

# GROUNDWATER TECHNOLOGY, INC.

1401 Halyard Drive, Suite 140, West Sacramento, CA 95691, (916) 372-4700

FAX (916) 372-8781

## ENVIRONMENTAL ASSESSMENT REPORT CHEVRON SERVICE STATION NO. 9-5542 7007 SAN RAMON ROAD DUBLIN, CALIFORNIA

GTI Project 02070 0156

September 28, 1995

Prepared for:

Mr. Brett Hunter  
Chevron U.S.A. Products Company  
6001 Bollinger Canyon Road, Bldg L  
San Ramon, CA 94583

02070-0156  
95091-09 PM 11:19

Groundwater Technology, Inc.  
Submitted by:

Brian McAloon  
Associate Geologist

Groundwater Technology, Inc.  
Approved by:

Jason M. Fedota  
Lead Geologist  
Project Manager

E. K. Simonis, R.G.  
Senior Geologist



0166EAR.rpt(Chv-97)

## CONTENTS

1.0	INTRODUCTION .....	1
2.0	ADDITIONAL ASSESSMENT WORK .....	1
2.1	Background Review/Permitting/Site-Specific Health and Safety Plan .....	1
2.2	Soil Borings .....	1
2.3	Soil Sampling .....	2
2.4	Groundwater Sampling .....	2
3.0	RESULTS OF SOIL SAMPLE ANALYSES .....	3
4.0	RESULTS OF GROUNDWATER SAMPLE ANALYSES .....	3

### Figures

1. Site Location Map
2. Site Plan

### Tables

1. Soil Stockpile Sample Analytical Results
2. Groundwater Sample Analytical Results

### Appendices

- A. Drilling and Encroachment Permits
- B. Boring Logs
- C. Laboratory Reports and Chain-of-Custody Manifest

## 1.0 INTRODUCTION

This report is submitted by Groundwater Technology, Inc. to summarize the methods and results of additional environmental assessment work conducted on July 12, 1995, at Chevron Service Station Number 9-5542 located at 7007 San Ramon Road, Dublin, California (Figure 1). All work was conducted in accordance with Groundwater Technology's *Addendum to Work Plan for Additional Assessment dated 3/30/95 (Work Plan)*, dated May 31, 1995, and approved by the County of Alameda Department of Environmental Health, Environmental Protection Division. This work included conducting a background review of the site, developing a health and safety plan for field activities, installing and sampling three hydraulically driven Geoprobe soil borings, obtaining "grab" groundwater samples from each of the borings, and preparation of this report.

## 2.0 ADDITIONAL ASSESSMENT WORK

### 2.1 Background Review/Permitting/Site-Specific Health and Safety Plan

Groundwater Technology conducted a technical review of all relevant information available prior to proceeding with site assessment work.

A Drilling Permit was obtained from the Alameda County Flood Control and Water Conservation District Zone 7 agency. In addition, an Encroachment Permit allowing drilling operations to be conducted in the west-bound curb lane of Dublin Boulevard was obtained from the City of Dublin Public Works Department. Copies of these permits are included in Appendix A.

Following a complete review of site conditions, Groundwater Technology prepared a site-specific *Health and Safety Plan* as required by the Occupational Safety and Health Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120). The document was reviewed and signed by all Groundwater Technology personnel and subcontractors prior to commencement of work at the site.

### 2.2 Soil Borings

On July 12, 1995, Groundwater Technology supervised the advancement of soil borings SB-1, SB-2 and SB-3 to a depth of 27 feet below ground surface (BGS) utilizing a truck-mounted Geoprobe rig equipped with hydraulically driven rod and samplers. All Geoprobe boring equipment was steam cleaned prior to advancement of each boring, and sampling equipment was washed in an Alconox (detergent) solution and rinsed with water between sampling intervals. The Geoprobe technique of borehole advancement does not generate any soil cuttings.

### 2.3 Soil Sampling

Soil samples were collected from each of boreholes SB-1, SB-2 and SB-3 at 5-foot intervals during boring, beginning at approximately 5 feet BGS. Samples were collected in a 1.375-inch-diameter by 2-foot-long stainless steel cylindrical sleeve lined with transparent, 1.125-inch-diameter by 2-foot-long, polyethylene terephthalate glycol (PTG) tubing. After being driven 5 feet, the sampling barrel and drive rods were removed from the probe hole and the tubing containing the soil sample was removed from the sampling barrel. Soil samples were field screened for hydrocarbon vapors using a photo-ionization detector. Soil was logged using the Unified Soil Classification System by a Groundwater Technology field geologist working under the supervision of a California registered geologist (Appendix B). One 6- to 9-inch-long section of sample tube from each sampling interval was sealed, labeled and placed on ice in an insulated container pending possible laboratory analyses. Soils used for lithologic description were placed in a U.S. Department of Transportation-approved 5-gallon bucket and temporarily stored on site pending disposal by Integrated Wastestream Management, Inc.

