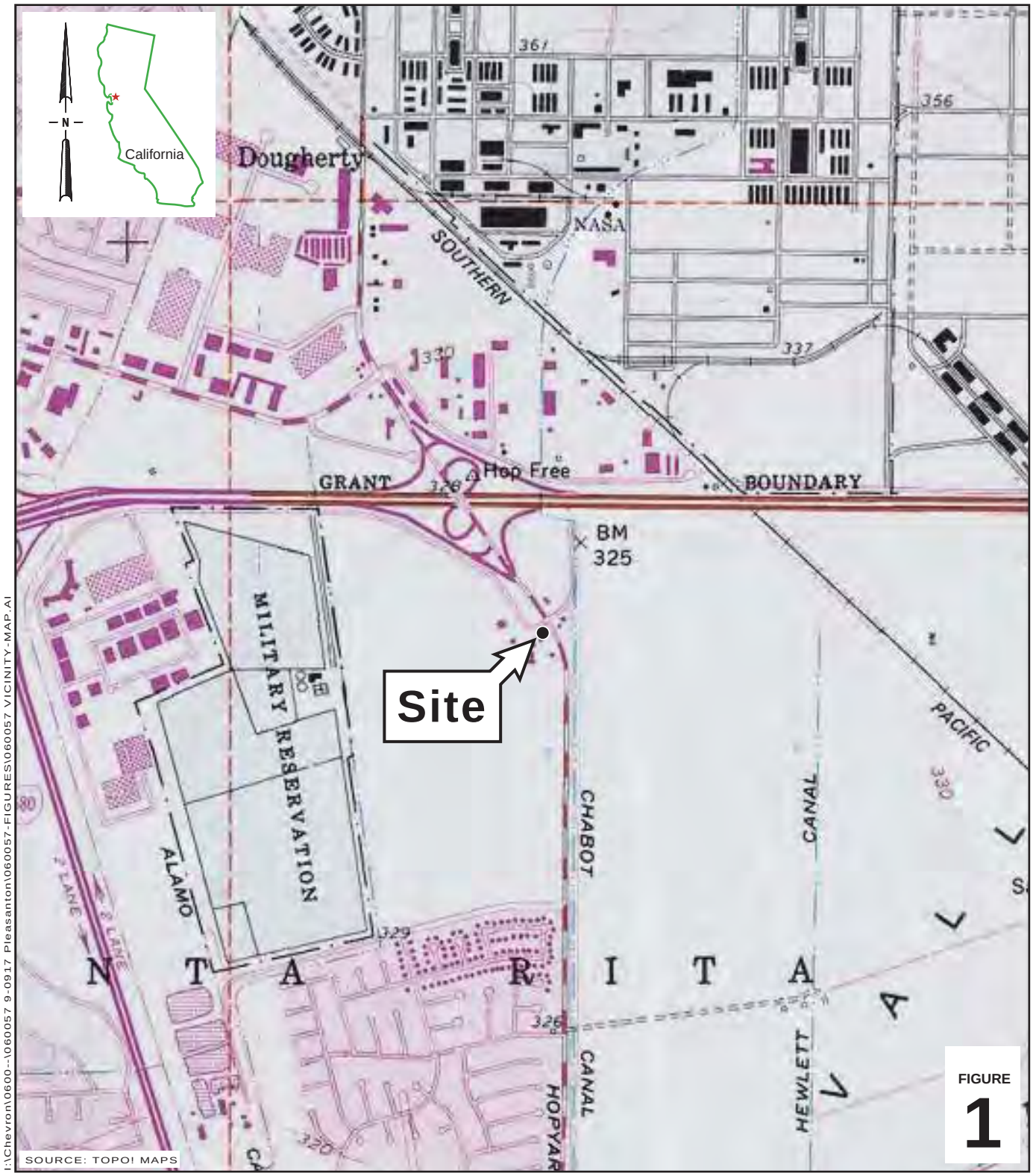
Figure 1	Site Vicinity Map
Figure 2	Site Plan
Figure 3	Site Plan with Excavation Extents

Attachment A	Summary of Previous Environmental Work
Attachment B	Standard Field Procedures for Excavation Sampling
Attachment C	Standard Field Procedures for Well Destructions

cc: Mr. Aaron Costa, Chevron Environmental Management Company
Lamorinda Development and Investment
C&H Development Company

FIGURES

10/23/08



I:\Chevron\0600--\060057 9-0917 Pleasanton\060057-FIGURES\060057 VICINITY-MAP.AI

FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Chevron Service Station 9-0917
5280 Hopyard Road
Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