In accordance with the *Work Plan*, no discrete soil samples were submitted for laboratory analyses. A composite sample was obtained from the discarded soils and placed on ice in an insulated container for transport under chain-of-custody manifest to GTEL Environmental Laboratories, Inc. (GTEL), a California state-certified analytical laboratory in Concord. Samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX), and total petroleum hydrocarbons-as-gasoline (TPH-G), using U.S. Environmental Protection Agency (EPA) methods 5030/8020/modified 8015.

Upon completion of boring and sampling, all borings were backfilled with grout to surface on July 12, 1995.

### 2.4 Groundwater Sampling

"Grab" groundwater samples were obtained from each of borings SB-1, SB-2 and SB-3 immediately after collection of the last soil sample from each boring. A 20-foot section of 0.75-inch outside-diameter (O.D.) Schedule 40 PVC casing with 0.010-inch-slot well screen was temporarily installed in the borings. A 0.5-inch O.D. stainless steel bailer was used to obtain groundwater samples from the borings. Samples were labeled and placed in an ice-containing insulated container for transport under chain-of-custody manifest to GTEL. Upon completion of groundwater sampling in each boring the PVC well screen was removed and the boring backfilled with a neat cement grout. A new PVC well screen was used in each boring, and the bailer was steam-cleaned prior to use in each boring.

Samples were analyzed for BTEX and TPH-G using EPA methods 5030/8020/modified 8015.

### 3.0 RESULTS OF SOIL SAMPLE ANALYSES

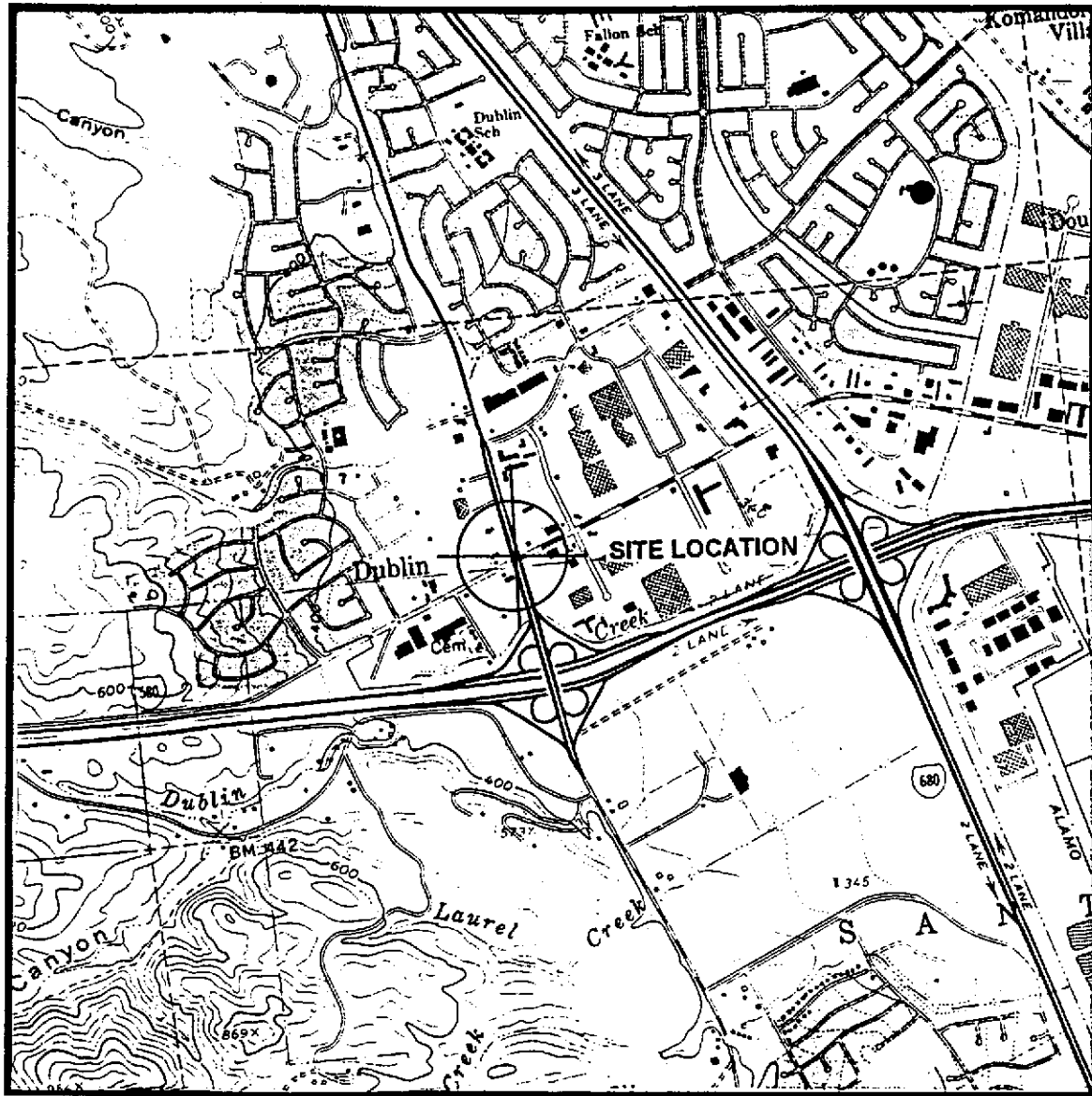
Table 1 summarizes the laboratory analytical results for the stockpile soil samples collected on July 12, 1995. The composite of samples SP-1 and SP-2 did not contain BTEX and TPH-G at or above the laboratory detection limits.