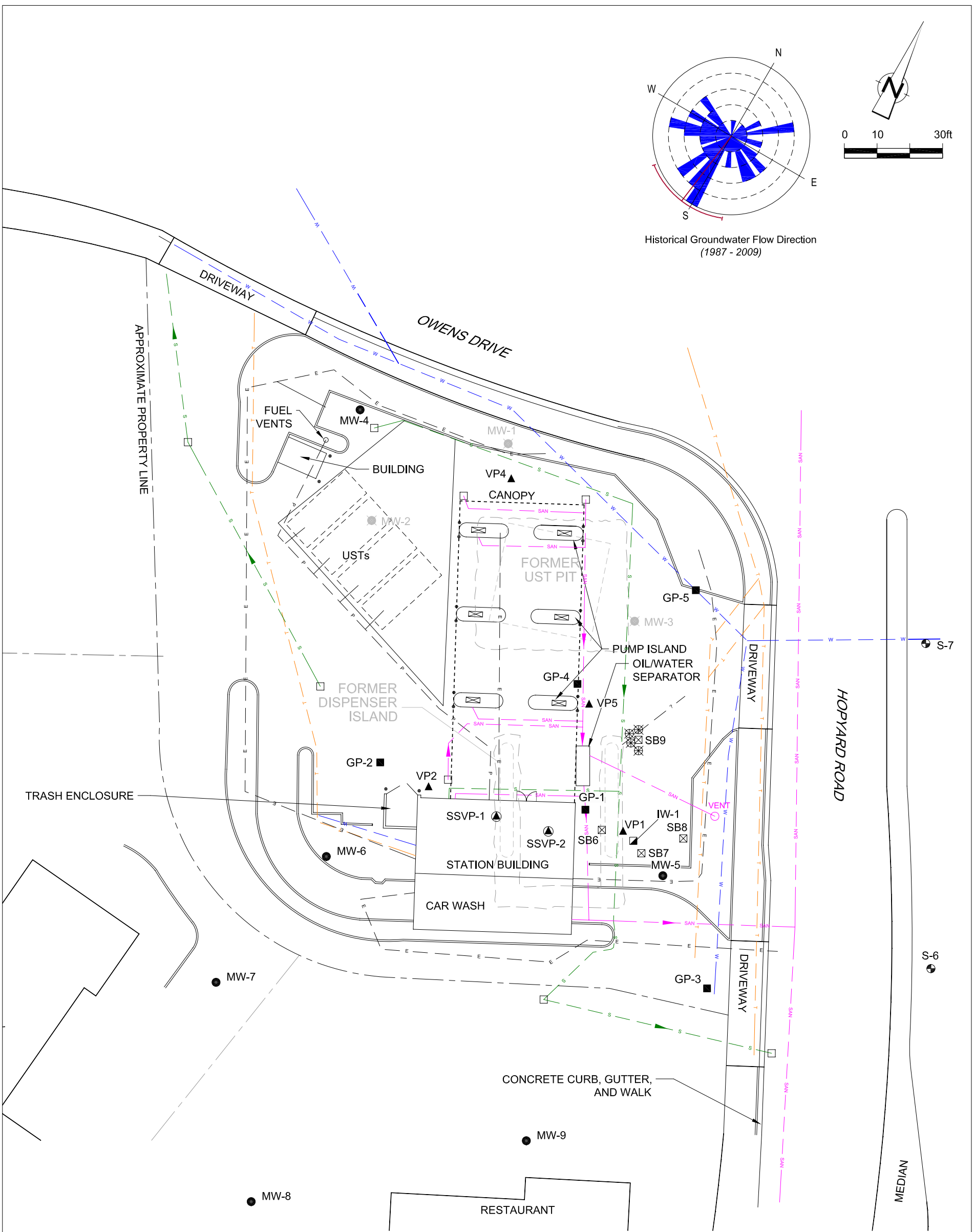


Figure 2

SITE PLAN WITH BORING LOCATIONS
CHEVRON STATION 9-0917
5280 HOPYARD ROAD
Pleasanton, California

60057-2009(010)GN-WA002 DEC 14/2009

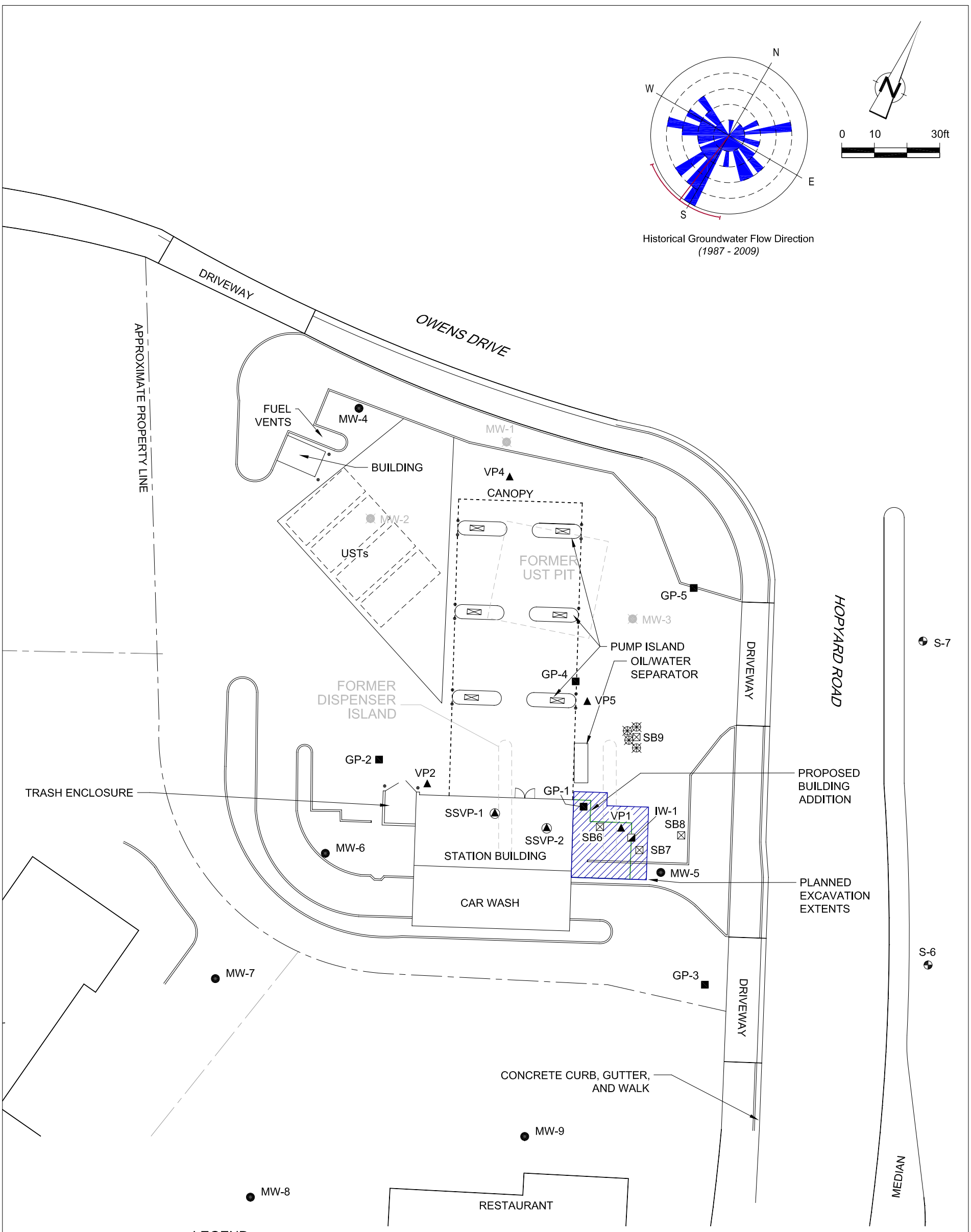


Figure 3

SITE PLAN WITH EXCAVATION EXTENTS
CHEVRON STATION 9-0917
5280 HOPYARD ROAD
Pleasanton, California

60057-2009(010)GN-WA003 DEC 14/2009

ATTACHMENT A

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

1989 Monitoring Well Installation: In August 1989, Groundwater Technology, Inc. (GTI) installed onsite groundwater monitoring wells MW-1 through MW-3. No total petroleum hydrocarbons as gasoline (TPHg) or benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in soil. Only 6 micrograms per liter (µg/L) ethylbenzene was detected in groundwater, no other fuel hydrocarbons were detected. Details of this investigation can be found in GTI's *Site Assessment Report*, dated August, 1989.