Copies of laboratory analyses reports and the chain-of-custody manifest for the stockpile soil samples collected July 12, 1995 are included in Appendix C.

### 4.0 RESULTS OF GROUNDWATER SAMPLE ANALYSES

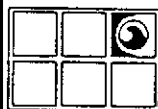
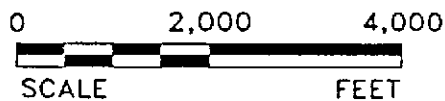
Table 2 summarizes the laboratory analytical results for groundwater samples collected from borings SB-1, SB-2, and SB-3 on July 12, 1995. Sample SB1-GW contained the highest concentrations of BTEX and TPH-G, with 470 micrograms per liter ( $\mu\text{g/L}$ ) benzene, and 65,000  $\mu\text{g/L}$  TPH-G. Sample SB3-GW collected from the boring drilled farthest downgradient contained 3.1  $\mu\text{g/L}$  toluene, and no benzene, ethylbenzene, total xylenes or TPH-G at or above the laboratory detection limits.

Copies of laboratory analytical reports and the chain-of-custody manifest for the groundwater samples collected July 12, 1995 are included in Appendix C.



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE  
 DUBLIN QUADRANGLE  
 7.5 MINUTE SERIES  
 1961, PHOTOREVISED 1980