1991 Monitoring Well Destruction and Well Installation: In July 1991, GTI destroyed wells MW-1 through MW-3 and installed groundwater monitoring wells MW-4 through MW-6. TPHg was detected at up to 3 milligrams per kilogram (mg/kg) in well MW-5, but the chromatogram was not consistent with a gasoline standard pattern. In particular, a set of peaks are present both before and after the gasoline hydrocarbon range, indicating a suite of hydrocarbons both lighter and heavier than normal gasoline-range hydrocarbons. No benzene, ethylbenzene or xylenes were detected; toluene was detected at a maximum concentration of 0.022 mg/kg. Groundwater was encountered in the well borings at a depth of approximately 13 fbg. Maximum TPHg and benzene concentrations were detected in groundwater in well MW-5 at 12,000 micrograms per liter (µg/L) and 4,000 µg/L, respectively. Details of this investigation can be found in GTI's *Well Installation Report*, November 14, 1991.

1991 UST Replacement and Soil Excavation: In June 1991, Blaine Tech Services, Inc. observed the underground storage tank (UST) system removal and soil excavation, and collected soil and groundwater samples for chemical analyses. Five fiberglass USTs consisting of three 10,000-gallon gasoline, one 10,000-gallon diesel, and one 500-gallon used-oil UST were removed and replaced with four 12,000-gallon double-walled fiberglass gasoline USTs. TPHg and benzene were detected in soil samples collected from the bottom of the UST excavation at maximum concentrations of 70 mg/kg and 0.64 mg/kg, respectively, at depths of 9.5 fbg to 10 fbg. TPHg and benzene were detected in over-excavation soil samples collected from beneath the fuel product piping at concentrations of 440 mg/kg and 1.1 mg/kg, respectively, at 7 fbg. Total petroleum hydrocarbons as diesel (TPHd) was detected at a maximum concentration of 8.0 mg/kg from 10 fbg in the product piping area. Over-excavation of UST and product piping areas extended to maximum depths of approximately 10 fbg. Concentrations of 24,000 µg/L TPHg and 1,000 µg/L benzene were detected in a groundwater sample collected from the UST excavation. Depth to water in the excavation was measured at approximately 10 fbg. Approximately 90 cubic yards of soil, not including pea gravel, were removed during UST removal and over-excavation, and approximately 70 cubic yards of soil were removed during product line removal and over-excavation. The probable hydrocarbon source area, based on reported soil and grab-groundwater samples, is the former dispenser

island and associated northeastern product lines. Details of this investigation can be found in Gettler-Ryan's (G-R) *Site Conceptual Model and Closure Request*, dated January 25, 2002.

1997 Monitoring Well Installation: On May 5, 1997, Pacific Environmental Group, Inc. (PEG) installed offsite groundwater monitoring wells MW-7 through MW-9 to define the extent of petroleum hydrocarbons and methyl tertiary-butyl ether (MTBE) in groundwater south of the source area. No TPHg, BTEX or MTBE was detected in any soil samples. Selected soil samples were sent to Cooper Testing Facilities for physical analysis for moisture, density, porosity, specific gravity, and organic content. Details of this investigation can be found in PEG's *Soil and Groundwater Investigation*, dated August 11, 1997.

March 1999 Enhanced Bioremediation: On March 26, 1999, G-R installed oxygen releasing compound (ORC) socks in wells MW-5 and MW-6 to increase the dissolved oxygen concentrations in groundwater to enhance biodegradation of the hydrocarbon plume. ORC in this application had an estimated time release of approximately six months. A significant decrease in dissolved hydrocarbon concentrations was observed in wells MW-5 and MW-6 after installation of the ORC. A significant decrease in dissolved oxygen (DO) concentrations in wells MW-5 and MW-6 was reported from samples collected from June 19, 2000 to September 18, 2000, suggesting that the ORC socks were spent. During the next five quarters DO concentrations stabilized around 3.6 milligrams per liter (mg/L) and 4.3 mg/L in wells MW-5 and MW-6, respectively. A second significant decrease in DO was reported in samples collected from September 7, 2001 to December 5, 2001. Per the request of ACEHS, G-R removed the ORC socks in wells MW-5 and MW-6 during the monitoring and sampling event on September 7, 2001.

2006 Subsurface Investigation: In February 2006, Cambria Environmental Technology, Inc. (Cambria) advanced five soil borings. Two of the borings were advanced to deeper groundwater bearing zones using a Cone Penetration Technology (CPT) direct push drill rig. TPHg was only detected in soil samples from boring GP-1, at concentrations ranging from 7.9 mg/kg at 7 fbg to 110 mg/kg at 5 fbg. Benzene was detected only in soil boring GP-1 at concentrations ranging from 0.003 mg/kg at 7 fbg to 0.09 mg/kg at 10 fbg. MTBE was detected only in soil boring GP-2 at 10 fbg at a concentration of 0.006 mg/kg. The highest TPHg concentrations detected in grab-groundwater samples were 2,400 µg/L at 8 fbg from GP-1 and 110 µg/L at 28 fbg in GP-2. Benzene was only detected in samples from GP-1 at concentrations of 2 µg/L (8 fbg) and 0.7 µg/L (36 fbg), respectively. MTBE detections were 19 µg/L in GP-1 at 36 fbg and 22 µg/L in GP-2 at 28 fbg. No TPHg, benzene or MTBE were detected in grab-groundwater samples from borings GP-3 through GP-5, with the exception of 1 µg/L MTBE in GP-5. Details of this investigation can be found in Cambria's *Subsurface Investigation Report*, dated March 29, 2006.

2006 Well Installation: In August 2006, Cambria installed remediation well IW-1. TPHg and benzene were detected at maximum concentrations of 880 mg/kg at 15.5 fbg and 0.35 mg/kg at 20 fbg, respectively. No MTBE was detected in soil. Details of this investigation can be found in Cambria's *Subsurface Investigation Report*, dated September 26, 2006.

2007 Groundwater Batch Extraction: Cambria performed batch groundwater extraction from well IW-1. The calculated TPHg mass removed was 0.0051 pounds. Review of the boring log and physical soil data indicate the majority of soil encountered beneath the site has high clay content and low permeability, therefore it yielded little hydrocarbon mass through groundwater extraction. Details of this investigation can be found in Cambria's *Groundwater Batch Extraction Results*, dated March 12, 2007.

2009 Soil Vapor Probe Installations: Conestoga-Rovers & Associates (CRA) installed four soil vapor probes onsite to evaluate the potential for a vapor intrusion pathway onsite from soil gas to indoor air. TPHg in soil was only detected in VP1 at 100 mg/kg. Benzene was detected in all four soil samples, ranging in concentration from 0.0007 mg/kg in VP2 and VP4 to 1.2 mg/kg in VP1. No toluene, ethylbenzene, xylenes or MTBE were detected above environmental screening levels (ESLs)[1] in any soil sample. Probe VP1 had hydrocarbon concentrations above ESLs[2] with maximum concentrations of 200,000,000 micrograms per meter cubed ($\mu g/m^3$) TPHg, 960,000 $\mu g/m^3$ benzene, and 87,000 $\mu g/m^3$ xylenes. No toluene, ethylbenzene, or MTBE was detected above shallow soil vapor ESLs. Elevated methane concentrations were detected in samples from VP1 and VP5, with a maximum concentration of 57 percent. Both VP1 and VP5 are adjacent to sewer lines that exit the station building. Details of this investigation can be found in CRA's *Soil Vapor Probe Installation and Sampling Report*, dated April 19, 2009.

2009 Soil Vapor Sampling: On May 14, 2009 CRA collected another set of samples from vapor points VP1, VP2, VP4 and VP5. Probe VP1 had hydrocarbon concentrations above ESLs[2] with maximum concentrations of 200,000,000 micrograms per meter cubed ($\mu g/m^3$) TPHg, 1,500,000 $\mu g/m^3$ benzene, and 66,000 $\mu g/m^3$ xylenes. No toluene, ethylbenzene, or MTBE was detected above shallow soil vapor ESLs. Elevated methane concentrations were again detected in samples from probes VP1 and VP5, with concentrations ranging up to 26 percent. Methane concentrations have decreased in probe VP1, but remained stable in probe VP5. Hydrogen

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1 Environmental Screening Levels (ESLs) for shallow soils (≤3m) where groundwater is current or potential source of drinking water for commercial/industrial land use from the 2007 *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* by the California Regional Water Quality Control Board, San Francisco Bay Region Interim Final November 2007, revised May 2008, Table A.

2 Environmental Screening Levels (ESLs) soil gas (Vapor Intrusion concerns) for commercial/industrial land use from the 2007 *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* by the California Regional Water Quality Control Board, San Francisco Bay Region Interim Final November 2007, revised May 2008, Table E

sulfide was detected in probes VP1 and VP5 at a maximum concentration of 1,400 parts-per-billion-by-volume. Hydrogen sulfide is a gas that can be derived in sewers from the decay of organic matter. Details of this investigation can be found in CRA's *Soil Vapor Sampling Report and Work Plan for Sub-Slab Vapor Probes*, dated June 29, 2009.