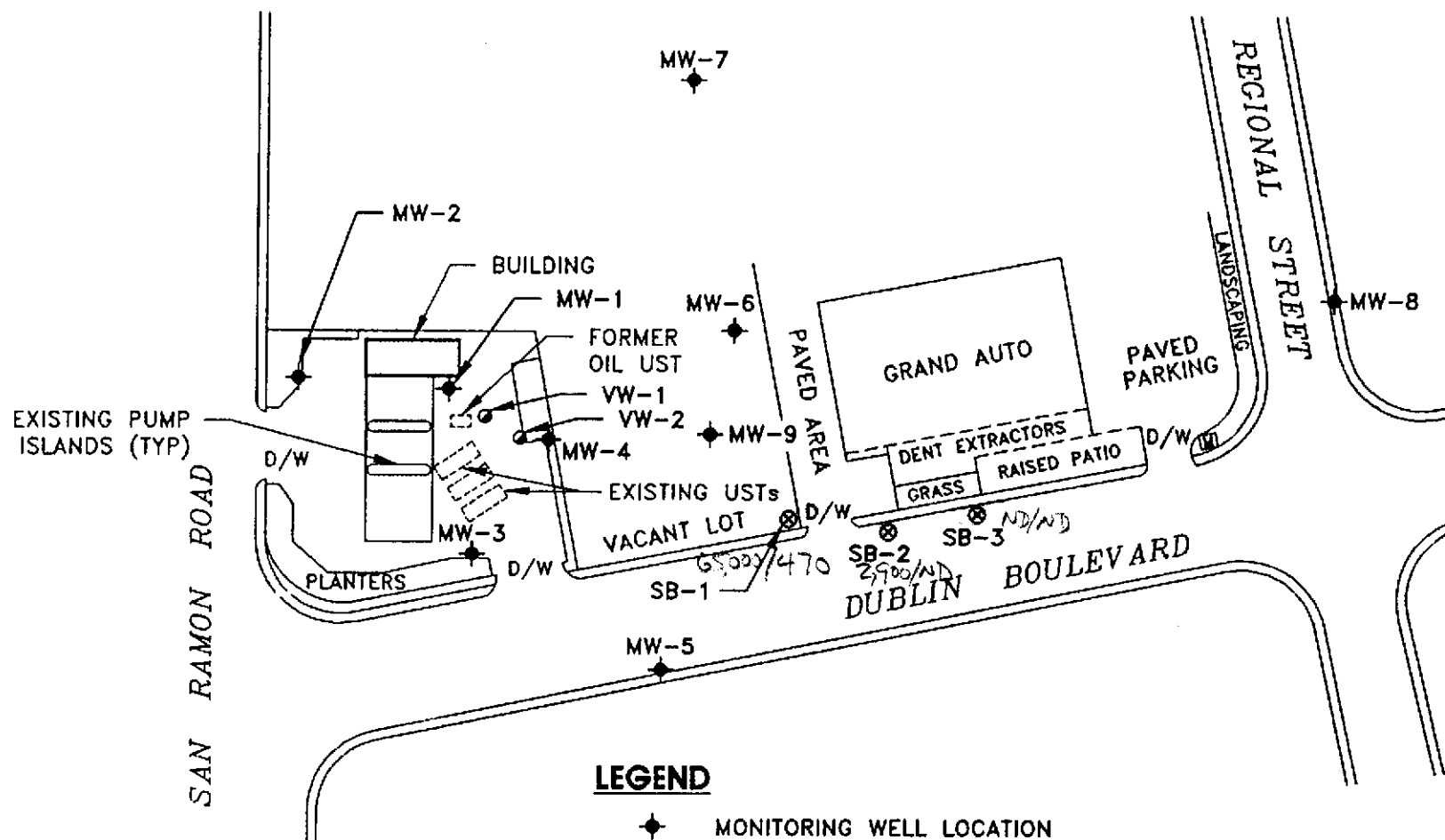
SCALE 1:24,000



GROUNDWATER  
 TECHNOLOGY

SITE LOCATION MAP

CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-5542	FILE: 0156SL (1:1)	PROJECT NO.: 02070-0156	PM <i>[Signature]</i>	PE/RG <i>[Signature]</i>
	REV.	FIGURE: 1		
LOCATION: 7007 SAN RAMON ROAD DUBLIN, CALIFORNIA	DES. AJK	DET. JF	DATE: 3/29/95	



**LEGEND**

- ◆ MONITORING WELL LOCATION
- VADOSE WELL LOCATION
- ⊗ GEOPROBE WATER SAMPLING LOCATION
- Ⓜ VACUUM MOTOR IN GRAND AUTO PARKING LOT
- D/W DRIVEWAY



**GROUNDWATER TECHNOLOGY**



CLIENT:  
CHEVRON U.S.A. PRODUCTS CO.  
SERVICE STATION NO. 9-5542

**SITE PLAN**

FILE: 0156SMA (1:100)

PROJECT NO.: 02070-0156

LOCATION:  
7007 SAN RAMON ROAD  
DUBLIN, CALIFORNIA

PM: *[Signature]*

PE/RG: *[Signature]*

FIGURE: 2

REV.:

DES.: JF    DET.: SWL    DATE: 8/29/95

**Table 1**  
**SOIL STOCKPILE SAMPLE ANALYTICAL RESULTS**

JULY 12, 1995

CHEVRON SERVICE STATION #9-5542  
7007 SAN RAMON ROAD, DUBLIN, CA

SAMPLE I.D.	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	TPH-G (mg/kg)
SP-1, SP-2 *	ND<0.005	ND<0.005	ND<0.005	ND<0.015	ND<1.0

**EXPLANATION**

TPH-G = Total petroleum hydrocarbons-as-gasoline  
mg/kg = milligrams per kilogram, equivalent to parts per million (ppm)  
ND = Not detected at or above the minimum detection limit shown  
\* Composite of samples SP-1 and SP-2

0156ST1.vrk4



**Table 2**  
**GROUNDWATER SAMPLE ANALYTICAL RESULTS**

JULY 12, 1995

CHEVRON SERVICE STATION NO. 9-5542  
7007 SAN RAMON ROAD, DUBLIN, CA

SAMPLE NUMBER	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)	TPH-G (ug/L)
SB1-GW	470	200	210	2,100	<del>75,000</del>
SB2-GW	ND<5.0	ND<5.0	72	52	<del>2,900</del>
SB3-GW	ND<0.5	3.1	ND<0.5	ND<0.5	ND<50

**EXPLANATION**

TPH-G = Total petroleum hydrocarbons-as-gasoline  
 ug/L = micrograms per liter, equivalent to parts per billion (ppb)  
 ND = Not detected at or above the minimum detection limit shown

0150w11.WK4