2009 Additional Site Assessment – Area of Proposed Station Building Expansion: On October 28 and 29, 2009 CRA advanced four direct-push soil borings (SB6 through SB9). Soil samples were collected from borings SB6, SB7 and SB8. Grab-groundwater samples were collected from SB6 and SB7. Abundant subsurface debris prevented soil and groundwater sample collection from the SB9 boring location. Soil vapor samples were collected from SB6, SB8, and SB9. Hydrocarbon concentrations in soil were detected in soil borings SB6, SB7 and SB8 and were greatest between 15 to 19 fbg, below the water table. Maximum detections in soil were 730 mg/kg TPHg and 3.4 mg/kg benzene in SB7 at 18 fbg. The maximum TPHg concentration in grab-groundwater was 1,400 µg/L from SB7. The maximum benzene concentration was 33 µg/L from SB6. Temporary soil vapor probes were advanced using a direct-push rig and installed inside the direct-push rods at 6 fbg. TPHg and benzene concentrations in soil vapor exceeded ESLs[2] in borings SB8 and SB9. Maximum concentrations were detected in SB8 of 130,000,000 µg/m^3 TPHg and 23,000 µg/m^3 benzene. Naphthalene was only detected in SB9 at 420 µg/m^3. No hydrocarbons were detected in soil vapor from SB6. All other analytes, if detected, were below ESLs. A report documenting additional information has not yet been submitted.

ATTACHMENT B

STANDARD FIELD PROCEDURES FOR EXCAVATION SAMPLING

Conestoga-Rovers & Associates

EXCAVATION SAMPLING PROCEDURES

After confirming a hazardous material, hydrocarbon or other release, soil excavation is often done to remove contaminant-bearing soils that may pose a threat to ground water quality beneath a site. Soil samples are routinely collected to monitor the progress of the excavation and to confirm that soils containing compounds above regulatory limits have been completely removed. CRA has developed standard operating procedures for collecting soil samples during routine excavation operations to ensure that the samples are collected, handled and documented in compliance with State and local regulatory agency regulations.

The removed soil is typically segregated based on perceived contaminant concentration and stockpiled onsite on plastic sheeting. Prior to collecting soil samples during excavation operations, CRA field staff will screen the removed soils with a portable photo-ionization detector (PID) (when excavating volatile compounds) and record observations of soil staining and lithology to qualitatively assess the presence or absence of the compound(s) of concern. When field screening suggests that the contaminant-bearing soil has been completely removed, CRA collects soil samples from the excavation sidewalls and bottom for confirmatory analysis at a State certified analytical laboratory.

The soil samples are collected in steam cleaned brass or steel tubes from either a driven split-spoon type sampler or the bucket of a backhoe or excavator. Samples are collected from the excavation cavity as soon as possible following excavation completion. When a backhoe or excavator is used for sampling, approximately three inches of soil are scraped from the surface and the tube is driven into the exposed soil, preferably near the bucket teeth.

Upon removal from the sampler or the backhoe, the samples are trimmed flush, capped with Teflon tape and plastic end caps, labeled, logged and refrigerated for delivery under chain of custody to a State certified analytical laboratory.

ATTACHMENT C

STANDARD FIELD PROCEDURES FOR WELL DESTRUCTIONS

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR ABANDONING MONITORING WELLS

This document presents standard field methods for abandoning ground water monitoring wells. The objective of well abandonment is to destroy wells in a manner that is protective of potential water resources. The two procedures most commonly used are pressure grouting and drilling out the well. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Pressure Grouting

Pressure grouting consists of injecting neat Portland cement through a tremie pipe under pressure to the bottom of the well. The cement is composed of about five gallons of water to a 94 lb. sack of Portland I/II Cement. Once the well casing is full of grout, it remains pressurized by applying pressure with a grout pump. The well casing can also be pressurized by extending the well casing to the appropriate height and filling it with grout. In either case, the additional pressure allows the grout to be forced into the sand pack. After grouting the sand pack and casing, the well vault is removed and the area resurfaced or backfilled as required.

Well Drill Out

When well drill out is required, a hollow-stem auger drilling rig is used to drill out the well casing and pack materials. First, drill rods are dropped down the well and used to guide the augers as they drill out the well. Once the well is drilled out, the boring is filled with Portland cement injected through the augers or a tremie pipe under pressure to the bottom of the boring. The well vault is removed and the area resurfaced or backfilled as required.